

## Third Generation Partnership Project

### Draft Meeting REPORT v3.0.0 3GPP TSG\_CN\_WG4#16

Miami, USA  
23<sup>rd</sup> – 27<sup>th</sup> September 2002



Hosts: North American Friends of 3GPP

**Chairman:** Mr. Ian Park, Vodafone  
**Vice Chairmen:** Mr. Peter Schmitt, Siemens  
Mr. Toshiyuki Tamura, NEC  
**MCC Support:** Mr. Kimmo Kymäläinen, ETSI MCC.

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# 1 Opening of the meeting & Approval of Agenda

Mr. Ian Park, CN4 chairman, opened the meeting. Additional support was provided by Mr. Kimmo Kymäläinen (CN4 Secretary, MCC).

## 1.1 Make calls for IPRs

The document is included in Annex C.

The agenda was presented and **approved** (N4-021113).

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# 2 Document Allocation

The late arrived documents were accepted by the meeting for discussion under the appropriate agenda headings.

- Documents 1215, 1227, 1240 and 1221 were re-routed under agenda item 9.1.
- Ericsson has sent documents on Friday before the meeting to CN4 mailing list without Tdoc numbers. Documents will be submitted during this meeting.
  - o Accepted by meeting.

The document allocation (N4-021115) was **approved** with the changes shown above.

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# 3 Meeting Reports

## 3.1 Approval of the report of CN4 #15, Helsinki, FINLAND

The Helsinki meeting report CN4#15 (N4-021118) was **approved**. The document is raised to version 3.0.0 and will be uploaded to the server.

## 3.2 Summary report of CN #17 & SA #17, Biarritz, June 2002

The summary report was presented by chairman Mr. Ian Park.

The document (N4-021116) was **noted**.

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# 4 Liaison Statements

**Document:** N4-021203  
**Title:** LS reply on Subscriber or Equipment Trace Impacts  
**Source:** CN1  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

**Decision:** Noted

**Document:** N4-021204  
**Title:** LS on persistent dialogs for unregistered users  
**Source:** CN1  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

**Decision:**

**Document:** N4-021205  
**Title:** LS on inclusion of CCF/ECF addresses on Sh interface

**Source:** CN1  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**  
- Lucent: The responses are in N4-021216 & N4-021222.

**Decision:**

**Document:** **N4-021207**  
**Title:** Liaison Statement on Interoperability Issues and SIP in IMS  
**Source:** Chairs, SIP, SIPPING, and SIMPLE Working Groups of the Internet Engineering Task Force  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**  
- Lucent wants to see the reply LS from SA. It will be N4-021245.

**Decision:** Noted

**Document:** **N4-021210**  
**Title:** Response to Liaison Statement on Support of IPv6 on Iu  
**Source:** RAN3  
**Presented:** Mr. Alessio Casati, Lucent  
**Discussion:**

**Decision:** Noted

**Document:** **N4-021213**  
**Title:** LS reply to LS reply on "Distribution of IMS Charging ID (ICID) from PCF/P-CSCF to GGSN"  
**Source:** SA2  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

**Decision:** Noted

**Document:** **N4-021214**  
**Title:** LS on the protocol development for the GMLC Lr-interface  
**Source:** SA2  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Noted

**Document:** **N4-021216**  
**Title:** Liaison Response on "inclusion of CCF/ECF addresses on Sh interface"  
**Source:** SA2  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Noted

**Document:** **N4-021220**  
**Title:** Response LS to "Liaison statement on DTMF"  
**Source:** SA4  
**Presented:** Mr. Toshiyuki Tamura, NEC  
**Discussion:**

**Decision:** Noted

**Document:** **N4-021222**  
**Title:** LS response to Inclusion of CCF/ECF addresses on Sh interface  
**Source:** SA5  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

**Decision:**

**Document:** N4-021223  
**Title:** LS on the support of "choice" construct in DDF  
**Source:** T2  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Noted

**Document:** N4-021224  
**Title:** LS on mandatory SRI\_for\_SM option for MMS recipient address resolution  
**Source:** T2  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Noted

**Document:** N4-021225  
**Title:** Use of Identifiers in GPRS & UMTS Environments  
**Source:** European Radiocommunication Office  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

- Lucent: Do we have a LS channel to communicate with this organisation.
- Chairman: A request for authority to send liaisons will be submitted to PCG
- [afternote: PCG has given authority to send liaisons to ENF]
- Chairman: Question 2 should be sent to SA1.

**Decision:** Noted

**Document:** N4-021254  
**Title:** Proposed LS to SA1 & CN1 on questions from the European Numbering Forum  
**Source:** Vodafone  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Approved

**Document:** N4-021255  
**Title:** Proposed LS to European Numbering Forum on Use of Identifiers in GPRS & UMTS Environments  
**Source:** Vodafone  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Approved

**Document:** N4-021245  
**Title:** Response to IETF LS on Interoperability Issues and SIP in IMS  
**Source:** SA  
**Presented:** Mr. Ian Park, Chairman  
**Discussion:**

**Decision:** Noted

**Document:** N4-021273  
**Title:** LS reply on Subscriber or Equipment Trace Impacts  
**Source:** SA2  
**Presented:** Mr. Toshiyuki Tamura, NEC  
**Discussion:**

**Decision:** Noted

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## 5 Work Item Management

**Document:** N4-021146  
**Title:** WID: Multimedia Resource Function Controller (MRFC) – Multimedia Resource Function Processor (MRFP) Mp Interface  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

- Lucent: WID is very dependent on the principle that the SIP AS controls the MRF via the S-CSCF; The UE could also control it via the S-CSCF.
  - o Accepted by the meeting.
- Lucent: The WID allows the re-introduction of the Sr interface. The WID should simply refer to the use of SIP over the MR reference point.
  - o Accepted by the meeting.
- Lucent: The SIP definition is being extended. Link to 24.229 in terms of specifications impacted.
  - o Accepted by the meeting.
- Chairman: We should agree the WID in this meeting or change the schedule in the WID.
- Ericsson: The use of the word “mapping” should be avoided to describe the way in which SIP and Mp-interface protocols interact.
  - o Ericsson proposed “interaction”.
  - o Chairman proposed “interworking”.
    - Lucent support chairman’s proposal.
- Ericsson: Reference to interworking with SDP as well as with SIP is needed.
  - o Accepted by the meeting.
- Ericsson: ITU-T SG16 are working with this issue. We should await the results.
- Chairman: We should avoid the duplication in work.
- Siemens: CN4 could tweak the first bullet of the objectives to reflect that CN4 will await the output from SG16 before we do our own design.
- Ericsson: The first output from SG16 should be available in time for us to look at in CN4#17 Bangkok.
- Nokia: We should revise the timescale to send the new specification to CN for information in March 2003 and for approval in June 2003.
- Nokia will produce revised WID in CN4#16.
  - o Accepted by the meeting.
- Nokia: Should CN4 combine this WID with Mn WID?
  - o CN4 agreed that the WIDs will be kept as separate.

**Decision:** Revised to N4-021256

**Document:** N4-021256  
**Title:** WID: Multimedia Resource Function Controller (MRFC) – Multimedia Resource Function Processor (MRFP) Mp Interface  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

**Decision:** Approved

**Document:** N4-021167  
**Title:** WID: Preferred Framing Protocol  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Siemens has a contribution which adds some text; N4-021167rev.
  - o Ericsson need some time to accept changes in section “objective”.
  - o Chairman: Siemens and Ericsson will discuss how to update the WID.
- WID will be presented also in CN3.
- If CN3 accept the WID, CN4 will send the WID to CN#18 for approval.

**Decision:** Revised to N4-021257

**Document:** N4-021257  
**Title:** WID: Preferred Framing Protocol  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021192  
**Title:** WID: STAGE 3 for KEY distribution  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Lucent: The title should be changed.
  - o Vodafone: Protocol definition for automatic distribution of MAP security keys
- Vodafone
- Supported companies added:
  - o Vodafone, Nortel Networks
    - More companies are needed.

**Decision:** Revised to N4-021258

**Document:** N4-021258  
**Title:** WID: Protocol definition for automatic distribution of MAP security keys  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Only 3 supporting companies => one more is needed before approval in CN#18.

**Decision:** Agreed

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## 6 Release 6

### 6.1 Network domain security

**Document:** N4-021121  
**Title:** MAPsec PIB  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- NEC: Why do Nokia want to submit this for IETF?
  - o Nokia: Our understanding is that it's not necessary to submit this to IETF as a draft RFC.
  - o Nokia: this could be added in Ze-specification as a normative annex.
- Siemens: The extensive use of ASN.1 macros, which are deprecated for 29.002 and 24.080; in fact the current ASN.1 recommendations don't include the macro construct.
  - o Nokia: The ASN.1 is based on the ASN.1 used in COPS. Revision is maybe needed.
- CN4 decided to make it the basis of a normative annex to the Ze interface protocol spec.
- After presentation of draft LS CN4 decided that IETF part has to be taken out from N4-021258.

**Decision:** Noted

**Document:** N4-021193  
**Title:** Draft LS on Status of protocol work on Ze interface  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Lucent: WID was not seen in CN plenary. We have to indicate that WID will be presented in CN#18 for approval.



- After presentation of draft LS CN4 decided that IETF part has to be taken out from N4-021258.

**Decision:** Revised to N4-021259

**Document:** N4-021259  
**Title:** Draft LS on Status of protocol work on Ze interface  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

**Decision:** Agreed

## 6.2 GPRS

### 6.3 Location services

**Document:** N4-021195  
**CR:** 29.002-491  
**Title:** Addition of LCS Format Indicator to LCS Client ID  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Chairman: ASN.1 additions don't conform to the style guide in 30.002.

**Decision:** Revised to N4-021260

**Document:** N4-021260  
**CR:** 29.002-491r1  
**Title:** Addition of LCS Format Indicator to LCS Client ID  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

**Decision:** Agreed

## 6.4 Any other business

### 6.4.1 TrFO/codec control

**Document:** N4-021168  
**CR:** 23.205-037  
**Title:** Preferred Framing Protocol  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Siemens are concerned that the preferred framing protocol and the default framing protocol are the same. The changes are described in N4-021187.
- Siemens proposed that at the edge of the PLMN that allows to negotiate whether luFP, or conventional 64k PCM (rather than a different framing protocol) shall be used.
- Siemens: Ericsson haven't presented the rationale for their solution.
  - o Ericsson: It has already been exposed in ITU-T SG11 and previous discussion paper when the WID was agreed.
- Siemens: The procedures described here are for use within PLMNs. Why do we need to define the possibility for negotiation framing protocol negotiation.
  - o Ericsson: This is to allow using of transparent mode.
  - o Siemens: The PLMN would then have to support the use of I.366.2 within the PLMN.
  - o Ericsson: It is handling the internal PLMN cases and external cases separately. PLMN must support I.366.2 if it supports interworking to an external AAL2 network as this is the defined ITU-T protocol.

- Siemens: The common use of a common procedure for negotiation between PLMNs and negotiation within a PLMN will probably have undesirable side effects, particularly use of I.366.2.

**Decision:** **Postponed to CN4#17**

**Document:** **N4-021187**

**Title:** Suggested Guidelines for Handling of Framing Protocol in Out-of-band signalling

**Source:** Siemens

**Presented:** Dr. Thomas Belling, Siemens

**Discussion:**

- Ericsson: CR 23.205-037 already proposes that the default framing protocol is luFP in support mode; the current spec doesn't describe how 64 kbit/s PCM is carried if there is interworking at the edge. The document seems to impose restrictions.
- Ericsson: The aim of the 23.205-037 CR is to allow flexibility of interworking with many external-framing protocols. The CR is addressed specifically to handling framing protocol within or between PLMN or between two directly connected PLMNs. The interworking between external networks are described in 3GPP TS 29.207.
- Siemens: Ericsson's CR propose to decouple the codec negotiation from the framing protocol negotiation.
- Ericsson: A specification 3GPP TS 23.205 covers the use of separate bearer & call control. It should be possible to negotiate the framing protocol without the need to implement OoBTC as specified in 23.153.
- Siemens: The current 3GPP nodes are unlikely to support multiple framing protocol I.366.2. A current GMSC will almost certainly support luFP, and on the top of that, multi-mode AMR codecs.
- Siemens: We would be happy if Ericsson CRs are presented for information in this meeting.

**Decision:** **Noted**

**Document:** **N4-021169**

**CR:** 29.205-005

**Title:** Preferred Framing Protocol

**Source:** Ericsson

**Presented:** Mr. Phil Hodges, Ericsson

**Discussion:**

- Siemens: When the changes in 4.1.1 are expected to be approved at ITU-T?
  - o Ericsson: In November during the same week CN4 has a meeting in Bangkok.
- The principles of the changes are agreed by the meeting, but the CR will be postponed to CN4#17 because of linkage of N4-021168 & N4-021170. It was agreed that TS 29.205 shall be the ETSI document to which a reference from the ITU-T specification Q.765.5 where the reserved point codes for the IEs can be made, CN4 endorsed the approach that Ericsson will submit a contribution on this to SG11.

**Decision:** **Postponed to CN4#17**

**Document:** **N4-021170**

**CR:** 23.153-046

**Title:** Preferred Framing Protocol

**Source:** Ericsson

**Presented:** Mr. Phil Hodges, Ericsson

**Discussion:**

**Decision:** **Postponed to CN4#17**

## 6.4.2 Mn interface protocol

**Document:** **N4-021185**

**Spec:** 29.332 v.0.1.0

**Title:** TS 29.332 0.1.0; Media Gateway Control Function (MGCF) – IM Media Gateway; Mn Interface

**Source:** Rapporteur

**Presented:** Mr. Peter Schmitt, Siemens

**Discussion:**

- Checking is needed with CN1 what the name is for IMS equivalent of a call.
- Ericsson: Why are the clauses on packages not grouped together?
  - o Siemens: The grouping is for PSTN interworking then IMS only.
- Ericsson: There is a close linkage to the work in CN3 on SIP-BICC interworking.
  - o Agreed by the meeting.
- Ericsson think March 2003 is not realistic to finish the work.
  - o If WID update is needed it will be decided in CN4#17.

**Decision:** **Approved as basis for further work**

**Document:** **N4-021186**

**Title:** Support for AMR/AMR-WB on the Mn interface

**Source:** Siemens

**Presented:** Mr. Peter Schmitt, Siemens

**Discussion:**

- Ericsson: Document has been seen in CN3 and the comment was made in there that the MGW should not be responsible for preparing the SDP answer. This should be done by the MGCF.

**Decision:** **Noted**

### 6.4.3 Access independence

**Document:** **N4-021229**

**Title:** Discussion on access independence

**Source:** Lucent

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

- Ericsson: SA2 have asked other WGs to hold off from specific changes until SA2 have made a decision.
- Nokia: 23.003 and 23.008 are missing on the list of specifications (IMS related specifications).
- Ericsson: Based on the current architecture the document list seems to be OK.
- CN4 agreed to endorse the list of specifications, but not the proposals for change of terminology

**Decision:** **Noted**

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## 7 Release 5

### 7.1 Subscriber data handling for the IMS

#### 7.1.1 HSS – CSCF (Cx) & SLF – CSCF (Dx) interfaces

**Document:** **N4-021202**

**Title:** Reply LS on dimensioning for IMS services

**Source:** CN1

**Presented:** Mr. Michel Houde, Ericsson

**Discussion:**

**Decision:** **Noted**

**Document:** **N4-021163**

**CR:** 29.228-010

**Title:** Removal of upper bounds in Cx i/f user profile

**Source:** Ericsson

**Presented:** Mr. Michel Houde, Ericsson

**Discussion:**

- Orange France: Why does this CR also remove constraints on length as well as on the number of instances of data types?
  - o Ericsson: This is in line with the spirit of CN1's aim to set no limits.
  - o Nokia: CN4 may need in future releases to define error handling for the case where receiving entity receives too much data.
- Lucent: CN4 need to define the error handling mechanism.
  - o Vodafone support Lucent's proposal
- Siemens: Could we indicate the capabilities in advance
  - o Ericsson: It is not a practical way.
- Lucent can accept the CR as long as CN4 will get the linked CR (on error handling mechanism) before CN#18.

**Decision:** **Agreed**

**Document:** **N4-021212**

**Title:** LS Response on persistent dialogs for unregistered users

**Source:** SA2

**Presented:** Mr. Ulrich Wiehe, Siemens

**Discussion:**

- Siemens: The Cx/Dx specification could be clearer on the ability to re-assign the S-CSCF.
- Reply LS is needed for SA2. Siemens will draft the reply N4-021313.

**Decision:** **Noted**

**Document:** **N4-021313**

**Title:** LS Response on persistent dialogs for unregistered users

**Source:** Siemens

**Presented:** Mr. Ulrich Wiehe, Siemens

**Discussion:**

- Orange France: Could we add a request to SA2 to clarify when the procedure would be required?
  - o Siemens: This is under discussion in SA2.
- Orange France: We aren't sure that the S-CSCF needs to be changed.
- Orange France: The decision in the I-CSCF line has added... "described in the CN4 specifications (it is clearly stated that the REGISTRATION type shall be used for registration)."
  - o Orange France: A reason for change is that we are concerned that SA2 might take "implementation specific" as an invitation to propose a solution based on the I-CSCF which is not possible.
- Siemens: The proposed text is contradictory with the earlier text.

**Decision:** **Revised to N4-021320**

**Document:** **N4-021320**

**Title:** LS Response on persistent dialogs for unregistered users

**Source:** Siemens

**Presented:** Mr. Ulrich Wiehe, Siemens

**Discussion:**

**Decision:** **Approved**

**Document:** **N4-021218**

**Title:** Response LS on Subscribed Media Parameter

**Source:** SA2

**Presented:** Mr. Francois Dronne, Orange France

**Discussion:**

- Chairman: Until we have clear guidance from SA2 we cannot make any progress on changes to our specifications.
  - o Meeting agreed the chairman's opinion.
- Orange France will draft the new set of CRs when CN4 have the conclusion from SA2.

**Decision:** **Noted**

**Document:** N4-021158  
**CR:** 29.229-008  
**Title:** Addition of User-Name AVP to SAA  
**Source:** Ericsson  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021261  
**CR:** 29.228-008r1  
**Title:** Rejection of registration of a Temporary Public Identity without active implicit registration  
**Source:** Ericsson, Nokia  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

- Siemens: The order of processing steps needs clarification.

**Decision:** Revised to N4-021281

**Document:** N4-021281  
**CR:** 29.228-008r1  
**Title:** Rejection of registration of a Temporary Public Identity without active implicit registration  
**Source:** Ericsson, Nokia  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021160  
**CR:** 23.008-058  
**Title:** Addition of Barring Indication of multimedia public identities  
**Source:** Ericsson  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021183  
**CR:** 29.228-011  
**Title:** S-CSCF Assignment  
**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021231  
**CR:** 29.228-012  
**Title:** NAS-Session-Key AVPs in MAA command  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021232  
**CR:** 29.229-007  
**Title:** Editorial correction of SIP-Auth-Data-Item AVP definition  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- Category was changed to F – correction.

**Decision:** Agreed

### 7.1.2 HSS – SIP AS (Sh) interface

**Document:** N4-021201  
**Title:** LS response on Sh interface signalling  
**Source:** CN1  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

- Ericsson: This LS has been seen in CN WG meeting in Helsinki.
- During discussion with CN1 delegates all the concerns have been resolved.

**Decision:** Noted

**Document:** N4-021164  
**CR:** 29.328-007  
**Title:** Removal of upper bounds in Sh i/f user profile  
**Source:** Ericsson  
**Presented:** Mr. Michel Houde, Ericsson  
**Discussion:**

- Lucent can accept the CR as long as CN4 will get the linked CR (on error handling mechanism) before CN#18.

**Decision:** Agreed

**Document:** N4-021184  
**CR:** 29.328-008  
**Title:** Clarification on update of repository data  
**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

- Ericsson support Siemens's CR.
- Lucent: The whole set of repository data should be updated once.
  - o Siemens: The atomic unit have to be the set of data from one AS, which is identified by the service indication.

**Decision:** Revised to N4-021282

**Document:** N4-021282  
**CR:** 29.328-008r1  
**Title:** Clarification on update of repository data  
**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021199  
**Title:** Change notification granularity issue with Sh interface Transparent data  
**Source:** dynamicsoft  
**Presented:** Mr. Andrew Allen, dynamicsoft  
**Discussion:**

- Ericsson: The whole principle of this proposal is to make the AS specific data non-transparent.
  - o Dynamicsoft: The transparency of the entire block isn't untouchable.
- Ericsson & Siemens & Nokia: CN4 should consider carefully the impact on the HSS. A single AS can always use several service indications to partition the data.
- Lucent: Does the notification of data change include the service identification?
  - o Nokia: Yes, it does.
- Dynamicsoft will have offline discussion with the vendors about the changes in proposal.
- CN4 agreed that the uniqueness of a piece of transparent data should be defined by the triplet of subscriber identity, server identity and service indication.

- The implications of this for data sharing between servers will need further study.

**Decision:** Noted

## 7.2 CAMEL phase 4

**Document:** N4-021252  
**CR:** 29.002-495  
**Title:** Correction to RCH – adding O-CSI trigger criteria  
**Source:** Ericsson, Alcatel  
**Presented:** Mr. Rogier Noldus, Ericsson  
**Discussion:**

- Siemens: Can we be sure that the additional information will fit into the Resume Call Handling?
  - Ericsson: it will.

**Decision:** Agreed

**Document:** N4-021120  
**CR:** 29.002-474r1  
**Title:** Correction of handling of MT-SMS in the SGSN  
**Source:** Vodafone  
**Presented:** Mr. Ian Park, Vodafone  
**Discussion:**

- Fujitsu: The CM Service request isn't used in the PS domain.
  - Source will delete it from SDL file.
- Siemens: The paging or search may fail because MS is doing an LAU or inter SGSN RAU => text at the top of page 4 have to be updated.
  - Accepted by meeting
- Test on sheet 2 of the macro: "MT supports SMS" should be "MS supports SMS".
- In sheet 1 of the macro, "MT SM supported by SGSN" should be "MT SMS supported by SGSN".

**Decision:** Revised to N4-021294

**Document:** N4-021294  
**CR:** 29.002-474r2  
**Title:** Correction of handling of MT-SMS in the SGSN  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021144  
**CR:** 23.205-035  
**Title:** CAMEL4 Call Party Handling interworking with Bearer independent CS core  
**Source:** Nokia  
**Presented:** Mr. Keijo Palviainen, Nokia  
**Discussion:**

- Ericsson: Why is the material in this CR introduced? It replicates what we already have for multiparty handling.
  - Nokia: It shows how CPH affects the configuration.
- Ericsson: Why is there the restriction to having all the call segments in the same MGW?
  - Nokia: It's easier to manage.
- Ericsson: 23.205 already covers the case where a party is put on hold
- CN4 chairman proposed telephone conference involving BICSCN experts and CAMEL experts.
  - Nokia, Ericsson, Siemens and Vodafone will take part to a telephone conference.

**Decision:** Postponed to CN4#17

**Document:** N4-021145  
**CR:** 29.232-049  
**Title:** Extending the 3G Expanded Call Progress Tones Generator Package with a new signal to allow a CAMEL4 flexible sequence of tones  
**Source:** Nokia  
**Presented:** Mr. Keijo Palviainen, Nokia  
**Discussion:**

**Decision:** Withdrawn

**Document:** N4-021246  
**CR:** 29.232-052  
**Title:** CAMEL4 flexible tone package  
**Source:** Ericsson  
**Presented:** Mr. Alf Heidermark, Ericsson  
**Discussion:**

- Ericsson: That is a duplicate in substance of the Nokia CR except that it includes a new package rather than updating an existing package.
- Nokia proposed to update H.248 reference in the paragraph.
  - o Meeting agreed to delete the last sentence.

**Decision:** Revised to N4-021295

**Document:** N4-021295  
**CR:** 29.232-052r1  
**Title:** CAMEL4 flexible tone package  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

**Decision:** Approved without presentation

**Document:** N4-021194  
**CR:** 29.002-490  
**Title:** Clarification of the use of Requested CAMEL Subscription Info parameters  
**Source:** Nokia  
**Presented:** Mr. Keijo Palviainen, Nokia  
**Discussion:**

- Siemens: Is it functionally possible to ask for modification of subscription data listed in the requestedCamel-SubscriptionInfo and information listed in the additionalRequestCAMEL-SubscriptionInfo in one request?
  - o Nokia: It isn't.
- Siemens: What happens if the receiver is a Rel-4 node and therefore discards the additionalRequestCAMEL-SubscriptionInfo?
  - o Nokia: The sender should know that Camel phase 4 is supported.

**Decision:** Agreed

**Document:** N4-021264  
**CR:** 29.002-496  
**Title:** Additional MM code for MG-CSI  
**Source:** Siemens  
**Presented:** Mr. Keijo Palviainen, CN2 chairman  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021279  
**CR:** 29.002-497  
**Title:** Additional handling of partial implementations of CAMEL phase 4  
**Source:** Alcatel  
**Presented:** Mr. Keijo Palviainen, CN2 chairman  
**Discussion:**



- CN4 chairman: The requirement to discard irrelevant bits should be defined in stage 2.
  - o Agreed by Siemens
    - Category of the CR should D (editorial)

**Decision:** Revised to N2-021296

**Document:** N4-021296  
**CR:** 29.002-497r1  
**Title:** Additional handling of partial implementations of CAMEL phase 4  
**Source:** Alcatel  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

## 7.3 GPRS

**Document:** N4-021217  
**Title:** Reply LS on Support of IPv6 on lu  
**Source:** SA2  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

**Decision:** Noted

**Document:** N4-021140  
**CR:** 29.060-333r1  
**Title:** Support of mandatory IPv6 on the lu interface  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021125  
**CR:** 29.060-350  
**Title:** Clarification on the inclusion of TEID II in SGSN Context Ack  
**Source:** Nortel Networks  
**Presented:** Dr. Daniel Warren, Nortel  
**Discussion:**

- There seems to be some differences between Ericsson and Nortel of understanding the word "active".
  - o Nortel: A PDP context can be active without having tunnels established.
    - Ericsson disagrees.
- Nortel: The text has to be changed to " that has a tunnel established between the old SGSN and the GGSN."
  - o Lucent: How does the new SGSN know?
    - Nortel: The PDP context information from old SGSN to new SGSN has uplink TEID data I IE included.
    - Lucent & Ericsson believe there is no need for this CR.
- Proposed change: "(i.e. those which have a tunnel established between the old SGSN and the GGSN)".
  - o Accepted by meeting
- Category was changed to "D"; editorial correction

**Decision:** Revised to N4-021265

**Document:** N4-021265  
**CR:** 29.060-350r1  
**Title:** Clarification on the inclusion of TEID II in SGSN Context Ack  
**Source:** Nortel Networks  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021135

**CR:** 29.060-354

**Title:** Removal of limitation in the Create PDP Context Request message

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

- Lucent: The removal of the check for equality of PDP address is out of scope of the title of the CR.
  - o Agreed by the meeting.
- Lucent: Why have the presence requirements for PCO IE changed from conditional to optional?
- Nokia support Ericsson's proposal to change requirements for PCO IE to optional to avoid problems during implementation.
- Lucent: In 24.008 has made PCO IE optional.
  - o Lucent: We can't accept the last change in CR, but we can accept other changes if Ericsson provide the CRs against R99 & Rel-4.
- Lucent: We should change "the SGSN includes" to "the SGSN shall include".
- NTT DoCoMo: Do we need to roll back R99?
  - o Several views we shouldn't.
  - o Meeting agreed that changes will be made only for Rel-5.
- Meeting agreed to accept the changes except a change in chapter 7.3.2.
  - o Lucent can accept only the first change. Not the changes from conditional to optional in table five.
  - o Ericsson's opinion is quite clear. They can accept the compromise, but they reserve the right to address this issue later, because they believe it's a clear mistake in table 5.

**Decision:** Revised to N4-021262

**Document:** N4-021262

**CR:** 29.060-354r1

**Title:** Removal of limitation in the Create PDP Context Request message

**Source:** Ericsson

**Presented:**

**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021136

**CR:** 29.060-348r3

**Title:** Introduction of PCO IE in session management messages used in the MS Initiated PDP Context Deactivation procedure (direction MS to NW)

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

- Lucent: How will a Rel-5 GGSN which wants to initiate a Delete PDP Context know that the SGSN is Rel-5 compliant?
  - o Ericsson: This CR deals only with MS initiated context deactivation.
- The reference "Deactivation PDP context" should be "Deactivate PDP context".

**Decision:** Revised to N4-021266

**Document:** N4-021266

**CR:** 29.060-348r4

**Title:** Introduction of PCO IE in session management messages used in the MS Initiated PDP Context Deactivation procedure (direction MS to NW)

**Source:** Ericsson

**Presented:**

**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021137**

**CR:** 29.060-355

**Title:** Introduction of PCO IE in session management messages used in the Network-Initiated PDP Context Activation procedure (direction NW to MS)

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

- Lucent: How does the GGSN know whether the SGSN will be able to process the new IE, because there is no new protocol version?
  - o Ericsson: The SGSN will silently discard the PCO IE. The shortcoming is accepted in CN1.
  - o Lucent: We can't understand this kind of behaviour.
  - o Ericsson: The application layer can still do the best it can with the information when it's available.
- Lucent: How do we use "silent discard on non-comprehension" IEs to add values without needing to raise protocol version.

**Decision:** **Agreed**

**Document:** **N4-021138**

**CR:** 29.060-356

**Title:** Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Modification procedure (direction NW to MS)

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

- Alcatel: The orders of IE have to be numeric order.

**Decision:** **Revised to N4-021308**

**Document:** **N4-021308**

**CR:** 29.060-356r1

**Title:** Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Modification procedure (direction NW to MS)

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021139**

**CR:** 29.060-357

**Title:** Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Deactivation procedure (direction NW to MS)

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

- "Deactivation" has to be "Deactivate".
- On page 4, third line: "of" has to be "if"

**Decision:** **Revised to N4-021309**

**Document:** **N4-021309**

**CR:** 29.060-357r1

**Title:** Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Deactivation procedure (direction NW to MS)

**Source:** Ericsson

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

**Decision:** **Agreed**

**Document:** N4-021238  
**CR:** 29.060-362r1  
**Title:** Clarification of the placement of the fields in the PDP Context IE  
**Source:** Ericsson  
**Presented:** Ms. Anna Jernryd, Ericsson  
**Discussion:**

- NEC: Clarification is needed of the ordering of the bits in a 12-bit TI, which is spread over octets p+1 & p+2.

**Decision:** Revised to N4-021269

**Document:** N4-021269  
**CR:** 29.060-362r2  
**Title:** Clarification of the placement of the fields in the PDP Context IE  
**Source:** Ericsson  
**Presented:** Ms. Anna Jernryd, Ericsson  
**Discussion:**

- Fujitsu: Clarification that the receiving entity ignores the first 4 bits of the TI.

**Decision:** Postponed to CN4#17

## 7.4 LCS in the PS domain

**Document:** N4-021234  
**CR:** 24.080-026r1  
**Title:** Exception handling for positioning methods MS Assisted E-OTD and MS Assisted OTDOA  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Vodafone: There might be a backwards compatibility problem if we make the changes only for Rel-5.
  - o Nokia: Pre-Rel-5 implementations shouldn't have used these methods.
- Ericsson: If we remove these methods from Rel-5 what would be effect for Rel-4 MS?
- Lucent support Nokia's CR because they also believe these values have been never used.
- Ericsson believe there are backwards compatibility problems if CR is accepted. Ericsson can't accept this CR.
  - o Nokia: We would like to hear what are the backward compatibility issues if these values have never been used before.
  - o Other companies can't define any backwards compatibility problems except Ericsson, but Ericsson couldn't indicate what are the problems.
- Nokia is ready to accept changes Ericsson has proposed.
- Ericsson proposed that changes are maybe possible to do in RANAP.
  - o Nokia can't accept that kind of solution.

**Decision:** Revised to N4-021310

**Document:** N4-021310  
**CR:** 24.080-026r2  
**Title:** Exception handling for positioning methods MS Assisted E-OTD and MS Assisted OTDOA  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

**Decision:** Agreed

## 7.5 Bearer Independent Architecture

**Document:** N4-021209  
**Title:** Response to Liaison Statement "on Request for clarification related to raised questions regarding "Exchange of addresses on Iu-CS using IP Transport Option in Release 5"

**Source:** RAN3  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

- Siemens: The RAN3 CRs were agreed on the condition that the corresponding CRs were agreed in CN4.
- Nokia: CN4 have to take the RAN3 CRs as a given. There is no need to modify the RAN3 CRs.

**Decision:** **Noted**

**Document:** **N4-021141**  
**CR:** 23.205-031r1  
**Title:** lu-cs over IP related corrections on 23.205  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

- Lucent: Editorial improvements are needed in proposed text.
- Siemens & Ericsson: don't like the use of the Modify Bearer. It could trigger TrFO break and we should not use Modify Bearer to indicate the changed address, because it's not backward compatible.
  - o Ericsson: The new procedure is needed to define the new addresses. The change of IP address is not related to modification of the Bearer Characteristics. (Alf also stated that these changes would be bearer dependent) .
- Ericsson: 23.205 should be decoupled from Ipv4/Ipv6/AAL2.
- Lucent: Formally, we should postpone the CR and wait a counter proposal from Ericsson, which will be provided in CN4#17.

**Decision:** **Postponed to CN4#17**

**Document:** **N4-021142**  
**CR:** 29.232-042r1  
**Title:** lu-cs over IP related corrections on 29.232  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

**Decision:** **Postponed to CN4#17**

**Document:** **N4-021165**  
**CR:** 23.205-036  
**Title:** Clarification of the termination of the lu interface components in the bearer independent .CS architecture  
**Source:** Lucent  
**Presented:** Mr. Nigel Berry, Lucent  
**Discussion:**

- Editorial improvements needed on new text in 5.1.1.3.
- Add reference to the Nb interface protocol.

**Decision:** **Revised to N4-021268**

**Document:** **N4-021268**  
**CR:** 23.205-036r1  
**Title:** Clarification of the termination of the lu interface components in the bearer independent .CS architecture  
**Source:** Lucent  
**Presented:** Mr. Nigel Berry, Lucent  
**Discussion:**

**Decision:** **Agreed**

## 7.6 SMS

**Document:** **N4-021119**  
**CR:** 29.002-442r2

**Title:** Description of MT SM delivery via two serving nodes  
**Source:** Vodafone  
**Presented:** Mr. Ian Park, Vodafone  
**Discussion:**

- Orange France: There is inconsistent use of "gateway MSC" and "SMS-GMSC".
- An extra sentence will be added at the beginning of 23.3.4: "CAMEL-specific handling is invoked only if the SMS-GMSC is integrated with the VMSC".

**Decision:** **Revised to N4-021299**

**Document:** **N4-021299**  
**CR:** 29.002-442r3  
**Title:** Description of MT SM delivery via two serving nodes  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021123**  
**Title:** Discussion Paper on introducing CB for SMS in PS domain  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

- Lucent: Have SA1 sent a requirement to CN1, and if they have, what was the conclusion?
  - o NTT DoCoMo: LS was sent and discussion will be during this week in CN1.
- Ericsson, Lucent & Nortel oppose changes before Rel-5.
  - o Position agreed by CN4

**Decision:** **Noted**

**Document:** **N4-021311**  
**Title:** Proposed LS to SA1 on Call Barring for SMS in PS domain  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

**Decision:** **Approved**

**Document:** **N4-021124**  
**CR:** 29.002-475  
**Title:** ODB and CB for SMS  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

- Lucent & Ericsson: There will be an incoming LS from SA1 and it's maybe too early to make a decision.
- CR will be approved, but if the LS from SA1 indicates a change in the stage 1, Lucent has possibility to object to the CR in CN#18.

**Decision:** **Agreed**

## 7.7 Network sharing

## 7.8 Any Other Business

### 7.8.1 ASN.1 Updates

**Document:** **N4-021122**

**CR:** 30.002-006  
**Title:** Alignment with use of ASN.1(1997) standard  
**Source:** Vodafone  
**Presented:** Mr. Ian Park, Vodafone  
**Discussion:**

**Decision:** **Approved**

### 7.8.2 GERAN Iu mode

**Document:** **N4-021143**  
**CR:** 23.003-055  
**Title:** Iur-g Introduction  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

- Lucent: The proposed text needs editorial improvement.
  - o Accepted by the meeting.
- This CR needs to be implemented **after** CR 23.003-056.

**Decision:** **Revised to N4-021271**

**Document:** **N4-021271**  
**CR:** 23.003-055r1  
**Title:** Iur-g Introduction  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

**Decision:** **Agreed**

### 7.8.3 MAP protocol

**Document:** **N4-021153**  
**CR:** 29.002-486  
**Title:** Correction of IMEI check for SGSN  
**Source:** Alcatel  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

**Decision:** **Approved**

### 7.8.4 Handover

**Document:** **N4-021267**  
**CR:** 23.009-084r1  
**Title:** Inter-MSC relocation and intersystem handover for multiple codecs  
**Source:** Siemens  
**Presented:** Mr. Robert Zaus, Siemens  
**Discussion:**

- Ericsson may raise objection before the meeting the end of meeting week. Experts have to check the CR back at home.
- Ericsson Can't accept the CR as it stands!

**Decision:** **Revised to N4-021315**

**Document:** **N4-021315**  
**CR:** 23.009-084r2  
**Title:** Inter-MSC relocation and intersystem handover for multiple codecs  
**Source:** Siemens  
**Presented:** Mr. Robert Zaus, Siemens  
**Discussion:**

- Ericsson: The knowledge of whether to use RAB configuration is based on configuration information. We should avoid the use of the word "database".
  - o Siemens: The phrase "Database configuration" is taken from 29.002.

- Meeting agreed: "Database configuration" has to be changed to "configuration information" systematically.
- Lucent: We have to check this back at home. We should postpone it to CN4#17.

**Decision:** **Postponed to CN4#17**

**Document:** **N4-021270**  
**CR:** 29.002-489r2  
**Title:** Available codecs list and selected codec indication  
**Source:** Siemens, Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Ericsson: The 23.009 CR indicates that the supported codec list is sent, whereas 29.002 CR shows that the supported codec list may be omitted. If the supported codec list is omitted then the set of supported codecs is the same as the selected codecs, but the 23.009 CR shows that MSC-B deduces other things from the presence or absence of the supported codes list, including whether MSC-A support the use of the supported codecs list.

**Decision:** **Revised to N4-021298**

**Document:** **N4-021298**  
**CR:** 29.002-489r3  
**Title:** Available codecs list and selected codec indication  
**Source:** Siemens, Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Siemens: The RAB configuration indicator needs to be included for the MAP PROCESS ACCESS SIGNALLING service definition.
  - o Nokia: We have to check it.

**Decision:** **Revised to N4-021316**

**Document:** **N4-021316**  
**CR:** 29.002-489r4  
**Title:** Available codecs list and selected codec indication  
**Source:** Siemens, Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Meeting agreed: "Database configuration" has to be changed to "configuration information" systematically.

**Decision:** **Postponed to CN4#17**

**Document:** **N4-021272**  
**Title:** Reply LS on CS data services for GERAN Iu-mode  
**Source:** CN3  
**Presented:** Dr. Thomas Belling, Siemens  
**Discussion:**

- CN3 would like to ask GERAN2, CN1 and CN4 group to investigate possible impacts of the hand-over cases listed by SA2 on their specifications and inform SA2 about the results.

**Decision:** **Postponed to CN4#17**

### 7.8.5 Optimal Routeing

**Document:** **N4-021191**  
**CR:** 23.079-020  
**Title:** Optimal routeing and CAMEL discrepancy  
**Source:** HP  
**Presented:** Ms. Sharon Lim  
**Discussion:**



- The document will be revised according to notes on N4-021250.

**Decision:** Revised to N4-021297

**Document:** N4-021297  
**CR:** 23.079-020r1  
**Title:** Optimal routeing and CAMEL discrepancy  
**Source:** HP  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

### 7.8.6 Numbering & Addressing

**Document:** N4-021237  
**CR:** 23.003-056r1  
**Title:** Editorial clean-up  
**Source:** Vodafone  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

- Lucent: The drawings in section 10 should be cleaned up.
  - o Vodafone will do this as a separate CR to be submitted to CN4#17.
    - This was accepted by the meeting.
- Nokia: There are duplicate references to RFC 1035 in [19] & [28]
- MCC: the base version should be 5.4.0.

**Decision:** Revised to N4-021283

**Document:** N4-021283  
**CR:** 23.003-056r2  
**Title:** Editorial clean-up  
**Source:** Vodafone  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021233  
**CR:** 23.003-057  
**Title:** Editorial correction of the private user identity's form  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- The category has to be F, correction.
- This CR has to be implemented **before** CR 23.003-056

**Decision:** Agreed

### 7.8.7 SCUDIF

**Document:** N4-021230  
**Title:** Inter-MSC SRNS Relocation For SCUDIF Calls  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Nokia: The available codecs list in the Prepare Handover Response is the best tool to indicate support of the Service Change feature.
- Ericsson: Stage 2 CR will be presented in Bangkok.
  - o Nokia: In that case stage 3 CRs should be postponed to CN4#17.
- CN4 agreed the principle of the document.

**Decision:** Principle agreed

## 7.8.8 AMR-WB

**Document:** N4-021206  
**Title:** Liaison Statement on Interworking of AMR-WB with G.722.2  
**Source:** CN (Originally SA4)  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Changes are already included in Annex of 23.153 AMR-WB.

**Decision:** Noted

**Document:** N4-021219  
**Title:** LS on Allowed AMR-WB Configurations  
**Source:** SA4  
**Presented:** Dr. Daniel Warren, Nortel Networks  
**Discussion:**

**Decision:** Noted

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# 8

## 8.1 Location services

**Document:** N4-021211  
**Title:** Handling of Multiple Deferred Mobile Terminating Location Request  
**Source:** SA2  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

- SA2 kindly asks CN4 to clarify whether it is possible to identify the correspondence of MAP\_PROVIDE\_SUBSCRIBER\_LOCATION message to MAP\_SUBSCRIBER\_LOCATION\_REPORT message by the current stage 3 specification.
- NTT DoCoMo: We have prepared a CR to solve the problems SA2 has described.
  - o Siemens: SA2 don't ask us to solve a problem, they ask us to confirm that there is a problem.
    - Nokia agree with Siemens opinion.
    - o Siemens: Before can solve a problem we need a clear description in stage 2.
  - NEC: We would like to know is there any impacts in stage 3 or not.
  - Nokia: Because the current stage 2 specification does not define how to identify the correspondence. That means that we really can solve a problem in stage 3.
  - The only we can do it is to respond to the SA2 LS.
    - o NTT DoCoMo will draft the reply LS in **N4-021300**
    - o Things which should be included in the reply LS:
      - Siemens: This correspondence is not possible now.
      - Siemens: We need clear guidance from SA2 in stage 2 spec how the problem should be solved and in which release.
        - NTT DoCoMo & Lucent: CN4 should make a proposal to SA2 how to solve a problem in stage 2.
      - o A question to SA2: their view on rejection because it is difficult to implement (see notes in N4-021156).

**Decision:** Noted

**Document:** N4-021300  
**Title:** LS on Handling of Multiple Deferred Mobile Terminating Location Request  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

- Clarification is needed on why it's difficult to reject identical repeated requests.

**Decision:** Revised to N4-021317

**Document:** N4-021317

**Title:** LS on Handling of Multiple Deferred Mobile Terminating Location Request

**Source:** NTT DoCoMo

**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo

**Discussion:**

**Decision:** Approved

**Document:** N4-021156

**CR:** 29.002-487 (Rel-4)

**Title:** Receiving the deferred MT-LR for the UE during waiting for the event of the same UE

**Source:** NTT DoCoMo

**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo

**Discussion:**

- The CR was previewed after N4-021211, but the CR doesn't necessarily solve the problem which is described in the SA2 LS.
- Siemens: What is regarded as an identical request?
  - o NTT DoCoMo: Identical Request Message content is same.
- Nokia: In LS to SA2 we have to ask from SA2 who will assign the reference number.
- Siemens: Stage 2 mentions the option to reject identical requests and this is missing.
  - o A question to SA2 on their view on rejection because it is difficult to implement.
- CR will be postponed to CN4#17 because we have to wait reply from SA2.

**Decision:** Postponed to CN4#17

**Document:** N4-021157

**CR:** 29.002-488 (Rel-5)

**Title:** Receiving the deferred MT-LR for the UE during waiting for the event of the same UE

**Source:** NTT DoCoMo

**Presented:**

**Discussion:**

- This is the Rel-5 mirror of N4-021156.

**Decision:** Postponed to CN4#17

**Document:** N4-021126

**Title:** Inclusion of SS-Data List in ISD to SGSN

**Source:** Nortel Networks

**Presented:** Dr. Daniel Warren, Nortel Networks

**Discussion:**

- Siemens: If we don't include the SS Code List the SGSN cannot indicate its capabilities to the HLR.
  - o Nortel will check the changes back at home. CRs will be withdrawn.

**Decision:** Noted

**Document:** N4-021127

**CR:** 29.002-483 (Rel-4)

**Title:** Correction to the handling of LCS-related SS codes

**Source:** Nortel Networks

**Presented:**

**Discussion:**

- Document was withdrawn after N4-021126 discussion.

**Decision:** Withdrawn

**Document:** N4-021128

**CR:** 29.002-483 (Rel-5)

**Title:** Correction to the handling of LCS-related SS codes

**Source:** Nortel Networks

**Presented:**  
**Discussion:**

- Document was withdrawn after N4-021126 discussion.

**Decision:** **Withdrawn**

**Document:** **N4-021197**  
**CR:** 29.010-076 (Rel-4)  
**Title:** Correction on the use of "User Failure" error for LCS-MOLR operation  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Nokia: If CR is not approved the implementing is impossible.

**Decision:** **Approved**

**Document:** **N4-021198**  
**CR:** 29.010-076 (Rel-5)  
**Title:** Correction on the use of "User Failure" error for LCS-MOLR operation  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- This is a mirror CR of N4-021197

**Decision:** **Approved**

**Document:** **N4-021235**  
**CR:** 29.010-072r1 (Rel-4)  
**Title:** LCS: adding missing parameter mapping to assistance data request procedure after inter-  
MSC SRNS relocation  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Vodafone: Is this an essential correction?
  - o Nokia: In 21.900 it says about category F: "to add a part of a functionality agreed for the Release found to be missing in the specification".
    - Supported by Siemens.
    - Also Vodafone agree this is an essential correction.

**Decision:** **Approved**

**Document:** **N4-021236**  
**CR:** 29.010-073r1 (Rel-5)  
**Title:** LCS: adding missing parameter mapping to assistance data request procedure after inter-  
MSC SRNS relocation  
**Source:** Nokia  
**Presented:**  
**Discussion:**

- This CR is a mirror of N4-021235

**Decision:** **Approved**

## 8.2 Bearer independent architecture

### 8.3 GPRS

**Document:** **N4-021149**  
**CR:** 29.060-358 (R99)  
**Title:** PDCP sequence numbers in SGSN Context Response  
**Source:** Alcatel  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

- Nokia: In table 27 "Presence requirements" should be conditional instead of optional.
  - o Alcatel: We haven't been sure if it causes backward compatibility problems, but we can also accept if it's "conditional".
- CN4 decided that RAB context has to be "conditional".
- NEC: The new IE is needed in Forward Relocation Request as well (in section 7.5.6).
  - o Agreed by meeting.

**Decision:** Revised to N4-021301

**Document:** N4-021301  
**CR:** 29.060-358r1 (R99)  
**Title:** PDCP sequence numbers in SGSN Context Response  
**Source:** Alcatel  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021302  
**CR:** 29.060-359r1 (Rel-4)  
**Title:** PDCP sequence numbers in SGSN Context Response  
**Source:** Alcatel  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021303  
**CR:** 29.060-360r1 (Rel-5)  
**Title:** PDCP sequence numbers in SGSN Context Response  
**Source:** Alcatel  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021152  
**CR:** 29.060-361 (R99)  
**Title:** Correction of incomplete implementation of CR 29.060-203r1  
**Source:** Alcatel  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

**Decision:** Agreed

## 8.4 Camel phase 3

**Document:** N4-021247  
**CR:** 23.078-464  
**Title:** Correction to Dialled Services criteria  
**Source:** Ericsson  
**Presented:** Mr. Keijo Palviainen, CN2 chairman  
**Discussion:**

- Is the MAP signalling expected to be segmented?
  - o Other mechanism can give a guarantee of in sequence delivery, but SCCP in sequence delivery doesn't give 100% guarantee.
- CN4 chairman: Would be a good idea to add health warning in 23.078 in R99, Rel-4 & Rel-5?
  - o Idea supported by CN2/CN4 joint meeting.

**Decision:** Noted

**Document:** N4-021248

**CR:** 29.002-493  
**Title:** Correction to Dialled Services criteria  
**Source:** Ericsson  
**Presented:** Mr. Rogier Noldus, Ericsson  
**Discussion:**

- Vodafone: Is this a right place to specify these changes? We would prefer to see these in stage 2 spec.
  - o CN2 chairman: We can leave these in stage 2.

**Decision:** **Rejected**

**Document:** **N4-021249**  
**CR:** 29.002-494  
**Title:** Correction to segmentation of O-CSI and T-CSI  
**Source:** Ericsson  
**Presented:** Mr. Rogier Noldus, Ericsson  
**Discussion:**

- CN4 Chairman: CR needs to be revised. The text has to be changed from "if O-CSI is segmented" to "If O-CSI shall not be segmented" and from "if T-CSI is segmented" to "If T-CSI shall not be segmented".

**Decision:** **Revised to N4-021288**

**Document:** **N4-021288**  
**CR:** 29.002-494r1 (R99)  
**Title:** Correction to segmentation of O-CSI and T-CSI  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021289**  
**CR:** 29.002-494r1 (Rel-4)  
**Title:** Correction to segmentation of O-CSI and T-CSI  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This CR is N4-021288 mirror.

**Decision:** **Agreed**

**Document:** **N4-021290**  
**CR:** 29.002-494r1 (Rel-5)  
**Title:** Correction to segmentation of O-CSI and T-CSI  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This CR is N4-021288 mirror.

**Decision:** **Agreed**

**Document:** **N4-021251**  
**CR:** 23.079-022  
**Title:** Correction to figure 7a (handling of RCH in GMSC)  
**Source:** Ericsson  
**Presented:** Mr. Rogier Noldus, Ericsson  
**Discussion:**

- The option triangle should indicate a check of CAMEL phase.

**Decision:** **Revised to N4-021291**

**Document:** N4-021291  
**CR:** 23.079-022r1 (R99)  
**Title:** Correction to figure 7a (handling of RCH in GMSC)  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- WI should to be Camel3.

**Decision:** **Agreed without presentation**

**Document:** N4-021292  
**CR:** 23.079-023 (Rel-4)  
**Title:** Correction to figure 7a (handling of RCH in GMSC)  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This CR is N4-021291 mirror.

**Decision:** **Agreed without presentation**

**Document:** N4-021293  
**CR:** 23.079-024 (Rel-5)  
**Title:** Correction to figure 7a (handling of RCH in GMSC)  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This CR is N4-021291 mirror.

**Decision:** **Agreed without presentation**

**Document:** N4-021253  
**Title:** Discussion Document, "Interaction between ORLCF and SCP-induced late call forwarding"  
**Source:** Ericsson  
**Presented:** Mr. Rogier Noldus, Ericsson  
**Discussion:**

- CN2/CN4 joint meeting decided that correction is needed only in Rel-5.
- Meeting have to consider how to carry the semantic of the SCP induced forwarding in the RCH.
- CN4 chairman: Wouldn't it be better to abandon hope of OR of SCF induced redirection at the VMSC?
  - o The Joint meeting agreed with CN4 chairman's opinion.

**Decision:** **Noted**

## 8.5 Handover

## 8.6 IP signalling transport

**Document:** N4-021239  
**Title:** Handling of optional parameters of M3UA  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola  
**Discussion:**

- Ericsson: All of the cases described in document are abnormal. The parameters shouldn't be added. There are no problems with allowing a node to make use of the parameters, but there could be problems with accepting the rest of the message, because it could be evidence of serious misbehaviour by the sending entity.
- Vodafone: Is Nokia's approach in line with the RFC?
  - o Ericsson: RFC is silent, that's why we need to decide what we want to do.
- Ericsson: It's only for the parameters related to routeing that Ericsson have proposed the conservative approach.
- Nortel Network support Nokia's contribution.

- Lucent: The parameters are core for routing messages, so we shouldn't silently discard.
- Nokia: We shouldn't have optional parameters which are comprehension required.
- CN4 chairman: It's better to postpone the discussion to CN4#17 so that delegates have time to consult at home.
- Ericsson can accept the proposal of Nokia. Documents 1154 & 1155 will be revised.

**Decision:** **Principle Agreed**

**Document:** **N4-021154**  
**CR:** 29.202-006 (Rel-4)  
**Title:** M3UA for 3GPP networks  
**Source:** Ericsson  
**Presented:** Mr. Alf Heidermark, Ericsson  
**Discussion:**

- CR will be revised as proposed by Nokia (N4-021239).

**Decision:** **Revised to N4-021304**

**Document:** **N4-021304**  
**CR:** 29.202-006r1 (Rel-4)  
**Title:** M3UA for 3GPP networks  
**Source:** Ericsson  
**Presented:** Mr. Alf Heidermark, Ericsson  
**Discussion:**

- Redundant asterisks to be removed from diagram on page 10.
- Reference on page 3 to new annex should show "B", not "A".

**Decision:** **Revised to N4-021318**

**Document:** **N4-021318**  
**CR:** 29.202-006r2 (Rel-4)  
**Title:** M3UA for 3GPP networks  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021305**  
**CR:** 29.202-007r1 (Rel-5)  
**Title:** M3UA for 3GPP networks  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This CR is a mirror of N4-021304.

**Decision:** **Revised to N4-021319**

**Document:** **N4-021319**  
**CR:** 29.202-007r1 (Rel-5)  
**Title:** M3UA for 3GPP networks  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This CR is a Rel-4 mirror of N4-021318.

**Decision:** **Agreed**

## 8.7 TrFO/Codec control

**Document:** **N4-021208**  
**Title:** Clarification on IP "Modify Bearer" Procedure



**Source:** RAN3  
**Presented:** Dr. Daniel Warren, Nortel Networks  
**Discussion:**  
- Reply Liaison to RAN3 is in N4-021306.

**Decision:** **Noted**

**Document:** **N4-021306**  
**Title:** Response LS on Clarification on IP "Modify Bearer" Procedure  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

**Decision:** **Approved**

**Document:** **N4-021171**  
**Title:** Codec Modification  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Reply Liaison to RAN3 N4-021307.
- The SCUDIF issues are intended to be resolved in CN3, who own the SCDIF stage 2.
- Ericsson: Mc interface signalling and MGW handling is in CN4's area.

**Decision:** **Noted**

**Document:** **N4-021307**  
**Title:** Response LS on Clarification on Handling of unsuccessful RAB assignment modify  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

- Ericsson: The case 4 may exist. Cases 2,3,4 are indicated to the MSC by a RAB release or other specific RAB message from the RNC.
  - o Siemens: RAN3 should tell us what really happens.
  - o Ericsson: CN4 should indicate what we have assumed in our specifications.

**Decision:** **Revised to N4-021322**

**Document:** **N4-021322**  
**Title:** Response LS on Clarification on IP "Modify Bearer" Procedure  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

**Decision:** **Approved**

**Document:** **N4-021284**  
**CR:** 23.153-038r2 (Rel-4)  
**Title:** Codec Modification  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021285**  
**CR:** 23.153-039r2 (Rel-5)  
**Title:** Codec Modification  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- This is a mirror of N4-021284.

**Decision:**      **Agreed**

**Document:**    **N4-021286**  
**CR:**            29.232-045r2 (Rel-4)  
**Title:**          Codec Modification  
**Source:**        Ericsson  
**Presented:**  
**Discussion:**

- "initdirerection" has to be corrected in 3 places during implementation procedure.

**Decision:**      **Agreed**

**Document:**    **N4-021287**  
**CR:**            29.232-046r2 (Rel-5)  
**Title:**          Codec Modification  
**Source:**        Ericsson  
**Presented:**  
**Discussion:**

**Decision:**      **Agreed**

## 8.8

### 8.8.1 Optimal Routing

**Document:**    **N4-021250**  
**CR:**            23.079-021  
**Title:**          Correction to CRN and GMSCA handling in HLR  
**Source:**        Ericsson  
**Presented:**    Mr. Rogier Noldus, Ericsson  
**Discussion:**

- Vodafone: The CR is unnecessary. Clause 6 **describes** the behaviour, it doesn't **mandate** it.
- Vodafone: We would add text at the beginning of clauses 5& 6 to indicate that this is descriptive text, not specifying text. The description does not take account of the requirements of other features or services.
  - o Vodafone: The new CR is needed only in Rel-5.
    - Accepted by the meeting

**Decision:**      **Withdrawn**

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## 9 GSM maintenance

### 9.1 GTP enhancements

**Document:**    **N4-021215**  
**Title:**          LS on MMS charges based upon the roamed to network  
**Source:**        SA2  
**Presented:**    Mr. Nick Russell, Vodafone  
**Discussion:**

**Decision:**      **Noted**

**Document:**    **N4-021221**  
**Title:**          LS on "Inclusion of SGSN's MCC+MNC in G-CDR"  
**Source:**        SA5  
**Presented:**    Mr. Ian Park, Chairman  
**Discussion:**

**Decision:**      **Noted**

**Document:** N4-021227  
**Title:** Discussion paper on "Content provided to GPRS subscribers while roaming"  
**Source:** Vodafone  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

**Decision:** Principle agreed

**Document:** N4-021130  
**CR:** 09.60-A115 (R97)  
**Title:** Inclusion of location information in GTP messages  
**Source:** Nortel Networks  
**Presented:** Dr. Daniel Warren, Nortel  
**Discussion:**

- Orange France: Oppose the proposal to include the cell ID in the information sent to the GGSN. They want to limit the information to the PLMN ID. The proposed changes are quite sensitive so Orange France can't accept the changes earlier than (maybe) in R99.
- Nokia proposes to include the RAI rather than the MCC/MNC or CGI because it has less impact in R97.
  - o NEC support Nokia's proposal.
- Orange France is concerned over the information element definition rather than the inclusion of the additional information element in the Create PDP Context.
- Vodafone: The finer grain location information will become out of date; that means we can only rely on the MCC+MNC
  - o Ericsson agrees with Vodafone.
- Nokia: The new information element is impossible to implement in R97 & R98.
- Ericsson can't accept the CR with the use of any location information of finer grain than MCC+MNC, because it violates the principle of transparency of mobility management to the GGSN.
- NEC: The LAC and RAC components of RAI should be set to a value which indicates that they are meaningless.
- Meeting agreed to work on revisions of the Vodafone & Ericsson CRs in N4-021240 – N4-021244.

**Decision:** Rejected

**Document:** N4-021131  
**CR:** 09.60-A116 (R98)  
**Title:** Inclusion of location information in GTP messages  
**Source:** Nortel Networks  
**Presented:**  
**Discussion:**

**Decision:** Rejected

**Document:** N4-021132  
**CR:** 29.060-351 (R99)  
**Title:** Inclusion of location information in GTP messages  
**Source:** Nortel Networks  
**Presented:**  
**Discussion:**

**Decision:** Rejected

**Document:** N4-021133  
**CR:** 29.060-352 (Rel-4)  
**Title:** Inclusion of location information in GTP messages  
**Source:** Nortel Networks  
**Presented:**  
**Discussion:**

**Decision:** Rejected

**Document:** N4-021134  
**CR:** 29.060-353 (Rel-5)  
**Title:** Inclusion of location information in GTP messages  
**Source:** Nortel Networks  
**Presented:**  
**Discussion:**

**Decision:** Rejected

**Document:** N4-021244  
**CR:** 09.60-A120 (R97)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

- Has to be revised to use RAI instead of VPLMN Id, and to indicate that the RAC & LAC components are populated with the "all-zeroes" value.

**Decision:** Revised to N4-021274

**Document:** N4-021274  
**CR:** 09.60-A120r1 (R97)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

- We should ask SA2 whether they have a requirement to be able to carry the LAC and/or RAC (rather than dummy values) in the RAI. Proposed LS to SA2 in N4-021312.
- Conclusion on this CR (and the mirrors) postponed until we have the response from SA2.

**Decision:** Postponed to CN4 #17

**Document:** N4-021243  
**CR:** 09.60-A119 (R98)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** Revised to N4-021275

**Document:** N4-021275  
**CR:** 09.60-A119r1 (R98)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** Postponed to CN4 #17

**Document:** N4-021242  
**CR:** 29.060-365 (R99)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** Revised to N4-021276

**Document:** N4-021276  
**CR:** 29.060-365r1 (R99)

**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Postponed to CN4 #17**

**Document:** **N4-021241**  
**CR:** 29.060-364 (Rel-4)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Revised to N4-021277**

**Document:** **N4-021277**  
**CR:** 29.060-364r1 (Rel-4)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Postponed to CN4 #17**

**Document:** **N4-021228**  
**CR:** 29.060-363 (Rel-6)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

- CN4 agreed that the change should be rolled back to R97, so this becomes category A for Rel-5

**Decision:** **Revised to N4-021240**

**Document:** **N4-021240**  
**CR:** 29.060-363r1 (Rel-5)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:**  
**Discussion:**

**Decision:** **Revised to N4-021278**

**Document:** **N4-021278**  
**CR:** 29.060-363r1 (Rel-5)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone, Ericsson  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

- This document is presented for information; CN4 will conclude on it when they have received the response from SA2

**Decision:** **Postponed to CN4 #17**

**Document:** **N4-021312**  
**Title:** Proposed LS to SA2 on MMS charges based upon the roamed to network  
**Source:** Nortel Networks  
**Presented:** Dr. Daniel Warren, Nortel Networks  
**Discussion:**

- "transparency of mobility management" will be revised to carry the message that the SGSN hides the details of mobility management from the SGSN.

**Decision:** Revised to N4-021314

**Document:** N4-021314

**Title:** Proposed LS to SA2 on MMS charges based upon the roamed to network

**Source:** Nortel Networks

**Presented:** Dr. Daniel Warren, Nortel Networks

**Discussion:**

- "principles of concealment of mobility management" will be revised to "principle of hiding from the GGSN the details of mobility management in the SGSN".

**Decision:** Revised to N4-021321

**Document:** N4-021321

**Title:** Proposed LS to SA2 on MMS charges based upon the roamed to network

**Source:** Nortel Networks

**Presented:** Dr. Daniel Warren, Nortel Networks

**Discussion:**

**Decision:** Approved

**Document:** N4-021147

**Title:** Removing inconsistency in definition of PDP Address length 4

**CR:** 09.60-A117 (R97)

**Source:** Alcatel

**Presented:** Mr. Markus Berg, Alcatel

**Discussion:**

- Alcatel: R99, Rel-4 & Rel-5 CRs were approved in CN4#15.

**Decision:** Agreed

**Document:** N4-021148

**Title:** Removing inconsistency in definition of PDP Address length 4

**CR:** 09.60-A118 (R98)

**Source:** Alcatel

**Presented:**

**Discussion:**

**Decision:** Agreed

## 9.2 MAP protocol

**Document:** N4-021166

**Title:** Correction of partly implemented CR 09.02-A324

**CR:** 09.02-A329

**Source:** Alcatel

**Presented:** Mr. Markus Berg, Alcatel

**Discussion:**

**Decision:** Agreed

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## 10 AOB

### 10.1 Work organisation

- There isn't any separate input document on this – but in N4-021116 has mentioned the possibility of a merger of CN2 and CN4 in about March next year. We should think about this, so that we can express a view in the next CN plenary!
  - o Vodafone: A better shot at load balancing would be merging CN2 & CN3.

- Nortel: A merge of CN2 & CN4 would probably lead to CN4 being seriously overloaded.
- CN chairman: If there isn't enough new work for a group to do it will shrink below a viable size. If CN2 workload shrinks below viability, then is the time to consider merging.
- CN4 chairman: CN4's skill set will be closest to CN2 if merging is needed.
  - Agreed by Lucent

## 11 Update of the Work Plan

- This will be done in CN4#17.

## 12 Future meetings

**Document:** N4-021190  
**Title:** Future meetings  
**Source:** CN4 chairman  
**Presented:** Mr. Ian Park, CN4 chairman  
**Discussion:**

- Nokia: We would like to have 2 meetings between plenary meetings.
  - Supported by Lucent
  - Nortel and Vodafone have a different opinion
- CN Chairman: There's no need for commitment so far in advance for single WG meetings as for the full set of CN WG meetings.
- Lucent: We could add placeholders in the calendar in case we need an extra meeting.
  - Ericsson: We could make placeholders only the first half of the year because there is no knowledge what will happen about combination of CN2 & CN4.
- Extra meeting dates for year 2003 if needed:
  - 7<sup>th</sup> –11<sup>th</sup> April
  - 17<sup>th</sup> –21<sup>st</sup> November
    - Dates are **agreed** by CN4 meeting
- Nortel Networks still has reservation about putting in the placeholders – this will effectively guarantee that there will be a meeting.

**Decision:** Noted

Date	Meeting	Place	Host
11 – 15 Nov 2002	CN WGs 1, 2, 3 & 4	Bangkok, Thailand	Japanese Friends of 3GPP
4 – 6 Dec 2002	CN plenary #18	New Orleans, USA	North American Friends of 3GPP
10 - 14 Feb 2003	CN WGs 1, 2, 3 & 4	Dublin, Eire	European Friends of 3GPP
12 – 14 Mar 2003	CN plenary #19	Jersey	UK Friends of 3GPP
7 – 11 April 2003	CN WG 4 (if needed)	?	?
19 - 23 May 2003	CN WGs 1, 2, 3 & 4	TBD, USA	North American Friends of 3GPP
4 – 6 Jun 2003	CN plenary #20	Hämeenlinna, Finland	Nokia
18 - 22 Aug 2003	CN WGs 1, 2, 3 & 4	Sophia Antipolis, France	ETSI
17 – 19 Sep 2003	CN plenary #21	Berlin, Germany	Siemens
27 - 31 Oct 2003	CN WGs 1, 2, 3 & 4	TBD, China	Ericsson
17 – 21 Nov 2003	CN WG 4 (if needed)	?	?
10 – 12 Dec 2003	CN plenary #22	Hawaii, USA	North American & Japanese Friends of 3GPP

Please note that due to the workload additional Ad Hoc Meetings can be planned on a short notice.

# 13 Output of CN4#16

## 13.1 Change Requests

Tdoc #	Title	Spec	CR-rev	Rel	Source
N4-021122	Alignment with use of ASN.1 (1997) standard	30.002	006	Rel-5	Vodafone
N4-021124	ODB and CB for SMS	29.002	475	Rel-5	DoCoMo
N4-021137	Introduction of PCO IE in session management messages used in the Network-Initiated PDP Context Activation procedure (direction NW to MS)	29.060	355	Rel-5	Ericsson
N4-021140	Support of mandatory IPv6 on the lu interface	29.060	333r1	Rel-5	Nokia
N4-021147	Removing inconsistency in definition of PDP Address length	09.60	A117	R97	Alcatel
N4-021148	Removing inconsistency in definition of PDP Address length	09.60	A118	R98	Alcatel
N4-021152	Correction of incomplete impementation of CR 29.060-203r1	29.060	361	R99	Alcatel
N4-021153	Correction of IMEI check for SGSN	29.002	486	Rel-5	Alcatel
N4-021158	Addition of User-Name AVP to SAA	29.229	008	Rel-5	Ericsson
N4-021160	Addition of Barring Indication of multimedia public identities	23.008	058	Rel-5	Ericsson
N4-021163	Removal of upper bounds in Cx i/f user profile	29.228	010	Rel-5	Ericsson
N4-021164	Removal of upper bounds in Sh i/f user profile	29.328	007	Rel-5	Ericsson
N4-021166	Correction of partly implemented CR 09.02-A324	09.02	A329	R98	Alcatel
N4-021183	S-CSCF Assignment	29.228	011	Rel-5	Siemens
N4-021194	Clarification of the use of Requested CAMEL Subscription Info parameters	29.002	490	Rel-5	Nokia
N4-021197	Correction on the use of "User Failure" error for LCS-MOLR operation	29.010	076	Rel-4	Nokia
N4-021198	Correction on the use of "User Failure" error for LCS-MOLR operation	29.010	077	Rel-5	Nokia
N4-021231	NAS-Session-Key AVPs in MAA command	29.228	012	Rel-5	Nokia
N4-021232	Editorial correction of SIP-Auth-Data-Item AVP definition.	29.229	007	Rel-5	Nokia
N4-021233	Editorial correction of the private user identity's form	23.003	057	Rel-5	Vodafone
N4-021235	LCS: adding missing parameter mapping to assistance data request procedure after inter-MSC SRNS relocation	29.010	072r1	Rel-4	Nokia
N4-021236	LCS: adding missing parameter mapping to assistance data request procedure after inter-MSC SRNS relocation	29.010	072r1	Rel-5	Nokia
N4-021252	Correction to RCH – adding O-CSI trigger criteria	29.002	495	Rel-5	Ericsson
N4-021260	Addition of LCS Format Indicator to LCS Client ID	29.002	491r1	Rel-6	Nokia
N4-021262	Removal of limitation in the Create PDP Context Request message	29.060	354r1	Rel-5	Ericsson
N4-021264	Additional MM code for MG-CSI	29.002	496	Rel-5	Siemens
N4-021265	Clarification on the inclusion of TEID II in SGSN Context Ack	29.060	350r1	Rel-5	Nortel Networks
N4-021266	Introduction of PCO IE in session management messages used in the MS Initiated PDP Context Deactivation procedure (direction MS to NW)	29.060	348r 4	Rel-5	Ericsson
N4-021268	Clarification of the termination of the lu interface components in the bearer independent .CS architecture	23.205	036r1	Rel-5	Lucent
N4-021271	lur-g Introduction	23.003	055r1	Rel-5	Nokia
N4-021281	Rejection of registration of a Temporary Public Identity without active implicit registration	29.228	008r2	Rel-5	Ericsson
N4-021282	Clarification on update of repository data	29.328	008r1	Rel-5	Siemens
N4-021283	Editorial clean-up	23.003	056r2	Rel-5	Vodafone
N4-021284	Codec Modification	23.153	038r2	Rel-4	LM Ericsson, Siemens



N4-021285	Codec Modification	23.153	039r2	Rel5	LM Ericsson, Siemens
N4-021286	Codec Modification	29.232	045r2	Rel-4	LM Ericsson, Siemens
N4-021287	Codec Modification	29.232	046r2	Rel-5	LM Ericsson, Siemens
N4-021288	Correction to segmentation of O-CSI and T-CSI	29.002	494r1	R99	Ericsson
N4-021289	Correction to segmentation of O-CSI and T-CSI	29.002	498	Rel-4	Ericsson
N4-021290	Correction to segmentation of O-CSI and T-CSI	29.002	499	Rel-5	Ericsson
N4-021291	Correction to figure 7a (handling of RCH in GMSC)	23.079	022r1	R99	Ericsson
N4-021292	Correction to figure 7a (handling of RCH in GMSC)	23.079	023	Rel-4	Ericsson
N4-021293	Correction to figure 7a (handling of RCH in GMSC)	23.079	024	Rel-5	Ericsson
N4-021294	Correction of handling of MT-SMS in the SGSN	29.002	474r2	Rel-5	Vodafone
N4-021295	CAMEL4 flexible tone package	29.232	052r1	Rel-5	Ericsson
N4-021296	Additional handling of partial implementations of CAMEL phase 4	29.002	497	Rel-5	Alcatel
N4-021297	Optimal routing and CAMEL discrepancy	23.079	020r1	Rel-5	HP
N4-021299	Description of MT SM delivery via two serving nodes	29.002	442r3	Rel-5	Vodafone
N4-021301	PDCP sequence numbers in SGSN Context Response	29.060	358r1	R99	Alcatel
N4-021302	PDCP sequence numbers in SGSN Context Response	29.060	359r1	Rel-4	Alcatel
N4-021303	PDCP sequence numbers in SGSN Context Response	29.060	360r1	Rel-5	Alcatel
N4-021308	Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Modification procedure (direction NW to MS)	29.060	356r1	Rel-5	Ericsson
N4-021309	Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Deactivation procedure (direction NW to MS)	29.060	357r1	Rel-5	Ericsson
N4-021310	LCS: Exception handling for positioning methods MS Assisted E-OTD and MS Assisted OTDOA	24.080	026r2	Rel-5	Nokia
N4-021318	M3UA for 3GPP networks	29.202	006r2	Rel-4	Ericsson
N4-021319	M3UA for 3GPP networks	29.202	007r2	Rel-5	Ericsson

## 13.2 Liaison Statements

The following Liaison Statements were agreed to be sent by CN4 #16 meeting:

<b>TDOC N4-02xxxx</b>	<b>Subject</b>	<b>To</b>	<b>Cc</b>	<b>Attachment</b>	<b>Sent</b>
1254	LS on Questions from the European Numbering Forum	SA1, CN1, T3		N4-021225	30 <sup>th</sup> September
1255	LS on Use of Identifiers in GPRS & UMTS Environments	TSG European Numbering Forum	CN, SA, T3		4 <sup>th</sup> October
1259	LS on Status of protocol work on Ze interface	SA3		N4-021258	30th September
1306	Response LS on Clarification on IP "Modify Bearer" Procedure	RAN3			30th September
1311	LS on Call Barring for SMS in PS domain	SA1			30th September
1317	Reply LS on Handling of Multiple Deferred Mobile Terminating Location Request	SA2			30th September
1320	LS Response on persistent dialogs for unregistered users	SA2	CN1		30th September
1321	Reply LS to LS from SA2 on MMS charges based upon the roamed to network.	SA2	T2, SA5, GSMA-BARG, GSMA-CPWP		30 <sup>th</sup> September
1322	Handling of Unsuccessful RAB assignment modify	RAN3		N4-021284	30th September

## 13.3 TS/TRs

<b>Tdoc #</b>	<b>Tdoc Title</b>

## 13.4 WIs

<b>Tdoc #</b>	<b>Tdoc Title</b>
N4-021256	Multimedia Resource Function Controller (MRFC) – Multimedia Resource Function Processor (MRFP) Mp Interface
N4-021257	Preferred Framing Protocol
N4-021258	Protocol definition for automatic distribution of MAP security keys

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## Annex A : Participants

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## Annex B: List of Temporary Documents

Tdoc n° 3GPP	List of Temporary Documents	Source	Status
N4-021111	Preliminary agenda for CN4 #16	CN4 chairman	Revised to N4-021112
N4-021112	CN4 #16: detailed agenda & time plan at document deadline	CN4 chairman	Revised to N4-021113
N4-021113	CN4 #16: detailed agenda & time plan on eve of meeting	CN4 chairman	Agreed
N4-021114	Proposed allocation of documents to agenda items at document deadline	CN4 chairman	Revised to N4-021115
N4-021115	Proposed allocation of documents to agenda items on eve of meeting	CN4 chairman	Agreed
N4-021116	Summary report of CN #17 and SA #17 plenary meetings	CN4 chairman	Noted
N4-021117	List of agreed output documents	CN4 chairman	Approved
N4-021118	CN4#15 meeting report Helsinki, FINLAND	MCC	Agreed
N4-021119	Description of MT SM delivery via two serving nodes	Vodafone	Revised to N4-021299
N4-021120	Correction of handling of MT-SMS in the SGSN	Vodafone	Revised to N4-021294
N4-021121	MAPsec PIB	Nokia	Revised to N4-021258
N4-021122	Alignment with use of ASN.1 (1997) standard	Vodafone	Agreed
N4-021123	Discussion Paper on introducing CB for SMS in PS domain	DoCoMo	Noted
N4-021124	ODB and CB for SMS	DoCoMo	Agreed
N4-021125	Clarification on the inclusion of TEID II in SGSN Context Ack	Nortel Networks	Revised to N4-021265
N4-021126	Inclusion of SS-Data List in ISD to SGSN	Nortel Networks	Noted
N4-021127	Correction to the handling of LCS-related SS codes	Nortel Networks	Withdrawn
N4-021128	Correction to the handling of LCS-related SS codes	Nortel Networks	Withdrawn
N4-021129	Addition of Positioning Data IE to Provide Subscriber Location and Send Location Report	Nortel Networks	Withdrawn
N4-021130	Inclusion of location information in GTP messages	Nortel Networks	Included in Revision of N4-021274
N4-021131	Inclusion of location information in GTP messages	Nortel Networks	Included in Revision of N4-021275
N4-021132	Inclusion of location information in GTP messages	Nortel Networks	Included in Revision of N4-021276
N4-021133	Inclusion of location information in GTP messages	Nortel Networks	Included in Revision of N4-021277
N4-021134	Inclusion of location information in GTP messages	Nortel Networks	Included in Revision of N4-021278
N4-021135	Removal of limitation in the Create PDP Context Request message	Ericsson	Revised to N4-021262
N4-021136	Introduction of PCO IE in session management messages used in the MS Initiated PDP Context Deactivation procedure (direction MS to NW)	Ericsson	Revised to N4-021266
N4-021137	Introduction of PCO IE in session management messages used in the Network-Initiated PDP Context Activation procedure (direction NW to MS)	Ericsson	Agreed
N4-021138	Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Modification procedure (direction NW to MS)	Ericsson	Revised to N4-021308
N4-021139	Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context	Ericsson	Revised to N4-021309

	Deactivation procedure (direction NW to MS)		
N4-021140	Support of mandatory IPv6 on the lu interface	Nokia	Agreed
N4-021141	lu-cs over IP related corrections on 23.205	Nokia	Postponed to CN4#17
N4-021142	lu-cs over IP related corrections on 29.232	Nokia	Postponed to CN4#17
N4-021143	lur-g Introduction	Nokia	Revised to N4-021271
N4-021144	CAMEL4 Call Party Handling interworking with Bearer independent CS core	Nokia	Postponed to CN4#17
N4-021145	Extending the 3G Expanded Call Progress Tones Generator Package with a new signal to allow a CAMEL4 flexible sequence of tones	Nokia	Withdrawn
N4-021146	Multimedia Resource Function Controller (MRFC) – Multimedia Resource Function Processor (MRFP) Mp Interface	Nokia	Revised to N4-021256
N4-021147	Removing inconsistency in definition of PDP Address length	Alcatel	Agreed
N4-021148	Removing inconsistency in definition of PDP Address length	Alcatel	Agreed
N4-021149	PDCP sequence numbers in SGSN Context Response	Alcatel	Revised to N4-021301
N4-021150	PDCP sequence numbers in SGSN Context Response	Alcatel	Revised to N4-021302
N4-021151	PDCP sequence numbers in SGSN Context Response	Alcatel	Revised to N4-021303
N4-021152	Correction of incomplete impementation of CR 29.060-203r1	Alcatel	Agreed
N4-021153	Correction of IMEI check for SGSN	Alcatel	Agreed
N4-021154	M3UA for 3GPP networks	Ericsson	Revised to N4-021304
N4-021155	M3UA for 3GPP networks	Ericsson	Revised to N4-021305
N4-021156	Receiving the deferred MT-LR for the UE during waiting for the event of the same UE	NTT DoCoMo, NTT Comware	Postponed to CN4#17
N4-021157	Receiving the deferred MT-LR for the UE during waiting for the event of the same UE	NTT DoCoMo, NTT Comware	Postponed to CN4#17
N4-021158	Addition of User-Name AVP to SAA	Ericsson	Agreed
N4-021159	Rejection of registration of a Temporary Public Identity without active implicit registration	Ericsson	Revised to N4-021261
N4-021160	Addition of Barring Indication of multimedia public identities	Ericsson	Agreed
N4-021161	Addition of Subscribed Media Types	Ericsson	Withdrawn
N4-021162	Addition of Subscribed Media Types	Ericsson	Withdrawn
N4-021163	Removal of upper bounds in Cx i/f user profile	Ericsson	Agreed
N4-021164	Removal of upper bounds in Sh i/f user profile	Ericsson	Agreed
N4-021165	Clarification of the termination of the lu interface components in the bearer independent .CS architecture	Lucent	Revised to N4-021268
N4-021166	Correction of partly implemented CR 09.02-A324	Alcatel	Agreed
N4-021167	Preferred Framing Protocol	LM Ericsson	Revised to N4-021257
N4-021168	Preferred Framing Protocol	LM Ericsson	Postponed to CN4#17
N4-021169	Preferred Framing Protocol	LM Ericsson	Postponed to CN4#17
N4-021170	Preferred Framing Protocol	LM Ericsson	Postponed to CN4#17

N4-021171	Codec Modification	LM Ericsson	Noted
N4-021172	Codec Modification	LM Ericsson	Revised to N4-021284
N4-021173	Codec Modification	LM Ericsson	Revised to N4-021285
N4-021174	Codec Modification	LM Ericsson	Revised to N4-021286
N4-021175	Codec Modification	LM Ericsson	Revised to N4-021286
N4-021176	To remove useless reference	MCC	Withdrawn
N4-021177	To remove useless reference	MCC	Withdrawn
N4-021178	To remove useless reference	MCC	Withdrawn
N4-021179	To remove useless reference	MCC	Withdrawn
N4-021180	To remove useless reference	MCC	Withdrawn
N4-021181	Clarification of the placement of the fields in the PDP Context IE	Ericsson	Revised to N4-021238
N4-021182	Available codecs list and selected codec indication	Siemens	Revised to N4-021263
N4-021183	S-CSCF Assignment	Siemens	Agreed
N4-021184	Clarification on update of repository data	Siemens	Revised to N4-021282
N4-021185	TS 29.332 0.0.0; Media Gateway Control Function (MGCF) – IM Media Gateway; Mn Interface	Siemens	Approved as basis for the further work
N4-021186	Support for AMR/AMR-WB on the Mn interface	Siemens	Noted
N4-021187	Comments on Framing	Siemens	Noted
N4-021188	On Codec Modification Procedures	Siemens	Withdrawn
N4-021189	Codec Modification Sequence package	Siemens	Withdrawn
N4-021190	Meeting calendar for CN4 in 2003	CN4 chairman	Noted
N4-021191	Optimal routing and CAMEL discrepancy	HP	Revised to N4-021297
N4-021192	STAGE 3 for KEY distribution	Nokia	Revised to N4-021258
N4-021193	Draft LS on Status of protocol work on Ze interface	Nokia	Revised to N4-021259
N4-021194	Clarification of the use of Requested CAMEL Subscription Info parameters	Nokia	Agreed
N4-021195	Addition of LCS Format Indicator to LCS Client ID	Nokia	Revised to N4-021260
N4-021196	Available codecs list and selected codec indication	Nokia	Withdrawn
N4-021197	Correction on the use of "User Failure" error for LCS-MOLR operation	Nokia	Agreed
N4-021198	Correction on the use of "User Failure" error for LCS-MOLR operation	Nokia	Agreed
N4-021199	Change notification granularity issue with Sh interface Transparent data	dynamicsoft	Noted
N4-021200	Inter-MSC relocation and intersystem handover for multiple codecs	Siemens	Revised to N4-021267
N4-021201	LS response on Sh interface signalling	CN1	Noted
N4-021202	Reply LS on dimensioning for IMS services	CN1	Noted
N4-021203	LS reply on Subscriber or Equipment Trace Impacts	CN1	Noted
N4-021204	LS on persistent dialogs for unregistered users	CN1	Noted

N4-021205	LS on inclusion of CCF/ECF addresses on Sh interface	CN1	Noted
N4-021206	LS on Allowed AMR-WB Configurations	CN	Noted
N4-021207	Liaison Statement on Interoperability Issues and SIP in IMS	Chairs, SIP, SIPPING, and SIMPLE Working Groups of the Internet Engineering Task Force	Noted
N4-021208	Clarification on IP "Modify Bearer" Procedure	RAN3	Noted
N4-021209	Response to Liaison Statement "on Request for clarification related to raised questions regarding "Exchange of addresses on lu-CS using IP Transport Option in Release 5"	RAN3	Noted
N4-021210	Response to Liaison Statement on Support of IPv6 on lu	RAN3	Noted
N4-021211	Handling of Multiple Deferred Mobile Terminating Location Request	SA2	Noted
N4-021212	LS Response on persistent dialogs for unregistered users	SA2	Noted
N4-021213	LS reply to LS reply on "Distribution of IMS Charging ID (ICID) from PCF/P-CSCF to GGSN"	SA2	Noted
N4-021214	LS on the protocol development for the GMLC Lr-interface	SA2	Noted
N4-021215	LS on MMS charges based upon the roamed to network	SA2	Noted
N4-021216	Liaison Response on "inclusion of CCF/ECF addresses on Sh interface"	SA2	Noted
N4-021217	Reply LS on Support of IPv6 on lu	SA2	Noted
N4-021218	Response LS on Subscribed Media Parameter	SA2	Noted
N4-021219	Liaison Statement on Interworking of AMR-WB with G.722.2	SA4	Noted
N4-021220	Response LS to "Liaison statement on DTMF"	SA4	Noted
N4-021221	LS on "Inclusion of SGSN's MCC+MNC in G-CDR"	SA5	Noted
N4-021222	LS response to Inclusion of CCF/ECF addresses on Sh interface	SA5	Noted
N4-021223	LS on the support of "choice" construct in DDF	T2	Noted
N4-021224	LS on mandatory SRI_for_SM option for MMS recipient address resolution	T2	Noted
N4-021225	Use of Identifiers in GPRS & UMTS Environments	European Radiocommunication Office	Noted
N4-021226	Editorial clean-up	Vodafone	Revised to N4-021237
N4-021227	Discussion paper on "Content provided to GPRS subscribers while roaming"	Vodafone	Principle agreed
N4-021228	Enabling control of content served to subscribers based on their location	Vodafone	Withdrawn
N4-021229	Discussion on access independence	Lucent	Noted
N4-021230	Inter-MSC SRNS Relocation For SCUDIF Calls	LM Ericsson	Principle agreed
N4-021231	NAS-Session-Key AVPs in MAA command	Nokia	Agreed
N4-021232	Editorial correction of SIP-Auth-Data-Item AVP definition.	Nokia	Agreed
N4-021233	Editorial correction of the private user identity's form	Nokia	Agreed
N4-021234	LCS: Exception handling for positioning methods MS Assisted E-OTD and MS Assisted OTDOA	Nokia	Revised to N4-021310
N4-021235	LCS: adding missing parameter mapping to assistance data request procedure after inter-MSC SRNS relocation	Nokia	Agreed



N4-021236	LCS: adding missing parameter mapping to assistance data request procedure after inter-MSC SRNS relocation	Nokia	Agreed
N4-021237	Editorial clean-up	Vodafone	Revised to N4-021283
N4-021238	Clarification of the placement of the fields in the PDP Context IE	Ericsson	Revised to N4-021269
N4-021239	Handling of parameters of M3UA	Nokia	Noted
N4-021240	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Revised to N4-021278
N4-021241	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Revised to N4-021277
N4-021242	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Revised to N4-021276
N4-021243	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Revised to N4-021275
N4-021244	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Revised to N4-021274
N4-021245	Response to IETF LS on Interoperability Issues and SIP in IMS	SA	Noted
N4-021246	CAMEL4 flexible tone package	Ericsson	Revised to N4-021295
N4-021247	Correction to Dialed Services criteria	Ericsson	Noted
N4-021248	Correction to Dialed Services criteria	Ericsson	Rejected
N4-021249	Correction to segmentation of O-CSI and T-CSI	Ericsson	Revised to N4-021288
N4-021250	Correction to CRN and GMSCA handling in HLR	Ericsson	Withdrawn
N4-021251	Correction to figure 7a (handling of RCH in GMSC)	Ericsson	Revised to N4-021291
N4-021252	Correction to RCH – adding O-CSI trigger criteria	Ericsson	Approved
N4-021253	Discussion Document, "Interaction between ORLCF and SCP-induced late call forwarding"	Ericsson	Noted
N4-021254	Proposed LS to SA1 on emergency calls from data-only terminals	Vodafone	Approved
N4-021255	Proposed LS to ENF on use of E.164 numbers for data-only terminals	Vodafone	Approved
N4-021256	Multimedia Resource Function Controller (MRFC) – Multimedia Resource Function Processor (MRFP) Mp Interface	Nokia	Agreed
N4-021257	Preferred Framing Protocol	LM Ericsson	Agreed
N4-021258	STAGE 3 for KEY distribution	Nokia	Agreed
N4-021259	Draft LS on Status of protocol work on Ze interface	Nokia	Agreed
N4-021260	Addition of LCS Format Indicator to LCS Client ID	Nokia	Agreed
N4-021261	Rejection of registration of a Temporary Public Identity without active implicit registration	Ericsson	Revised to N4-021281
N4-021262	Removal of limitation in the Create PDP Context Request message	Ericsson	Agreed without presentation
N4-021263	Available codecs list and selected codec indication	Siemens, Nokia	Revised to N4-021270
N4-021264	Additional MM-Code for MG-CSI	Siemens	Agreed
N4-021265	Clarification on the inclusion of TEID II in SGSN Context Ack	Nortel Networks	Agreed without presentation
N4-021266	Introduction of PCO IE in session management messages used in the MS Initiated PDP Context Deactivation procedure (direction MS to NW)	Ericsson	Agreed without presentation
N4-021267	Inter-MSC relocation and intersystem handover for multiple codecs	Siemens, Nokia	Revised to N4-021315

N4-021268	Clarification of the termination of the lu interface components in the bearer independent .CS architecture	Lucent	Agreed
N4-021269	Clarification of the placement of the fields in the PDP Context IE	Ericsson	Postponed tp CN4#17
N4-021270	Available codecs list and selected codec indication	Siemens, Nokia	Revised to N4-021298
N4-021271	Iur-g Introduction	Nokia	Agreed
N4-021272	Reply LS on CS data services for GERAN Iu-mode	CN3	Noted
N4-021273	LS reply on Subscriber or Equipment Trace Impacts	SA2	Noted
N4-021274	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Postponed to CN4#17
N4-021275	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Postponed to CN4#17
N4-021276	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Postponed to CN4#17
N4-021277	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Postponed to CN4#17
N4-021278	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson	Postponed to CN4#17
N4-021279	Additional handling of partial implementations of CAMEL phase 4	Alcatel	Revised to N4-021296
N4-021280	LS Response on persistent dialogs for unregistered users	Siemens	Revised to N4-021313
N4-021281	Rejection of registration of a Temporary Public Identity without active implicit registration	Ericsson	Agreed
N4-021282	Clarification on update of repository data	Siemens	Agreed
N4-021283	Editorial clean-up	Vodafone	Agreed
N4-021284	Codec Modification	LM Ericsson, Siemens	Agreed
N4-021285	Codec Modification	LM Ericsson, Siemens	Agreed
N4-021286	Codec Modification	LM Ericsson, Siemens	Agreed
N4-021287	Codec Modification	LM Ericsson, Siemens	Agreed
N4-021288	Correction to segmentation of O-CSI and T-CSI	Ericsson	Agreed
N4-021289	Correction to segmentation of O-CSI and T-CSI	Ericsson	Agreed
N4-021290	Correction to segmentation of O-CSI and T-CSI	Ericsson	Agreed
N4-021291	Correction to figure 7a (handling of RCH in GMSC)	Ericsson	Agreed without presentation
N4-021292	Correction to figure 7a (handling of RCH in GMSC)	Ericsson	Agreed without presentation
N4-021293	Correction to figure 7a (handling of RCH in GMSC)	Ericsson	Agreed without presentation
N4-021294	Correction of handling of MT-SMS in the SGSN	Vodafone	Agreed without presentation
N4-021295	CAMEL4 flexible tone package	Ericsson	Agreed without presentation
N4-021296	Additional handling of partial implementations of CAMEL phase 4	Alcatel	Agreed without presentation
N4-021297	Optimal routing and CAMEL discrepancy	HP	Agreed without presentation
N4-021298	Available codecs list and selected codec indication	Siemens, Nokia	Revised to N4-021316
N4-021299	Description of MT SM delivery via two serving nodes	Vodafone	Agreed without presentation
N4-021300	LS on Handling of Multiple Deferred Mobile Terminating Location Request	NTT DoCoMo	Revised to N4-021317
N4-021301	PDCP sequence numbers in SGSN Context Response	Alcatel	Agreed

N4-021302	PDCP sequence numbers in SGSN Context Response	Alcatel	Agreed
N4-021303	PDCP sequence numbers in SGSN Context Response	Alcatel	Agreed
N4-021304	M3UA for 3GPP networks	Ericsson	Revised to N4-021318
N4-021305	M3UA for 3GPP networks	Ericsson	Revised to N4-021319
N4-021306	Proposed LS to RAN3 on IP "Modify Bearer" procedure	Siemens, Ericsson	Approved
N4-021307	LS to RAN3 on Handling of unsuccessful RAB assignment modify	Siemens, Ericsson	Revised to N4-021322
N4-021308	Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Modification procedure (direction NW to MS)	Ericsson	Agreed
N4-021309	Introduction of PCO IE in session management messages used in the GGSN-Initiated PDP Context Deactivation procedure (direction NW to MS)	Ericsson	Agreed
N4-021310	LCS: Exception handling for positioning methods MS Assisted E-OTD and MS Assisted OTDOA	Nokia	Agreed
N4-021311	Proposed LS to SA1 on Call Barring for SMS on PS domain	NTT DoCoMo	Agreed
N4-021312	Proposed LS to LS from SA2 on MMS charges based on the roamed to network	Nortel Networks	Revised to N4-021314
N4-021313	LS Response on persistent dialogs for unregistered users	Siemens	Revised to N4-021320
N4-021314	Proposed LS to LS from SA2 on MMS charges based on the roamed to network	Nortel Networks	Revised to N4-021321
N4-021315	Inter-MSC relocation and intersystem handover for multiple codecs	Siemens, Nokia	Postponed to CN4#17
N4-021316	Available codecs list and selected codec indication	Siemens, Nokia	Postponed
N4-021317	LS on Handling of Multiple Deferred Mobile Terminating Location Request	NTT DoCoMo	Approved
N4-021318	M3UA for 3GPP networks	Ericsson	Agreed without presentation
N4-021319	M3UA for 3GPP networks	Ericsson	Agreed without presentation
N4-021320	LS Response on persistent dialogs for unregistered users	Siemens	Approved
N4-021321	Proposed LS to LS from SA2 on MMS charges based on the roamed to network	Nortel Networks	Approved
N4-021322	LS to RAN3 on Handling of unsuccessful RAB assignment modify	Siemens, Ericsson	Approved

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## Annex C: Make calls for IPRs

The attention of the members of this Technical Specification Group is drawn to 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 members take note that they are hereby 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 the Technical Specification Group.
- to notify the Chairman, or the Director-General 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.

---

## Annex D: Access to 3GPP documents

This document briefly outlines some of the more important locations of information that all TSG\_CN WG4 members should be aware of.

### 2.2 3GPP email lists:

To receive information about CN4 issues, all delegates and other interested parties MUST register for email list **3GPP\_TSG\_CN\_WG4**. This can be done by sending an email to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG) with the following single line of text in the body of the message:

```
subscribe 3GPP_TSG_CN_WG4 YourFirstName YourLastName
```

There are many other 3GPP email lists that may also be of interest. Go to <http://www.3gpp.org/e-mail.htm> for further information.

If at any time you would like to confirm which lists you are currently a member of, just send a message to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG) with the following single line of text in the body of the message:

```
QUERY *
```

### 2.3 Email archives:

All 3GPP lists have an associated archive of every email sent via that list. Information on how to access the archive is sent to you when you subscribe to the list. This means that if you have temporary email problems, or have just joined the group, you can check to see if you have missed any messages. The easiest way to search the archive is first to request a list of all messages sent to the particular group you are interested in. For example, to get a list of messages sent via the **3GPP\_TSG\_CN\_WG4** list between 1<sup>st</sup> Jan 1999 and the current date, send the following command to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG):

```
search * in 3GPP_TSG_CN_WG4 since Jan 1999
```

As well as a list of emails sent, you receive instructions about how to retrieve the emails.

Some 3GPP archives are also available via a new user-friendly WWW interface. For CN4, go to: [http://list.3gpp.org/archives/3gpp\\_tsg\\_cn\\_wg4.html](http://list.3gpp.org/archives/3gpp_tsg_cn_wg4.html)

### 2.4 Meeting calendar:

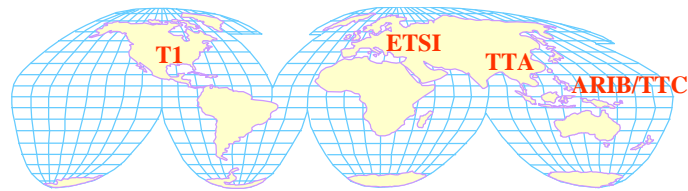
The central location for all information relating to the 3GPP meeting calendar and the corresponding meeting invitations can be found at: <http://www.3gpp.org/Meetings.htm>

### 2.5 Documents on the server:

All documents submitted to CN4 meetings will be made available on the 3GPP document server in a directory (related to the number of the meeting) under: [ftp://ftp.3gpp.org/TSG\\_CN/WG4\\_protocollars/](ftp://ftp.3gpp.org/TSG_CN/WG4_protocollars/) e.g. the documents for CN4 meeting #4 can be found at: [ftp://ftp.3gpp.org/TSG\\_CN/WG4\\_protocollars/tsgN4\\_04/Docs/](ftp://ftp.3gpp.org/TSG_CN/WG4_protocollars/tsgN4_04/Docs/)

## ANNEX E: Document history

<b>Document History</b>	
<b>30<sup>th</sup> September 2002</b>	<p>DRAFT v.1.0.0 dispatched to the TSG_CN4 mail exploder for comments.</p> <p>Comments to be addressed to:</p> <p><b>Mr. Kimmo Kymäläinen, 3GPP TSG-CN4 MCC Support</b> MCC - ETSI Secrétariat Tel :+33 (0)4 92 94 42 38 E-mail: kimmo.kymalainen@etsi.fr</p> <p>A deadline of a week was given to the CN4 delegates for e-mail comments on the draft report.</p> <p><b>E-mail comments back by 13<sup>th</sup> October 2002</b></p>
<b>14<sup>th</sup> October 2002</b>	Draft report v2.0.0 placed on the FTP serve
<b>14<sup>th</sup> November 2002</b>	Version 2.0.0 approved at CN4#16 Meeting in Miami, USA – Made version 3.0.0. Placed to server as the official meeting report.



## Third Generation Partnership Project

### Draft Meeting REPORT v2.0.0 3GPP TSG\_CN\_WG4#17

**Bangkok, THAILAND**  
11<sup>th</sup> – 15<sup>th</sup> November 2002



Hosts: Japanese Friends of 3GPP

**Chairman:** Mr. Ian Park, Vodafone  
**Vice Chairmen:** Mr. Peter Schmitt, Siemens  
Mr. Toshiyuki Tamura, NEC  
**MCC Support:** Mr. Kimmo Kymäläinen, ETSI MCC.

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# 1 Opening of the meeting & Approval of Agenda

Mr. Ian Park, CN4 chairman, opened the meeting. Additional support was provided by Mr. Kimmo Kymäläinen (CN4 Secretary, MCC). Welcome introduction was provided a member of the hosts, Mr. Toshiyaki Tamura (NEC).

## 1.1 Make calls for IPRs

The document is included in Annex C.

The agenda was presented and **approved** (N4-021333).

---

# 2 Document Allocation

The late arrived documents were accepted by the meeting for discussion under the appropriate agenda headings.

- NTT Commware: Documents N4-021373 & N4-021420 were withdrawn.

The document allocation (N4-021335) was **approved** with the changes shown above.

---

# 3 Meeting Reports

## 3.1 Approval of the report of CN4 #16, Miami, USA

The Miami meeting report CN4#16 (N4-021337) was **approved**. The document is raised to version 3.0.0 and will be uploaded to the server.

---

# 4 Liaison Statements

**Document:** N4-021468  
**Title:** Response LS to "Liaison statement on DTMF"  
**Source:** CN1  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** Noted

**Document:** N4-021469  
**Title:** Liaison statement on Interoperability Issues and SIP in IMS  
**Source:** CN1  
**Presented:** Mr. Ian Park, chairman  
**Discussion:**

**Decision:** Noted

**Document:** N4-021470  
**Title:** Liaison Statement on Subscriber and Equipment Trace Impacts  
**Source:** CN1  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

**Decision:** Noted

**Document:** N4-021472  
**Title:** Use of E.164 numbers for emerging mobile systems

**Source:** European Radiocommunications Office

**Presented:** Mr. Ian Park, chairman

**Discussion:**

- Lucent & NEC & Nortel: We should forward the LS to SA1, because these are service related issues.
- Lucent: We may want to send a short message to a vending machine, which would require an E.164 number.
- Vodafone: This LS should also be forwarded to SA2, because they are handling GPRS stage 2. Also previous LS from Miami meeting should be sent to SA2 (N4-021254).
  - o Accepted by the meeting
- Chairman will draft LS to SA1 & SA2; N4-021493 which was revised later on as N4-021566.
  - o To ask them to consider whether there are service profiles which would allow a terminal not to have an E.164 number.
  - o To ask them to reply to CN4, who will co-ordinate the responses to ENF.

**Decision:** **Noted**

**Document:** **N4-021493**

**Title:** Output LS on Use of E164 numbers for emerging mobile systems

**Source:** Chairman

**Presented:** Mr. Ian Park, chairman

**Discussion:**

- Vodafone: An E.164 number is used for MO SMS as well; the SM-TP-PDU has to carry it.

**Decision:** **Revised to N4-021566**

**Document:** **N4-021566**

**Title:** Output LS on Use of E164 numbers for emerging mobile systems

**Source:** Chairman

**Presented:**

**Discussion:**

**Decision:** **Approved without presentation**

**Document:** **N4-021475**

**Title:** LS on proposed TR for the architectural aspects of early UE handling

**Source:** SA2

**Presented:** Mr. Nick Russell, Vodafone

**Discussion:**

- Vodafone: There is no point to transferring the IMEI from one VLR to another, because the IMEI in the old VLR is not reliable - the SIM could have been changed to another mobile equipment.
- The reply LS to SA2; N4-021497 drafted by Nick Russell, Vodafone.

**Decision:** **Noted**

**Document:** **N4-021497**

**Title:** LS on "Proposed TR for the architectural aspects of early UE handling"

**Source:** SA2

**Presented:** Mr. Nick Russell, Vodafone

**Discussion:**

**Decision:** **Approved**

**Document:** **N4-021491**

**Title:** **Discussion Paper:** Early UE handling

**Source:** Siemens

**Presented:** Mr. Peter Schmitt, Siemens

**Discussion:**

- After discussion, CN4 decided that issues should be discussed in SA2 rather than CN4.

**Decision:** Noted

**Document:** N4-021477

**Title:** Response to Liaison Statement on Support of IPv6 on Lu

**Source:** SA2

**Presented:** Ms. Anna Jernryd, Ericsson

**Discussion:**

**Decision:** Noted

**Document:** N4-021478

**Title:** Liaison Statement on Maximum Rate Control and Guaranteed bit rate

**Source:** SA4

**Presented:** Mr. Ian Park, chairman

**Discussion:**

- Ericsson: This sounds strange that there is no impact on CN4.
- Reply to SA4 to set out our current working assumptions.
  - o N4-021498 drafted by Mr. Phil Hodges, Ericsson.

**Decision:** Noted

**Document:** N4-021498

**Title:** Output LS on Liaison Statement on Maximum Rate Control and Guaranteed bit rate

**Source:** Ericsson

**Presented:** Mr. Phil Hodges

**Discussion:**

**Decision:** Approved

**Document:** N4-021479

**Title:** LS Response on Inclusion of CCF/ECF addresses on Sh interface

**Source:** SA5

**Presented:** Mr. Miguel-Angel Pallares, Ericsson

**Discussion:**

**Decision:** Noted

**Document:** N4-021481

**Title:** LS on Structure of IMS Charging Identifier (ICID)

**Source:** SA5

**Presented:** Mr. Miguel-Angel Pallares, Ericsson

**Discussion:**

**Decision:** Noted

**Document:** N4-021482

**Title:** Reply LS on Subscriber and Equipment Trace Impacts

**Source:** SA5

**Presented:** Mr. Seppo Kauntola, Nokia

**Discussion:**

**Decision:** Noted

**Document:** N4-021484

**Title:** LS on proposed list of core IMS specifications for Access Independence

**Source:** SA5

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

- Lucent: We should consider the specifications which are IMS, nothing else.
- In specification list, specification number [4] should be 29.332.
- CN4 should include a specification 29.333, which handles Mp-interface.
- Reply to SA2
  - o N4-021499 drafted by Mr. Nigel Berry, Lucent.

**Decision:** Noted

**Document:** N4-021499

**Title:** Output LS on proposed list of core IMS specifications for Access Independence

**Source:** Lucent

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

**Decision:** Approved

**Document:** N4-021494

**Title:** Diameter security issues

**Source:** SA3

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

**Decision:** Noted

**Document:** N4-021495

**Title:** Liaison statement on Interoperability Issues and SIP in IMS

**Source:** SA3

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

**Decision:** Noted

**Document:** N4-021496

**Title:** LS on Lr interface security

**Source:** SA3

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

**Decision:** Noted

**Document:** N4-021546

**Title:** LS on Questions from the European Numbering Forum

**Source:** T3

**Presented:** Mr. Ian Park, chairman

**Discussion:**

**Decision:** Noted

**Document:** N4-021549

**Title:** Incoming email LS from RAN3

**Source:** CN4 chairman

**Presented:** Mr. Ian Park, chairman

**Discussion:**

**Decision:** Noted

**Document:** N4-021569

**Title:** Response to LS on Maximum Rate Control and Guaranteed bit rate

**Source:** RAN2

**Presented:** Dr. Dan Warren, Nortel

**Discussion:**

- This is coupled with reply LS N4-021498

**Decision:** Noted

**Document:** N4-021570

**Title:** Response to LS on Maximum Rate Control and Guaranteed bit rate

**Source:** RAN3

**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

**Decision:** **Noted**

---

## 5 Work Item Management

**Document:** **N4-021392**  
**Title:** WID: Media Gateway Control Function (MGCF) – IM Media Gateway (IMS-MGW) Mn Interface  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt  
**Discussion:**

- only dates for 29.332 are updated .

**Decision:** **Approved**

**Document:** **N4-021488**  
**Title:** WID: Multimedia Resource Function Controller (MRFC) – Multimedia Resource Function Processor (MRFP) Mp Interface  
**Source:** Vodafone  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

- This is an update of WID that was approved in CN#16 (N4-021254)

**Decision:** **Approved**

**Document:** **N4-021492**  
**Title:** WID for eTFO  
**Source:** Nortel Networks  
**Presented:** Dr. Dan Warren, Nortel Networks  
**Discussion:**

- Nokia: In section 4 it says: "ATM transport will be first addressed, followed by IP". Why can't these be together?
- Ericsson: The WID should be presented in CN3 for information, because the specifications 29.414 & 29.415 are under CN3 control.
- There is no need for CN4 to be secondary responsible WG. It should be removed from new specification 28.063
  - o Agreed by meeting
- Ericsson: There might be possible impacts also on 3GPP TS 23.153.

**Decision:** **Revised to N4-021550**

**Document:** **N4-021550**  
**Title:** WID for eTFO  
**Source:** Nortel Networks  
**Presented:** Dr. Dan Warren, Nortel Networks  
**Discussion:**

**Decision:** **Noted**

---

## 6 Release 6

### 6.1 Network domain security

### 6.2 GPRS

### 6.3 Location services

**Document:** N4-021473  
**Title:** LS on the protocol development for the GMLC – PPR, Lpp-interface  
**Source:** SA2  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Actions to CN4:
  - o 3GPP TSG SA2 kindly requests TSG CN WG4 to investigate whether it is found agreeable to standardize the stage 3 of the new H-GMLC –PPR Lpp interface along the same lines as the inter GMLC Lr interface being developed in 3GPP and OMA.
- Lucent: We feel that requirements for the protocol on this intra-PLMN interface that is concerned with privacy will need to be carefully specified.
- Response LS to SA2 that CN4 can accept proposal for OMA to develop Lpp interface protocol.
  - o N4-021503; drafted by Ian Park, Vodafone

**Decision:** Noted

**Document:** N4-021503  
**Title:** Output LS on the protocol development for the GMLC – PPR, Lpp-interface  
**Source:** Vodafone  
**Presented:** Mr. Ian Park, Vodafone  
**Discussion:**

**Decision:** Approved

**Document:** N4-021485  
**CR:** 29.002-517r1 (Rel-6)  
**Title:** Addition of V-GMLC Address to the Update Location and Update GPRS Location requests  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Ericsson: How does VLR knows what is V-GMLC Address.
- Siemens: Do we have a one or multiple V-GMLC Address number/numbers?
  - o Nokia: Only one V-GMLC Address number is needed
- Fujitsu: in Table 8.1/2: MAP\_UPDATE\_LOCATION and Table 8.1/7: MAP\_UPDATE\_GPRS\_LOCATION, V-GMLC Address should be U optional instead of C.
- Vodafone: shouldn't the V-GMLC address be an IP address rather than an E.164 address?

**Decision:** Revised to N4-021504

**Document:** N4-021504  
**CR:** 29.002-517r2 (Rel-6)  
**Title:** Addition of V-GMLC Address to the Update Location and Update GPRS Location requests  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Nokia: The revision is based on the use of an IP address rather than an E.164 address.

**Decision:** **Agreed**

**Document:** **N4-021486**

**CR:** 29.002-518r1 (Rel-6)

**Title:** Addition of V-GMLC Address to the Send Routing Info for LCS response

**Source:** Nokia

**Presented:** Mr. Jari Jansson, Nokia

**Discussion:**

- V-GMLC address should be U, not C, as in N4-021485
- V-GMLC address should be an IP address rather than an E.164 address

**Decision:** **Revised to N4-021505**

**Document:** **N4-021505**

**CR:** 29.002-518r2 (Rel-6)

**Title:** Addition of V-GMLC Address to the Send Routing Info for LCS response

**Source:** Nokia

**Presented:** Mr. Jari Jansson, Nokia

**Discussion:**

- Ericsson: We should refer to 23.271 for the presence requirement for the H-GMLC address.

**Decision:** **Revised to N4-021567**

**Document:** **N4-021567**

**CR:** 29.002-518r2 (Rel-6)

**Title:** Addition of V-GMLC Address to the Send Routing Info for LCS response

**Source:** Nokia

**Presented:**

**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021487**

**CR:** 29.002-519r1 (Rel-6)

**Title:** Addition of PPR Address to the Send Routing Info for LCS response

**Source:** Nokia

**Presented:** Mr. Jari Jansson, Nokia

**Discussion:**

- Lucent: The H-GMLC is the only node, which is allowed to communicate with the PPR, and should know the PPR address, so why do we need this CR?
  - o Nokia: This is for resolution in SA2. Requirements are reflected in CR.
- PPR address should be an IP address rather than an E.164 address

**Decision:** **Revised to N4-021506**

**Document:** **N4-021506**

**CR:** 29.002-519r2 (Rel-6)

**Title:** Addition of PPR Address to the Send Routing Info for LCS response

**Source:** Nokia

**Presented:** Mr. Jari Jansson, Nokia

**Discussion:**

**Decision:** **Agreed**

## 6.4 TrFO/codec control

**Document:** **N4-021361**

**Title:** Preferred Framing Protocol Solution

**Source:** Ericsson

**Presented:** Mr. Phil Hodges, Ericsson

**Discussion:**



- Siemens: We have doubts about the value of being able to do framing protocol negotiation without codec negotiation as well.
- Ericsson: There is a distinction between the framing protocol, which we use on the Nb interface (specified in 29.414) and the framing protocols, which can be used on the interfaces between a PLMN and an external network, which are already defined in other specifications.
  - o Siemens: It's very unusual for 3GPP specifications to specify the detailed behaviour for interworking with other networks.

**Decision:** Noted

**Document:** N4-021440  
**Title:** Negotiation of lu UP framing protocol mode  
**Source:** Siemens  
**Presented:** Dr. Thomas Belling, Siemens  
**Discussion:**

- Ericsson: We should have some clear requirements from CN3 for the handling for CS data. They want to indicate to CN3 what our current protocol will support.
  - o Siemens would like to wait until we have the clear indication from CN3 of their requirements before we look at the Ericsson CRs.
- Siemens would like to provide the ability within the PLMN to negotiate the use of transparent or support mode, independently of the framing protocol negotiation at the edge of the PLMN.
- Ericsson would prefer to separate out the issue of CS data support and deal only with the PFP issues, if we're going to use two separate protocols.
  - o Siemens: Do we really need two separate protocols?

**Decision:** Noted

**Document:** N4-021442  
**Title:** Comments on framing protocol negotiation between PLMNs  
**Source:** Siemens  
**Presented:** Dr. Thomas Belling, Siemens  
**Discussion:**

- Ericsson: The determination by route identity of whether to use luFP is not a good idea, because it will require the route data to be updated as the network capabilities evolve.
- Ericsson: We don't want the solution, which prefers the use of OoBTC as defined in the document. Proposal shows that it is not possible to drop back TrFO.
  - o Siemens: TrFO is bound to the IU framing Protocol.
    - Ericsson have a different view.
- This approach also requires also the use of 64 kbit/s channel, which would prevent the use in the external networks of CS based supplementary services example Multiparty
- Ericsson: The Siemens paper adds the possibility of codec negotiation over ISUP, which is outside the scope of WID.

**Decision:** Noted

**Document:** N4-021560  
**Title:** Suggestions for framing protocol negotiation between PLMNs  
**Source:** Siemens  
**Presented:** Dr. Thomas Belling, Siemens  
**Discussion:**

**Proposed Signaling Extensions:**

- **Basic idea for transparent pipe**
  - o Set up a bearer with TMR=64 kBit/s unrestricted digital through the PSTN.
  - o Negotiate if IU FP is applied within.
  - o For speech, transport either luFP/optimized speech or G.711 within.
  - o Initialize lu FP end-to-end through the PSTN
  - o To avoid possible transcoding at transit nodes, the standard BICC codec negotiation must not be used.
- **Basic idea for optimized bearer**
  - o Negotiate if IU FP is applied.

- To allow configuration of bearer according to codec negotiated for IUFP, all transit nodes must support signaling extensions.
- Allow BICC Codec Negotiation, with or without additional codec negotiation for IUFP
- Initialize lu FP hop-by-hop through the PSTN
- **Main differences:**
  - TMR used?
  - Normal BICC codec negotiation allowed?
  - Transit node behavior:
    - If extension is understood: IUFP initialization? Involvement in new Codec Negotiation?
    - If extension is not understood: discard new IE or transport transparently?
- **Proposed new Information Elements**
- **For the offer in a BICC or ISUP IAM message the following information elements are introduced:**
  - lu Framing supported,
  - Supported Codec List for lu FP
- **For the answer in a BICC APM or ISUP ACM message the following information elements are introduced:**
  - lu Framing selected,
  - Selected Codec for lu FP
  - Available Codec List for lu FP
- **Behavior of Originating Node**
  - Includes “lu Framing supported” and “Supported Codec List for lu FP” to APM.
  - Sets compatibility information for these IEs to “discard at terminating node”
  - Learns from “lu Framing selected” in APM/ACM that negotiation was successful.
  - Shall initialize luFP when receiving APM/ACM message with “lu Framing supported”
  - Uses “Selected Codec for lu FP” and “Available Codec List for lu FP” if negotiation successful
  - Is configured to behave according to one of the scenarios:
- **For transparent pipe:**
  - Includes “TMR= 64 kBit/s unrestricted digital” to IAM.
  - Must not perform normal BICC codec negotiation
  - Sets compatibility information for these IEs to “transport transparently at transit node”
  - Uses PCM in 64k bearer if lu FP support negotiation fails.
- **For optimized bearer:**
  - Must not includes “TMR= 64 kBit/s unrestricted digital” to IAM.
  - may perform normal BICC codec negotiation
  - Sets compatibility information for these IEs to “discard at transit node”
  - Uses default framing protocol and Codec negotiated with normal BICC procedure if lu FP support negotiation fails.
- **Behavior of Transit Node**
  - It new IEs understood, interfere in IUFP initialization and IUFP codec negotiation, if, and only if, TMR present in IAM
- **Behavior at terminating Node**
  - Shall send “lu Framing selected” in APM/ACM if “lu Framing supported” was in APM.
  - Shall answer “Supported Codec List for lu FP” in IAM with “Selected Codec for lu FP” and “Available Codec List for lu FP” in APM/ACM
  - If lu framing negotiation successful, select codec in following precedence order:
    - Codec Negotiation for luFP.
    - Codec Negotiation for BICC,
    - Default Codec PCM
  - Shall use bearer according to normal BICC rules (either TMR if present, or default for codec).

Decision: Noted

**Document:** N4-021568  
**Title:** Comparison of proposed solutions for PFP and evaluation of the scope & requirements  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- **Proposal:**
  - o It is proposed that the supporting companies of this WI and the members of CN4 evaluate the list of requirements with the aim to identify: REQUIRED, DESIRED, DON'T CARE, NOT WANTED.
  - o In light of the results the WID may need to be updated to reflect this as it is clear that the scope and important requirements of this WI are under contention.
- **Proposed requirements:**
  1. Solution allows luFP to be negotiated between two PLMNs and if successful avoids transcoding or transframing.
  2. Framing protocol negotiation is supported for external networks – included in external protocols
  3. Framing protocol negotiation is supported “through” ISUP transit networks.
  4. Existing Codec Negotiation procedures shall be supported
  5. Fallback to Rel5 behaviour shall allow compressed voice/OoBTC across transit networks
  6. Fallback to Rel5 behaviour shall not allow compressed voice /OoBTC across transit networks
  7. Transit network bearer shall be able to be less than 64K b/s for speech calls that select compressed voice codecs.
  8. The protocol solution shall support the capability for indicating mode version of the UP.
  9. The protocol solution shall be independent from the solution to indicate the mode version of the UP.
  10. TMR for basic speech calls shall be unaffected by the solution.

**Decision:** Noted

### General discussion N4-021560 & N4-021568

- Lucent: Does the list of the requirements match the requirements in the WID?
  - o Siemens: WI doesn't go into that level of detail.
- Nortel: CN4 shouldn't simply be adding to the requirements, which have already been defined in the WID.
- Nortel would like to see an indication of which of the candidate requirements are included in the WID.
  - o Ericsson support Nortel's proposal, but CN4 should first rate the candidate requirements.
  - o Siemens: It may be unclear whether the existing WID includes a candidate requirement.
- Ericsson: We should avoid adding in WID lots of new candidate requirements. We shouldn't allow the new requirements, which are clearly not covered in the existing WID.
- CN4 decided that for the companies the closing date for proposing additional candidate requirements is 29<sup>th</sup> November 2002.
- CN4 also decided that the closing date for providing ratings of candidate requirements is 17<sup>th</sup> January 2003.
  - o Ericsson will put the inputs into a paper after deadline.
- **N4-021362, N4-021363, N4-021364 & N4-021441 are postponed to CN4#18**
- The WID (N4-021257), which was approved in Miami, will not be sent to CN#18 for approval.

## 6.5 Mn interface protocol

**Document:** N4-021391  
**Title:** Procedures section to TS 29.332  
**Source:** Siemens, Nokia  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

- Nokia: We should replace section 5.2.1 with a reference to 3GPP TS 29.232.
  - o Agreed by meeting
- Ericsson: Principle of proposed contribution is accepted. Technical content will be discussed during presentation of the new version of 3GPP TS 29.332 v.0.1.0
- Document is accepted as basis for further development. The next version will be 0.1.0

**Decision:**      **Approved as the basis for further development**

**Document:**    **N4-021564**

**Title:**        TS 29.332 0.0.1; Media Gateway Control Function (MGCF) – IM Media Gateway; Mn Interface

**Source:**       Editor

**Presented:**   Mr. Peter Schmitt, Siemens

**Discussion:**

- Proposal of discussion paper
  - o To agree the documentation split outlined above.
    - Agreed by CN4 meeting
  - o Agree to add the following text to TS 29.332 as a basis for further contributions.
    - Agreed by CN4 meeting

**Decision:**      **Principle Agreed**

## 6.6 Any other business for Release 6

# 7 Release 5

## 7.1 Subscriber data handling for the IMS

### 7.1.1 HSS – CSCF (Cx) & SLF – CSCF (Dx) interfaces

**Document:**    **N4-021366**

**CR:**            29.228-013 (Rel-5)

**Title:**        Correction to detailed behaviour of user registration status query

**Source:**       Nokia, Ericsson

**Presented:**   Mr. Kalle Tammi, Nokia

**Discussion:**

- N4-021281 shall be implemented before this CR.
- Some editorial changes were made in text.

**Decision:**      **Revised to N4-021511**

**Document:**    **N4-021511**

**CR:**            29.228-013r1 (Rel-5)

**Title:**        Correction to detailed behaviour of user registration status query

**Source:**       Nokia, Ericsson

**Presented:**

**Discussion:**

**Decision:**      **Agreed without presentation**

**Document:**    **N4-021367**

**CR:**            29.228-014 (Rel-5)

**Title:**        Removing the DDF dependencies from Cx interface

**Source:**       Nokia, Ericsson, Siemens, Lucent, Nortel

**Presented:**   Mr. Kalle Tammi, Nokia

**Discussion:**

- Ericsson: If T2 decide to continue with the DDF for the GUP work then misalignment will be a problem.
- Ericsson: There are some corrections needed in XML schema.

- Nokia: Nokia agree that some corrections are needed, but those are better to fix by a separate CR.
- After discussion CN4 decided to do the XML schema corrections in this CR.

**Decision:** Revised to N4-021512

**Document:** N4-021512  
**CR:** 29.228-014r1 (Rel-5)  
**Title:** Removing the DDF dependencies from Cx interface  
**Source:** Nokia, Ericsson, Siemens, Lucent, Nortel  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021369  
**CR:** 29.228-015 (Rel-5)  
**Title:** Clarification of SERVER\_CHANGE de-registration reason code  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- Ericsson proposed to remove the second part of the text.
  - If the HSS has to re-allocate an S-CSCF when the S-CSCF capabilities change, it may try the same S-CSCF again
- A revised CR will be drafted by Nokia, Ericsson and Orange France
- Ericsson: Should we ask user to re-register or to re-authenticate, which has side effect of automatic re-registration?
  - Nokia: This will be discussed in CN1. We have to wait for CN1 decision before we make the changes in our text.

**Decision:** Revised to N4-021513

**Document:** N4-021513  
**CR:** 29.228-015r1 (Rel-5)  
**Title:** Clarification of SERVER\_CHANGE de-registration reason code  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021370  
**CR:** 29.228-016 (Rel-5)  
**Title:** Clarification of User-Authorization-Type AVP usage within the UAR  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- Lucent proposed to change “shall be selected” to “needs to be selected”.
  - Agreed by meeting

**Decision:** Revised to N4-021514

**Document:** N4-021514  
**CR:** 29.228-016r1 (Rel-5)  
**Title:** Clarification of User-Authorization-Type AVP usage within the UAR  
**Source:** Nokia  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021371  
**CR:** 29.229-008 (Rel-5)

**Title:** Clarification of REGISTRATION\_AND\_CAPABILITIES value  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- Lucent proposed to change “shall be selected” to “needs to be selected”.
  - o Agreed by meeting
- Vodafone: A CR is not needed, because the material is already in 29.228-016r1.
  - o Nokia: Would like to accept the CR as it is, but if CN4 agrees to remove the sentence, it means a reference to 29.228 is needed instead of the text.
- Vodafone will not block the CR, but asked for their concerns about duplication of definition to be put on record.

**Decision:** **Revised to N4-021515**

**Document:** **N4-021515**  
**CR:** 29.229-008r1 (Rel-5)  
**Title:** Clarification of REGISTRATION\_AND\_CAPABILITIES value  
**Source:** Nokia  
**Presented:**  
**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021372**  
**CR:** 29.228-017 (Rel-5)  
**Title:** Correction to HSS initiated update of user profile  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- Orange France: We believe that if we use the DIAMETER\_ERROR\_USER\_UNKNOWN error then there is no trigger for the DIAMETER\_UNABLE\_TO\_COMPLY error.
  - o Nokia: This is the case where the private user ID was recognised but the database update failed for some other reason.

**Decision:** **Agreed**

**Document:** **N4-021444**  
**CR:** 29.228-019 (Rel-5)  
**Title:** Editorial correction in charging information  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021445**  
**CR:** 29.229-009 (Rel-5)  
**Title:** Editorial correction in charging information  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021446**  
**CR:** 29.228-020 (Rel-5)  
**Title:** Error handling in S-CSCF when receiving too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

- Siemens: For the registration case the S-CSCF should delete the user record and reject the registration attempt.

- o Orange France: This approach would lead to misalignment between the HSS view and the S-CSCF view.
- Orange France: We should consistently trigger the deregistration procedure if there is data overload.
  - o Ericsson: This could lead to looping.
- Orange France: If the S-CSCF suffers from data overload then it is temporarily unavailable, and the I-CSCF can select another S-CSCF.
- CN4 agreed: For the push case the HSS shall initiate deregistration and reselection of the S-CSCF.

**Decision:** Revised to N4-021517

**Document:** N4-021517  
**CR:** 29.228-020r1 (Rel-5)  
**Title:** Error handling in S-CSCF when receiving too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021447  
**CR:** 29.229-010 (Rel-5)  
**Title:** Error handling in S-CSCF when receiving too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

- CR needs to be revised to reflect the deregistration reason.

**Decision:** Revised to N4-021518

**Document:** N4-021518  
**CR:** 29.229-010r1 (Rel-5)  
**Title:** Error handling in S-CSCF when receiving too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021448  
**CR:** 29.228-021 (Rel-5)  
**Title:** Re-assignment of S-CSCF  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

- The first case identified in the "reason for change" doesn't need to be covered, following discussions between CN1 & SA2.

**Decision:** Revised to N4-021519

**Document:** N4-021519  
**CR:** 29.228-021r1 (Rel-5)  
**Title:** Re-assignment of S-CSCF  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021436  
**CR:** 29.228-018 (Rel-5)  
**Title:** Definition of the Subscribed media parameter

**Source:** Orange France

**Presented:**

**Discussion:**

- This CR, and the linked one in N4-021437, are withdrawn until SA2 have decided how much detail they want in the Subscribed Media data.

**Decision:** **Withdrawn**

**Document:** **N4-021437**

**CR:** CR 23.008-063 (Rel-5)

**Title:** Definition of the Subscribed media parameter

**Source:** Orange France

**Presented:**

**Discussion:**

**Decision:** **Withdrawn**

**Document:** **N4-021561**

**Title:** Definition of the Subscribed media parameter

**Source:** Orange France

**Presented:**

**Discussion:**

- This document was provided for offline study; it was presented to SA2.

**Decision:** **Noted**

**Document:** **N4-021558**

**CR:** 29.228-023 (Rel-5)

**Title:** Addition of the Subscribed media types

**Source:** Ericsson

**Presented:**

**Discussion:**

- This CR, and the linked one in N4-021559, are withdrawn until SA2 have decided how much detail they want in the Subscribed Media data.

**Decision:** **Withdrawn**

**Document:** **N4-021559**

**CR:** 23.008-064 (Rel-5)

**Title:** Addition of the Subscribed media types

**Source:** Ericsson

**Presented:**

**Discussion:**

**Decision:** **Withdrawn**

**Document:** **N4-021547**

**CR:** 29.228-022

**Title:** Correction of the SPI

**Source:** Nokia

**Presented:** Mr. Kalle Tammi, Nokia

**Discussion:**

- Ericsson would like to support the CR.

**Decision:** **Agreed**

### 7.1.2 HSS – SIP AS (Sh) interface

**Document:** **N4-021368**

**CR:** 29.328-009 (Rel-5)

**Title:** Removing the DDF dependencies from Sh interface

**Source:** Nokia

**Presented:** Mr. Kalle Tammi, Nokia



**Discussion:**

- This CR needs a revision. Reasons are same as in document N4-021367

**Decision: Revised to N4-021520****Document: N4-021520****CR:** 29.328-009r1 (Rel-5)**Title:** Removing the DDF dependencies from Sh interface**Source:** Nokia**Presented:** Mr. KalleTammi, Nokia**Discussion:****Decision: Agreed****Document: N4-021409****Title:** Synchronisation of Transparent Data shared by more than one Application Server**Source:** Siemens**Presented:** Mr. Ulrich Wiehe, Siemens**Discussion:**

- Vodafone: The data lock should be a subject to a time out against the AS failing and leaving the record permanently locked
  - o Accepted by Siemens, but they need guidance with a timer value.
  - o Vodafone: Timer could be 30 seconds
- Nokia & Ericsson: Record locking and update sequence number are not really needed;
- Siemens: If we don't have the update sequence number as proposed in this contribution the internal mechanism for ensuring synchronisation of data will be more complex.
- After offline discussion, Siemens decided to withdraw the CRs. They will prepare revisions for the next meeting.

**Decision: Noted****Document: N4-021410****CR:** 29.328-010 (Rel-5)**Title:** Synchronisation of transparent data**Source:** Siemens**Presented:** Mr. Ulrich Wiehe, Siemens**Discussion:****Decision: Withdrawn****Document: N4-021411****CR:** 29.329-004 (Rel-5)**Title:** Synchronisation of transparent data**Source:** Siemens**Presented:** Mr. Ulrich Wiehe, Siemens**Discussion:****Decision: Withdrawn****Document: N4-021412****CR:** 29.328-011 (Rel-5)**Title:** Clarification on format of transparent data**Source:** Siemens**Presented:** Mr. Ulrich Wiehe, Siemens**Discussion:**

- After discussion if XML schema is needed or not, Siemens decided to withdraw the document.

**Decision: Withdrawn****Document: N4-021413****CR:** 29.328-012 (Rel-5)**Title:** Initial Filter Criteria

**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

- Siemens: We don't have stage 2 requirements from SA2.
  - o Chairman: We should send LS to SA2 & CN1 and ask them give us some guidance.
- The CR is postponed until CN4 have more information.

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021521**  
**Title:** LS on Initial Filter Criteria  
**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

**Decision:** **Approved**

**Document:** **N4-021414**  
**CR:** 29.329-005 (Rel-5)  
**Title:** Initial Filter Criteria  
**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021449**  
**CR:** 29.328-013 (Rel-5)  
**Title:** Error handling in HSS when being updated with too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

- Nokia: The HSS should discard the entire set of data from AS.
  - o Accepted by meeting

**Decision:** **Revised to N4-021522**

**Document:** **N4-021522**  
**CR:** 29.328-013r1 (Rel-5)  
**Title:** Error handling in HSS when being updated with too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** **Revised to N4-021553**

**Document:** **N4-021553**  
**CR:** 29.328-013r2 (Rel-5)  
**Title:** Error handling in HSS when being updated with too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021450**  
**CR:** 29.329-006 (Rel-5)  
**Title:** Error handling in HSS when being updated with too much data  
**Source:** Ericsson  
**Presented:** Mr. Miguel-Angel Pallares, Ericsson  
**Discussion:**

**Decision:**     **Agreed**

**Document:**   **N4-021548**  
**CR:**           29.238-014  
**Title:**        Correction of the SPI  
**Source:**      Nokia  
**Presented:**   Mr. Kalle Tammi, Nokia  
**Discussion:**

**Decision:**     **Agreed**

## 7.2 CAMEL phase 4

**Document:**   **N4-021426/N2-020998**  
**CR:**           23.205-035r1 (Rel-5) on  
**Title:**        CAMEL4 Call Party Handling interworking with Bearer independent CS core  
**Source:**      Nokia  
**Presented:**   Mr. Keijo Palviainen, Nokia  
**Discussion:**

- Vodafone proposed a set of editorial changes to CR.
  - o Accepted by meeting

**Decision:**     **Revised to N4-021544/N2-021070**

**Document:**   **N4-021544/N2-021070**  
**CR:**           23.205-035r1 (Rel-5) on  
**Title:**        CAMEL4 Call Party Handling interworking with Bearer independent CS core  
**Source:**      Nokia  
**Presented:**  
**Discussion:**

- Endorsed by CN2

**Decision:**     **Agreed without presentation**

**Document:**   **N4-021443/N2-021009**  
**CR:**           29.002-513 (Rel-5)  
**Title:**        Reference to TS 23.078 in TS 29.002 regarding handling of VMSC address is missing  
**Source:**      Ericsson  
**Presented:**   Mr. Panagiotis Dimitroulas, Ericsson  
**Discussion:**

- Endorsed by CN2

**Decision:**     **Agreed**

**Document:**   **N4-021466/N2-021016**  
**Title:**        Incorrect Charging with MNP  
**Source:**      Ericsson  
**Presented:**   Mr. Panagiotis Dimitroulas, Ericsson  
**Discussion:**

- Proposed solution:
  - o The CAMEL Service Environment, the gsmSCF, shall have the capability to query the MNP information for prepaid services for the served subscriber at any time.
  - o The MNP functional entity, the MNP-SRF, shall have the capability to access the MNP information at any time.
  - o The interface between the gsmSCF and the MNP-SRF, to allow the gsmSCF to query the MNP data base, shall be the MAP Any Time Interrogation.
- Siemens: Have you considered another possible solution? Sending an ATI to Signalling Relay Function could be regarded as misuse of the MNP-SRF. We should not use ATI, but rather the IN query identified for MNP.

- Siemens: If this is CAMEL related matter, we must discuss based on the service requirement in 22.078. However, 22.078 does not state the interface between the gsmSCF and the NMP-SRF.
  - o Ericsson: yes, we have considered other solutions, but we think this is the best one.
- Telia, Orange France and T-Mobil support the proposed feature.
- Siemens & Vodafone: Do we have service requirements in 22.078?
  - o CN4 chairman: Yes, this is something that should be handled first in SA1.
- Siemens: We shouldn't use ATI query to the NMP-SRF. Instead of that we should use the SendIMSI operation, and define it for use on the gsmSCF - HLR interface. The NMP-SRF would relay the sendIMSI request to the gaining HLR.
- Siemens: If ATI is used for non-CAMEL related issue, then we did not have to discuss it at the joint meeting.
- After offline discussion, Nokia & Siemens indicated that companies can't accept the proposed solution.

**Decision:**       **Noted**

**Document:**    **N4-021464/ N2-021068**  
**CR:**            29.002-520 (Rel-5)  
**Title:**         Incorrect Charging with MNP  
**Source:**       Ericsson  
**Presented:**  
**Discussion:**

**Decision:**       **Postponed to CN4#18**

**Document:**    **N4-021465/ N2-021067**  
**CR:**            23.066-020 (Rel-5)  
**Title:**         Incorrect Charging with MNP  
**Source:**       Ericsson  
**Presented:**    Mr. Panagiotis Dimitroulas, Ericsson  
**Discussion:**

- *Document was presented only in CN4 meeting, not during CN2/CN4 joint session*
- Ericsson provided background information about service requirements before CR presentation. The examples from stage 1 and stage 2 specification clarifies that stage 1 requirements are not needed
- Orange France: "FFS" should be added in the new paragraph (4.3).
- Siemens: There is a need for a MATF in the NMP-SRF in section 4.3 with the new functionality
- Vodafone D2: The new IE described is not needed; it can be deduced from the IMSI.
  - o Siemens: All we need is the IMSI to determine whether the number is ported or not.
    - Ericsson: There is already the number portability status in SRI ack.
- The "ported out" and "ported in" values have full meaning only when coupled to the identity of the responding PLMN.
- Chairman: Further discussion is needed on the CN4 E-mail exploder.
- Ericsson: Can we accept that this CR is approved by CN4 as the basis of the technical solution.
  - o CN4 couldn't make this kind of agreement.

**Decision:**       **Postponed to CN4#18**

**Document:**    **N4-021545/N2-021007**  
**CR:**            23.078-495  
**Title:**         Correction to ATI handling in HLR  
**Source:**       Ericsson  
**Presented:**    Mr. Rogier Noldus, Ericsson  
**Discussion:**

- The CR was presented for information in CN4

**Decision:**       **Noted**

**Document:** N4-021531/N2-021069  
**CR:** 29.002-522 (Rel-5)  
**Title:** Introduction of CHOICE element netDetNotReachable for PS-SubscriberState  
**Source:** Ericsson  
**Presented:** Mr. Rogier Noldus, Ericsson  
**Discussion:**

- The change to Annex B is unnecessary.
  - o It will be ignored when the CR is implemented.
    - MCC secretary will reject the changes in Annex B, before the CR is sent to CN plenary for approval.

**Decision:** Agreed

## 7.3 GPRS

**Document:** N4-021339  
**CR:** 29.060-366 (Rel-5)  
**Title:** Clarification on IP fragmentation over Iu interface  
**Source:** Lucent  
**Presented:**  
**Discussion:**

**Decision:** Withdrawn

**Document:** N4-021360  
**CR:** 29.060-373 (Rel-5)  
**Title:** Clarification on IP fragmentation over Iu interface by reference  
**Source:** Lucent  
**Presented:**  
**Discussion:**

- RAN3's preference is for the handling of fragmentation to be defined in a RAN3 specification, with a reference from 29.060.

**Decision:** Revised to N4-021533

**Document:** N4-021533  
**CR:** 29.060-373r1 (Rel-5)  
**Title:** Clarification on IP fragmentation over Iu interface by reference  
**Source:** Lucent  
**Presented:** Mr. Nigel Berry, Lucent  
**Discussion:**

- Nortel: The new text in 25.414 could be added in 29.060 instead of proposed one.
  - o Accepted by meeting
  - o Vodafone: There is no reason to refer a single line of text in 25.414.
  - o Siemens: If RAN3 decide later to expand their specification we have to update our specification. We should also avoid duplication in specifications.
- CN4 decided to accept the reference to 25.414.
- Lucent: This should not be changed in Rel-4 because this is not a critical correction.
  - o NEC support Lucent
- Nortel: The change would be safer to align also in Rel-4.
  - o After discussion, CN4 agreed to make the change in Rel-4 as a critical correction.
- Category of this CR will be changed to A.
- Rel-4 CR will be N4-021532.
- "Iu-ps" should be changed to "Iu"

**Decision:** Revised to N4-021534

**Document:** N4-021532  
**CR:** 29.060-383 (Rel-4)  
**Title:** Clarification on IP fragmentation over Iu interface by reference  
**Source:** Lucent

**Presented:**  
**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021534**  
**CR:** 29.060-373r2 (Rel-5)  
**Title:** Clarification on IP fragmentation over lu interface by reference  
**Source:** Lucent  
**Presented:**  
**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021427**  
**CR:** 29.060-362r3 (Rel-5)  
**Title:** Clarification of the placement of the fields in the PDP Context IE  
**Source:** Ericsson  
**Presented:** Ms. Anna Jernryd, Ericsson  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021428**  
**CR:** 29.060-379 (Rel-5)  
**Title:** General cause code for IMS related PDP context rejections  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- After discussion in CN3 Ericsson withdrew the CR
  - o Nokia: The decision in CN3 was that the CR is not needed.

**Decision:** **Withdrawn**

## 7.4 LCS in the PS domain

**Document:** **N4-021350**  
**CR:** 29.002-500 (Rel-5)  
**Title:** Addition of Positioning Data IE to Provide Subscriber Location and Send Location Report  
**Source:** Nortel  
**Presented:** Dr. Dan Warren, Nortel  
**Discussion:**

- Nokia: Is there a requirement in the stage 2?
  - o Nortel: Not yet.
- Ericsson can't agree with the changes for Rel-5, because there are no stage 1 requirements. Category should be B.
  - o Nortel agreed with this comment
- Siemens: A CR is not needed. Accuracy is already part of the info as can be seen e.g. in section 7.6.11.

**Decision:** **Withdrawn**

**Document:** **N4-021383**  
**CR:** 29.002-512 (Rel-5)  
**Title:** Correction of Codeword Handling  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

- Nortel: There might be some impacts on SDLs
  - o NTT DoCoMo: no effect on SDLs

**Decision:** **Agreed**

**Document:** N4-021384  
**CR:** 23.008-060 (Rel-5)  
**Title:** Deleting codeword related information  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

**Decision:** Agreed

## 7.5 Bearer Independent Architecture

**Document:** N4-021340  
**CR:** 23.205-031r2  
**Title:** lu-cs over IP related corrections on 23.205  
**Source:** Nokia, LM Ericsson, Siemens, Lucent, Nortel  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Nokia: "UDP port address" should be renamed as "UDP port".
- Nokia: Table 16.23 should be changed: "UDP port of the MGW" => "UDP port of the RNC"
- Ericsson: There is no specific handling for release with lu-CS. We could add a general exception that if an IP bearer is used there is no reason to release the bearer.
- Nortel: We need a separate CR for cleaning the specification.
  - o Accepted by the meeting
- The category is rather B than F.
  - o Ericsson: This CR is to resolve an issue which was declared as open for Rel-5 in RAN.

**Decision:** Revised to N4-021554

**Document:** N4-021554  
**CR:** 23.205-031r3  
**Title:** lu-cs over IP related corrections on 23.205  
**Source:** Nokia, LM Ericsson, Siemens, Lucent, Nortel  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021341  
**CR:** 29.232-042r2  
**Title:** lu-cs over IP related corrections on 29.232  
**Source:** Nokia, LM Ericsson, Siemens, Lucent, Nortel  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

- Some editorial changes were made.

**Decision:** Revised to N4-021555

**Document:** N4-021555  
**CR:** 29.232-042r3  
**Title:** lu-cs over IP related corrections on 29.232  
**Source:** Nokia, LM Ericsson, Siemens, Lucent, Nortel  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**

**Decision:** Agreed

**Document:** N4-021395  
**CR:** 29.232-052r2 (Rel-4) on  
**Title:** Flexible Tone Package for CAMEL4  
**Source:** LM Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson

**Discussion:**

- This supersedes CR 29.232-052r1 (N4-021295), which was agreed in CN4 #16.

**Decision:** **Approved**

## 7.6 SMS

**Document:** **N4-021523**

**Title:** Liaison statement on Introduction of Call Barring for SMS in PS domain

**Source:** SA2

**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo

**Discussion:**

- Ericsson: CN1 has decided that Call Barring for SMS in PS domain will not be introduced before Rel-6 because of the problems with Mobile Terminals.

**Decision:** **Noted**

**Document:** **N4-021516**

**Title:** Introduction of Call Barring for SMS in PS domain

**Source:** NTT Commware

**Presented:** Mr. Nobuyuki Uda, NTT Commware

**Discussion:**

- The approach of filtering the call-independent SS request in the MS will need discussion in CN1.

**Decision:** **Noted**

**Document:** **N4-021379**

**CR:** 23.088-003 (Rel-5)

**Title:** Introducing SMS Call Barring in PS domain

**Source:** NTT DoCoMo

**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo

**Discussion:**

- Motorola: CN1 are waiting for SA1 to clarify the service requirements for SMS PS barring
- Changes will be done to Rel-6; that means the CRs are postponed to CN4#18

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021380**

**CR:** 24.088-001 (Rel-5)

**Title:** Introducing SMS Call Barring in PS domain

**Source:** NTT DoCoMo

**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo

**Discussion:**

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021375**

**CR:** 23.016-030 (Rel-5)

**Title:** Introducing SMS Call Barring in PS domain

**Source:** NTT Commware

**Presented:** Mr. Yukihide Shiozawa, NTT Commware

**Discussion:**

- The document is technically approved in CN4.

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021376**

**CR:** 24.010-006 (Rel-5)

**Title:** Introducing SMS Call Barring in PS domain

**Source:** NTT Commware

**Presented:** Mr. Yukihide Shiozawa, NTT Commware



**Discussion:**  
- The document is technically approved in CN4.

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021377**  
**CR:** 24.080-027 (Rel-5)  
**Title:** Introducing SMS Call Barring in PS domain  
**Source:** NTT Commware  
**Presented:** Mr. Yukihide Shiozawa, NTT Commware  
**Discussion:**

- The document is technically approved in CN4.

**Decision:** **Postponed to CN4#18**

**Document:** **N4-021502**  
**CR:** 29.002-509 (Rel-5)  
**Title:** Introducing SMS Call Barring in PS domain  
**Source:** NTT Commware  
**Presented:** Mr. Yukihide Shiozawa, NTT Commware  
**Discussion:**

- The document was substantially revised after off-line comments. Further off-line comments are invited

**Decision:** **Noted**

**Document:** **N4-021501**  
**CR:** 23.011r1-003 (Rel-5)  
**Title:** Introducing SMS Call Barring in PS domain  
**Source:** NTT Commware  
**Presented:** Mr. Nobuyuki Uda, NTT Commware  
**Discussion:**

- The document was substantially revised after off-line comments. Further off-line comments are invited

**Decision:** **Noted**

#### **GENERAL DISCUSSION about Introducing SMS Call Barring in PS domain:**

- *Lucent & Nortel would like to see the changes in Rel-5, but Nokia & Ericsson prefer to see them in Rel-6.*
  - o *Nokia: There are no CISS requirements in 23.060 for Rel-5.*
- **CN4 decided that the target release for SMS Call Barring in PS domain is Rel-6.**

**Document:** **N4-021419**  
**Title:** On dealing with a long SMS RPDU by MSC and SGSN  
**Source:** NTT Commware  
**Presented:** Mr. Nobuyuki Uda, NTT Commware  
**Discussion:**

- NTT Comware would like to ask CN4 if our analysis on this paper would be acceptable:
  - o The analysis: the current TS 29.002 and TS 24.011 fulfil the requirements of TS 23.040 and fit on various network interconnection environment.
- CN4 agreed with NTT Comware proposal.

**Decision:** **Noted**

## 7.7 Handover

**Document:** **N4-021393**  
**CR:** 23.009-084r3 (Rel-5)  
**Title:** Inter-MSC relocation and intersystem handover for multiple codecs  
**Source:** Siemens  
**Presented:** Mr. Robert Zaus, Siemens

**Discussion:**

**Decision:** **Endorsed by CN4**

**Document:** **N4-021394**

**CR:** 29.010-078 (Rel-5)

**Title:** Interworking between security mode procedure and relocation

**Source:** Siemens

**Presented:** Mr. Robert Zaus, Siemens

**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021467**

**CR:** 29.002-492r5 (Rel-5)

**Title:** Available codecs list and selected codec indication

**Source:** Nokia

**Presented:** Mr. Jari Jansson

**Discussion:**

- Summary of changes has to be added in cover page.

**Decision:** **Agreed**

## 7.8 SCUDIF

## 7.9 Any Other Business for Release 5

### 7.9.1 Basic Call Handling

**Document:** **N4-021343**

**CR:** 23.018-112

**Title:** Clarification of requirements for the presence of IEs in messages

**Source:** Vodafone

**Presented:** Mr. Ian Park, Vodafone

**Discussion:**

- Ericsson: In second bullet, the text should be changed to: "it shall always be present in the context of the service or feature defined in the derived specification"

**Decision:** **Revised to N4-021500**

**Document:** **N4-021500**

**CR:** 23.018-112r1

**Title:** Clarification of requirements for the presence of IEs in messages

**Source:** Vodafone

**Presented:**

**Discussion:**

**Decision:** **Agreed without presentation**

### 7.9.2 Numbering & addressing

**Document:** **N4-021344**

**CR:** 23.003-058 (Rel-5)

**Title:** Addition of a reference to the ITU-T RECOMMENDATION E.212 for Mobile Country Codes

**Source:** Lucent, Vodafone

**Presented:** Mr. Nigel Berry, Lucent

**Discussion:**

- This CR must be implemented after CR 23.003-056.

**Decision:** **Agreed**

### 7.9.3 IMS identities

**Document:** N4-021385  
**CR:** 23.008-061  
**Title:** Correction to the form of public user identity  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

- CN4 agreed the principle to replace explicit definitions of the form of the public identity in 3GPP TS 23003.
- Lucent: There is a misalignment between terms "Public Identity" and "Public User Identity"

**Decision:** Revised to N4-021507

**Document:** N4-021507  
**CR:** 23.008-061r1  
**Title:** Correction to the form of public user identity  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi  
**Discussion:**

- When the CR is implemented, reference [47] should be made "void", not deleted.

**Decision:** Agreed

**Document:** N4-021386  
**CR:** 23.003-059  
**Title:** Correction to the form of public user identity  
**Source:** Nokia  
**Presented:** Mr. Kalle Tammi, Nokia  
**Discussion:**

**Decision:** Agreed

### 7.9.4 MAP protocol

**Document:** N4-021415  
**CR:** 29.002-505 (Rel-5)  
**Title:** Requesting Node Type  
**Source:** Siemens  
**Presented:** Mr. Ulrich Wiehe, Siemens  
**Discussion:**

- Ericsson: We don't like the use of the requesting node type to indicate S-CSCF.

**Decision:** Rejected

**Document:** N4-021483  
**CR:** 29.002-521 (Rel-5)  
**Title:** Editorial clean-up of references  
**Source:** MCC  
**Presented:** Mr. Kimmo Kymäläinen  
**Discussion:**

- Reference number [63] should be restored.
- Reference number will be added for 12.08 throughout the document.
- Reference [98] Camel phase 3 has to be changed to Camel phase 4

**Decision:** Revised to N4-021524

**Document:** N4-021524  
**CR:** 29.002-521r1 (Rel-5)  
**Title:** Editorial clean-up of references  
**Source:** MCC  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

### 7.9.5 GERAN Iu mode

**Document:** N4-021471  
**Title:** Reply LS on CS data services for GERAN Iu-mode  
**Source:** CN3  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**  
- Reply LS N4-021525 drafted by Peter Schmitt, Siemens

**Decision:** Noted

**Document:** N4-021525  
**Title:** Reply LS on CS data services for GERAN Iu-mode  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

**Decision:** Approved

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## 8

### 8.1 Location services

**Document:** N4-021474  
**Title:** Reply LS on Handling of Multiple Deferred Mobile Terminating Location Request.  
**Source:** SA2  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**

**Decision:** Noted

**Document:** N4-021381  
**CR:** 29.002-510 (Rel-4)  
**Title:** Addition of reference number to deferred location request procedure  
**Source:** NTT DoCoMo  
**Presented:** Mr. Daisuke Igarashi, NTT DoCoMo  
**Discussion:**  
- Editorial changes were made.

- o Vodafone: "Reference number" should to be changed to "LCS reference number"

- Nokia ask for the ASN.1 comments on presence requirement for the reference number to be removed.

- o Vodafone don't see the requirement for references.
- o NTT DoCoMo would like to keep the references.
- o Lucent & Ericsson support DoCoMo
  - CN4 decided to keep it

**Decision:** Revised to N4-021562

**Document:** N4-021562  
**CR:** 29.002-510r1 (Rel-4)  
**Title:** Addition of reference number to deferred location request procedure  
**Source:** NTT DoCoMo  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021382  
**CR:** 29.002-511 (Rel-5)  
**Title:** Addition of reference number to deferred location request procedure  
**Source:** NTT DoCoMo  
**Presented:**  
**Discussion:**

- Rel-5 mirror of N4-021381

**Decision:** Revised to N4-021563

**Document:** N4-021563  
**CR:** 29.002-511 (Rel-5)  
**Title:** Addition of reference number to deferred location request procedure  
**Source:** NTT DoCoMo  
**Presented:**  
**Discussion:**

- Rel-5 mirror of N4-021562

**Decision:** Agreed without presentation

## 8.2 Bearer independent architecture

**Document:** N4-021421  
**CR:** 29.232-040r1 (Rel-4)  
**Title:** Termination ID Correction  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

- The other vendors (Ericsson, Siemens, Lucent, Nortel, Alcatel) disagreed with Nokia. The length of ROOT termination ID should be the same as for other termination IDs. The 8 octets proposal was rejected.

**Decision:** Revised to N4-021556

**Document:** N4-021556  
**CR:** 29.232-040r2 (Rel-4)  
**Title:** Termination ID Correction  
**Source:** Nokia  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021557  
**CR:** 29.232-041r2 (Rel-5)  
**Title:** Termination ID Correction  
**Source:** Nokia  
**Presented:**  
**Discussion:**

- This is a Rel-5 mirror CR of N4-021556.

**Decision:** Agreed without presentation

## 8.3 GPRS

**Document:** N4-021351  
**CR:** 29.060-367 (R99)  
**Title:** Update PDP Context Response for Contexts that do not exist  
**Source:** Nortel Networks  
**Presented:** Dr. Daniel Warren, Nortel Networks  
**Discussion:**

- Nokia: The CR is redundant – the behaviour is already specified.
- Nokia: If there are needs to set TEID 0 that should be specified in section 8.2.

- o Nortel: That proposal means we would need to remove the statement for the delete PDP context that TEID is set to 0.
- NEC: The CR is against frozen release and NEC don't see any reason to agree this one in earlier releases than Rel-5.

**Decision:** **Withdrawn (mirror CRs in N4-021352 & N4-021353 also withdrawn)**

**Document:** **N4-021354**  
**CR:** 29.060-370 (R99)  
**Title:** Create (Secondary) PDP Context Response where Primary Context is not known  
**Source:** Nortel Networks  
**Presented:** Dr. Daniel Warren, Nortel Networks  
**Discussion:**

**Decision:** **Withdrawn (mirror CRs in N4-021355 & N4-021356 also withdrawn)**

**Document:** **N4-021480**  
**Title:** Reply LS on "LS on missing Charging Characteristics for a short period of time after an inter-SGSN RAU"  
**Source:** SA5  
**Presented:** Mr. Ian Park, chairman  
**Discussion:**

**Decision:** **Noted**

**Document:** **N4-021387**  
**CR:** 29.060-374 (Rel-4)  
**Title:** Transfer of Charging characteristics in case of inter SGSN change  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

- Alcatel: Do you have a one or multiple charging characteristic?
  - o Siemens: Only one
  - o Alcatel: How can we have the correct charging characteristics for each PDP context? If we send multiple charging characteristics, how do we correlate the charging characteristics with the contexts?
    - Nortel: In principle the HLR can assign different charging characteristics to different PDP contexts.
- NEC: How do you handle the absence of the charging characteristic element from an R99 SGSN?
  - o Siemens: This is not treated as an error in protocol level.
  - o After discussion presence requirement has to be changed to Optional
- Lucent: Further study is needed to handle multiple charging characteristics.
  - o Nokia: We would like to avoid a new IE, because of the impact on existing implementations.

**Decision:** **Revised to N4-021551**

**Document:** **N4-021551**  
**CR:** 29.060-374r1 (Rel-4)  
**Title:** Transfer of Charging characteristics in case of inter SGSN change  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

- Lucent: The reference to 32.215 should be added in the proposed text.

**Decision:** **Revised to N4-021577**

**Document:** **N4-021577**  
**CR:** 29.060-374r2 (Rel-4)  
**Title:** Transfer of Charging characteristics in case of inter SGSN change  
**Source:** Siemens  
**Presented:**

**Discussion:**

**Decision:** **Agreed without presentation**

**Document:** **N4-021578**  
**CR:** 29.060-375r2 (Rel-5)  
**Title:** Transfer of Charging characteristics in case of inter SGSN change  
**Source:** Siemens  
**Presented:**  
**Discussion:**

- Rel-5 mirror of N4-021577

**Decision:** **Agreed without presentation**

**Document:** **N4-021423**  
**CR:** 29.060-376 (R99)  
**Title:** Cause Codes in SGSN Context Acknowledge  
**Source:** Nokia  
**Presented:** Mr. Seppo Kauntola, Nokia  
**Discussion:**

- Nortel: "Roaming restriction" isn't a possible cause code.
- Nortel: If the authentication failure is caused by MS disappearing and T3timer is stopped, the PDP context would persist indefinitely.
  - o Nokia: This should be rare enough that we can tolerate it.
  - o Vodafone: Maybe health warning could be added.
- Lucent: The first paragraph of proposed text is not needed, because the change is covered already in stage 2 specification 23.060.
- Motorola: We don't think this an essential correction for R99 & Rel-4.
- After discussion, also Rel-5 was rejected.

**Decision:** **Rejected**

**Document:** **N4-021424**  
**CR:** 29.060-376 (Rel-4)  
**Title:** Cause Codes in SGSN Context Acknowledge  
**Source:** Nokia  
**Presented:**  
**Discussion:**

**Decision:** **Rejected**

**Document:** **N4-021425**  
**CR:** 29.060-377 (Rel-5)  
**Title:** Cause Codes in SGSN Context Acknowledge  
**Source:** Nokia  
**Presented:**  
**Discussion:**

**Decision:** **Rejected**

**Document:** **N4-021429**  
**Title:** Cause #8 in Non-combined GPRS Attach and Normal Routing Area Update  
**Source:** Ericsson  
**Presented:** Ms. Anna Jernryd  
**Discussion:**

- Ericsson wanted to withdraw this discussion paper and related CRs because there was no agreement in CN1 discussion:
  - o N4-021430; 29.010-079 **withdrawn**
  - o N4-021431; 29.010-080 **withdrawn**
  - o N4-021432; 29.010-081 **withdrawn**

**Decision:** **Withdrawn**

**Document:** N4-021451  
**CR:** 29.060-381 (R99)  
**Title:** Clarification on presence of optional fields in GTP header  
**Source:** Alcatel, Orange France  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

- Lucent: Does this CR adds value, since it restates what is already clear?
  - o Orange France: There is the contradiction between chapter 6 & chapter 9.3.1.
- Vodafone: The clause " and the length of the header is at least 12 octets": is it part of the condition or the consequence?
  - o Alcatel: It's part of the consequence.
- Vodafone: We would like to object the additional text at the end of the second clause ("in case of discrepancy ...").
  - o Orange France clarified why the text is there.
    - Vodafone can accept that some additional text is needed, but it needs improvement.
  - o Lucent want to strike out the additional text altogether

**Decision:** Revised to N4-021541

**Document:** N4-021541  
**CR:** 29.060-381r1 (R99)  
**Title:** Clarification on presence of optional fields in GTP header  
**Source:** Alcatel, Orange France  
**Presented:** Mr. Markus Berg, Alcatel  
**Discussion:**

- Nokia don't object to the CR, but they might have a different opinion in CN plenary.

**Decision:** Agreed

**Document:** N4-021542  
**CR:** 29.060-382r1 (Rel-4)  
**Title:** Clarification on presence of optional fields in GTP header  
**Source:** Alcatel, Orange France  
**Presented:**  
**Discussion:**

- Rel-4 mirror of N4-021451

**Decision:** Agreed

**Document:** N4-021543  
**CR:** 29.060-383r1 (Rel-5)  
**Title:** Clarification on presence of optional fields in GTP header  
**Source:** Alcatel, Orange France  
**Presented:**  
**Discussion:**

- Rel-5 mirror of N4-021452

**Decision:** Agreed

## 8.4 Camel phase 3

**Document:** N4-021357/ N2-020956  
**Title:** Compatibility of LocationInformationGPRS definition in R99/ Rel-4 and Rel-5  
**Source:** Nortel Networks, Vodafone  
**Presented:** Dr. Dan Warren, Nortel Networks  
**Discussion:**

- Vendors had objections to making the incompatible change to R99 & Rel-5.
  - o Siemens was concerned about changing Rel-5 MAP.
- Nokia proposed: Local definition as an OCTET STRING in 29.078 but retain the CHOICE type definition in 29.002.



- CN2/CN4 joint meeting agreed with Nokia's proposal

**Decision:** **Noted**

**Document:** **N4-021358/ N2-020961**  
**CR:** 29.002-501 (Rel-5)  
**Title:** Correction of LocationInformationGPRS definition (OCTET STRING option)  
**Source:** Nortel Networks  
**Presented:**  
**Discussion:**  
- The CR was rejected after discussion on N4-021357.

**Decision:** **Rejected**

**Document:** **N4-021359/ N2-020961**  
**CR:** 29.078-286 (R99)  
**Title:** Correction of LocationInformationGPRS definition (OCTET STRING option)  
**Source:** Nortel Networks  
**Presented:** Dr. Dan Warren, Nortel Networks  
**Discussion:**

**Decision:** **Noted**

**Document:** **N4-021416/ N2-021064**  
**CR:** 29.002-506 (R99)  
**Title:** ODB correction  
**Source:** Siemens  
**Presented:** **Ulrich Wiehe, Siemens**  
**Discussion:**

**Decision:** **Agreed**

**Document:** **N4-021417/ N2-021065**  
**CR:** 29.002-507 (Rel-4)  
**Title:** ODB correction  
**Source:** **Siemens**  
**Presented:**  
**Discussion:**  
- Rel-4 mirror of N4-021416

**Decision:** **Agreed**

**Document:** **N4-021418/ N2-021066**  
**CR:** 29.002-508 (Rel-5)  
**Title:** ODB correction  
**Source:** **Siemens**  
**Presented:**  
**Discussion:**  
- Rel-5 mirror of N4-021416

**Decision:** **Agreed**

## 8.5 IP signalling transport

**Document:** **N4-021396**  
**CR:** 29.202-008 (Rel-4)  
**Title:** IETF RFC Reference For M3UA  
**Source:** Ericsson  
**Presented:** Mr. Phil Hodges, Ericsson  
**Discussion:**  
- Styles of the references has to be updated during implementation.

**Decision:** **Agreed**

**Document:** N4-021397  
**CR:** 29.202-009 (Rel-5)  
**Title:** IETF RFC Reference For M3UA  
**Source:** Ericsson  
**Presented:**  
**Discussion:**

- Rel-5 mirror of N4-021396

**Decision:** Agreed

## 8.6 TrFO/Codec control

**Document:** N4-021389  
**CR:** 23.153-048 (Rel-4)  
**Title:** Alignment on the optionality on usage of GTT in case of relocation between RNC's connected to different 3G MSC's  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

- "GTT" on the cover sheet should be expanded to "Global Title Translation".

**Decision:** Agreed

**Document:** N4-021390  
**CR:** 23.153-049 (Rel-5)  
**Title:** Alignment on the optionality on usage of GTT in case of relocation between RNC's connected to different 3G MSC's  
**Source:** Siemens  
**Presented:**  
**Discussion:**

- Rel-5 mirror of N4-021389

**Decision:** Agreed

**Document:** N4-021489  
**CR:** 23.153-050r1 (Rel-5)  
**Title:** Removal of Codec Restriction for Interface between MSC-A and MSC-B  
**Source:** Siemens  
**Presented:** Mr. Peter Schmitt, Siemens  
**Discussion:**

- Ericsson: We should not recommend the use of the Inter-MSC SRNS Relocation procedure in 6.2; if anything, we should recommend the Intra-MSC SRNS Relocation procedure (although the Inter-MSC SRNS Relocation procedure is permitted).
- Ericsson: The interaction between the MAP procedures and TrFO isn't described. We need to indicate the codec type to intermediate switches/media gateways.
- After offline discussion, Siemens decided to postpone the CR to the next meeting.

**Decision:** Postponed to CN4#18

## 8.7 Any other business for Release 4 or Release 99

### 8.7.1 Handover

**Document:** N4-021433  
**CR:** 23.009-088 (R99)  
**Title:** Clarification of the protocol to be used on the E-interface  
**Source:** Siemens  
**Presented:** Mr. Robert Zaus, Siemens  
**Discussion:**

**Decision:** Endorsed

**Document:** N4-021434  
**CR:** 23.009-089 (Rel-4)  
**Title:** Clarification of the protocol to be used on the E-interface  
**Source:** Siemens  
**Presented:**  
**Discussion:**  
- Rel-4 mirror of N4-021433

**Decision:** Endorsed

**Document:** N4-021435  
**CR:** 23.009-090 (Rel-5)  
**Title:** Clarification of the protocol to be used on the E-interface  
**Source:** Siemens  
**Presented:**  
**Discussion:**  
- Rel-5 mirror of N4-021433

**Decision:** Endorsed

**Document:** N4-021508  
**CR:** 23.009-081r2 (R99) on  
**Title:** MSC\_A\_HO SDL correction  
**Source:** Nortel  
**Presented:** Dr. Dan Warren, Nortel  
**Discussion:**

**Decision:** Endorsed

**Document:** N4-021509  
**CR:** 23.009-082r2 (Rel-4) on  
**Title:** MSC\_A\_HO SDL correction  
**Source:** Nortel  
**Presented:** Dr. Dan Warren, Nortel  
**Discussion:**

**Decision:** Endorsed

**Document:** N4-021510  
**CR:** 23.009-083r2 (Rel-5) on  
**Title:** MSC\_A\_HO SDL correction  
**Source:** Nortel  
**Presented:** Dr. Dan Warren, Nortel  
**Discussion:**

**Decision:** Endorsed

## 8.7.2 Multicall

**Document:** N4-021535  
**CR:** 29.002-514r1 (R99)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Ericsson: We believe that there is no need to carry the list of RAB parameters for all multicall components in the encapsulated BSSAP signalling.

**Decision:** Revised to N4-021571

**Document:** N4-021571  
**CR:** 29.002-514r2 (R99)

**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- Ericsson: Do we need this correction to R99?
  - o Siemens asked postponement of the decision for email approval.
    - Supported by Alcatel
- If no objection before 22<sup>nd</sup> November 12:00 CET the document will be sent to CN#18 for approval. If there is an objection, the CR will be discussed further in CN4 #18.

**Decision:** **Postponed for Email approval**

**Document:** **N4-021572**  
**CR:** 29.002-515r2 (Rel-4)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:**  
**Discussion:**

- If no objection before 22<sup>nd</sup> November 12:00 CET the document will be sent to CN#18 for approval. If there is an objection, the CR will be discussed further in CN4 #18.

**Decision:** **Postponed for Email approval**

**Document:** **N4-021573**  
**CR:** 29.002-515r2 (Rel-5)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:**  
**Discussion:**

- If no objection before 22<sup>nd</sup> November 12:00 CET the document will be sent to CN#18 for approval. If there is an objection, the CR will be discussed further in CN4 #18.

**Decision:** **Postponed for Email approval**

**Document:** **N4-021574**  
**CR:** 29.010-082r2 (R99)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

**Decision:** **Revised to N4-021579**

**Document:** **N4-021579**  
**CR:** 29.010-082r3 (R99)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- If no objection before 22<sup>nd</sup> November 12:00 CET the document will be sent to CN#18 for approval. If there is an objection, the CR will be discussed further in CN4 #18.

**Decision:** **Postponed for Email approval**

**Document:** **N4-021580**  
**CR:** 29.010-083r3 (Rel-4)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- If no objection before 22<sup>nd</sup> November 12:00 CET the document will be sent to CN#18 for approval. If there is an objection, the CR will be discussed further in CN4 #18.

**Decision:** Postponed for Email approval

**Document:** N4-021581  
**CR:** 29.010-084r3 (Rel-5)  
**Title:** Correction to the Service Handover parameters  
**Source:** Nokia  
**Presented:** Mr. Jari Jansson, Nokia  
**Discussion:**

- If no objection before 22<sup>nd</sup> November 12:00 CET the document will be sent to CN#18 for approval. If there is an objection, the CR will be discussed further in CN4 #18.

**Decision:** Postponed for Email approval

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## 9 GSM maintenance

### 9.1 GTP enhancements

**Document:** N4-021476  
**Title:** Response to "LS on MMS charges based upon the roamed to network"  
**Source:** SA2  
**Presented:** Ms. Anna Jernryd, Ericsson  
**Discussion:**

- The CRs in N4-021490 and mirrors reflect the requirement of this LS

**Decision:** Noted

**Document:** N4-021490  
**CR:** 09.60-A120r2 (R97)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**

-

**Decision:** Revised to N4-021526

**Document:** N4-021526  
**CR:** 09.60-A120r3 (R97)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021346  
**CR:** 09.60-A119r1 (R98)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

-

**Decision:** Revised to N4-021527

**Document:** N4-021527  
**CR:** 09.60- A119r2 (R98)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021347  
**CR:** 29.060-365r1 (R99)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:** Mr. Nick Russell, Vodafone  
**Discussion:**  
-

**Decision:** Revised to N4-021528

**Document:** N4-021528  
**CR:** 09.60- 365r2 (R99)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021348  
**CR:** 29.060-364r1 (Rel-4)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**  
-

**Decision:** Revised to N4-021529

**Document:** N4-021529  
**CR:** 29.060-364r2 (Rel-4)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

**Document:** N4-021348  
**CR:** 29.060-363r3 (Rel-4)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**  
-

**Decision:** Revised to N4-021530

**Document:** N4-021530  
**CR:** 29.060-363r4 (Rel-4)  
**Title:** Enabling control of content served to subscribers based on their location  
**Source:** Vodafone  
**Presented:**  
**Discussion:**

**Decision:** Agreed without presentation

## 9.2 Any other business for GSM maintenance

### 9.2.1 LMSI handling

**Document:** N4-021398  
**Title:** LMSI handling  
**Source:** NEC  
**Presented:** Mr. Toshiyuki Tamura, NEC  
**Discussion:**

- After long discussion, CN4 meeting agreed that the ASN.1 definition means that the protocol handling in the VLR shall be able to decode the IMSI-WithLMSI CHOICE element, unpack the IMSI from the IMSI-WithLMSI sequence and use the IMSI if the LMSI is not used.
- NEC decided to withdraw the documents **N4-021399 – N4-021407**.

**Decision:** **Noted**

**Document:** N4-021408  
**CR:** 23.003-062 (Rel-5)  
**Title:** Fix miss-interworking for LMSI handling (Definition)  
**Source:** NEC  
**Presented:** Mr. Toshiyuki Tamura, NEC  
**Discussion:**

- The reason for change will be revised to reflect that this isn't a critical correction.
- Editorial corrections were made in section 2.5.

**Decision:** **Revised to N4-021565**

**Document:** N4-021565  
**CR:** 23.003-062r1 (Rel-5)  
**Title:** Fix miss-interworking for LMSI handling (Definition)  
**Source:** NEC  
**Presented:**  
**Discussion:**

-

**Decision:** **Agreed without presentation**

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## 10 AOB

### 10.1 Work organisation

**Document:** N4-021342  
**Title:** Organisation of work in CN2 & CN4 after Release 5  
**Source:** CN4 & CN2 chairman  
**Presented:**  
**Discussion:**

- CN2 chairman: As discussed in CN2 meeting in Miami, CN2 has enough work for the whole year 2003. Discussion on Enhancements of dialled services for Release 6 will have impact on this discussion as well as Rel-6 enhancements for MRFC functionality. Summary: CN2 believes that 2003 is too early for merging with CN4.
- Alcatel: As long as there is a lot of work in both groups, there is no sense to merge and run 2 subgroups (as it was at the beginning: CN2A & CN2B) of one group for the whole meeting.
  - o CN4 chairman: CN4 meetings in 2002 have needed parallel sessions, as we know from experience, the chairman of one of the parallel sessions has to double as secretary. It's not reasonable to go for subgroups because in long term the support from MCC is valuable.
- CN2/CN4 joint meeting concluded that it would be too early to consider a merger during 2003.

- The chairmen of the groups will cover the fact in CN#18 status reports.

**Decision:** Noted

## 11 Update of the Work Plan

**Document:** N4-021338  
**Title:** Work Plan updates  
**Source:** MCC  
**Presented:** Mr. Kimmo Kymäläinen, MCC  
**Discussion:**

### Rel-6 work:

- 14011 Preferred Framing Protocol for bearer independent CS architecture
  - The target will be CN#20
- 2028 FS on Network impacts
  - CN4 is waiting for input from SA3!
- 33005 STAGE 3 for KEY distribution
  - CN4 is working with the issue. The first draft will be presented in CN4#18. The target of the work is CN#21
- 14001 Mn interface (IM-MGW to MGCF) enhancements
  - WID approved at CN#17
  - Target will be CN#20
- 14008 Generic User Profile Stage 3
  - No activity in CN4. CN4 don't have any inputs from SA2.

**Decision:** Noted

## 12 Future meetings

- Ericsson oppose to agree the extra meetings. They believe some companies could use the extra meetings as an excuse to delay the work in CN4.
  - CN4 agreed: The status of the tentative meetings is that they are not yet planned to happen; if meetings happen the dates will be as described below in April & November.
  - MCC will be a candidate host if extra meetings are needed.

Date	Meeting	Place	Host
4 – 6 Dec 2002	CN plenary #18	New Orleans, USA	North American Friends of 3GPP
10 - 14 Feb 2003	CN WGs 1, 2, 3 & 4	Dublin, Eire	European Friends of 3GPP
12 – 14 Mar 2003	CN plenary #19	Birmingham, UK	UK Friends of 3GPP
7 – 11 April 2003	CN WG 4 (if needed)	?	?
19 - 23 May 2003	CN WGs 1, 2, 3 & 4	TBD, USA	North American Friends of 3GPP
4 – 6 Jun 2003	CN plenary #20	Hämeenlinna, Finland	Nokia
18 - 22 Aug 2003	CN WGs 1, 2, 3 & 4	Sophia Antipolis, France	ETSI
17 – 19 Sep 2003	CN plenary #21	Berlin, Germany	Siemens
27 - 31 Oct 2003	CN WGs 1, 2, 3 & 4	TBD, China	Ericsson
17 – 21 Nov 2003	CN WG 4 (if needed)	?	?
10 – 12 Dec 2003	CN plenary #22	Hawaii, USA	North American & Japanese Friends of 3GPP

Please note that due to the workload additional Ad Hoc Meetings can be planned on a short notice.



# 13 Output of CN4#17

## 13.1 Change Requests

Tdoc #	Title	Spec	CR-rev	Rel	Source
N4-021344	Addition of a reference to the ITU-T RECOMMENDATION E.212 for Mobile Country Codes	23.003	058		Lucent Technologies
N4-021372	Correction to HSS initiated update of user profile	29.228	017		Nokia
N4-021383	Correcion of Codeword Handling	29.002	512		NTT DoCoMo
N4-021384	Deleting codeword related information	23.008	060		NTT DoCoMo
N4-021386	Correction to the form of public user identity	23.003			Nokia
N4-021389	Alignment on the optionality on usage of GTT in case of relocation between RNC's connected to different 3G MSC's	23.153	048		Siemens
N4-021390	Alignment on the optionality on usage of GTT in case of relocation between RNC's connected to different 3G MSC's	23.153	049		Siemens
N4-021393	Inter-MSC relocation and intersystem handover for multiple codecs	23.009	084	3	Siemens
N4-021394	Interworking between security mode procedure and relocation	29.010	078		Siemens
N4-021395	Flexible Tone Package for CAMEL4	29.232	052	2	LM Ericsson
N4-021396	IETF RFC Reference For M3UA	29.202	008		LM Ericsson
N4-021397	IETF RFC Reference For M3UA	29.202	009		LM Ericsson
N4-021416	ODB correction	29.002	506		Siemens
N4-021417	ODB correction	29.002	507		Siemens
N4-021418	ODB correction	29.002	508		Siemens
N4-021427	Clarification of the placement of the fields in the PDP Context IE	29.060	362	3	LM Ericsson/ Fujitsu/ Lucent
N4-021443	Reference to TS 23.078 in TS 29.002 regarding handling of VMSC address is missing	29.002	513		LM Ericsson
N4-021444	Editorial correction in charging information	29.228	019		Ericsson
N4-021445	Editorial correction in charging information	29.229	009		Ericsson
N4-021450	Error handling in HSS when being updated with too much data	29.329	006		Ericsson
N4-021467	Available codecs list and selected codec indication	29.002	492	5	Nokia
N4-021500	Clarification of requirements for the presence of IEs in messages	23.018	112	1	Vodafone
N4-021504	Addition of V-GMLC Address to the Update Location and Update GPRS Location requests	29.002	517	2	Nokia
N4-021506	Addition of PPR Address to the Send Routing Info for LCS response	29.002	519	1	Nokia
N4-021507	Correction to the form of public user identity	23.008	061	1	Nokia
N4-021511	Correction to detailed behaviour of user registration status query	29.228	013	1	Nokia, Ericsson
N4-021512	Removing the DDF dependencies from Cx interface	29.228	014	1	Nokia
N4-021513	Clarification of SERVER_CHANGE de-registration reason code	29.228	015	1	Nokia
N4-021514	Clarification of User-Authorization-Type AVP usage within the UAR	29.228	016	1	Nokia
N4-021515	Clarification of REGISTRATION_AND_CAPABILITIES value	29.229	008	1	Nokia
N4-021517	Error handling in S-CSCF when receiving too much data	29.228	020	1	Ericsson
N4-021518	Error handling in S-CSCF when receiving too much data	29.229	010	1	Ericsson
N4-021519	Re-assignment of S-CSCF	29.228	021	1	Ericsson

N4-021520	Removing the DDF dependencies from Sh interface	29.328	009	1	Nokia, Siemens, Lucent, Ericsson
N4-021524	Editorial clean-up	29.002	521	1	MCC
N4-021526	Enabling control of content served to subscribers based on their location	09.60	A120	3	Vodafone, Ericsson, Nortel, Nokia
N4-021527	Enabling control of content served to subscribers based on their location	09.60	A119	2	Vodafone, Ericsson, Nortel, Nokia
N4-021528	Enabling control of content served to subscribers based on their location	29.060	365	2	Vodafone, Ericsson, Nortel, Nokia
N4-021529	Enabling control of content served to subscribers based on their location	29.060	364	2	Vodafone, Ericsson, Nortel, Nokia
N4-021530	Enabling control of content served to subscribers based on their location	29.060	363	4	Vodafone, Ericsson, Nortel, Nokia
N4-021531	Introduction of the choice element "netPetNotReachable" for PS-Subscriber State	29.002	522		Ericsson
N4-021532	Clarification on IP fragmentation over lu interface by reference	29.060	383		Lucent Technologies
N4-021534	Clarification on IP fragmentation over lu interface by reference	29.060	373	2	Lucent Technologies
N4-021541	Clarification on presence of optional fields in GTP header	29.060	380	1	Alcatel
N4-021542	Clarification on presence of optional fields in GTP header	29.060	381	1	Alcatel
N4-021543	Clarification on presence of optional fields in GTP header	29.060	382	1	Alcatel
N4-021544	CAMEL4 Call Party Handling interworking with Bearer independent CS core	23.205	035	2	Nokia
N4-021547	Correction of the SPI	29.228	022		Nokia
N4-021548	Correction of the SPI	29.328	014		Nokia
N4-021553	Error handling in HSS when being updated with too much data	29.328	013	2	Ericsson
N4-021554	lu-cs over IP related corrections on 23.205	23.205	031	3	Nokia, Ericsson, Siemens, Lucent
N4-021555	lu-cs over IP related corrections on 29.232	29.232	042	3	Nokia, Ericsson, Siemens, Lucent
N4-021556	Termination ID Correction	29.232	040	2	Nokia
N4-021557	Termination ID Correction	29.232	041	2	Nokia
N4-021562	Addition of reference number to deferred location request procedure	29.002	510		NTT DoCoMo
N4-021563	Addition of reference number to deferred location request procedure	29.002	511		NTT DoCoMo
N4-021565	Fix miss-interworking for LMSI handling (Definition)	23.003	062	1	NEC
N4-021567	Addition of V-GMLC Address to the Send Routing Info for LCS response	29.002	518	3	Nokia
N4-021577	Transfer of Charging characteristics in case of inter SGSN change	29.060	374	1	Siemens
N4-021578	Transfer of Charging characteristics in case of inter SGSN change	29.060	375	1	Siemens

## 13.2 Liaison Statements

The following Liaison Statements were agreed to be sent by CN4 #17 meeting:

<b>TDOC N4-02xxxx</b>	<b>Subject</b>	<b>To</b>	<b>Cc</b>	<b>Attachment</b>	<b>Sent</b>
N4-021497	LS on "Proposed TR for the architectural aspects of early UE handling"	SA2	CN1		13 <sup>th</sup> November
N4-021498	LS on Comments to LS from SA4 on Maximum Rate Control and Guaranteed bit rate	SA2, RAN3	RAN2, SA4		18 <sup>th</sup> November
N4-021499	LS on proposed list of core IMS specifications for Access Independence	SA2	CN1, CN3		18 <sup>th</sup> November
N4-021503	LS on the protocol development for the GMLC – PPR, Lpp-interface	SA2, OMA location group	CN		18 <sup>th</sup> November
N4-021521	LS on requirements for one AS to be able to read and/or modify the initial filter criteria of another AS	CN1, SA2			18 <sup>th</sup> November
N4-021525	Reply LS on CS data services for GERAN Iu-mode	SA2, CN3, GERAN2, CN1			18 <sup>th</sup> November
N4-021566	LS on Use of E164 numbers for emerging mobile systems	SA1, SA2	CN1, T3	N4-021225, N4-021255, N4-021472	18 <sup>th</sup> November

## 13.3 TS/TRs

<b>Tdoc #</b>	<b>Tdoc Title</b>

## 13.4 WIs

<b>Tdoc #</b>	<b>Tdoc Title</b>
N4-021392	Media Gateway Control Function (MGCF) – IM Media Gateway (IMS-MGW) Mn Interface
N4-021488	Updated WID for Mp interface protocol definitions

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## Annex A : Participants

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## Annex B: List of Temporary Documents

Tdoc n° 3GPP	List of Temporary Documents	Source	Status
N4-021331	Preliminary agenda for CN4 #17	CN4 chairman	Revised to N4-021332
N4-021332	CN4 #17: detailed agenda & time plan at document deadline	CN4 chairman	Revised to N4-021333
N4-021333	CN4 #17: detailed agenda & time plan on eve of meeting	CN4 chairman	Approved
N4-021334	Proposed allocation of documents to agenda items at document deadline	CN4 chairman	Revised to N4-021335
N4-021335	Proposed allocation of documents to agenda items on eve of meeting	CN4 chairman	Approved
N4-021336	List of agreed output documents	CN4 chairman	Approved
N4-021337	CN4#16 meeting report Miami, USA	MCC	Approved
N4-021338	Work Plan	MCC	Noted
N4-021339	Clarification on IP fragmentation over Iu interface	Lucent Technologies	Withdrawn
N4-021340	Iu-cs over IP related corrections on 23.205	Nokia, Ericsson, Siemens, Lucent	Revised to N4-021554
N4-021341	Iu-cs over IP related corrections on 29.232	Nokia, Ericsson, Siemens, Lucent	Revised to N4-021554
N4-021342	Organisation of work in CN2 & CN4 after Release 5	CN2 & CN4 chairmen	Noted
N4-021343	Clarification of requirements for the presence of IEs in messages	Vodafone	Revised to N4-021500
N4-021344	Addition of a reference to the ITU-T RECOMMENDATION E.212 for Mobile Country Codes	Lucent Technologies	Agreed
N4-021345	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Revised to N4-021490
N4-021346	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Revised to N4-021527
N4-021347	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Revised to N4-021528
N4-021348	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Revised to N4-021529
N4-021349	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Revised to N4-021530
N4-021350	Addition of Positioning Data IE to Provide Subscriber Location and Send Location Report	Nortel Networks	Withdrawn
N4-021351	Update PDP Context Response for Contexts that do not exist	Nortel Networks	Withdrawn
N4-021352	Update PDP Context Response for Contexts that do not exist	Nortel Networks	Withdrawn
N4-021353	Update PDP Context Response for Contexts that do not exist	Nortel Networks	Withdrawn
N4-021354	Create (Secondary) PDP Context Response where Primary Context is not known	Nortel Networks	Withdrawn
N4-021355	Create (Secondary) PDP Context Response where Primary Context is not known	Nortel Networks	Withdrawn
N4-021356	Create (Secondary) PDP Context Response where Primary Context is not known	Nortel Networks	Withdrawn
N4-021357	Compatibility of LocationInformationGPRS definition in R99/ Rel-4 and Rel-5 (N2-020956)	Nortel Networks, Vodafone	Noted
N4-021358	Correction of LocationInformationGPRS definition (OCTET STRING option) (N2-020961)	Nortel Networks	Rejected
N4-021359	Correction of LocationInformationGPRS definition (OCTET STRING option) (N2-020959)	Nortel Networks	Noted

N4-021360	Clarification on IP fragmentation over Iu interface by reference	Lucent Technologies	Revised to N4-021533
N4-021361	Preferred Framing Protocol Solution	LM Ericsson	Noted
N4-021362	Preferred Framing Protocol	LM Ericsson	Postponed to CN4#18
N4-021363	Preferred Framing Protocol	LM Ericsson	Postponed to CN4#18
N4-021364	Preferred Framing Protocol	LM Ericsson	Postponed to CN4#18
N4-021365	Meeting calendar for CN4 in 2003	CN4 chairman	Noted
N4-021366	Correction to detailed behaviour of user registration status query	Nokia, Ericsson	Revised to N4-021511
N4-021367	Removing the DDF dependencies from Cx interface	Nokia	Revised to N4-021512
N4-021368	Removing the DDF dependencies from Sh interface	Nokia	Revised to N4-021520
N4-021369	Clarification of SERVER_CHANGE de-registration reason code	Nokia	Revised to N4-021513
N4-021370	Clarification of User-Authorization-Type AVP usage within the UAR	Nokia	Revised to N4-021514
N4-021371	Clarification of REGISTRATION_AND_CAPABILITIES value	Nokia	Revised to N4-021515
N4-021372	Correction to HSS initiated update of user profile	Nokia	Agreed
N4-021373	Introduction of Call Barring for SMS in PS domain	NTTComware	Withdrawn
N4-021374	Introducing SMS Call Barring in PS domain	NTTComware	Revised to N4-021501
N4-021375	Introduction of Call Barring for SMS in PS domain	NTTComware	Postponed to CN4#18
N4-021376	Introduction of Call Barring for SMS in PS domain	NTTComware	Postponed to CN4#18
N4-021377	Introduction of Call Barring for SMS in PS domain	NTTComware	Postponed to CN4#18
N4-021378	Introduction of Call Barring for SMS in PS domain	NTTComware	Revised to N4-021502
N4-021379	Introducing SMS Call Barring in PS domain	NTT DoCoMo	Postponed to CN4#18
N4-021380	Introducing SMS Call Barring in PS domain	NTT DoCoMo	Postponed to CN4#18
N4-021381	Addition of reference number to deferred location request procedure	NTT DoCoMo	Revised to N4-021562
N4-021382	Addition of reference number to deferred location request procedure	NTT DoCoMo	Revised to N4-021563
N4-021383	Correcion of Codeword Handling	NTT DoCoMo	Agreed
N4-021384	Deleting codeword related information	NTT DoCoMo	Agreed
N4-021385	Correction to the form of public user identity	Nokia	Revised to N4-021507
N4-021386	Correction to the form of public user identity	Nokia	Agreed
N4-021387	Transfer of Charging characteristics in case of inter SGSN change	Siemens	Revised to N4-021551
N4-021388	Transfer of Charging characteristics in case of inter SGSN change	Siemens	Revised to N4-021552
N4-021389	Alignment on the optionality on usage of GTT in case of relocation between RNC's connected to different 3G MSC's	Siemens	Agreed
N4-021390	Alignment on the optionality on usage of GTT in case of relocation between RNC's connected to different 3G MSC's	Siemens	Agreed
N4-021391	TS 29.332 0.0.1; Media Gateway Control Function (MGCF) – IM Media Gateway; Mn Interface	Siemens	Approved as basic for further work
N4-021392	Media Gateway Control Function (MGCF) – IM Media Gateway (IMS-MGW) Mc Interface between IMS-MGW and MGCF	Siemens	Agreed

N4-021393	Inter-MSC relocation and intersystem handover for multiple codecs	Siemens	Agreed
N4-021394	Interworking between security mode procedure and relocation	Siemens	Agreed
N4-021395	Flexible Tone Package for CAMEL4	LM Ericsson	Agreed
N4-021396	IETF RFC Reference For M3UA	LM Ericsson	Agreed
N4-021397	IETF RFC Reference For M3UA	LM Ericsson	Agreed
N4-021398	LMSI handling	NEC	Noted
N4-021399	Fix miss-interworking for LMSI handling (Procedure)	NEC	Withdrawn
N4-021400	Fix miss-interworking for LMSI handling (Procedure)	NEC	Withdrawn
N4-021401	Fix miss-interworking for LMSI handling (Procedure)	NEC	Withdrawn
N4-021402	Fix miss-interworking for LMSI handling (Procedure)	NEC	Withdrawn
N4-021403	Fix miss-interworking for LMSI handling (Procedure)	NEC	Withdrawn
N4-021404	Fix miss-interworking for LMSI handling (Definition)	NEC	Withdrawn
N4-021405	Fix miss-interworking for LMSI handling (Definition)	NEC	Withdrawn
N4-021406	Fix miss-interworking for LMSI handling (Definition)	NEC	Withdrawn
N4-021407	Fix miss-interworking for LMSI handling (Definition)	NEC	Withdrawn
N4-021408	Fix miss-interworking for LMSI handling (Definition)	NEC	Revised to N4-0215
N4-021409	Synchronisation of Transparent Data shared by more than one Application Server	Siemens	Withdrawn
N4-021410	Synchronisation of transparent data	Siemens	Withdrawn
N4-021411	Synchronisation of transparent data	Siemens	Withdrawn
N4-021412	Clarification on format of transparent data	Siemens	Withdrawn
N4-021413	Initial Filter Criteria	Siemens	Postponed to CN4#18
N4-021414	Initial Filter Criteria	Siemens	Postponed to CN4#18
N4-021415	Requesting Node Type	Siemens	Rejected
N4-021416	ODB correction	Siemens	Agreed
N4-021417	ODB correction	Siemens	Agreed
N4-021418	ODB correction	Siemens	Agreed
N4-021419	On dealing with a long SMS RPDU by MSC and SGSN	NTTComware	Noted
N4-021420	Introduction of Call Barring for SMS in PS domain	NTTComware	Withdrawn
N4-021421	Termination ID Correction	Nokia	Revised to N4-021556
N4-021422	Termination ID Correction	Nokia	Revised to N4-021557
N4-021423	Cause Codes in SGSN Context Acknowledge	Nokia	Rejected
N4-021424	Cause Codes in SGSN Context Acknowledge	Nokia	Rejected
N4-021425	Cause Codes in SGSN Context Acknowledge	Nokia	Rejected
N4-021426	CAMEL4 Call Party Handling interworking with Bearer independent CS core	Nokia	Revised to N4-021544



N4-021427	Clarification of the placement of the fields in the PDP Context IE	LM Ericsson/ Fujitsu/ Lucent	Agreed
N4-021428	General cause code for IMS related PDP context rejections	LM Ericsson/ Nokia	Withdrawn
N4-021429	Cause #8 in Non-combined GPRS Attach and Normal Routing Area Update	LM Ericsson	Withdrawn
N4-021430	Cause code #8: "GPRS Services and non-GPRS services not allowed"	LM Ericsson	Withdrawn
N4-021431	Cause code #8: "GPRS Services and non-GPRS services not allowed"	LM Ericsson	Withdrawn
N4-021432	Cause code #8: "GPRS Services and non-GPRS services not allowed"	LM Ericsson	Withdrawn
N4-021433	Clarification of the protocol to be used on the E-interface	Siemens	Endorsed by CN4
N4-021434	Clarification of the protocol to be used on the E-interface	Siemens	Endorsed by CN4
N4-021435	Clarification of the protocol to be used on the E-interface	Siemens	Endorsed by CN4
N4-021436	Definition of the Subscribed media parameter	Orange France	Withdrawn
N4-021437	Definition of the Subscribed media parameter	Orange France	Withdrawn
N4-021438	WID for eTFO	Nortel Networks	Revised to N4-021492
N4-021439	Removal of Codec Restriction for Interface between A-MSC and MSC-B	Siemens	Revised to N4-021489
N4-021440	Negotiation of Iu UP framing protocol mode	Siemens	Noted
N4-021441	Negotiation of Iu UP framing protocol mode	Siemens	Postponed
N4-021442	Comments on framing protocol negotiation between PLMNs	Siemens	Noted
N4-021443	Reference to TS 23.078 in TS 29.002 regarding handling of VMSC address is missing	LM Ericsson	Agreed
N4-021444	Editorial correction in charging information	Ericsson	Agreed
N4-021445	Editorial correction in charging information	Ericsson	Agreed
N4-021446	Error handling in S-CSCF when receiving too much data	Ericsson	Revised to N4-021517
N4-021447	Error handling in S-CSCF when receiving too much data	Ericsson	Revised to N4-021518
N4-021448	Re-assignment of S-CSCF	Ericsson	Revised to N4-021519
N4-021449	Error handling in HSS when being updated with too much data	Ericsson	Revised to N4-021522
N4-021450	Error handling in HSS when being updated with too much data	Ericsson	Agreed
N4-021451	Clarification on presence of optional fields in GTP header	Alcatel	Revised to N4-021541
N4-021452	Clarification on presence of optional fields in GTP header	Alcatel	Revised to N4-021542
N4-021453	Clarification on presence of optional fields in GTP header	Alcatel	Revised to N4-021543
N4-021454	Re-assignment of S-CSCF	Ericsson	Withdrawn
N4-021455	Correction to the Service Handover parameters	Nokia	Revised to N4-021535
N4-021456	Correction to the Service Handover parameters	Nokia	Revised to N4-021536
N4-021457	Correction to the Service Handover parameters	Nokia	Revised to N4-021537
N4-021458	Correction to the Service Handover parameters	Nokia	Revised to N4-021538
N4-021459	Correction to the Service Handover parameters	Nokia	Revised to N4-021539
N4-021460	Correction to the Service Handover parameters	Nokia	Revised to N4-021540

N4-021461	Addition of V-GMLC Address to the Update Location and Update GPRS Location requests	Nokia	Revised to N4-021485
N4-021462	Addition of V-GMLC Address to the Send Routing Info for LCS response	Nokia	Revised to N4-021486
N4-021463	Addition of PPR Address to the Send Routing Info for LCS response	Nokia	Revised to N4-021487
N4-021464	Incorrect Charging with MNP	LM Ericsson	Postponed to CN4#18
N4-021465	Incorrect Charging with MNP	LM Ericsson	Postponed to CN4#18
N4-021466	Incorrect Charging with MNP	LM Ericsson	Noted
N4-021467	Available codecs list and selected codec indication	Nokia	Agreed
N4-021468	Response LS to "Liaison statement on DTMF"	CN1	Noted
N4-021469	Liaison statement on Interoperability Issues and SIP in IMS	CN1	Noted
N4-021470	Liaison Statement on Subscriber and Equipment Trace Impacts	CN1	Noted
N4-021471	Reply LS on CS data services for GERAN Iu-mode	CN3	Noted
N4-021472	use of E164 numbers for emerging mobile systems	European Radiocommunications Office	Noted
N4-021473	LS on the protocol development for the GMLC – PPR, Lpp-interface	SA2	Noted
N4-021474	Reply LS on Handling of Multiple Deferred Mobile Terminating Location Request.	SA2	Noted
N4-021475	LS on proposed TR for the architectural aspects of early UE handling	SA2	Noted
N4-021476	Response to "LS on MMS charges based upon the roamed to network"	SA2	Noted
N4-021477	Response to Liaison Statement on Support of IPv6 on Iu	SA2	Noted
N4-021478	Liaison Statement on Maximum Rate Control and Guaranteed bit rate	SA4	Noted
N4-021479	LS Response on Inclusion of CCF/ECF addresses on Sh interface	SA5	Noted
N4-021480	Reply LS on "LS on missing Charging Characteristics for a short period of time after an inter-SGSN RAU"	SA5	Noted
N4-021481	LS on Structure of IMS Charging Identifier (ICID)	SA5	Noted
N4-021482	Reply LS on Subscriber and Equipment Trace Impacts	SA5	Noted
N4-021483	Editorial clean-up	MCC	Revised to N4-021524
N4-021484	LS on proposed list of core IMS specifications for Access Independence	SA2	Noted
N4-021485	Addition of V-GMLC Address to the Update Location and Update GPRS Location requests	Nokia	Revised to N4-021504
N4-021486	Addition of V-GMLC Address to the Send Routing Info for LCS response	Nokia	Revised to N4-021505
N4-021487	Addition of PPR Address to the Send Routing Info for LCS response	Nokia	Revised to N4-021506
N4-021488	Updated WID for Mp interface protocol definitions	Vodafone	Agreed
N4-021489	Removal of Codec Restriction for Interface between A-MSC and MSC-B	Siemens	Postponed to CN4#18
N4-021490	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Revised to N4-021526
N4-021491	Early UE handling	Siemens	Noted
N4-021492	WID for eTFO	Nortel Networks	Revised to N4-021550
N4-021493	Use of E164 numbers for emerging mobile systems	Vodafone	Revised to N4-021566

N4-021494	Diameter security issues	SA3	Noted
N4-021495	Liaison statement on Interoperability Issues and SIP in IMS	SA3	Noted
N4-021496	LS on Lr interface security	SA3	Noted
N4-021497	LS on "Proposed TR for the architectural aspects of early UE handling"	Vodafone	Approved
N4-021498	Reply LS to SA4	Ericsson	Approved
N4-021499	Proposed LS on proposed list of core IMS specifications for Access Independence	Lucent	Approved
N4-021500	Clarification of requirements for the presence of IEs in messages	Vodafone	Agreed without presentation
N4-021501	Introducing SMS Call Barring in PS domain	NTTComware	Noted
N4-021502	Introduction of Call Barring for SMS in PS domain	NTTComware	Noted
N4-021503	Reply to SA2	Vodafone	Approved
N4-021504	Addition of V-GMLC Address to the Update Location and Update GPRS Location requests	Nokia	Agreed
N4-021505	Addition of V-GMLC Address to the Send Routing Info for LCS response	Nokia	Revised to N4-021567
N4-021506	Addition of PPR Address to the Send Routing Info for LCS response	Nokia	Agreed
N4-021507	Correction to the form of public user identity	Nokia	Agreed
N4-021508	MSC_A_HO SDL correction	CN1	Endorsed
N4-021509	MSC_A_HO SDL correction	CN1	Endorsed
N4-021510	MSC_A_HO SDL correction	CN1	Endorsed
N4-021511	Correction to detailed behaviour of user registration status query	Nokia, Ericsson	Agreed without presentation
N4-021512	Removing the DDF dependencies from Cx interface	Nokia	Agreed
N4-021513	Clarification of SERVER_CHANGE de-registration reason code	Nokia	Agreed
N4-021514	Clarification of User-Authorization-Type AVP usage within the UAR	Nokia	Agreed without presentation
N4-021515	Clarification of REGISTRATION_AND_CAPABILITIES value	Nokia	Agreed without presentation
N4-021516	Introduction of Call Barring for SMS in PS domain	NTTComware	Noted
N4-021517	Error handling in S-CSCF when receiving too much data	Ericsson	Agreed
N4-021518	Error handling in S-CSCF when receiving too much data	Ericsson	Agreed
N4-021519	Re-assignment of S-CSCF	Ericsson	Agreed
N4-021520	Removing the DDF dependencies from Sh interface	Nokia	Agreed
N4-021521	LS on "Initial Filter Criteria"	Siemens	Approved
N4-021522	Error handling in HSS when being updated with too much data	Ericsson	Revised to N4-021553
N4-021523	Reply to LS on Call Barring for SMS in PS domain	SA1	Noted
N4-021524	Editorial clean-up	MCC	Agrees without presentation
N4-021525	Reply LS to SA2, GERAN2, CN1, CN3 on CS data services for GERAN Iu-mode	Siemens	Approved
N4-021526	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Agreed without presentation
N4-021527	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Agreed without presentation

N4-021528	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Agreed without presentation
N4-021529	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Agreed without presentation
N4-021530	Enabling control of content served to subscribers based on their location	Vodafone, Ericsson, Nortel, Nokia	Agreed without presentation
N4-021531	Introduction of the choice element "netPetNotReachable" for PS-Subscriber State	Ericsson	Agreed
N4-021532	Clarification on IP fragmentation over Iu interface by reference	Lucent Technologies	Agreed without presentation
N4-021533	Clarification on IP fragmentation over Iu interface by reference	Lucent Technologies	Revised to N4-021534
N4-021534	Clarification on IP fragmentation over Iu interface by reference	Lucent Technologies	Agreed without presentation
N4-021535	Correction to the Service Handover parameters	Nokia	Revised to N4-021571
N4-021536	Correction to the Service Handover parameters	Nokia	Revised to N4-021572
N4-021537	Correction to the Service Handover parameters	Nokia	Revised to N4-021573
N4-021538	Correction to the Service Handover parameters	Nokia	Revised to N4-021574
N4-021539	Correction to the Service Handover parameters	Nokia	Revised to N4-021575
N4-021540	Correction to the Service Handover parameters	Nokia	Revised to N4-021576
N4-021541	Clarification on presence of optional fields in GTP header	Alcatel	Agreed
N4-021542	Clarification on presence of optional fields in GTP header	Alcatel	Agreed
N4-021543	Clarification on presence of optional fields in GTP header	Alcatel	Agreed
N4-021544	CAMEL4 Call Party Handling interworking with Bearer independent CS core	Nokia	Agreed without presentation
N4-021545	Introduction of the choice element "netPetNotReachable" for PS-Subscriber State	Ericsson	Noted
N4-021546	LS on Questions from the European Numbering Forum	T3	Noted
N4-021547	Correction of the SPI	Nokia	Agreed
N4-021548	Correction of the SPI	Nokia	Agreed
N4-021549	Incoming LS	CN4 chairman	Noted
N4-021550	WID for eTFO	Nortel Networks	Noted
N4-021551	Transfer of Charging characteristics in case of inter SGSN change	Siemens	Revised to N4-021577
N4-021552	Transfer of Charging characteristics in case of inter SGSN change	Siemens	Revised to N4-021578
N4-021553	Error handling in HSS when being updated with too much data	Ericsson	Agreed
N4-021554	Iu-cs over IP related corrections on 23.205	Nokia, Ericsson, Siemens, Lucent	Agreed without presentation
N4-021555	Iu-cs over IP related corrections on 29.232	Nokia, Ericsson, Siemens, Lucent	Agreed
N4-021556	Termination ID Correction	Nokia	Agreed without presentation
N4-021557	Termination ID Correction	Nokia	Agreed without presentation
N4-021558	Addition of Subscribed Media Types	Ericsson	Withdrawn
N4-021559	Addition of Subscribed Media Types	Ericsson	Withdrawn
N4-021560	Proposal on framing protocol negotiation between PLMNs	Siemens	Noted
N4-021561	Subscribed Media	Orange France	Noted

N4-021562	Addition of reference number to deferred location request procedure	NTT DoCoMo	Agreed without presentation
N4-021563	Addition of reference number to deferred location request procedure	NTT DoCoMo	Agreed without presentation
N4-021564	Procedures Section to TS 29.332	Siemens, Nokia	Principle Agreed
N4-021565	Fix miss-interworking for LMSI handling (Definition)	NEC	Agreed without presentation
N4-021566	Use of E164 numbers for emerging mobile systems	Vodafone	Approved without presentation
N4-021567	Addition of V-GMLC Address to the Send Routing Info for LCS response	Nokia	Approved without presentation
N4-021568	Comparison of proposed solutions for PFP and evaluation of the scope & requirements	Ericsson	Noted
N4-021569	Response to LS on Maximum Rate Control and Guaranteed bit rate	RAN2	Noted
N4-021570	REPLY LS on proposed TR for the architectural aspects of early UE handling	RAN3	Noted
N4-021571	Correction to the Service Handover parameters	Nokia	E-mail approval
N4-021572	Correction to the Service Handover parameters	Nokia	E-mail approval
N4-021573	Correction to the Service Handover parameters	Nokia	E-mail approval
N4-021574	Correction to the Service Handover parameters	Nokia	Revised to N4-021579
N4-021575	Correction to the Service Handover parameters	Nokia	Revised to N4-021580
N4-021576	Correction to the Service Handover parameters	Nokia	Revised to N4-021581
N4-021577	Transfer of Charging characteristics in case of inter SGSN change	Siemens	Agreed without presentation
N4-021578	Transfer of Charging characteristics in case of inter SGSN change	Siemens	Agreed without presentation
N4-021579	Correction to the Service Handover parameters	Nokia	E-mail approval
N4-021580	Correction to the Service Handover parameters	Nokia	E-mail approval
N4-021581	Correction to the Service Handover parameters	Nokia	E-mail approval

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## Annex C: Make calls for IPRs

The attention of the members of this Technical Specification Group is drawn to 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 members take note that they are hereby 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 the Technical Specification Group.
- to notify the Chairman, or the Director-General 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.

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## Annex D: Access to 3GPP documents

This document briefly outlines some of the more important locations of information that all TSG\_CN WG4 members should be aware of.

### 2.2 3GPP email lists:

To receive information about CN4 issues, all delegates and other interested parties MUST register for email list **3GPP\_TSG\_CN\_WG4**. This can be done by sending an email to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG) with the following single line of text in the body of the message:

```
subscribe 3GPP_TSG_CN_WG4 YourFirstName YourLastName
```

There are many other 3GPP email lists that may also be of interest. Go to <http://www.3gpp.org/e-mail.htm> for further information.

If at any time you would like to confirm which lists you are currently a member of, just send a message to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG) with the following single line of text in the body of the message:

```
QUERY *
```

### 2.3 Email archives:

All 3GPP lists have an associated archive of every email sent via that list. Information on how to access the archive is sent to you when you subscribe to the list. This means that if you have temporary email problems, or have just joined the group, you can check to see if you have missed any messages. The easiest way to search the archive is first to request a list of all messages sent to the particular group you are interested in. For example, to get a list of messages sent via the **3GPP\_TSG\_CN\_WG4** list between 1<sup>st</sup> Jan 1999 and the current date, send the following command to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG):

```
search * in 3GPP_TSG_CN_WG4 since Jan 1999
```

As well as a list of emails sent, you receive instructions about how to retrieve the emails.

Some 3GPP archives are also available via a new user-friendly WWW interface. For CN4, go to:

[http://list.3gpp.org/archives/3gpp\\_tsg\\_cn\\_wg4.html](http://list.3gpp.org/archives/3gpp_tsg_cn_wg4.html)

### 2.4 Meeting calendar:

The central location for all information relating to the 3GPP meeting calendar and the corresponding meeting invitations can be found at: <http://www.3gpp.org/Meetings.htm>

### 2.5 Documents on the server:

All documents submitted to CN4 meetings will be made available on the 3GPP document server in a directory (related to the number of the meeting) under: [ftp://ftp.3gpp.org/TSG\\_CN/WG4\\_protocollars/](ftp://ftp.3gpp.org/TSG_CN/WG4_protocollars/) e.g. the documents for CN4 meeting #4 can be found at:

[ftp://ftp.3gpp.org/TSG\\_CN/WG4\\_protocollars/tsgN4\\_04/Docs/](ftp://ftp.3gpp.org/TSG_CN/WG4_protocollars/tsgN4_04/Docs/)

## ANNEX E: Document history

<b>Document History</b>	
<b>18<sup>th</sup> November 2002</b>	<p>DRAFT v.1.0.0 dispatched to the TSG_CN4 mail exploder for comments.</p> <p>Comments to be addressed to:</p> <p><b>Mr. Kimmo Kymäläinen, 3GPP TSG-CN4 MCC Support</b> MCC - ETSI Secrétariat Tel :+33 (0)4 92 94 42 38 E-mail: kimmo.kymalainen@etsi.fr</p> <p>A deadline of a week was given to the CN4 delegates for e-mail comments on the draft report.</p> <p><b>E-mail comments back by 29<sup>th</sup> November 2002</b></p>
<b>9<sup>th</sup> December 2002</b>	Draft report v2.0.0 placed on the FTP server
<b>10<sup>th</sup> February 2003</b>	Version 2.0.0 approved at CN4#18 Meeting in Dublin, EIRE – Made version 3.0.0. Placed to server as the official meeting report.