

**3GPP TSG CN Plenary  
Meeting #10, Bangkok, Thailand  
6<sup>th</sup> – 8<sup>th</sup> December 2000**

**Tdoc NP-000632**

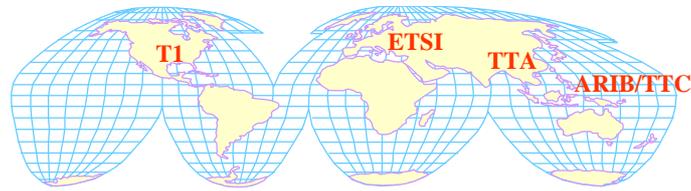
**Source:** TSG CN WG 4  
**Title:** CN4 WG #05 draft meeting report  
**Agenda item:** 6.4.1  
**Document for:** Information

---

**Introduction:**

This document includes CN4 WG #05 draft meeting report, Paris 13.-17.11.2000.  
It is forwarded to TSG CN Plenary meeting #10 for information only.

<b>TDoc #</b>	<b>Tdoc Title</b>
N4-00xxxx	CN4 WG #05 meeting report



## Third Generation Partnership Project

### Draft Meeting REPORT v1.0.0 3GPP TSG-CN4 WG #05

Paris, FRANCE  
13<sup>th</sup> – 17<sup>th</sup> November 2000



Hosted by Alcatel, FRANCE

**Chairman:** Yun-Chao Hu, Ericsson. (Rel-4 issues)  
**Vice-Chairman:** Teemu Mäkinen, Nokia. ( - R99 issues)  
**MCC Support:** Kimmo Kymäläinen, ETSI MCC.

## Table of contents

1	Opening of the meeting Approval of Agenda .....	4
2	Document Allocation.....	4
2.1	Make calls for IPRs.....	4
3	Meeting Reports .....	4
2.2	Seattle meeting report .....	4
2.3	CN4 ad hoc in Stockholm .....	4
2.4	TrFO/TFO harmonisation workshop #04 in Windsor .....	4
2.5	TrFO/TFO harmonisation workshop #05 in Stockholm.....	4
2.6	CN#9 meeting report .....	4
4	Liaison Statements .....	4
5	Work Item Management .....	7
6	R99 .....	9
6.1	Camel Phase 3.....	9
6.2	USSD .....	10
6.3	Handover.....	11
6.4	Supplementary Services.....	15
6.5	GPRS .....	16
6.6	Basic Call Processing.....	21
6.7	Location Services .....	21
6.8	ASCI.....	21
6.9	AOB.....	24
6.9.1	Security .....	24
7	Rel4 .....	26
7.1	TrFO/TFO Workshop .....	26
7.2	Bearer Independent Architecture .....	27
7.2.1	Stage 2.....	27
7.2.2	Stage 3.....	33
7.3	Core Network Security .....	35
7.4	Camel Phase 4.....	36
7.5	AOB.....	37
7.5.1	Supplementary services .....	37
7.5.2	ASCI.....	37
8	GSM Maitenance .....	39
8.1	Supplementary Services.....	39
8.2	GPRS .....	40
8.3	Location Services .....	40
8.4	USSD .....	41
9	Output of CN4# ad hoc Meeting .....	42

9.1	TS/TRs .....	42
9.2	WIs .....	42
9.3	Liaison Statements .....	42
9.4	Change Requests .....	42
10	Close of meeting .....	44
Annex A : Participants .....		45
Annex B: List of Temporary Documents .....		46
Annex C: Make calls for IPRs .....		51

---

# 1 Opening of the meeting Approval of Agenda

Mr. Yun-Chao Hu, CN4 chairman, gave a welcome introduction. Additional support was provided Mr. Kimmo Kymäläinen (CN4 Secretary, MCC).

On behalf of Alcatel, Jean-Alain Evenou welcomed the group of participants and gave the usual logistic information after the meeting.

The chair informed the delegates that he will handle all the Rel-4 issues and vice chairman will handle all –R99 issues.

The agenda was presented and approved (N4-00901).

---

## 2 Document Allocation

Document allocation was approved (N4-00902).

### 2.1 Make calls for IPRs

Document will be inserted to meeting report (N4-001046). **Document is included as Annex C.**

---

## 3 Meeting Reports

### 2.2 Seattle meeting report

The Seattle meeting report (**N4-000903**) was approved.

### 2.3 CN4 ad hoc in Stockholm

Document noted. (**N4-000904**) Final version will send out by E-mail.

### 2.4 TrFO/TFO harmonisation workshop #04 in Windsor

Document approved. (**N4000905**)

### 2.5 TrFO/TFO harmonisation workshop #05 in Stockholm

Document noted. (**N4-001027**)

### 2.6 CN#9 meeting report

Document noted. (**N4000905**)

---

## 4 Liaison Statements

**Document:** N4-000951  
**Title:** *proposed response to* Liaison Statement on IPT Basic Call Handling  
**Source:** S2  
**Presented:** Chairman  
**Discussion:**

- This was drafted before CN#09
- Lots of IPT basic call handling were changed

**Decision:** Noted

**Document:** N4-000952  
**Title:** Draft LS on GERAN impacts on overall system architecture

**Source:** S2  
**Presented:** Ian Park, Vodafone

**Discussion:**

- There are impacts to (2G) SGSN by the Gb interface and to another (3G) SGSN by the lu-ps interface
- lu-ps have to investigate by CN4
- Response to S2
- LS to S2; Tdoc N4-0001045

**Decision:** Noted

**Document:** **N4-000953**  
**Title:** Response LS on RAB Assignment QoS Negotiation  
**Source:** S2  
**Presented:** Kevin Corey, Nortel Networks  
**Discussion:** No discussion, no comments

**Decision:** Noted

**Document:** **N4-001035**  
**Title:** Response to "LS on RAB Assignment QoS Negotiation" from RAN 3  
**Source:** N1  
**Presented:** Teemu Makinen, Nokia

**Discussion:** No discussion, no comments

**Decision:** Noted

**Document:** **N4-000956**  
**Title:** LS Regarding WI for "Transcoder At The Edge"  
**Source:** 3GPP harmonisation TrFO/TFO Workshop  
**Presented:** Elena Garcia-Mendeve  
**Discussion:** No discussion, no comments

**Decision:** Noted

**Document:** **N4-000961**  
**Title:** LS reply to CN1 on Supported Codec Lists in 26.103  
**Source:** S4  
**Presented:** Elena Garcia-Mendeve

**Discussion:** No discussion, no comments

**Decision:** Noted

**Document:** **N4-001034**  
**Title:** Response to LS on Support of additional GPRS ciphering algorithms  
**Source:** N1  
**Presented:** Luis Lopes, Ericsson  
**Discussion:** No discussion, no comments

**Decision:** Noted

**Document:** **N4-001036**  
**Title:** Liaison statement on the introduction of GEA2.  
**Source:** N1  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:**

- No comments before CN & SA

**Decision:** Noted

**Document:** N4-001038  
**Title:** Response to liaison statement on support of AMR via lu-ps in GERAN  
**Source:** R3  
**Presented:** None

**Discussion:** None

**Decision:** Noted without presentation

**Document:** N4-001039  
**Title:** LS to S2 on use of IP for security key distribution  
**Source:** S3  
**Presented:** None

**Discussion:** None

**Decision:** Noted without presentation

---

## 5 Work Item Management

**Document:** N4-000950  
**Title:** Work Item description: "Subscriber Data Management in the IP Multimedia CN Subsystem"  
**Source:** Ericsson  
**Presented:** Luis Lopes, Ericsson

**Discussion:**

- FT: Protocol specification part of this WI ?
  - o Ericsson: No it isn't.

**Decision:** Ericsson, BT& NORTEL Network will combine N4-000950 & N4-000968. WI tdoc will be N4-001049

**Document:** N4-000968  
**Title:** IP Multimedia CN Subsystem: Cx Technical Recommendations  
**Source:** Nortel Networks  
**Presented:** Kevin Corey

**Discussion:**

- We will need WI description with stage 2 activities. Protocol selection feasibility
- Ericsson, BT& Nortel Network will bring in if there is a new TS or CR's for existent specifications 23.008 and 23.016

**Decision:** Ericsson, BT& NORTEL Network will combine N4-000950 & N4-000968. WI tdoc will be N4-001049

**Document:** N4-000969  
**Title:** 3GPP UMTS Release 5 HSS-to-CSCF Interactions  
**Source:** Nortel Networks  
**Presented:** Kevin Corey, Nortel Networks

**Discussion:**

- Nortel Network's opinion: the CN4 is the WG who is deciding the protol (Cx-protocol)
  - o Nokia: S2 is a right WG to decide protocol
  - o Vodafone: CN4 is a right place to decide the protocol if there are no architectual impacts
- Nortel Networks: TR would be used to investigate the protocol
- New Wi document will be published Tdoc.N4-001049

**Decision:** Noted

**Document:** N4-001049  
**Title:** Work Item Description: "IP Multimedia CN Subsystem, CSCF-HSS (Cx) interface"  
**Source:** Ericsson  
**Presented:** Luis Lopes, Ericsson

**Discussion:**

- Section 1 Work area: Services will be removed
- Section 4: "The output should be a **decision** on the most suitable protocol for the Cx interface." Have to be changed, as "The output should be a **recommendation** on the most suitable protocol for the Cx interface."
- Some other textual modifications were made CN4
- Document will be revised

**Decision:** Revised in Tdoc N4-001065

**Document:** N4-001065  
**Title:** Work Item Description: "IP Multimedia CN Subsystem, CSCF-HSS (Cx) interface"  
**Source:** Ericsson  
**Presented:** Luis Lopes, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-001058  
**Title:** LS on the Work Item "Cx Interface specification"  
**Source:** N4  
**Presented:** Yun-Chao Hu, Ericsson

**Discussion:**

- Textual modifications were made

**Decision:** Revised in Tdoc N4-001066

**Document:** N4-001066  
**Title:** LS on the Work Item "Cx Interface specification"  
**Source:** N4  
**Presented:** Yun-Chao Hu, Ericsson

**Discussion:**

**Decision:** Agreed

---

## 6 R99

### 6.1 Camel Phase 3

**Document:** N4-000907  
**Title:** Corrections of ISD data structure for CAMEL phase 3  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:**

- Vodafone agrees with Nokia & Siemens about corrections
- Also mirror CR 29.002-191 for R4 will be approved

**Decision:** Agreed

**Document:** N4-000908  
**Title:** Corrections of ISD data structure for CAMEL phase 3  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:**

- 

**Decision:** Agreed

**Document:** N4-001047  
**Title:** ATSI correction  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:**

- **RequestedSS-InfoList ::= SEQUENCE SIZE (1.. maxNumOfBasicServices)**
  - o Size is 70 (desimal)
- Category F
  - o Critical correction

**Decision:** Agreed

**Document:** N4-001048  
**Title:** ATSI correction  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:**

**Decision:** Agreed

**Document:** N4-001088  
**Title:** Indroduction of GGSN address  
**Source:** T-Mobil  
**Presented:** Steffen Habermann, T-mobil

**Discussion:**

- Cover sheet modification
- Category F
  - o Critical correction

**Decision:** Agreed

**Document:** **N4-001089**  
**Title:** Indroduction of GGSN address  
**Source:** T-Mobil  
**Presented:** Steffen Habermann, T-mobil

**Discussion:**

**Decision:** Agreed

## 6.2 USSD

**Document:** **N4-000913**  
**Title:** ATSI correction  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:**

- Lucent: USSD is not a part of follow me but actually they do not have strong opinion. They can accept the CR.
- "NOTE: On the HLR - VLR interface the Originating reference may be omitted." Have to be changed as:" The Originating reference may be omitted"

**Decision:** Revised in Tdoc N4-001068

**Document:** **N4-000914**  
**Title:** ATSI correction  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:**

**Decision:** Revised in Tdoc N4-001069

**Document:** **N4-001068**  
**Title:** ATSI correction  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:**

- R99

**Decision:** Agreed

**Document:** **N4-001069**  
**Title:** ATSI correction  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:**

- R4

**Decision:** Agreed

## 6.3 Handover

**Document:** N4-000915  
**Title:** GSM to 3G Handover: Location Reporting in 3G\_MSC-B  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**  
- Nortel: Location Report Control does not need, it can do by O&M

**Decision:** Agreed

**Document:** N4-000916  
**Title:** GSM to 3G Handover: Chosen IEs in Handover Request Ack  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**  
- Category F  
    o CR is supported by consensus in the CN4

**Decision:** Agreed

**Document:** N4-000917  
**Title:** GSM to 3G Handover: Chosen IEs in Handover Request Ack  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**  
- It is proposed that neither the MAP parameter Target Cell Id nor the Target RNC Id shall be included in MAP\_PREPARE\_HANDOVER and MAP\_PREPARE SUBSEQUENT\_HANDOVER in case of inter-system handover GSM to UMTS.  
-

**Decision:** Agreed on Stage 2 CR

**Document:** N4-000918  
**Title:** GSM to 3G Handover: MAP parameter Target Cell ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Revised in Tdoc N4-001070

**Document:** N4-001070  
**Title:** GSM to 3G Handover: MAP parameter Target Cell ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-000919  
**Title:** GSM to 3G Handover: MAP parameter Target Cell ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Revised in Tdoc N4-001071

**Document:** **N4-001071**  
**Title:** GSM to 3G Handover: MAP parameter Target Cell ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** **N4-000920**  
**Title:** ASN.1 description of TargetCellId in MAP  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Vodafone: There could be major problem if CR is not approved
  - o Category F, Critical correction

**Decision:** Agreed

**Document:** **N4-000921**  
**Title:** ASN.1 description of TargetCellId in MAP  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Category A

**Decision:** Agreed

**Document:** **N4-000922**  
**Title:** ASN.1 description of TargetCellId in MAP  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Category F, critical correction

**Decision:** Revised in Tdoc N4-001072

**Document:** **N4-001072**  
**Title:** ASN.1 description of TargetCellId in MAP  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** **N4-000923**  
**Title:** ASN.1 description of TargetCellId in MAP  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Category A

**Decision:** Revised in Tdoc N4-001073

**Document:** N4-001073  
**Title:** ASN.1 description of TargetCellId in MAP  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-000924  
**Title:** GSM/UMTS Interworking: Mapping of cause codes  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Vodafone was concern if 29.010 is the correct specification to insert this CR.
- Chairman: It's not clear which is the correct specification.
  - o CN4 agreed to insert CR to 29.010.
- Alcatel: HANDOVER REQUEST REJECT should be in Handover Require reject in the last page
- Invalid message context shall be mapped to single message

**Decision:** Revised in Tdoc N4-001074

**Document:** N4-001074  
**Title:** GSM/UMTS Interworking: Mapping of cause codes  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-000937  
**Title:** Alignment of the Target RNC-ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Vodafone, Ericsson & Siemens will solve reference

**Decision:** Revised in Tdoc N4-001075

**Document:** N4-000938  
**Title:** Alignment of the Target RNC-ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

- Vodafone, Ericsson & Siemens will solve reference

**Decision:** Revised in Tdoc N4-001076

**Document:** N4-001075  
**Title:** Alignment of the Target RNC-ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-001076  
**Title:** Alignment of the Target RNC-ID  
**Source:** Ericsson  
**Presented:** Ciriaco Angelo, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-000955  
**Title:** Intersystem handover problem  
**Source:** CN3  
**Presented:** Ahti Muhonen, Nokia

**Discussion:**

- LS to CN3 & CN1 Tdoc N4-001077

**Decision:** Noted

**Document:** N4-000939  
**Title:** Proposal to solve intersystem handover problem  
**Source:** Alcatel  
**Presented:** Jean-Alain Evenou, Alcatel

**Discussion:**

- Correct way is answer back to N1 and N3.

**Decision:** Noted

**Document:** N4-000927  
**Title:** Indication of Intra-MSB Intersystem handover from MSB-B to MSB-A  
**Source:** Nokia  
**Presented:** None

**Discussion:**

**Decision:** Withdraw

**Document:** N4-000928  
**Title:** Indication of Intra-MSB Intersystem handover from MSB-B to MSB-A  
**Source:** Nokia  
**Presented:** None

**Discussion:**

**Decision:** Withdraw

**Document:** N4-001031  
**Title:** Size of RANAP messages over MAP-E  
**Source:** R3  
**Presented:** Yun-Chao Hu, Ericsson

**Discussion:**

- RAN WG3 have discussed a number of different approaches which are outlined below:
  1. Enhance the capacity of MAP-E. This could be done by mandating White Book SCCP (07/96) in the E interface. That would allow the maximum payload of about 2.5 koctets, which should be enough for all RANAP messages.
  2. Reduce the size of the too large RANAP messages. This is difficult in general, and it is unlikely to be a solution for the message mentioned above since it would be required to make a very substantial decrease in this case.

3. Use additional layer. This layer would do the necessary segmentation and re-assembly to a smaller size based on the capability of the lower layers. Even though such a layer could be fairly simple, it is undesirable to have a new protocol layer defined for the R99 interfaces.
4. Avoid using the MAP E-Interface. The main idea is to allow any MSC in a PLMN to setup an SCCP connection directly to any RNC within the same PLMN. In this way we would avoid making inter-MSC relocations and could thus avoid using MAP-E for intra-UMTS relocations. This solution would solve the problem, but would also introduce an architectural change very late for the R99 version of the standards.

- Majority of meeting support approach number 1.
- Siemens: Would like to limit use of whitebook SCCP signalling to MAP-E interface and with the Handover operation.
  - o Vodafone agrees, all the other signalling will support whitebook SCCP at the beginning of July 2002
- LS to R3; Tdoc N4-001078
- CR 29.002-209 R99 will be published (N4-001079), also mirror CR 29.002-212 Rel-4 (N4-001095)

**Decision:** Noted

**Document:** **N4-001079**  
**Title:** Transport of long RANAP messages on MAP-E interface  
**Source:** Alcatel  
**Presented:** Jean-Alain Evenou, Alcatel

**Discussion:**

**Decision:** Agreed

**Document:** **N4-001095**  
**Title:** Transport of long RANAP messages on MAP-E interface  
**Source:** Alcatel  
**Presented:** Jean-Alain Evenou, Alcatel

**Discussion:**

- Mirror of R99

**Decision:** Agreed

## 6.4 Supplementary Services

**Document:** **N4-001016**  
**Title:** CR 24.080 – 007 on Correction to Annex A.  
**Source:** Vodafone  
**Presented:** Ian Park, Vodafone

**Discussion:**

- Ulrich will regenerate the Annex A.
- New version of 24.080 will be 3.4.1

**Decision:** Withdraw

**Document:** **N4-001023**  
**Title:** ODB works for PS domain  
**Source:** NEC  
**Presented:** Tamura-san, NEC

**Discussion:**

- Vodafone: It's too late for release 99.
- To send a liaison S1: It's not in R99 ask if they want to set requirements to R4.

- NEC: Modification to stage 2 it's not a problem. We can handle it as correction.
- Alcatel: A Service requirement needs more clarification.
- Ericsson: R99 is frozen.
- CN4 Agrees should not be changed in stage 2 and stage 3
- LS to S1 Tdoc N4-001080
- NEC: If S1 says yes: Do we need WI?
  - o

**Decision:** Noted

**Document:** **N4-001080**  
**Title:** LS on Operator Determined Barring of Packet Oriented  
**Source:** N4  
**Presented:** Ian Park, Vodafone

**Discussion:**

- NEC: We hope that N4-1023 will be included in LS
  - o Vodafone agrees but they will in clearance that attachment represent only NEC point of you, not CN4
- Ericsson & Nokia: Attachment do not need. It might be cause confusion in S1.
- CN4 decided do not change LS
- LS to S1 as soon as possible
  - o LS was sent out 15.11.2000

**Decision:** Approved

**Document:** **N4-001018**  
**Title:** CR 23.082 – 009 on Correction of message between VLR and HLR.  
**Source:** Vodafone  
**Presented:** Ian Park, Vodafone

**Discussion:**

- Siemens: “C Conditional (The IE shall be sent, if available)” have to be removed
- Category F
  - o Accepted by a consensus of the meeting

**Decision:** Revised in Tdoc N4-001081

**Document:** **N4-001081**  
**Title:** CR 23.082 – 009 on Correction of message between VLR and HLR.  
**Source:** Vodafone  
**Presented:** Ian Park, Vodafone

**Discussion:** None

**Decision:** Agreed without presentation

## 6.5 GPRS

**Document:** **N4-000926**  
**Title:** CR 29.002 – 201 on Addition of Charging Type Support indicator to the GPRS Location Update  
**Source:** Nokia  
**Presented:** None

**Discussion:** None

**Decision:** Withdrew

**Document:** **N4-000927**  
**Title:** CR 29.002 – 202 on Addition of Charging Type Support indicator to the GPRS Location Update  
**Source:** Nokia  
**Presented:** None

**Discussion:** None

**Decision:** Withdrew

**Document:** **N4-000941**

**Title:** CR 29.060 – 149 on Clarification on the use of Teardown Indicator

**Source:** Fujitsu

**Presented:** Shinichiro Aikawa, Fujitsu

**Discussion:**

- Category will be F.
- Aikawa-san will add the text: A CR is supported by consensus in the CN4 meeting

**Decision:** Agreed

**Document:** **N4-000942**

**Title:** CR 29.060 – 150 on Correction to the PDU Notification Request message

**Source:** NEC, Fujitsu

**Presented:** Toshiyuki Tamura, NEC

**Discussion:**

- Vodafone: Is this essential correction?
  - o NEC: Yes it is. System doesn't work without correction.
- CN4 will accept the CR.
  - o Category will be F.
  - o Tamura-san will add the text: A CR is supported by consensus in the CN4 meeting
- LS to S2 (N4-001050)

**Decision:** Agreed

**Document:** **N4-000945**

**Title:** Proposed LS back to RAN3 on R99 Loss less Relocation for UMTS

**Source:** NTT

**Presented:** Takeshi Igarashi, NTT

**Discussion:**

- CR will be changed category F
- Incorrect implementation of a previously approved CR.
- New Title: Correction of wrong entry in information table
  - o There should be CR number included
- 7.5 will be changed also
- The new Tdoc N4-001051

**Decision:** Revised in Tdoc N4-001051

**Document:** **N4-001051**

**Title:** Proposed LS back to RAN3 on R99 Lossless Relocation for UMTS

**Source:** NTT

**Presented:** Takeshi Igarashi, NTT

**Discussion:**

-

**Decision:** Agreed

**Document:** **N4-000946**

**Title:** Moving informative Annex A from 3G TS 29.060 and making it normative.

**Source:** Nokia

**Presented:** Ahti Muhonen, Nokia

**Discussion:**

- CR will be as R99 even the original was R4.

- Ahti will add the text: A CR is supported by consensus in the CN4

**Decision:** Agreed

**Document:** **N4-000947**  
**Title:** Moving of Annex A to 3G TS 23.003.  
**Source:** Nokia  
**Presented:** Ahti Muhonen, Nokia

**Discussion:**

- CR will be as R99
- Ahti will add the text: A CR is supported by consensus in the CN4

**Decision:** Agreed

**Document:** **N4-000972**  
**Title:** Selecting GGSN IP Address  
**Source:** Nokia  
**Presented:** Georgi Gulvani, Nokia

**Discussion:**

- CN4 agreed that CR is functional modification
  - o Approval is not acceptable

**Decision:** Revised Tdoc N4-001055

**Document:** **N4-001055**  
**Title:** Selecting GGSN IP Address  
**Source:** Nokia  
**Presented:** Georgi Gulvani, Nokia

**Discussion:**

- 29.060 reads, that "the GGSN IP address where the SGSN sends the Create PDP Context Request the first IP address in the list of IP addresses provided by the DNS server". Using the first address from the list is not the best possible way of selection. Therefore, this feature should be an implementation dependent one. It is relevant to note, that this issue does not belong to the 29.060.
- Stage 2 specs do not specify how SGSN shall select the IP address.
- It is proposed to remove the above-mentioned ambiguous statement.
- Besides, it is proposed to correct an editorial error in Section 6, Figure 3.

**Decision:** Agreed

**Document:** **N4-000962**  
**Title:** Removal of 'Version not Supported' for GTP-U  
**Source:** Nortel Network  
**Presented:** Kevin Corey

**Discussion:**

- Category F
  - o A CR is supported by consensus in the CN4
- Section 9.3.1 should be change also modified.

**Decision:** Revised in Tdoc N4-001052

**Document:** N4-001052  
**Title:** Removal of 'Version not Supported' for GTP-U  
**Source:** Nortel Network  
**Presented:** Kevin Corey

**Discussion:**

-

**Decision:** Agreed

**Document:** N4-001011  
**Title:** Compatibility GTPv0/GTPv1 in case of SGSN change  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:**

- Category F
- CR is presented before. Then CN4 decided to wait SA2 decision.
  - o CR's approved in S2, also in plenary meeting.
- A CR is supported by consensus in the CN4.
- Revised Tdoc N4-001053

**Decision:** Revised in Tdoc N4-001053

**Document:** N4-001053  
**Title:** Compatibility GTPv0/GTPv1 in case of SGSN change  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:** None

**Decision:** Agreed

**Document:** N4-001012  
**Title:** MS Network Capability in MM context  
**Source:** Siemens  
**Presented:** Peter Schmitt, Siemens

**Discussion:** None

**Decision:** Agreed

**Document:** N4-000959  
**Title:** N4 and S2 on R99 Loss less Relocation for UMTS  
**Source:** R3  
**Presented:** Giorgi Gulbani, Nokia

**Discussion:**

- R3 has identified two possible solutions:
  - o Use a totally separate tunnel for forwarding and "regular" Iu (would need new IE in RANAP, and changes to 23.060)
  - o Modify the rule in GTP, to allow this scenario in the case of data forwarding
- Nortel support 1. solution.
- Alcatel, Ericsson, Nokia, Fujitsu support 2. solution.
- Vodafone: We should answer to R3 that there are no consensus in CN4
- CN4 couldn't solve the issue. LS will be sent to CN (cc: S2, R3) they will solve the problem
- Response LS to R3 in N4-001056

**Decision:** Noted

**Document:** N4-001022  
**Title:** Adding Uplink TEID for Data I and user plane GGSN address to PDP Context IE

**Source:** Nokia, Alcatel  
**Presented:** Giorgi Gulbani, Nokia

**Discussion:**

**Decision:** Withdraw

**Document:** **N4-001044**  
**Title:** Handling of GTP-U packets in the UL direction during relocation  
**Source:** Nortel Network  
**Presented:** Kevin Gorey, Nortel Network

**Discussion:**

**Decision:** Noted

**Document:** **N4-000943**  
**Title:** Proposed LS back to R3 on R99 Loss less Relocation for UMTS  
**Source:** NEC  
**Presented:**

**Discussion:**

-

**Decision:** Withdraw

**Document:** **N4-000960**  
**Title:** Real Time SRNS Relocation for PS Domain RABs  
**Source:** R3  
**Presented:** Giorgi Gulbani, Nokia

**Discussion:**

- *Solution 1* utilises the Release 99 mechanism in Iu interface to support also real time SRNS Relocations. Both the intra- and inter SGSN cases are handled by RANAP. To realise the SRNS relocation for real time services it is required that target SGSN gets the IP address of the GGSN and TEID to be used for the uplink traffic of the UE between target SGSN and GGSN. One possibility is to get them from source SGSN, and in this situation both the source and target SGSN would be using the same IP address and TEID of the GGSN.
- *Solution 2* utilises CN bi-casting based mechanism for the Real Time services. In the inter SGSN relocation case the CN bi-casting mechanism requires that SGSN is able to initialise bi-casting from the active GGSNs, the GGSN(s) are able to handle two GTP tunnels towards SGSNs and GGSN is able to perform bi-casting of the downlink data during SRNS Relocation. In the intra SGSN SRNS relocation case the SGSN is required to be able to handle two GTP tunnels towards RNCs and to perform the bi-casting of downlink data during SRNS Relocation.
- CN4 agrees that both solutions are feasibility.
- LS to R3 Tdoc. N4-001057

**Decision:** Noted

**Document:** **N4-001057**  
**Title:** Answer to RAN 3 LS on Real Time SRNS Relocation for PS Domain RABs  
**Source:** N4  
**Presented:** Laurent Thiebaut, Alcatel

**Discussion:**

- Which stage
- TSG CN WG4 thanks RAN WG3 for their LS on Real Time SRNS Relocation for PS Domain RABs in which they describe 2 solutions:
  - o "Solution 1 utilises the Release 99 mechanism in Iu interface to support also real time SRNS Relocations"

- “ Solution 2 utilises CN [GGSN] bi-casting based mechanism for the Real Time services”
- TSG CN WG4 answer is
  - Both solutions are feasible
  - For solution 2, the delay required to initialise the GGSN bi-casting procedure will be the longest delay to exchange an acknowledged GTP-C message between SGSN and any GGSN serving RT traffic for the user being relocated. This delay would make the relocation preparation phase longer than it is according to current R99 specifications.
  - Solution 1 would require less standardisation effort because for this solution only stage 3 (29.060) needs to be corrected whereas solution 2 requires the introduction of new messages (and procedures) both in stage 2 and stage 3. Furthermore TSG CN WG4 thinks that it is important to fix this issue of “Real Time SRNS Relocation for PS Domain RABs” for R4 in order not to jeopardise completion of IM specifications for R5.
  - Modifications required by solution 1 have been discussed (see attached N4-001022 and N4-000943 (the latter about R3-(00)2874 which is a connected to subject)) but no agreement has been reached due to the very strong opposition of one company.
- After hard discussion Nokia brought in that the first sentence of third bullet point should be removed.
- Third bullet item will be deleted.

**Decision:** Agreed

**Document:** N4-001050

**Title:** LS on GGSN address selection mechanism in SGSN in case of network requested PDP context activation procedure

**Source:** NEC

**Presented:**

**Discussion:**

- Will be sent to S2 meeting ASAP!!!
  - LS was sent out 14.11.2000

**Decision:** Agreed

## 6.6 Basic Call Processing

No documents

## 6.7 Location Services

No documents

## 6.8 ASCI

**Document:** N4-000932

**Title:** The accepted priority in the call proceeding message

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

- Nokia: Category C, Functional modification of feature is not allowed anymore R99. Decision has made in CN plenary Hawaii (CN#09).
  - Sagem: We would like to see it as correction.
- In call proceeding part the sentence: “The network should include...” Should be changed “The network shall include...”
- Category will be F.
  - A CR, which is supported by consensus in the meeting.
- Sagem will checked if correction have to make also stage 3 specification 24.067

- If correction will be needed Sagem will input new CR for stage 3
- Title: The accepted priority in the CALL PROCEEDING message

**Decision:** Revised in Tdoc N4-001084

**Document:** **N4-001084**  
**Title:** The accepted priority in the call proceeding message  
**Source:** Sagem  
**Presented:** Vivien Perlick, Sagem

**Discussion:**  
-

**Decision:** Revised in Tdoc N4-001111

**Document:** **N4-001111**  
**Title:** The accepted priority in the call proceeding message  
**Source:** Sagem  
**Presented:** Vivien Perlick, Sagem

**Discussion:**  
-

**Decision:** Agreed

**Document:** **N4-001087**  
**Title:** The accepted priority in the call proceeding message for GSM and UMTS  
**Source:** Sagem, Ericsson  
**Presented:** Vivien Perlick, Sagem

**Discussion:**

**Decision:** Revised in Tdoc N4-001112

**Document:** **N4-001112**  
**Title:** The accepted priority in the call proceeding message for GSM and UMTS  
**Source:** Sagem, Ericsson  
**Presented:** Vivien Perlick, Sagem

**Discussion:**

**Decision:** Revised to N4-001115

**Document:** **N4-001115**  
**Title:** The accepted priority in the call proceeding message for GSM and UMTS  
**Source:** Sagem, Ericsson  
**Presented:** Vivien Perlick, Sagem

**Discussion:**

**Decision:** Revised to N4-001118

**Document:** **N4-001118**  
**Title:** The accepted priority in the call proceeding message for GSM and UMTS  
**Source:** Sagem, Ericsson  
**Presented:** Vivien Perlick, Sagem

**Discussion:**

**Decision:** Agreed

**Document:** N4-001003  
**Title:** CR 23.067 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Siemens: Items descriptors in figure 2 are only applicable in GSM
- Siemens: Under figure 2 only "For further study" should delete, nothing else.
- Category will be F.
  - o A CR, which is supported by consensus in the meeting.
- Also other editorial comments will be given to Elena by offline (Mr. Ian Park).

**Decision:** Revised in Tdoc N4-001085

**Document:** N4-001085  
**Title:** CR 23.067 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Category F
  - o Essential correction
- 11.3.2.1 Changed text will removed and reference point will be added

**Decision:** Revised in Tdoc N4-001114

**Document:** N4-001093  
**Title:** CR 3.67 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

**Decision:** Revised in Tdoc N4-001113

**Document:** N4-001114  
**Title:** CR 23.067 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Category F
  - o Essential correction
- 11.3.2.1 Changed text will removed and reference point will be added

**Decision:** Agreed

**Document:** N4-001113  
**Title:** CR 3.67 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-001094  
**Title:** CR 23.067 on Correction of Pre-emption service (eMLPP)  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

-

**Decision:** Agreed

**Document:** **N4-001004**

**Title:** CR 24.067 on eMLPP correction for GSM/UMTS use

**Source:** Ericsson

**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Editorial modifications will be made

**Decision:** Revised in Tdoc N4-001086

**Document:** **N4-001086**

**Title:** CR 24.067 on eMLPP correction for GSM/UMTS use

**Source:** Ericsson

**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Category will be F.
  - o A CR, which is supported by consensus in the meeting.

**Decision:** Agreed

## 6.9 AOB

### 6.9.1 Security

**Document:** **N4-000971**

**Title:** CR 29.060 – 156 on RAND Length

**Source:** Nokia

**Presented:** None

**Discussion:** None

**Decision:** Withdrew

**Document:** **N4-001006**

**Title:** Correction of Security parameters length

**Source:** NTT, Fujitsu, NEC

**Presented:**

**Discussion:**

- Category will changed F

**Decision:** Agreed

**Document:** **N4-001015**

**Title:** GTP-C Message Protection

**Source:** Motorola

**Presented:** Michael Young, Motorola

**Discussion:**

- 10.1.3 have to be deleted
- 10.1 Ipsec will be removed from the header
- Ipsec is mandatory for vendors but optional for operators

**Decision:** Revised in Tdoc. N4-001059

**Document:** **N4-001059**  
**Title:** GTP-C Message Protection  
**Source:** Motorola  
**Presented:** Michael Young, Motorola

**Discussion:**

**Decision:** Postponed till next meeting

**Document:** **N4-001042**  
**Title:** Clarifications to the Security Mode usage, and error cases  
**Source:** Nokia  
**Presented:** Giorgi Gulbani, Nokia

**Discussion:**

- Category F
  - o CR is supported by consensus in the CN4.
- Vodafone: Material doesn't belong to 29.060.
- Vice Chairman (Teemu) proposed that Nokia will send a new CR directly to S2
- CN4 agrees to proposed textual modification
  - o Small editorial corrections will be made
  - o LS to S2 N4-001062
  - o Additional text will be included to LS attachment N4-001063
- Only KSI modification will be included to CR
- Totally new CR will be published: 29.060-161 N4-001064

**Decision:** Withdraw

**Document:** **N4-001064**  
**Title:** Clarifications to the Security Mode usage, and error cases  
**Source:** Nokia  
**Presented:** Ahti Muhonen, Nokia

**Discussion:**

- Category F
  - o CR is supported by consensus in the CN4.

**Decision:** Agreed

**Document:** **N4-001062**  
**Title:** LS to S2 on Clarifications to the usage of CKSN and KSI for security type 0  
**Source:** Nokia  
**Presented:** Ahti Muhonen, Nokia

**Discussion:**

- Document N4-001063 will be attached to LS

**Decision:** Agreed

---

## 7 Rel4

### 7.1 TrFO/TFO Workshop

**Document:** N4-000954  
**Title:** Reply LS, on Terminology of TrFO/TFO and other possible interworking scenarios.  
**Source:** S2  
**Presented:** None

**Discussion:**

**Decision:** Noted

**Document:** N4-001005  
**Title:** LS response to "LS on Codec Requirements to UMTS UEs / Mandatory Sub flow Combinations for SID and NO\_DATA frames for speech calls"  
**Source:** S4  
**Presented:** Alexander Vesely, Siemens

**Discussion:**

**Decision:** Noted

**Document:** N4-001025  
**Title:** Stage 2 OoBTC – 3G TS 23153 V 2.2.0  
**Source:** Editors  
**Presented:** Phil Hodges, Phil

**Discussion:**

- Editorial modification was made
- New version will be published 23.153 v.2.3.0

**Decision:** Revised in Tdoc N4-001083

**Document:** N4-001083  
**Title:** Stage 2 OoBTC – 3G TS 23153 V 2.3.0  
**Source:** Editors  
**Presented:** None

**Discussion:**

**Decision:** Revised in Tdoc N4-001106

**Document:** N4-001106  
**Title:** Stage 2 OoBTC – 3G TS 23153 V 2.3.0  
**Source:** Editors  
**Presented:** Phil Hodges, Ericsson

**Discussion:**

- TS 23.153 v.2.3.0 will be submitted CN#10 for approval

**Decision:** Agreed

## 7.2 Bearer Independent Architecture

### 7.2.1 Stage 2

**Document:** N4-001043  
**Title:** Open Issues on the Bearer Independent Architecture Option  
**Source:** France Telecom  
**Presented:** Francois Dronne, FT

**Discussion:**

- Question 2:
  - o CN4 can't decide the protocol -> It depends on the interest of the companies. They can bring in the CR's and make a nomination.
- Question 3:
  - o The Majority of CN4 believes that demands should not be documented in 23.205. If France Telecom has a different point of view. It was supposed
- Question 4:
  - o Solution was already rejected

**Decision:** Noted

#### 7.2.1.1 TS 23.205

**Document:** N4-001024  
**Title:** TS 23.205 Version 0.2.0 editors version  
**Source:** Editors  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- CN4 agrees: The document is based on Stockholm output
- Some effects will be after Nortel Networks document N4-000963
- Updated draft TS version will be made after the meeting N4-001104
  - o The final version will be published 30.11.2000

**Decision:** Agreed

**Document:** N4-000963  
**Title:** Bearer Independent CS Core Network – Stage 2 Proposed Updates  
**Source:** Nortel Networks  
**Presented:** Kevin Gorey, Nortel Network

**Discussion:**

- 4.2 agreed
- 5.1.2.1 agreed, text will be deleted
  - o 5.1.2 Will add reference point because it's already described in 23.002
- 5.2 New proposed text will be made by Kevin & Pekka
- 6.1.1 put on hold till other contributions are discussed
  - o RAB assignment
    - CN4 agrees: Media Gateway selection has to be made before RAB assignment.
  - o Inter-working function
    - Clarification of PLMN BC investigation are needed
  - o Note in section accepted
  - o Table 16.1
    - Editor will check the modifications together with Pekka Larmala
  - o

**Decision:** Agreed

**Document:** N4-001010  
**Title:** Proposal for restructuring TS 23.205

**Source:** Siemens  
**Presented:** None

**Discussion:**  
- None

**Decision:** Withdraw

**Document:** **N4-000973**  
**Title:** Proposed improvements in Mobile Originating Speech/Data Call (sections 6.1 and 6.2)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

- OoBTR is optional feature and this specification we can handle it in 6.1 RAB assignment
- Vodafone: Where do we specify TrFO handling and non TrFO handling? 23.153 specification have to handle TrFO environment.
  - o Ericsson: Don't see any problem in supposed text in CR.
- RAB assignment text will handled by Ericsson, Vodafone and Nortel offline.
- Confirmation of bearer establishment: Vodafone nominations accepted and will be included to specification.
- Text after figure 6.1 accepted
- 6.2 accepted already in Nortel's document
- 6.1.1
  - o In MGW selection: text will be added
    - Media Gateway will be selected before RAB assignment.

**Decision:** Agreed

**Document:** **N4-000975**  
**Title:** Proposed improvements in Mobile Terminating Speech/Data Call (sections 6.3 and 6.4)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

- Initial addressing
  - o Editorial modifications are made
- Some textual modifications/enhancements
- Needs to be merged with 0963. All open issues addressed.
- Agreed text on MGW selection to be included

**Decision:** Agreed

**Document:** **N4-000979**  
**Title:** Proposed improvements in Call Clearing (chapter 7)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**  
- No modifications

**Decision:** Agreed

**Document:** **N4-000980**  
**Title:** Proposed improvements in Handover (chapter 8)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

- Multicall issue
- Extent lu to lu i/f resources
- Reference to the mobile call termination = basic mobile termination
- More specific on which paragraph is reflected

- Siemens and Nortel comments were accepted and shall be included

**Decision:** revised in Tdoc N4-001103

**Document:** **N4-001103**  
**Title:** Proposed improvements in Handover (chapter 8)  
**Source:** Ericsson/Siemens  
**Presented:** Alexander Vesely, Siemens

**Discussion:**  

- Some editorial modifications was made

**Decision:** Agreed

**Document:** **N4-000987**  
**Title:** Proposed improvements to Interactions with other Services (chapter 13)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**  

- This contribution does not reflect the backward bearer setup scenarios.
- Continuity message is required for TrFO to notify that the bearer is established since the Codec and Bearer can be modified during the Codec negotiation in the succeeding nodes. A comment of this effect is required.

**Decision:** Agreed

**Document:** **N4-000991**  
**Title:** Proposed improvements to DTMF (section 14.4)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**  

- BICC supports the DTMF signalling. However the text shall reflect that the succeeding MSC does not support the DTM at call level.
- For TrFO cases it shall support out-of-band DTMF
- Some editorial modifications are made.

**Decision:** Agreed

**Document:** **N4-000992**  
**Title:** Proposed improvements on backward bearer release for OR (section 14.5)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** **N4-000993**  
**Title:** Proposed improvements to Messages/Procedures and their Contents (chapter 15)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**  

- A condition on the optional IE needs to be described clearly. Subsequent contributions on this issue are invited.

**Decision:** Agreed

**Document:** **N4-001026**  
**Title:** Proposed improvements to General (G)MSC-MGW Procedures (chapter 15)

**Source:** Ericsson  
**Presented:** Alf Heidermark, Ericsson

**Discussion:**  
- Textual clarifications are needed in section 15.4.1.

**Decision:** Agreed

### 7.2.1.2 Backward Bearer Establishment – MO

**Document:** N4-000964  
**Title:** BICSCN – Mobile Originating backwards bearer establishment  
**Source:** Nortel Networks  
**Presented:** Mark Watson, Nortel Networks

**Discussion:**  
- See N4-000974  
- Notify request accepted to be deleted

**Decision:** Agreed

**Document:** N4-000974  
**Title:** Backward bearer set up in Mobile Originating Speech/Data Call  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**  
- Approved with together with N4-000964  
    o A new combined draft (N4-000964+N4-000974) will be made and be given to editors

**Decision:** Agreed

### 7.2.1.3 Backward Bearer Establishment – MT

**Document:** N4-000965  
**Title:** BICSCN – Mobile Terminating backwards bearer establishment  
**Source:** Nortel Networks  
**Presented:** Mark Watson, Nortel Networks

**Discussion:**  
- Flow diagram will be included.

**Decision:** Agreed

**Document:** N4-000976  
**Title:** Backward bearer set up in Mobile Terminating Speech/Data Call  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**  
- Text distribution are agreed. Check will be done to replace word “can” with “may”  
- Agreed text on MGW selection to be included.

**Decision:** Agreed

### 7.2.1.4 Backward Bearer Establishment – HO

**Document:** N4-000966  
**Title:** BICSCN – Inter-MSC SRNS relocation using backwards bearer establishment  
**Source:** Nortel Networks

**Presented:** Mark Watson, Nortel Networks

**Discussion:**

- The issues are included in N4-000980
- Agreed but contents are already reflected to N4-000980

**Decision:** Agreed

### 7.2.1.5 Redirection

**Document:** N4-000967

**Title:** Examples of bearer redirection when call is in progress

**Source:** Nortel Networks

**Presented:** Mark Watson, Nortel Networks

**Discussion:**

- Principals of contributions agreed in TS 23.205
- Further contributions are invited. It was also noted that the virtual MGW is also an optional capability and needs to be addressed as well.

**Decision:** Noted

### 7.2.1.6 Inter-System HO

**Document:** N4-000982

**Title:** Inter-system Handover

**Source:** Ericsson

**Presented:** Pekka Larmala, Ericsson

**Discussion:**

- Are there multiple MGW in handover?
- Intra MSC inter MGW handover needs to be checked
- Both document will be included into the draft N4001008 & N4-000982
- 

**Decision:** Agreed

**Document:** N4-001008

**Title:** Inter-system Handover

**Source:** Siemens

**Presented:** Alexander Vesely, Ericsson

**Discussion:**

- Both document will be included into the draft N4001008 & N4-000982
  - o Editor's note will reflected to decision of 3GPP on the split of the A-interface
  - o CN4 will be sent a LS to GERAN2 and SA2 on the status of splitted A interface
    - N4-001090

**Decision:** Agreed

**Document:** N4-001090

**Title:** LS on connecting a GERAN to a Rel4 CN node via A interface

**Source:** Siemens

**Presented:** Alexander Vesely, Siemens

**Discussion:**

- LS will published by E-mail
  - o Was published 23.11.2000

**Decision:** Agreed

**Document:** N4-001017  
**Title:** UMTS to GSM handover of data calls  
**Source:** Ericsson  
**Presented:** None  
  
**Discussion:** None  
  
**Decision:** Withdrew

### 7.2.1.7 Data Services

**Document:** N4-000977  
**Title:** FAX for UMTS  
**Source:** Ericsson  
**Presented:** None

**Discussion:**  
- CR is covered by N4-000973 & N4-000974

**Decision:** Withdrew

**Document:** N4-000978  
**Title:** Alternate speech/FAX for UMTS  
**Source:** Ericsson  
**Presented:** None

**Discussion:**

**Decision:** Withdrew

### 7.2.1.8 GSM Services

**Document:** N4-000983  
**Title:** Handling of GSM Services after Handover  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-000988  
**Title:** Removal of forward bearer set up for Interactions with other Services (chapter 13)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-001009  
**Title:** CH & CW scenarios  
**Source:** Siemens  
**Presented:** Alexander Vesely, Ericsson

**Discussion:**  
- Call waiting needs to reflect forward and backward direction

**Decision:** Revised Tdoc N4-001096

**Document:** N4-001096  
**Title:** Proposed improvements to Interactions with other Services (chapter 13)  
**Source:** Siemens  
**Presented:** Alexander Vesely, Ericsson

**Discussion:**

**Decision:** Agreed

### 7.2.1.9 Recovery

**Document:** N4-000988  
**Title:** Removal of forward bearer set up for Interactions with other Services (chapter 13)  
**Source:** Ericsson  
**Presented:** Pekka Larmala, Ericsson

**Discussion:**

**Decision:** Agreed

### 7.2.1.10 Charging

**Document:** N4-000986  
**Title:** Charging  
**Source:** Ericsson  
**Presented:** None

**Discussion:** None

**Decision:** Withdrew

### Multicall

**Document:** N4-000989  
**Title:** Multicall (section 13.15)  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

-

**Decision:** Approved

### 7.2.2 Stage 3

**Document:** N4-000995  
**Title:** Iu User Plane package (section 4.7.4)  
**Source:** Ericsson  
**Presented:** None

**Discussion:** None

**Decision:** Withdrew

**Document:** N4-001020  
**Title:** Media Gateway Controller (MGC) – Media Gateway (MGW) Interface; Stage 3  
**Source:** Editor's  
**Presented:** Ian Park, Vodafone

**Discussion:**

- Two modification was be made.

- SCTP
- Section 4.5, wording on signalling transport

**Decision:** Noted

**Document:** **N4-001021**  
**Title:** Proposed changes to the structure of TS 29.232  
**Source:** Editor's  
**Presented:** Ian Park, Vodafone

**Discussion:**  
 - Subsection will be reorganised

**Decision:** Agreed

**Document:** **N4-001105**  
**Title:** Media Gateway Controller (MGC) – Media Gateway (MGW) Interface; Stage 3  
**Source:** Editor's  
**Presented:** None

**Discussion:**  
 - Will be published 24.11. 17:00 CET as version 0.3.0  
 - TS 29.232 v.0.3.0 will be submitted CN#10

**Decision:** Agreed

**Document:** **N4-000996**  
**Title:** Circuit Switched package (section 4.7.5)  
**Source:** Ericsson  
**Presented:** Alf Heidermark, Ericsson

**Discussion:**  
 - When CN4 have agreed to package to specification  
 - Code point required from IANA. Editors will take care of this and will report back to CN4

**Decision:** Agreed

**Document:** **N4-000997**  
**Title:** TFO package (section 4.7.6)  
**Source:** Ericsson  
**Presented:** Phil Hodges, Ericsson

**Discussion:**  
 - All the package name will start 3gpp  
 - Phil Hodges, Ericsson will make a new draft for editor's N4-001097

**Decision:** Agreed

**Document:** **N4-001097**  
**Title:** TFO package (section 4.7.6)  
**Source:** Ericsson  
**Presented:** Phil Hodges, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** **N4-000998**  
**Title:** Call independent H.248 Procedures (section 4.7.7)  
**Source:** Ericsson  
**Presented:** Alf Heidermark, Ericsson

**Discussion:**

- Table 4.6 is removed to section 4.7
  - o Text immediately after table is removed
- Section numbers have to delete
- Modifications also in referencies

**Decision:** Agreed

**Document:** N4-000999

**Title:** Call Related H.248 Procedures (section 4.7.8)

**Source:** Ericsson

**Presented:** Alf Heidermark, Ericsson

**Discussion:**

- Section names and numbering shall be changed
- Modifications was made

**Decision:** Agreed

**Document:** N4-001000

**Title:** Formats and Codes – Signalling Objects

**Source:** Ericsson

**Presented:** Alf Heidermark, Ericsson

**Discussion:**

- Editorial modifications was made

**Decision:** Agreed

**Document:** N4-001001

**Title:** Framing of CS User Plane in IP CN

**Source:** Ericsson

**Presented:** None

**Discussion:** None

**Decision:** Withdrew

**Document:** N4-001028

**Title:** LS Proposed enhancements to Mc specification

**Source:** 3GPP TrFO/TFO Harmonisation Workshop

**Presented:** Phil Hodges, Ericsson

**Discussion:**

-

**Decision:** Noted

## 7.3 Core Network Security

**Document:** N4-001029

**Title:** Security for MAP over IP

**Source:** S3

**Presented:** Yun-Chao Hu, Chairman

**Discussion:**

- Vodafone: We should inform S3 that CN4 recognize the situation.
- LS to S3; N4-001082

**Decision:** Agreed

**Document:** N4-001082  
**Title:** LS on Security for MAP over IP  
**Source:** Vodafone  
**Presented:** Ian Park, Vodafone

**Discussion:**

**Decision:** Noted

**Document:** N4-001030  
**Title:** Protection of GTP Messages using IPSec  
**Source:** S3  
**Presented:** None

**Discussion:**  
- Already handled in Stockholm ad hoc

**Decision:** Noted

**Document:** N4-001032  
**Title:** Liaison statement to TSG-N WG4 on Security Policy for MAP Security  
**Source:** S3  
**Presented:** None

**Discussion:** None

**Decision:** Noted

**Document:** N4-001033  
**Title:** GTP signalling security  
**Source:** S3  
**Presented:** None

**Discussion:** None

**Decision:** Noted

**Document:** N4-001037  
**Title:** LS on Positive Authentication Reporting  
**Source:** CN  
**Presented:** None

**Discussion:**  
- Already handled in Stockholm ad hoc

**Decision:** Noted

## 7.4 Camel Phase 4

**Document:** N4-000957  
**Title:** Introduction of CAMEL support for OR  
**Source:** Vodafone  
**Presented:** Ian Park, Vodafone

**Discussion:**  
- Editorial modification will be made

**Decision:** Revised in Tdoc N4-001109

**Document:** N4-001109  
**Title:** Introduction of CAMEL support for OR  
**Source:** Vodafone

**Presented:** Ian Park, Vodafone

**Discussion:**

**Decision:** Agreed

**Document:** **N4-001019**

**Title:** Introduction of CAMEL support for OR

**Source:** N2

**Presented:** Teemu Makinen, Nokia

**Discussion:**

- Siemens: To change the naming from sms-csi to mo-sms-csi will cause confusion
- CR will be sent in CN4 mailing list for E-mail discuss

**Decision:** Postponed till January meeting

## 7.5 AOB

### 7.5.1 Supplementary services

**Document:** **N4-000944**

**Title:** Tidying up of Process Subs\_FSM and inter-process signals.

**Source:** Vodafone

**Presented:** Ian Park, Vodafone

**Discussion:**

**Decision:** Agreed

### 7.5.2 ASCI

**Document:** **N4-000933**

**Title:** CR 23.067 – 003 on Pre-emption by a higher priority call of the talker of a group call

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

- Stage 1 CR have to be submitted to SA1.

**Decision:** postponed till next meeting

**Document:** **N4-000934**

**Title:** CR 23.067 – 004 on VGCS, VBS and eMLPP are not specific for this document. Those abbreviations are already described in 21.905.

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

- Vodafone supposed the following modification to text:
  - o This fact is not a reason for a mobile station to reject a call for which setup message was received

**Decision:** Agreed

**Document:** **N4-000935**

**Title:** CR 23.067 – 005 on To describe the MS solution when priority in paging and setup are not the same

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

- The last modification will be removed
- Editorial modification have to be made

**Decision:** Revised in Tdoc N4-001107

**Document:** **N4-001107**

**Title:** CR 23.067 – 005 on To describe the MS solution when priority in paging and setup are not the same

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

**Decision:** Agreed

**Document:** **N4-000936**

**Title:** Automatic answering

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

- Small textual modifications was made
- Category C, functional modification

**Decision:** Revised in Tdoc N4-001108

**Document:** **N4-001108**

**Title:** Automatic answering

**Source:** Sagem

**Presented:** Vivien Perlick, Sagem

**Discussion:**

**Decision:** Agreed

---

## 8 GSM Maintenance

### 8.1 Supplementary Services

**Document:** N4-001002  
**Title:** CR 03.67 on removal of wrong description  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Vodafone: R96&R97 CR's are needed
- Category F
  - o A CR have be accepted by consensus of the meeting
- Separate out the material which is mirror R97
- Mirror
  - o Differences between GSM access and UTMS access have to be check out
- New CR need for UMTS part; N4-001094

**Decision:** Revised in Tdoc N4-001093

**Document:** N4-001093  
**Title:** Correction of Pre-emption service (eMLPP)  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Category F
  - o A CR have be accepted by consensus of the meeting
- 11.3.2.1 have to be made corrections

**Decision:** Revised in Tdoc N4-001113

**Document:** N4-001113  
**Title:** Correction of Pre-emption service (eMLPP)  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

- Category F
  - o A CR have be accepted by consensus of the meeting

**Decision:** Agreed

**Document:** N4-001085  
**Title:** CR 23.067 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

**Decision:** Revised in Tdoc N4-001114

**Document:** N4-001114  
**Title:** CR 23.067 on correction of Pre-emption service  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

**Decision:** Agreed

**Document:** N4-001094  
**Title:** CR 23.067 on Correction of Pre-emption service (eMLPP)  
**Source:** Ericsson  
**Presented:** Elena Garcia-Mendive, Ericsson

**Discussion:**

**Decision:** Agreed

## 8.2 GPRS

**Document:** N4-001013  
**Title:** CR 09.60 – A099 on Ignore last octet in MS Network Capability  
**Source:** Ericsson  
**Presented:** None

**Discussion:** None

**Decision:** Withdraw

**Document:** N4-001014  
**Title:** CR 09.60 – A098 on Ignore last octet in MS Network Capability  
**Source:** Ericsson  
**Presented:** None

**Discussion:** None

**Decision:** Withdraw

## 8.3 Location Services

**Document:** N4-000929  
**Title:** CR 09.02 – A312 on Correction to LCS application context  
**Source:** Nokia  
**Presented:** Ahti Muhonen, Nokia

**Discussion:**  
- Nokia will provide the document again

**Decision:** Postponed till Beijing meeting in January

**Document:** N4-000930  
**Title:** CR 09.02 – A312 on Correction to LCS application context  
**Source:** Nokia  
**Presented:** None

**Discussion:** None

**Decision:** Postponed till Beijing meeting in January

**Document:** N4-000931  
**Title:** CR 09.02 – A312 on Correction to LCS application context  
**Source:** Nokia

**Presented:** None  
**Discussion:** None  
**Decision:** Postponed till Beijing meeting in January

## 8.4 USSD

**Document:** **N4-000909**  
**Title:** CR 09.02 – A309 Rev 2 on Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:** None.

**Decision:** Agreed

**Document:** **N4-000910**  
**Title:** CR 09.02 – A308 Rev 2 on Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:** None.

**Decision:** Agreed without presentation

**Document:** **N4-000911**  
**Title:** CR 29.002 – 167 Rev3 on Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:** None.

**Decision:** Agreed without presentation

**Document:** **N4-000912**  
**Title:** CR 29.002 – 167 Rev3 on Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface  
**Source:** Siemens  
**Presented:** Ulrich Wiehe, Siemens

**Discussion:** None.

**Decision:** Agreed without presentation

## 9 Output of CN4# ad hoc Meeting

### 9.1 TS/TRs

TDoc #	Tdoc Title
N4-001104	TS 23.205 v. 1.0.0 Bearer Independent CS Core Network; Stage 2
N4-001105	TS 29.232 v. 1.0.0 Media Gateway Controller (MGC) – Media Gateway (MGW) Interface; Stage 3
N4-001106	TS 23.153 v. 2.3.0 Out of band Transcoder Control – Stage 2

### 9.2 WIs

TDoc #	Tdoc Title
N4-001065	IP Multimedia CN Subsystem: Cx Technical Recommendations

### 9.3 Liaison Statements

The following Liaison Statements were agreed to be sent by N4 #05 meeting:

TDOC N4-00xxxx	Subject	To	Cc	Attachment	Sent
N4-001050	LS on GGSN address selection mechanism in SGSN in case of network requested PDP context activation procedure	S2			14.11.2000
N4-001066	LS on the Work Item "Cx Interface specification"	S2		N4-001065	20.11.2000
N4-001045	LS on GERAN impacts on overall system architecture	S2	GERAN, CN1, CN2		20.11.2000
N4-001080	LS on Operator Determined Barring of Packet Oriented	S1	S2		15.11.2000
N4-001062	LS on Clarifications to the Security Mode usage, and error cases	S2	S3	N4-001063	20.11.2000
N4-001077	LS providing comments to LS from CN3 on intersystem handover problem	N1	N3		20.11.2000
N4-001082	LS on Security for MAP over IP	S3			20.11.2000
N4-001119	LS on Size of RANAP messages over the MAP E-interface	R3	N1, S2	N4-001079	20.11.2000
N4-001120	LS on R99 Lossless Relocation for UMTS to TSG_CN	CN	S2, R3	N4-000943, N4-000959, N4-001022, N4-001044, N4-001054	20.11.2000
N4-001121	Answer to RAN 3 LS on Real Time SRNS Relocation for PS Domain RABs	R3	S2	N4-000943, N4-001022	20.11.2000
N4-001090	LS to GERAN2 and SA2 on the status of splitted A interface	S2, GERAN		N4-000982, N4-001008	30.11.2000

### 9.4 Change Requests

None.

TDoc #	Spec	CR #	Rel	Tdoc Title	CAT	Version	WI
N4-001060	09.02	A313	R97	Clarification in SupportedCamelPhases	F	6.9.0	Camel Phase 2
N4-001061	09.02	A314	R98	Clarification in SupportedCamelPhases	A	7.6.0	Camel Phase 2

TDoc #	Spec	CR #	Rel	Tdoc Title	CAT	Version	WI
N4-001088	29.002	210	R99	Introduction of GGSN address	F	3.6.0	Camel Phase 3
N4-001088	29.002	211	Rel-4	Introduction of GGSN address	A	4.1.0	Camel Phase 3
N4-000907	29.002	190	R99	Corrections of ISD data structure for Camel Phase 3	F	3.6.0	Camel Phase 3
N4-000908	29.002	191	Rel-4	Corrections of ISD data structure for Camel Phase 3	A	4.1.0	Camel Phase 3
N4-001047	29.002	213	R99	ATSI correction	F	3.6.0	Camel Phase 3
N4-001048	29.002	214	Rel-4	ATSI correction	A	4.1.0	Camel Phase 3
N4-001006	29.060	157	R99	Correction of Security parameters lenght	F	3.6.0	Security
N4-001064	29.060	161	R99	Clarifications to the usage of CKSN ans KSI for security type	F	3.6.0	Security
N4-001052	29.060	154r1	R99	Correction of Security parameters lenght	F	3.6.0	TEI
N4-001086	24.067	001r1	R99	eMLPP correction for GSM/UMTS use	F	3.0.0	ASCI
N4-001111	23.067	002r2	R99	The accepted priority in the call proceeding message	F	3.10	ASCI
N4-001118	24.067	002r3	R99	The accepted priority in the call proceeding message for GSM and UMTS	F	3.0.0	ASCI
N4-001094	23.067	008r1	R99	Correction of Pre-emption service	F	3.1.0	ASCI
N4-001081	23.082	009r1	R99	Correction of message between VLR and HLR	F	3.4.0	CF enhancements
N4-001012	29.060	159	R99	MS Network Capability in MM Context	F	3.6.0	GPRS
N4-001053	29.060	136r2	R99	Compatibility GTPv0/GTPv1 in case of SGSN change	F	3.6.0	GPRS
N4-001055	29.060	153r2	R99	Selecting GGSN IP address	F	3.6.0	GPRS
N4-001051	29.060	151r1	R99	Correction of wrong entry in information table	F	3.6.0	GPRS
N4-000942	29.060	150	R99	Correction to the PDU Notification Request message	F	3.6.0	GTP Enhancements
N4-000946	29.060	152	R99	Moving of Annex A to 3G TS 23.003	F	3.6.0	GTP Enhancements
N4-000947	23.003	024	R99	Moving informative Annex A from 3G TS 29.060 and making it normative	F	3.6.0	GTP Enhancements
N4-000941	29.060	149	R99	Clarification on the use of Teardown indicator	F	3.6.0	GTP Enhancements
N4-001079	29.002	209	R99	Transport of long RANAP messages on MAP-E interface	F	3.6.0	Handover
N4-001095	29.002	212	Rel-4	Transport of long RANAP messages on MAP-E interface	A	4.1.0	Handover
N4-000915	29.010	008	R99	GSM to 3G handover: location Reporting in 3G_MSC-B	F	3.3.0	Handover
N4-000916	29.010	009	R99	GSM to 3G handover: Chosen IEs in Handover Request Ack	F	3.3.0	Handover
N4-000917	29.010	010	R99	GSM to 3G handover: MAP parameter Target Cell ID	F	3.3.0	Handover
N4-000920	29.002	197	R99	ASN.1 description of target Cell ID	F	3.6.0	Handover

TDoc #	Spec	CR #	Rel	Tdoc Title	CAT	Version	WI
N4-000921	29.002	198	Rel-4	ASN.1 description of target Cell ID	A	4.1.0	Handover
N4-001070	29.002	195r1	R99	GSM to 3G Handover: MAP parameter Target Cell ID	F	3.6.0	Handover
N4-001071	29.002	196r1	Rel-4	GSM to 3G Handover: MAP parameter Target Cell ID	A	4.1.0	Handover
N4-001072	29.002	199r1	R99	IMSI in MAP_PREPARE_HANDOVER	F	3.6.0	Handover
N4-001073	29.002	200r1	Rel-4	IMSI in MAP_PREPARE_HANDOVER	A	4.1.0	Handover
N4-001074	29.010	011r1	R99	GSM/UMTS Interworking: Mapping of cause codes	F	3.3.0	Handover
N4-001075	29.002	207r1	R99	Alignment of the Target RNC-ID	F	3.6.0	Handover
N4-001076	29.002	207r1	Rel-4	Alignment of the Target RNC-ID	A	4.1.0	Handover
N4-001113	03.67	A006r2	R98	Correction of Pre-emption service (eMLPP)	F	7.1.0	Supplementary Services
N4-001114	23.067	007r2	R99	Correction of Pre-emption service (eMLPP)	A	3.1.0	Supplementary Services
N4-000909	09.02	A309r2	R97	Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface	F	6.8.0	USSD
N4-000910	09.02	A308r2	R98	Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface	A	7.5.0	USSD
N4-000911	09.02	167r3	R99	Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface	A	3.5.1	USSD
N4-000912	09.02	166r3	Rel-4	Corrections and clarifications for USSD procedures on the HLR – gsmSCF interface	A	4.0.1	USSD
N4-001068	29.002	192r2	R99	USSD corrections for Follow Me	F	3.6.0	USSD
N4-001069	29.002	193r2	Rel-4	USSD corrections for Follow Me	A	4.1.0	USSD
N4-001109	23.079	016r2	Rel-4	CAMEL support for OR	B	3.6.0	Camel Phase 4
N4-000934	23.067	003	Rel-4	Correction of abbreviations	D	3.1.0	ASCI
N4-001107	23.067	005r1	Rel-4	MS strategy in case of discrepancy of priority in MT	C	3.1.0	ASCI
N4-001008	23.067	006r1	Rel-4	Automatic answering	C	3.1.0	ASCI
N4-000944	23.018	064	Rel-4	Tidying up of Process Subs_FSM and inter-process signals	C	4.0.0	TEI

---

## 10 Close of meeting

The CN4 chairman closed the meeting on Thursday 17<sup>st</sup> October at 15:30.

## Annex A : Participants

<b>Name</b>	<b>Organisation</b>	<b>Tel</b>	<b>e-mail</b>
HU, Yun-Chao	Ericsson Radio Systems <b>N4 Chairman</b>	+46 8 508 781 53	<a href="mailto:Yun-Chao.Hu@era.ericsson.se">Yun-Chao.Hu@era.ericsson.se</a>
MÄKINEN, Teemu	Nokia <b>N4 Vice Chairman</b>	+358 40 5077283	<a href="mailto:Teemu.Makinen@Nokia.com">Teemu.Makinen@Nokia.com</a>
KYMÄLÄINEN, Kimmo	ETSI MCC <b>N4 Secretary</b>	+33 67 44 08 365	<a href="mailto:Kimmo.kymalainen@etsi.fr">Kimmo.kymalainen@etsi.fr</a>
AIKAWA, Shinichiro	Fujitsu	+81 44 754 4196	<a href="mailto:aikawa@ss.ts.fujitsu.co.jp">aikawa@ss.ts.fujitsu.co.jp</a>
ANGELO, Ciriaco	Ericsson L.M.	+39 081 5147573	<a href="mailto:Ciriaco.Angelo@tei.ericsson.se">Ciriaco.Angelo@tei.ericsson.se</a>
BIGNON, Marianne	Alcatel	+33 1 30773212	<a href="mailto:Marianne.bignon@alcatel.fr">Marianne.bignon@alcatel.fr</a>
BRUCH, Diemo	Alcatel SEL	+49 711 821 47594	<a href="mailto:D.Bruch@alcatel.de">D.Bruch@alcatel.de</a>
CASATI, Alessio	Lucent technologies	+44 1793 776996	<a href="mailto:acasati@lucent.com">acasati@lucent.com</a>
DE VRIES, Edzo	Lucent Technologies	+31 35 687 2313	<a href="mailto:eedvries@lucent.com">eedvries@lucent.com</a>
SMITH, David G	British Telecom	+44 1473 605441	<a href="mailto:david.g.smith@bt.com">david.g.smith@bt.com</a>
EVENOU, Jean-Alain	Alcatel	+33 1 30773992	<a href="mailto:Jean-Alain.Evenou@alcatel.fr">Jean-Alain.Evenou@alcatel.fr</a>
DRONNE, François	France Télécom	+ 33 1 45 29 62 74	<a href="mailto:francois.dronne@francetelecom.fr">francois.dronne@francetelecom.fr</a>
GARCÍA-MENDIVE, Elena	Ericsson L.M.	+49 2407 575 205	<a href="mailto:Elena.Garcia-Mendive@eed.ericsson.se">Elena.Garcia-Mendive@eed.ericsson.se</a>
GOREY, Kevin	Nortel Networks	+44 1628 434606	<a href="mailto:Kgorey@nortelnetworks.com">Kgorey@nortelnetworks.com</a>
HEIDERMARK, Alf	Ericsson L.M.	+46 8 727 3894	<a href="mailto:Alf.Heidermark@uab.ericsson.se">Alf.Heidermark@uab.ericsson.se</a>
HODGES, Phil	Ericsson	+49 2407 575 6628	<a href="mailto:Phil.Hodges@eed.ericsson.se">Phil.Hodges@eed.ericsson.se</a>
IGARASHI, Takeshi	NTT Software	+81 45 317 7018	<a href="mailto:rassy@po.ntts.co.jp">rassy@po.ntts.co.jp</a>
KALLIO, Juha	Nokia	+358 40 5288457	<a href="mailto:Juha.Kallio@nokia.com">Juha.Kallio@nokia.com</a>
LARMALA, Pekka	Ericsson L.M.	+49 2407 575 5670	<a href="mailto:Pekka.Larmala@eed.ericsson.se">Pekka.Larmala@eed.ericsson.se</a>
LÓPEZ-SORIA, Luis	Ericsson L.M.	+34 91 339 2656	<a href="mailto:Luis.Lopez-Soria@ece.ericsson.se">Luis.Lopez-Soria@ece.ericsson.se</a>
MÄKELÄINEN, Klaus	Sonera Oy	+358 2040 63246	<a href="mailto:Klaus.makelainen@sonera.com">Klaus.makelainen@sonera.com</a>
MENARD, John	Lucent Technologies	+1 630 979 6376	<a href="mailto:imenard@lucent.com">imenard@lucent.com</a>
MITAMURA, Kazuo	NTT Communicationware	+81 42 211 2708	<a href="mailto:mitamura.kazuo@se.nttcom.co.jp">mitamura.kazuo@se.nttcom.co.jp</a>
MOUTON, Virginie	Nokia	+358 50 568 99 33	<a href="mailto:Virginie.Mouton@nokia.com">Virginie.Mouton@nokia.com</a>
MUHONEN, Ahti	Nokia	+358 405318469	<a href="mailto:Ahti.muhonen@nokia.com">Ahti.muhonen@nokia.com</a>
PARK, Ian	Vodafone	+44 1635 673 527	<a href="mailto:ian.park@vf.vodafone.co.uk">ian.park@vf.vodafone.co.uk</a>
PERLICK, Vivien	SAGEM SA	+33 1 30 73 72 27	<a href="mailto:vivien.perlick@sagem.com">vivien.perlick@sagem.com</a>
POMPONI, Laura	CSELT	+39 011 228 7576	<a href="mailto:laura.pomponi@cselt.it">laura.pomponi@cselt.it</a>
SCHMITT, Peter	Siemens	+49 6621 169 152	<a href="mailto:peter.schmitt@icn.siemens.de">peter.schmitt@icn.siemens.de</a>
SOEJIMA, Miyuki	NTC	+81 44 900 7313	<a href="mailto:miyuki@mob.ntc.co.jp">miyuki@mob.ntc.co.jp</a>
TAMURA, Toshiyuki	NEC	+81 471-85-6901	<a href="mailto:tamura@nsf.ncos.nec.co.jp">tamurato@nsf.ncos.nec.co.jp</a>
THIEBAUT, Laurent	Alcatel	+33 1 30770645	<a href="mailto:Laurent.thiebaut@alcatel.fr">Laurent.thiebaut@alcatel.fr</a>
TOTH, Stefan	Ericsson L.M.	+46 31 344 6046	<a href="mailto:stefan.toth@erv.ericsson.se">stefan.toth@erv.ericsson.se</a>
VESELY, Alexander	Siemens	+43 51707 21318	<a href="mailto:alexander.vesely@siemens.at">alexander.vesely@siemens.at</a>
WATSON, Mark	Nortel Networks	+44 1628 434456	<a href="mailto:mwatson@nortelnetworks.com">mwatson@nortelnetworks.com</a>
WIEHE, Ulrich	Siemens	+49 6621 169 139	<a href="mailto:Ulrich.wiehe@icn.siemens.de">Ulrich.wiehe@icn.siemens.de</a>
WILD, Johanna	Motorola	+1 480 456 2233	<a href="mailto:Johanna.Wild@motorola.com">Johanna.Wild@motorola.com</a>
YARGER, Brian	Tellabs Operations, Inc.	+1 630 378 6959	<a href="mailto:Brian.Yarger@tellabs.com">Brian.Yarger@tellabs.com</a>
YOUNG, Michael	Motorola	+1 (604)241-6032	<a href="mailto:Michael.young@motorola.com">Michael.young@motorola.com</a>

## Annex B: List of Temporary Documents

Tdoc n° 3GPP	List of Temporary Documents	Source	Status
N4-000901	Agenda	N4 Chairman	Approved
N4-000902	Tdoc allocation to agenda items	N4 Chairman	Approved
N4-000903	Previous meeting report CN4#04 Seattle	MCC	Approved
N4-000904	Previous meeting report CN4 ad hoc in Stockholm	MCC	Noted
N4-000905	TrFO workshop #04 meeting report	MCC	Approved
N4-000906	Previous meeting report CN#09 Hawaii	MCC	Noted
N4-000907	Corrections of ISD data structure for CAMEL phase 3	Siemens	Agreed
N4-000908	Corrections of ISD data structure for CAMEL phase 3	Siemens	Agreed
N4-000909	Corrections and clarifications for USSD procedures on the HLR - gsmSCF interface	Siemens	Agreed
N4-000910	Corrections and clarifications for USSD procedures on the HLR - gsmSCF interface	Siemens	Agreed
N4-000911	Corrections and clarifications for USSD procedures on the HLR - gsmSCF interface	Siemens	Agreed
N4-000912	Corrections and clarifications for USSD procedures on the HLR - gsmSCF interface	Siemens	Agreed
N4-000913	USSD corrections for Follow Me	Siemens	Revised in Tdoc N4-001068
N4-000914	USSD corrections for Follow Me	Siemens	Revised in Tdoc N4-001069
N4-000915	GSM to 3G Handover: Location Reporting in 3G_MSC-B	Ericsson L.M.	Agreed
N4-000916	GSM to 3G Handover: Chosen IEs in Handover Request Ack	Ericsson L.M.	Agreed
N4-000917	GSM to 3G Handover: MAP parameter Target Cell ID	Ericsson L.M.	Agreed
N4-000918	GSM to 3G Handover: MAP parameter Target Cell ID	Ericsson L.M.	Revised in tdoc N4- 001070
N4-000919	GSM to 3G Handover: MAP parameter Target Cell ID	Ericsson L.M.	Revised in tdoc N4- 001071
N4-000920	ASN.1 description of TargetCellId in MAP	Ericsson L.M.	Agreed
N4-000921	ASN.1 description of TargetCellId in MAP	Ericsson L.M.	Agreed
N4-000922	IMSI in MAP PREPARE_HANDOVER	Ericsson L.M.	Revised in tdoc N4- 001072
N4-000923	IMSI in MAP PREPARE_HANDOVER	Ericsson L.M.	Revised in tdoc N4- 001073
N4-000924	GSM/UMTS Interworking: Mapping of cause codes	Ericsson L.M.	Revised in tdoc N4- 001074
N4-000925	Addition of Charging Type Support indicator to the GPRS Location Update	Nokia	Withdrew
N4-000926	Addition of Charging Type Support indicator to the GPRS Location Update	Nokia	Withdrew
N4-000927	Indication of Intra-MSC Intersystem handover from MSC-B to MSC-A	Nokia	Withdrew
N4-000928	Indication of Intra-MSC Intersystem handover from MSC-B to MSC-A	Nokia	Withdrew
N4-000929	Correction to LCS application context	Nokia	postponed till January meeting
N4-000930	Correction to LCS application context	Nokia	postponed till January meeting
N4-000931	Correction to LCS application context	Nokia	postponed till January meeting
N4-000932	Recommandation to include priority in the call proceeding message if the network is supporting eMLPP.	SAGEM SA	Revised in Tdoc N4-001084
N4-000933	Pre-emption by a higher priority call of the talker of a group call	SAGEM SA	Postponed
N4-000934	VGCS, VBS and eMLPP are not specific for this document. Those abbreviations are already described in 21.905.	SAGEM SA	Agreed
N4-000935	To describe the MS solution when priority in paging and setup are not the same	SAGEM SA	Revised in Tdoc N4-001107
N4-000936	for automatic answering with same priority: Rewording of the automatic answering to avoid any misunderstanding, and to underline that automatic answering applies in idle mode or in case of called party preemption	SAGEM SA	Revised in Tdoc N4-001108
N4-000937	Alignment of the Target RNC-ID	ERICSSON	Revised to N4- 001075
N4-000938	Alignment of the Target RNC-ID	ERICSSON	Revised to N4- 001076
N4-000939	Proposal to solve intersystem handover	Alcatel	Noted
N4-000940	Size of RANAP messages over MAP-E	Alcatel	Noted
N4-000941	Clarification on the use of Teardown Indicator	Fujitsu	Agreed
N4-000942	Correction to the PDU Notification Request message	NEC, Fujitsu	Agreed
N4-000943	Proposed LS back to R3 on R99 Lossless Relocation for UMTS	NEC	Withdrew
N4-000944	Tidying up of Process Subs_FSM and inter-process signals.	Vodafone Group PLC	Agreed
N4-000945	Editorial corrections	NTT Software	Revised in tdoc N4- 001051
N4-000946	Moving informative Annex A from 3G TS 29.060 and making it normative.	Nokia	Agreed

N4-000947	Moving of Annex A to 3G TS 23.003.	Nokia	Agreed
N4-000948	Selecting GGSN IP address	Nokia	Revised to N4-000972
N4-000949	Introduction of CAMEL support for OR	Vodafone	Revised to N4-000957
N4-000950	Work Item description: "Subscriber Data Management in the IP Multimedia CN Subsystem"	Ericsson L.M.	Noted
N4-000951	proposed response to Liaison Statement on IPT Basic Call Handling	S2	Noted
N4-000952	LS on GERAN impacts on overall system architecture	S2	Noted
N4-000953	Response LS on RAB Assignment QoS Negotiation	S2	Noted
N4-000954	Reply LS, on Terminology of TrFO/TFO and other possible interworking scenarios.	S2	Noted
N4-000955	Intersystem handover problem	CN3	Noted
N4-000956	LS Regarding WI for "Transcoder At The Edge"	3GPP TrFO/TFO Harmonisation Workshop	Noted
N4-000957	Introduction of CAMEL support for OR	Vodafone	Revised to Tdoc N4-001109
N4-000958	LS on Size of RANAP messages over MAP-E	R3	Revised in Tdoc N4-001031
N4-000959	Proposed LS to N4 and S2 on R99 Lossless Relocation for UMTS	R3	Noted
N4-000960	Real Time SRNS Relocation for PS Domain RABs	R3	Noted
N4-000961	LS reply to CN1 on Supported Codec Lists in 26.103	S4	Noted
N4-000962	Removal of 'Version not Supported' for GTP-U	Nortel Networks	Revised Tdoc N4-001052
N4-000963	Bearer Independent CS Core Network – Stage 2 Proposed Updates	Nortel Networks	Agreed
N4-000964	BICSCN – Mobile Originating backwards bearer establishment	Nortel Networks	Agreed
N4-000965	BICSCN – Mobile Terminating backwards bearer establishment	Nortel Networks	Agreed
N4-000966	BICSCN – Inter-MSC SRNS relocation using backwards bearer establishment	Nortel Networks	Agreed
N4-000967	Examples of bearer redirection when call is in progress	Nortel Networks	Noted
N4-000968	IP Multimedia CN Subsystem: Cx Technical Recommendations	Nortel Networks	Noted
N4-000969	3GPP UMTS Release 5 HSS-to-CSCF Interactions	Nortel Networks	Noted
N4-000970	Adding Uplink TEID for Data I and user plane GGSN address to PDP Context IE	Nokia	Revised in Tdoc N4-001022
N4-000971	RAND Length	Nokia	Withdraw
N4-000972	Selecting GGSN IP Address	Nokia, Lucent	Revised in Tdoc N4-001055
N4-000973	Proposed improvements in Mobile Originating Speech/Data Call (sections 6.1 and 6.2)	Ericsson L.M.	Agreed
N4-000974	Backward bearer set up in Mobile Originating Speech/Data Call	Ericsson L.M.	Agreed
N4-000975	Proposed improvements in Mobile Terminating Speech/Data Call (sections 6.3 and 6.4)	Ericsson L.M.	Agreed
N4-000976	Backward bearer set up in Mobile Terminating Speech/Data Call	Ericsson L.M.	Agreed
N4-000977	FAX for UMTS	Ericsson L.M.	Withdraw
N4-000978	Alternate speech/FAX for UMTS	Ericsson L.M.	Withdraw
N4-000979	Proposed improvements in Call Clearing (chapter 7)	Ericsson L.M.	Agreed
N4-000980	Proposed improvements in Handover (chapter 8)	Ericsson L.M.	Revised in Tdoc N4-001103
N4-000981	Backward bearer set up in Handover	Ericsson L.M.	Withdraw
N4-000982	Inter-system Handover	Ericsson L.M.	Agreed
N4-000983	Handling of GSM Services after Handover	Ericsson L.M.	Agreed
N4-000984	Proposed substitution of 'Recovery' (chapter 10) by 'General (G)MSC-MGW Procedures' (chapter 15)	Ericsson L.M.	Agreed
N4-000985	Proposed improvements to General (G)MSC-MGW Procedures (chapter 15)	Ericsson L.M.	Revised in Tdoc N4-001026
N4-000986	Charging	Ericsson L.M.	Withdraw
N4-000987	Proposed improvements to Interactions with other Services (chapter 13)	Ericsson L.M.	Agreed
N4-000988	Removal of forward bearer set up for Interactions with other Services (chapter 13)	Ericsson L.M.	Agreed
N4-000989	Multicall (section 13.15)	Ericsson L.M.	Agreed
N4-000990	IST (section 14.2)	Ericsson L.M.	Agreed
N4-000991	Proposed improvements to DTMF (section 14.4)	Ericsson L.M.	Agreed
N4-000992	Proposed improvements on backward bearer release for OR (section 14.5)	Ericsson L.M.	Agreed
N4-000993	Proposed improvements to Messages/Procedures and their Contents (chapter 15)	Ericsson L.M.	Agreed
N4-000994	Tunnelling	Ericsson L.M.	Withdraw
N4-000995	Iu User Plane package (section 4.7.4)	Ericsson L.M.	Withdraw
N4-000996	Circuit Switched package (section 4.7.5)	Ericsson L.M.	Agreed
N4-000997	TFO package (section 4.7.6)	Ericsson L.M.	Agreed
N4-000998	Call independent H.248 Procedures (section 4.7.7)	Ericsson L.M.	Agreed
N4-000999	Call Related H.248 Procedures (section 4.7.8)	Ericsson L.M.	Agreed
N4-001000	Formats and Codes – Signalling Objects	Ericsson L.M.	Agreed
N4-001001	Framing of CS User Plane in IP CN	Ericsson L.M.	Withdraw
N4-001002	CR 03.67 on removal of wrong description	Ericsson	Revised in Tdoc

			N4-001093
N4-001003	CR 23.067 on correction of Pre-emption service	Ericsson	Revised in Tdoc N4-001085
N4-001004	CR 24.067 on eMLPP correction for GSM/UMTS use	Ericsson	Revised in Tdoc N4-001086
N4-001005	LS response to "LS on Codec Requirements to UMTS UEs / Mandatory Subflow Combinations for SID and NO_DATA frames for speech calls"	S4	Noted
N4-001006	Correction of Security parameters length	NTT Software, Fujitsu, NEC	Agreed
N4-001007	Clarifications to the Security Mode usage, and error cases	Nokia	Revised in Tdoc N4-001042
N4-001008	Intersystem HO	Siemens	Agreed
N4-001009	CH & CW scenarios	Siemens	Revised in Tdoc N4-001096
N4-001010	proposal for restructuring TS 23.205	Siemens	withdrew
N4-001011	Compatibility GTPv0/GTPv1 in case of SGSN change	Siemens	Revised in Tdoc N4-001053
N4-001012	MS Network Capability in MM context	Siemens	Agreed
N4-001013	Ignore last octet in MS Network Capability	Motorola	Withdrew
N4-001014	Ignore last octet in MS Network Capability	Motorola	Withdrew
N4-001015	GTP-C Message Protection	Motorola	Revised in Tdoc N4-001059
N4-001016	Correction to Annex A.	Vodafone	Withdrew
N4-001017	UMTS to GSM handover of data calls	Ericsson	Withdrew
N4-001018	Correction of message between VLR and HLR.	Vodafone	Revised in Tdoc N4-001081
N4-001019	Introduction of MT SMS CAMEL4 to MAP	N2	Postponed
N4-001020	Media Gateway Controller (MGC) – Media Gateway (MGW) Interface; Stage 3	Editors (CSELT/ Vodafone)	Noted
N4-001021	Proposed changes to the structure of TS 29.232	Editors (CSELT/ Vodafone)	Agreed
N4-001022	Adding Uplink TEID for Data I and user plane GGSN address to PDP Context IE	Nokia, Alcatel	Withdrew
N4-001023	ODB works for PS domain	NEC	Noted
N4-001024	TS 23.205 Version 0.2.0 editors version	Editors	Noted
N4-001025	TS 23.153 Version 2.2.0	Editors	Revised in Tdoc N4-001083
N4-001026	Proposed improvements to General (G)MSC-MGW Procedures (chapter 15)	Ericsson L.M.	Agreed
N4-001027	TrFO workshop #05 meeting report	MCC	Noted
N4-001028	LS Proposed enhancements to Mc specification	TrFO harmonisation workshop	Noted
N4-001029	Security for MAP over IP	S3	Noted
N4-001030	Protection of GTP Messages using IPSec	S3	Noted
N4-001031	LS on Size of RANAP messages over MAP-E	R3	Noted
N4-001032	Liaison statement to TSG-N WG4 on Security Policy for MAP Security	S3	Noted
N4-001033	GTP signalling security	S3	Noted
N4-001034	Response to LS on Support of additional GPRS ciphering algorithms	N1	Noted
N4-001035	Response to "LS on RAB Assignment QoS Negotiation" from RAN 3	N1	Noted
N4-001036	Liaison statement on the introduction of GEA2.	N1	Noted
N4-001037	LS on Positive Authentication Reporting	CN	Noted
N4-001038	Response to liaison statement on support of AMR via lu-ps in GERAN	R3	Noted
N4-001039	LS to S2 on use of IP for security key distribution	S3	Noted
N4-001040	Draft LS reply to CN1 on codec types for different access technologies	S4	Duplicated from 0961
N4-001041	Draft LS response to "LS on Codec Requirements to UMTS UEs / Mandatory Subflow Combinations for SID and NO_DATA frames for speech calls"	S4	Duplicated from 1005
N4-001042	Clarifications to the Security Mode usage, and error cases	Nokia	Revised in Tdoc N4-001063
N4-001043	Open issues on the Bearer Independent Architecture Option	France Telecom	Noted
N4-001044	Handling of GTP-U packets in the UL direction during relocation	Nortel Networks	Noted
N4-001045	LS to LS on GERAN impacts on overall system architecture	N4	Agreed
N4-001046	Make calls for IPRs	CN	Noted
N4-001047	ATSI correction (R99)	Siemens	Agreed
N4-001048	Request more than one SS data and/or CSI in one ATSI request (R4)	Siemens	Agreed
N4-001049	Work Item Description: "IP Multimedia CN Subsystem, CSCF-HSS (Cx) interface"	CN4	Revised in Tdoc N4-001065
N4-001050	LS on GGSN address selection mechanism in SGSN in case of network requested PDP context activation procedure	N4	Agreed
N4-001051	Correction of wrong entry in information element tablevalue	NTT Software	Agreed

N4-001052	Removal of 'Version not Supported' for GTP-U	Nortel Networks	Agreed
N4-001053	Compatibility GTPv0/GTPv1 in case of SGSN change	Siemens	Agreed
N4-001054	Giorgio's comments about N4-001044	Nokia	Noted
N4-001055	Selecting GGSN IP Address	Nokia, Lucent	Agreed
N4-001056	LS on R99 Lossless Relocation for UMTS to TSG_CN	N4	Revised in Tdoc N4-001120
N4-001057	LS to R3 Answer to RAN 3 LS on Real Time SRNS Relocation for PS Domain	N4	Revised in Tdoc N4-001121
N4-001058	LS on the Work Item "Cx Interface specification"	N4	Revised Tdoc N4-001066
N4-001059	GTP-C Message Protection	Motorola	Postponed
N4-001060	Clarification in supported Camel Phases	Vodafone	Agreed
N4-001061	Clarification in supported Camel Phases	Vodafone	Agreed
N4-001062	LS on Clarifications to the Security Mode usage, and error cases	N4	Agreed
N4-001063	Annex to LS N4-001063	Nokia	Noted
N4-001064		Nokia	Agreed
N4-001065	Work Item Description: "IP Multimedia CN Subsystem, CSCF-HSS (Cx) interface"	CN4	Agreed
N4-001066	LS on the Work Item "Cx Interface specification"	N4	Agreed
N4-001067	Handling of sequence numbers for reliable transmission of control plane messages	Lucent	Noted
N4-001068	USSD corrections for Follow Me	Siemens	Agreed
N4-001069	USSD corrections for Follow Me	Siemens	Agreed
N4-001070	GSM to 3G Handover: MAP parameter Target Cell ID	Ericsson L.M.	Agreed
N4-001071	GSM to 3G Handover: MAP parameter Target Cell ID	Ericsson L.M.	Agreed
N4-001072	IMSI in MAP PREPARE_HANDOVER	Ericsson L.M.	Agreed
N4-001073	IMSI in MAP PREPARE_HANDOVER	Ericsson L.M.	Agreed
N4-001074	GSM/UMTS Interworking: Mapping of cause codes	Ericsson L.M.	Agreed
N4-001075	Alignment of the Target RNC-ID	ERICSSON	Agreed
N4-001076	Alignment of the Target RNC-ID	ERICSSON	Agreed
N4-001077	LS providing comments to LS from CN3 on intersystem handover problem	N4	Agreed
N4-001078	LS on Size of RANAP messages over the MAP E-interface	N4	Revised in Tdoc N4-001119
N4-001079	CR Jean-Alain	Alcatel	Agreed
N4-001080	LS on Operator Determined Barring of Packet Oriented	N4	Agreed
N4-001081	Correction of message between VLR and HLR.	Vodafone	Agreed
N4-001082	LS on Security for MAP over IP	N4	Agreed
N4-001083	TS 23.153 Version 2.3.0	Editors	Revised in Tdoc N4-001106
N4-001084	The accepted priority in the call proceeding message	SAGEM SA	Revised in Tdoc N4-1111
N4-001085	CR 23.067 on correction of Pre-emption service	Ericsson	Revised in Tdoc N4-1114
N4-001086	CR 24.067 on eMLPP correction for GSM/UMTS use	Ericsson	Agreed
N4-001087	The accepted priority in the call proceeding message for GSM and UMTS	Sagem, Ericsson	Revised in Tdoc N4-1111
N4-001088	Introduction of GGSN address	T-Mobil	Agreed
N4-001089	Introduction of GGSN address	T-Mobil	Agreed
N4-001090	LS to GERAN2 and SA2 on the status of splitted A interface	N4	Will published later
N4-001091	Response to Liaison Statement on identifying responsibility for selection of the protocol over the Mp interface (Between SGSN server and PS-MGW)	S2	Noted
N4-001092	Reply to LS on Proposed enhancements to Mc specification	N3	Noted
N4-001093	CR 03.67 on removal of wrong description	Ericsson	Revised in Tdoc N4-1113
N4-001094	CR 23.067 on Correction of Pre-emption service (eMLPP)	Ericsson	Agreed
N4-001095	Transport of long RANAP messages on MAP-E interface	Alcatel	Agreed
N4-001096	Proposed improvements to Interactions with other Services (chapter 13)	Siemens, Ericsson	Agreed
N4-001097	TFO package (section 4.7.6)	Ericsson L.M.	Agreed
N4-001098	RE: LS on size of ranap messages over map-e	S2	Noted
N4-001099	RE: LS, SRNS relocation based on global title	S2	Noted
N4-001100	<i>USED in TrFO ad hoc</i>		
N4-001101	<i>USED in TrFO ad hoc</i>		
N4-001102	<i>USED in TrFO ad hoc</i>		
N4-001103	Proposed improvements to 3G TS 23.205 "Bearer Independent CS CN – Stage 2" related to Handover	Ericsson L.M., Siemens	Agreed
N4-001104	TS 23.205 Version 0.2.0 editors version	Editors	Agreed
N4-001105	Media Gateway Controller (MGC) – Media Gateway (MGW) Interface; Stage 3	Editors (CSELT/ Vodafone)	E-mail approval 24.11 CET 17:00
N4-001106	TS 23.153 Version 2.3.0	Editors	Agreed
N4-001107	To describe the MS solution when priority in paging and setup are not the same	SAGEM SA	Agreed

N4-001108	Automatic answering	SAGEM SA	Agreed
N4-001109	Introduction of CAMEL support for OR	Vodafone	Agreed
N4-001110	Liaison Regarding the Support of Mobility in the MSF Architecture	MSF Architecture Working Group	Noted
N4-001111	The accepted priority in the call proceeding message	SAGEM SA	Agreed
N4-001112	The accepted priority in the call proceeding message for GSM and UMTS	Sagem, Ericsson	Revised in Tdoc N4-001115
N4-001113	CR 03.67 on removal of wrong description	Ericsson	Agreed
N4-001114	CR 23.067 on correction of Pre-emption service	Ericsson	Agreed
N4-001115	The accepted priority in the call proceeding message for GSM and UMTS	Sagem, Ericsson	Revised in Tdoc N4-001118
N4-001116	LS providing Comments to LS from SA4 regarding support of DTX and No_Data frames.	N4	Agreed
N4-001117	Output documents	CN4 Chairman	Noted
N4-001118	The accepted priority in the call proceeding message for GSM and UMTS	Sagem, Ericsson	Agreed
N4-001119	LS on Size of RANAP messages over the MAP E-interface	N4	Agreed
N4-001120	LS on R99 Lossless Relocation for UMTS to TSG_CN	N4	Agreed
N4-001121	Answer to RAN 3 LS on Real Time SRNS Relocation for PS Domain RABs	N4	Agreed

---

## Annex C: Make calls for IPRs

Under Article 3.1 of the Third Generation Partnership Project, the Organizational Partners undertook to encourage that their IPR Policies are respected by their members and that their respective members declare their willingness to grant licences on fair, reasonable terms and conditions on a non discriminatory basis, and consistent with their IPR Policies.

A list of essential patents declared with regard to transposed 3GPP deliverables can be found at [http://www.3gpp.org/pcg/ipr\\_declarations.htm](http://www.3gpp.org/pcg/ipr_declarations.htm)

3GPP Individuals Members are required to make reasonable endeavours to inform their respective Organizational Partners, in a timely manner, of Essential IPRs of which they become aware. You, as a Technical Specification Group Chairmen, are urged to remind your members of this obligation.

***The objectives of the call for IPRs*** should be to:

- remind the Individuals Members and the person making the technical proposal of technical solution about their obligation under their respective Organizational Partners IPR Policy. To draw attention to any of their own IPRs which might be essential to a 3GPP Technical Specification and Technical Report, if their proposed solution is adopted; and other IPRs which they think could be Essential to the 3GPP Technical Specification and Technical Report under preparation
- seek a statement from the person submitting a technical solution concerning the existence of IPRs (especially patents), which are, or are likely to become, Essential to any 3GPP Technical Specification and Technical Report based on the proposed technical solution (**an IPR statement**)

It is obvious that the members' representatives present in 3GPP Technical Specification Groups cannot be deemed to know details of all IPRs owned by their company. However, you need to invite them to contact the patent experts of their company.

### ***When?***

A **formal call** for IPR must be made by the Chairman at **the beginning** of each meeting.

A shorter **call** for IPRs should be made:

- on formal creation of a work item;
- on formal submission of a technical solution;
- on completion of the first stable draft of the 3GPP Technical Specification and Technical Report;
- on working group approval of a draft 3GPP Technical Specification and 3GPP Technical Report ;
- on TSG approval of a draft 3GPP Technical Specification and 3GPP Technical Report .

### ***How?***

- 1) The formal call for IPRs needs to be made by the Chairman orally or in writing according to the example given in ***the attached Appendix***. Individuals Members needs to be informed that the **form for the notification** of essential IPRs and licensing declaration is available to them (For ETSI :<http://www.etsi.org/ipr/IPRForms.pdf>)).
- 2) During the meeting the **shorter call of IPRs** can consist in the following sentence "**Does anyone have an essential IPR to declare?**" as a reminder of the call for IPRs made in the beginning of the meeting.

If a member of your 3GPP Technical Specification Group informs you, as Chairman, that his company or someone else has a potentially Essential IPR, you should be aware of the fact that:

- the owner of an Essential IPR does not have to disclose anything other than its existence and identity, e.g. in the case of a patent, its number or that of the application;
- the holder of an Essential patent should never be asked to disclose the commercial terms under which licenses for the Essential patent may be made available,
- Members have no obligation to conduct formal IPR searches.

What needs to be done if no IPR statement can be obtained or if the IPR owner refuses to grant licenses?

As 3GPP Technical Specification Group Chairmen, you need to encourage Individual Members to make IPR statement and Licensing Declaration at an early stage in order to avoid undue delay to the work of the Technical Specification Group. However, organizations may need time to study the IPR situation – this may especially be the case for large organizations.

If it becomes apparent to you that an IPR statement is unlikely to be provided to you, you should inform the Project Coordination Group who will arrange with the Organizational Partners for the necessary declarations to be obtained.

## Appendix A: Example of a formal call 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.

### 2.7 3GPP email lists:

To receive information about CN3 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 \***

### 2.8 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)

### 2.9 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>

### 2.10 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 D: Document history

<b>Document History</b>	
<b>30<sup>th</sup> Nov 2000</b>	<p>DRAFT v.1.0.0 dispatched to the TSG_CN 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 2 weeks was given to the CN delegates for e-mail comments on the draft report.</p> <p><b>E-mail comments back by 14<sup>th</sup> December 2000</b></p>
<b>14<sup>th</sup> Dec 2000</b>	Draft report v2.0.0 placed on the FTP serve
<b>15<sup>th</sup> Jan 2001</b>	Version 2.0.0 approved at CN4#06 Meeting in Beijing – Made version 3.0.0 and sent out for info. Placed to server as the official meeting report.