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Third Generation Partnership Project

MEETING REPORT v24.0.0

3GPP TSG-CN4#21

Bangkok, THAILAND.
27th - 31st October, 2003

Hosted by:

The Japanese Friends of 3GPP

CN4 Officials:

Chairman: Peter Schmitt, Siemens. Peter.Schmitt@gksag.de
Vice-Chairman: Sir. ~~Toshiyaki~~[Toshiyuki](mailto:tamurato@aj.jp.nec.com) Tamura, NEC. tamurato@aj.jp.nec.com
MCC Support: Kimmo Kymäläinen, ETSI MCC. kimmo.kymalainen@etsi.org

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1 Opening of the meeting and approval of the agenda

Mr. Toshiyuki Tamura of NEC welcomed the delegates to Bangkok on behalf of the hosts. The meeting was chaired by Mr. Peter Schmitt, (Chair, Siemens). Additional support was provided by Mr. Kimmo Kymäläinen (CN4 Secretary, MCC).

Proposed agenda **N4-031083 APPROVED**

1.1 IPR Call

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

The delegates were invited:

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

2 Allocation of documents to agenda items

N4-031085rev Detailed agenda & time plan for CN4 #21: status on eve of meeting

Discussion:

Status: **APPROVED.**

3 Meeting Reports

3.1 CN4#20 meeting report Sophia Antipolis, FRANCE

N4-031089 CN4#20 meeting report Sophia Antipolis, FRANCE

Discussion:

Status: **APPROVED.**

3.2 Summary report from CN #21 & SA #21, Frankfurt, GERMANY

N4-030737 Summary report from CN #20 & SA #20, Hämeenlinna, FINLAND

Discussion:

Status: **NOTED.**

4 Input liaison statements

N4-031242 LS on identifying MMS Enabled devices and MMS Capabilities of those devices [T2-030535], T2.

Discussion: CN4 is kindly asked to comment on the attached proposed CR to resolve the MMS Enabled problem, and to provide any guidance in the area of the MMS Capabilities problem.

CN4 will wait until SA2 has made a solution to resolve MMS enabled problem.

Status: **NOTED.**

N4-031329 Response LS on identifying MMS Enabled devices and MMS Capabilities of those devices.

Discussion:

[Siemens later indicated that SA2 thought CN4 should respond to this and thus prepared a reply LS and edited the CR. Ericsson was concerned that this might give impression that CN4 had discussed this issue and was giving some form of agreement to the proposed solution. It was agreed to state that this was not the case and only indicate that the solution was feasible but not perfect.](#)

Status: **Revised to N4-031351**

↓ **REVISED** ↓

N4-031351 **Response LS on identifying MMS Enabled devices and MMS Capabilities of those devices.**

Discussion:

Status: **Approved**

N4-031328 **Legacy Terminal Detection; T-Mobil, CN4**

CR: 23.140-???

Discussion:

Status: **Noted**

N4-031243 **LS Response to "Inclusion of IMS Signalling Indicator in S-CDR" [BARG Doc 226/03], GSMA.**

Discussion: CN4 copied for info only.

Status: **NOTED.**

N4-031246 **LS on P-TMSI signature validation in R99 [N1-031334], CN1.**

Discussion: CN4 copied for info only.

Status: **NOTED.**

N4-031248 **LS on Reporting of attempted UE positioning methods over lu [R3-032264], RAN3.**

Discussion: CN4 copied for info only.

Status: **NOTED.**

N4-031252 **LS on Special-RAND mechanism [S3-030652], SA3.**

Discussion: CN4 is kindly asked to confirm that extracting information from the lower layers of the stack is feasible and give their view on alternative solutions.

Siemens: The solution is acceptable but it's not a way we are usually going in CN4. This kind of mechanism should be avoided. Siemens would like to propose to transport the information on MAP-level on Rel-6.

There is a consensus to use upper layer instead to extracting lower layer on Rel-6 onwards. Ericsson needs more time to check possible solutions.

Reply LS to SA3 **N4-031289**

Status: **NOTED.**

N4-031289 **Response LS on Special-RAND mechanism; Siemens**

Discussion:

Status: **Approved**

N4-031256 **LS reply on sending the SGSN's MNC and MCC to the GGSN [S5-034557], SA5.**

Discussion:

Status: **NOTED.**

N4-031257 **LS on principles for overlapping issues with OMA regarding PoC [SP-030530], SA.**

Discussion: CN4 copied for info only.

Status: **NOTED.**

N4-031265 **Liaison Statement on EC Requirements on Emergency Telecommunications [EM04td014r2], OCG EMTEL.**

Discussion: CN4 is kindly invited, within your area of expertise and recognised responsibility, with the utmost urgency to:

1. Familiarise the TB or WG with the requirements from the COMMISSION RECOMMENDATION of the 25/07/2003 C(2003) 2657 and SR 002 180.
2. Identify areas where your TB or WG is or expects to be active; and initiate the corresponding activities and Work-items.
3. Define functional requirements and collaborate with other TBs, in their defined areas of responsibility, to work on the high priority items.
4. Specify solutions for the existing, new and evolving technologies.
5. Keep OCG EMTEL informed about your existing and expected activities and their status.
6. Provide feedback to the OCG EMTEL in time for their next meeting.

Vodafone: Some action is maybe needed in CLIR/CLIP.

Lucent: Requirements and information are needed from SA2 about proposed solution.

Status: **NOTED.**

N4-031287 **Reply LS to 3GPP on principles for overlapping issues with OMA regarding PoC [OMA-REQ-2003-0676R02], OMA Req WG.**

Discussion: CN4 copied for info only.

Status: **NOTED.**

N4-031382 **LS on IETF work for WLAN network selection [S2-033792], SA2.**

Discussion: CN4 copied for info only.

Status: **NOTED.**

N4-031383 **LS on IETF work on RADIUS enhancements [S2-033793], SA2.**

Discussion:

Status: **NOTED.**

5 Work Item management

N4-031278 **WID: Support for subscriber certificates, stage 3**

Discussion:

Status: **WITHDRAWN.**

N4-031279 **Updated WID: Support of WLAN, stage 3**

Discussion:

Status: **APPROVED**

N4-031366 **Updated WID: Subscriber Certificates revised WID**

Discussion:

Status: **APPROVED** [Revised to N4-031389](#)

[⇓ REVISED ⇓](#)

[N4-031389](#) [Updated WID: Subscriber Certificates revised WID](#)

Discussion:

Status: [Approved](#)

6 Release 6

6.1 Wireless LAN interworking

N4-031261 LS OUT LS on clarification for the WLAN D'/Gr' interface standardization, Ericsson

Discussion: Lucent doesn't see need to this CR. Or if we send a CR we should insert a clarification about the work in stage 2 and stage 3.

Siemens: Requirements in stage to Annex do really not work. Interface description should be more detailed in stage 3 level

Status: [Revised to N4-021320](#)

↓ REVISSED ↓

N4-031320 LS OUT LS on clarification for the WLAN D'/Gr' interface standardization, Ericsson

Discussion:

Status: [Approved](#)

N4-031385 Reply LS on Clarification for the WLAN D'/Gr' interface standardization [S2-033795], SA2.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031128 Re-use of Cx protocol for Wx interface, Ericsson

Discussion: According to the analysis and conclusions in the previous chapter, Ericsson proposes to adapt Cx to cope with the Wx interface needs and to include the following modifications into the TS 29.234 v 1.0.0.

Ericsson proposal is also to postpone the final commands and AVPs modifications until WLAN interworking Stage 2 and Stage 3 are mature enough.

Principle agreed but new application ~~context~~-IDs ~~will be~~ [likely to be](#) assigned. Proposed section 2.2 will be re-drafted ~~more common way~~ [to indicate that Cx shall be reused as much as possible](#).

Status: [Revised to N4-021321](#)

↓ REVISSED ↓

N4-031321 Re-use of Cx protocol for Wx interface, Ericsson

Discussion:

Status: [Revised to N4-021368](#)

↓ REVISSED ↓

N4-031368 Re-use of Cx protocol for Wx interface, Ericsson

Discussion:

Status: [Agreed](#)

N4-031158 RADIUS based Ws reference point; China Mobile, Huawei, Intel

Discussion: *China Mobile:* Currently in TS29.234, only DIAMETER based Ws reference point is supported between AAA proxy and AAA server, which enforces that AAA proxy must support Diameter at

least and AAA server must support Diameter. But it is not reasonable to exclude RADIUS based Ws reference point when taking the following points into consideration.

- Nowadays, RADIUS is widely used by the public WLAN service deployments on global and becomes the de facto standard for authentication, authorization and accounting in roaming or non-roaming case.
- From the network evolution and deployment point of view, RADIUS based WLAN ANs and AAA proxies & servers will exist in long run. Some operators would continually keep RADIUS based AAA proxies & servers rather than deploy these DIAMETER based network elements immediately taking into the consideration the investments protection, service stability, and technology maturity.
- IETF manages to enhance RADIUS to overcome some of its deficiencies. This means that it is possible to improve the capabilities of RADIUS. The functionality especially the network initiated procedures can also be done now by RADIUS extension. Operators may choose to upgrade RADIUS to support some functionality instead of installing new DIAMETER immediately which they have not had much experience on and is unproven in the current practice.
- According to the definition of Ws in TS23.234 by stage 2 work, AAA server will potentially necessary support RADIUS protocol to accommodate the legacy WLAN ANs based on RADIUS in non-roaming case. It indicates that RADIUS based Ws reference point should be also naturally supported.

Lucent: CN4 have to make a clear decision about the support of a single interface or both DIAMETER and RADIUS based interface.

AT&T: It's not clear for us why do we should support both interfaces. If we support only a one interface we can develop a new standards much effectively. Support only DIAMETER protocol in Ws interface is a right way continue work in 3GPP. How do we interwork in Ws-interface if a one operator selects DIAMETER based protocol and the other one select RADIUS based?

Vodafone and France Telecom: It can be solved between roaming agreements.

AT&T: We can't understand why do we should support optional RADIUS interface on Ws-interface when DIAMETER is mandated. AT&T can agree that both protocols should be supported on Ws-interface. RADIUS will not support all enhancements on Ws-interface

Intel: IETF works with RADIUS based protocol. The work will be estimated to finish in 6-9 months.

Vodafone: If IETF works with RADIUS development, why don't we choose RADIUS only?

HuaWei: In long term operators will support DIAMETER, but the current situation from operator point of view is more RADIUS based.

Vodafone: Some feasibility study is needed to clarify the possible solution between scenarios 1, 2 and 3.

Lucent: There is a clear requirement from SA2 that only a one protocol is need, a DIAMETER based. Ideal solution is that we have only a one protocol.

China Mobile: We have contributed a document to change this also to support RADIUS in stage 2.

Nokia: We believe there should be only a one protocol supported in Ws if possible, RADIUS or DIAMETER. Nokia doesn't believe RADIUS full fill all the requirements in scenario 2 and 3.

CN4 chairman: If some company challenge the current work assumption of CN4 ([to only have 1 protocol on Ws](#)) the full study of advantages and drawbacks is needed to contribute to the next CN4 meeting.

Status: **Noted**

N4-031159 **Radius based Ws Information Elements; China Mobile, Huawei, Intel**

Discussion: *Lucent:* Does RFC 3580 should be reference in this section?

Agreed by China Mobile.

"YES" and "NO" have to be changed as "Mandatory", "Conditional" or "Optional" on the table.

Status: **Revised to N4-031350**

↓ REVISED ↓

N4-031350 Radius based Wr Information Elements; China Mobile, Huawei, Intel

Discussion:

Status: [Revised to N4-031369](#)

↓ REVISED ↓

N4-031369 Radius based Wr Information Elements; China Mobile, Huawei, Intel

Discussion: The information of the hotspot, operator and country needs to be added.

Status: [Revised to N4-031370](#)

↓ REVISED ↓

N4-031370 Radius based Wr Information Elements; China Mobile, Huawei, Intel

Discussion: Will be incorporated with the new version of 29.234.

Status: [Agreed](#)

N4-031160 Addition of D'/Gr' reference point description; China Mobile, Huawei

CR: 29.002-690

Discussion: Decision depends on SA2 response to CN4 LS N4-031320

Status: [Postponed to next meeting](#)

N4-031161 TS 29.234, Addition of D'/Gr' reference point description; China Mobile, Huawei

Discussion: Decision depends on SA2 response to CN4 LS N4-031320

Status: [Postponed to next meeting](#)

N4-031187 Addition of 3GPP WLAN-IW overview; Nokia

Discussion: Overview section is not needed in 3GPP specifications

Status: [Withdrawn](#)

N4-031188 Updates to definitions and abbreviations; Nokia

Discussion: Correction is needed in section 3.2.

Status: [Revised to N4-031353](#)

↓ REVISED ↓

N4-031353 Updates to definitions and abbreviations; Nokia

Discussion:

Status: [Revised to N4-031386](#)

↓ REVISED ↓

N4-031386 Updates to definitions and abbreviations; Nokia

Discussion: Will be incorporated with the new version of 29.234

Status: [Agreed](#)

N4-031189 Wn and Wm reference points; Nokia

Discussion: Lucent: We think reference points are stage 2 issue and these are not need to describe in stage 3 specification.
Chapter 5.2 will be revised and text will be replaced by reference to stage 2.
After discussion Nokia decided to withdrawn a document.

Status: **Withdrawn**

6.2 Generic User Profile

N4-031255 LS Reply on GUP [S5-032645], SA5.

Discussion:

Status: **NOTED.**

N4-031258 LS response on usage of GUP reference points [T2-030518], T2.

Discussion: Ericsson: LS was discussed in SA1. SA1 didn't see any conflicts between these 2 cases.

Status: **NOTED.**

N4-031190 Addition of References, Nokia.

Discussion: *Lucent:* We would like to see clarification why do we need so many references to Liberty Alliance.
Nokia did present a discussion paper about the reasons at CN4#20.

Status: **Noted**

N4-031191 XML Schema Structure, Nokia.

Discussion: *Lucent:* Scope of GUP and the scope of Liberty Alliance is totally different. We don't believe reference to Liberty Alliance is ~~not~~ clear.

Ericsson and Nokia believe Lucent haven't a clear knowledge of Liberty Alliance's scope.

Ericsson: SA1 has decided that interworking with Liberty Alliance documentation should be used as much as possible.

Lucent: We should do our data management by ourselves without reusing Liberty Alliance specification. That will be better solution for long term.

Status: **Noted**

N4-031192 General Guidelines, Nokia.

Discussion: Vodafone clarified editorial comments.
Accepted by Nokia

Status: **Revised to N3-01330**

↓ **REVISED** ↓

N4-031330 General Guidelines, Nokia.

Discussion:

Status: **Withdrawn**

N4-031193 GUP Schemas, Nokia.

Discussion: The proposal is giving guidelines for schemas.

Further discussion is needed. Lucent had a different opinion about schemas.

Status: **Noted**

N4-031194 ResourceID contents; Nokia.

Discussion: Alcatel: "Subscriber identity" will be replaced by "user identity"

Status: **Noted**

N4-031195 GUP Procedure/Redirect Update; Nokia.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031196 Rp reference point description improvements; Nokia.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031197 Authorisation; Nokia.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031198 GUP Procedures Schema; Nokia.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031199 GUP Component Schema Template; Nokia.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031230 Proposed XML schema for GUP; [AlcatelLucent](#).

Discussion:

Status: [Noted](#)

N4-031231 GUP vs Liberty Alliance; [AlcatelLucent](#).

Discussion: *Nokia:* Lucent's document is based Liberty Alliance phase 1 whereas Nokia has used stage 2 in their documentation.

Lucent: Phase 2 is only draft and we can't reliable the draft documentation. Liberty Alliance is heavily depended on XML Schema. XML schema is using the computing power of the device that might be a disadvantage.

CN4 decided to use XML schemas unless we find drawbacks not use it or CN4 will receive a recommendation from SA1/SA2 not to use XML schemas.

Status: [Noted](#)

N4-031362 Liberty Alliance Project alignment with GUP; Nokia.

Discussion:

Status: [Postponed to CN4#22](#)

N4-031108 Query; Ericsson.

Discussion:

Status: [Postponed to CN4#22](#)

Email discussion will occur to discuss the following issues:

- [How does XML schema for GUP have to look like?](#)
- [What are we reusing from other standardisation bodies e.g. liberty alliance?](#)
- [How do we do the reference to thejre documents when there is no final version available about the document we want to reference?](#)

6.3 Presence

N4-031103 Introduction of Presence Stage 3 (Ph) to the Sh interface; Lucent

CR: 29.328-026r2

Discussion: The common understanding is that Ph is based Sh and/or Ph based MAP

Nortel: What events are transferred over Sh-interface? Does any additional information element is needed for Ph-interface?

Lucent: If there will be; requirements are needed.

Status: [Revised to N4-031336](#)

⇓ REVISED ⇓

N4-031336 Introduction of Presence Stage 3 (Ph) to the Sh interface; Lucent

CR: 29.328-026r3

Discussion:

Status: [Agreed](#)

N4-031182 Introduction of Presence Stage 3 (Ph) to the MAP interface; Lucent

CR: 29.002-701

Discussion: Nokia: Do we need to describe the presence in MAP protocol?

Siemens: Would be enough if we just add a note that presence emulates GSMSCF?

Status: [Revised to N4-031292](#)

⇓ REVISED ⇓

N4-031292 Introduction of Presence Stage 3 (Ph) to the MAP interface; Lucent

CR: 29.002-701r1

Discussion: Nortel: There should be a clear indication when the different protocol ([MAP or Sh](#)) is used.

Lucent: It is already covered in stage 2

CN4 disagreed with Lucent's view.

Status: [Postponed to CN4#22](#)

6.4 Subscriber data handling for the IMS

N4-031109 Cx, Dx and Sh re-use and evolution management; Ericsson, Nortel Networks.

Discussion: **Proposal 1.**

At the initiation of a Diameter exchange, Capabilities Exchange Request and Answer messages are exchanged between the two nodes establishing the session.

Currently though, there is no way for the each node to know what type of node the other is. When the Cx interface only connected the HSS to I-CSCF's and S-CSCF's and the Sh interface only connected the HSS to Application Servers, this was not a significant problem but with the HSS now interfacing to up to eight different devices (not to mention the multiple interactions that the BSF and SLF may have) it would be useful to have a mechanism whereby the nodes at either end of the interface can easily determine what type of node the other is.

To achieve this, it is proposed to include a 'Node Type Identifier AVP' in the CER/CEA messages. This will allow the devices to know what they are attaching to, and particularly in the case of the HSS, to only send appropriate messages to the corresponding device and to reject incorrect requests from devices that should not be sending certain commands (ie an I-CSCF sending a SAR could be rejected by the HSS). This change is reflected in N4-031114 for Cx interface and N4-031181 for Sh interface.

Proposal 2.

Nortel proposes that version identification and version negotiation should be done at the application level. This should be accomplished by adding a 'Version AVP' to the CER/CEA messages, possibly as a proprietary extension of the 'Vendor Specific Application Id AVP'. Multiple instances of this AVP should be allowed. If the AVP is not included in the message it shall indicate that only 'version 1' of the application is supported.

Nortel believes that a combination of Proposal 1 and Proposal 2 provides a complete, simple and clear mechanism whereby capabilities and version information can be enhanced beyond that provided by Diameter Base protocol to allow for the increased level of compatibility negotiation that 3GPP standardisation processes require. This change is reflected in N4-031157.

Status: **Noted**

N4-031212 Separation of Diameter applications and their versions; Nokia, Siemens.

Discussion:

In the situation when it is not known how the new or evolving 3GPP Diameter applications will look in the end of Rel-6 and how they will evolve in the future releases, the most safest solution is to give them a separate Application Identifiers. In many of the cases in 3GPP the new Diameter applications or new versions of the applications may re-use the existing Rel-5 Cx command codes and AVPs, but it is highly probable they will require at least one new AVP which have "M" (=mandatory) bit set or even a new command code to be introduced. These meet the Diameter base protocol rules to create a new application.

Hence, in order to harmonise and simplify the use of Diameter Nokia suggests 3GPP to follow the original IETF Application Identifier based separation of applications always when introducing new Diameter applications and new versions of the existing Diameter applications.

Status: **Principle agreed**

Decision after 1109 & 1212 discussion:

After discussion Nortel and Ericsson accepted "Nokia & Siemens" proposals [to identify the applications](#). CRs will be submitted to CN4#22 to describe the version control of the Nokia/Siemens solution. Documents **N4-031114**, **N4-031157** and **N4-031277** were **WITHDRAWN** after discussion.

N4-031110 Documentation of protocols related to IMS for R6 and beyond; Nortel Networks.

Discussion:

Nortel does not have a specific proposal at this stage about how documentation of Cx and Cx like protocols should be done. However, we believe it would be expeditious of CN4 to consider the evolution of the documentation in advance of the point where the current structure is out moded. Nortel can see a number of possible routes;

- Continue as we are, expanding the scope of 29.228 and 29.229 as needed but for protocols that expand on Cx interface protocol, defining the extensions in separate documents.
 - Advantages – no upheaval of current documentation structure, continue as now.
 - Disadvantages – potentially confusing documentation, may end up with a document where every sentence begins with 'If', eg 'If applied to the Px interface', 'If the sending node is an S-CSCF', 'If this condition but not that condition or another condition, then...'
- Have a separate document for each of the Cx like applications.
 - Advantages – clearly defined protocols for each of the individual Cx-like instances. Single reference point for each of the interface definitions without conditions applying to other interfaces causing confusion.
 - Disadvantages – any general problem found in a Cx-like protocol may need to be corrected in multiple documents, one CR for each instance.
- Create a central reference document that is 'interface agnostic' but instead defines 3GPP specific DMA (similar to how 29.202 defines 3GPP implementations of M3UA).
 - Advantages – common problem sin all instances can be corrected in a single place. Individual interface documents can reference the generic document and specify interface specfic extensions. Easy migration once DMA is an RFC.
 - Disadvantages – major change to the Cx interface specs – much of the detail would be removed and replaced with references.

Nortel would like an opinion from the meeting of whether this concern is shared and whether it is worthy of further consideration.

This subject is something that should be discussed on **e-mail** if document structure should be reorganise.

Status: **Noted**

6.4.1 HSS – CSCF (Cx) & SLF - CSCF (Dx) interfaces

N4-031294 **Forking indication; Nokia.**

CR: **23.008-125r1 (Rel-6)**

Discussion: Ericsson: The CR is not approved in stage 2 (CR S2-033574). We should postpone the decision of the CR.

Status: **POSTPONED to next meeting**

N4-031295 **Forking indication; Nokia.**

CR: **29.228-058r1 (Rel-6)**

Discussion:

Status: **POSTPONED to next meeting**

N4-031213 **Originating S-CSCF name; Nokia.**

CR: **23.008-123 (Rel-6)**

Discussion: Ericsson believes stage 2 requirements are needed before we can agree stage 3 CR

Nokia don't see reason to postponed the CR. They believe all the requirements are already stated in stage 2 TS 23.218 and TS 23.228.

Lucent supported Ericsson's view that requirements should be clearly described in stage 2.

After discussion CN4 decided to postpone the CR.

Status: **POSTPONED to next meeting**

N4-031214 **Originating S-CSCF name; Nokia.**

CR: **29.228-053r1 (Rel-6)**

Discussion: Nokia: We not aware any requirements which are needed by SA2

Ericsson: We believe that the requirements are needed from SA2 before we can agree with this document.

Status: **POSTPONED to next meeting**

N4-031216 **Originating S-CSCF name; Nokia.**

CR: **29.229-020 (Rel-6)**

Discussion:

Status: **POSTPONED to next meeting**

6.4.2 HSS – SIP AS (Sh) interface

N4-031216 **Originating S-CSCF name; Nokia.**

CR: **29.328-037 (Rel-6)**

Discussion: Depending on CN1 CR. CN 1 CR needs to be rejected first.

Status: **POSTPONED to next meeting**

N4-031217 **Dh interface; Nokia.**

CR: **23.328-036 (Rel-6)**

Discussion: Lucent: Before we can approve the CR, changes have to be done in stage 2 specification 23.218. Two CRs are still open in SA2.

Status: [Revised to N4-031307](#)

↓ REVISED ↓

N4-031307 Dh interface; Nokia.

CR: 23.328-036r1 (Rel-6)

Discussion:

Status: [Withdrawn](#)

N4-031224 Multiple terminals; Nokia.

CR: 23.328-039 (Rel-6)

Discussion: XML schema need to be compatible with Rel-5

Status: [Revised to N4-031308](#)

↓ REVISED ↓

N4-031308 Multiple terminals; Nokia.

CR: 23.328-039r1 (Rel-6)

Discussion: XML schema need to be compatible with Rel-5

Status: [Revised to N4-1371](#)

N4-031371 Multiple terminals; Nokia.

CR: 23.328-039r2 (Rel-6)

Discussion:

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003,18:00CET, objection should be raised till this time.

Status: [Email approval](#) [After email approval postponed to next meeting](#)

6.5 CAMEL phase 4

N4-031098 Enhancements for the Partial Implementation for “Change of position procedure armed with criteria”; Alcatel.

CR: 29.002-677 (Rel-6)

Discussion:

Status: [Agreed](#)

N4-031133 Collective CR for Rel-6 Enhanced Dialled Services; Nokia.

CR: 23.018-126 (Rel-6)

Discussion:

Status: [Agreed](#)

N4-031134 Collective CR for Rel-6 Enhanced Dialled Services; Nokia.

CR: 23.078-553 (Rel-6)

Discussion:

Status: [Noted](#)

N4-031135 Collective CR for Rel-6 Enhanced Dialled Services; Nokia.

CR: 29.002-687 (Rel-6)

Discussion:

Status: **Agreed**

N4-031136 Collective CR for Rel-6 Enhanced Dialed Services; Nokia.

CR: 29.078-332 (Rel-6)

Discussion:

Status: **Noted**

6.6 GPRS

N4-031104 Disc Successful Recovery from Path Failure with no Dangling Contexts; Nortel Networks

Discussion: Nortel sees three paths open to resolve this problem

1. Make Echo Request mandatory, the requirement to delete contexts upon failure to receive response to Echo Request after T3 timer expires N3 times mandatory, set a mandatory value for T3-TIMER, set a mandatory value for N3-RESPONSES and define a mechanism whereby all GSNs in all networks send Echo Request simultaneously.
2. Implement a subset of the requirements in 1, along with a mechanism something like that described in N4-030780 to recover the dangling contexts that would result when contexts are still left dangling.
3. Implement the mechanism described in N4-030780, which would remove dangling contexts after path failure cleanly and immediately the path is re-established.

Vodafone: The different operators use different timers so it's impossible to make T3-timers or N3-timers mandatory.

Ericsson: [The problem with this solution is that when removing dangling PDP Contexts there is a risk that new, active PDP Contexts, which has been activated after the path has been re-established, are deleted at the same time.](#) ~~Problem of this solution is that PDP contexts which are created between detecting the path failure and deleting the contexts on this path, the path could be up again and if all new established context are also deleted and not only the dangling contexts which were established before the path failure.~~

After discussion Nortel decided to **withdrawn** CR **N4-031275** and **N4-031266**. CRs will be submitted again to the next meeting.

Status: **Noted**

N4-031150 IE Type Value to be corrected for Common Flags; NEC

CR: 29.060-464

Discussion:

Status: **Withdrawn**

N4-031155 Correction of a mis-implementation; Vodafone

CR: 29.060-466

Discussion:

Status: **Agreed**

N4-031250 Reply LS on "Security issues regarding multiple PDP contexts in GPRS" [S3-030634]; S3.

Discussion: Vodafone: We should postpone our decision until stage 2 CRs are approved.

CN4 decided that related CN4 CRs will be handled after SA2 decision is clear.

Status: **Noted**

N4-031177 Clarification of SGSN handling of RAI Information Element in Create PDP Context Request and Update PDP Context Request; Huawei

CR: 29.060-467

Discussion: Huawei: If Nortel contributions are approved we are ready to withdrawn this contribution.

Nortel: Stage 2 CRs (from R97 to Rel-6) propose to send "Routing area index" always.

Status: **Withdrawn**

N4-031200 Robust authentication during Attach and RAU; Nokia

CR: **29.060-445r1**

Discussion: Lucent: How often this happens and does we really save signalling load to HLR?
Nokia: We will clarify the scenarios when this happens.

Status: **Postponed to next meeting**

N4-031363 Network solution to the security issue with multiple, concurrent PDP Contexts in GPRS; Vodafone

Discussion: Related stage 2 is not approved.

Status: **Noted**

N4-031364 Controlling the creation of multiple, concurrent PDP Contexts; Vodafone

CR: **29.060-464r1**

Discussion: Related SA2 CR wasn't approved before CN4 meeting finished.
CR needs to be revised

Status: **Postponed to next meeting**

6.7 Mn Interface protocol

N4-031201 DISC TS 29.332, Mn interface procedures; Nokia.

Discussion: Ericsson: We should follow the same format with this table as we did with 29.232.

Status: **Revised to N4-031314**

↓ **REVISED** ↓

N4-031314 DISC TS 29.332, Mn interface procedures; Nokia.

Discussion:

Status: **Postponed to CN4#22**

N4-031202 DISC TS 29.332, Mandatory IMS packages; Nokia.

Discussion:

Ericsson: The CR is based to stage 2 which is still unstable. [The packages introduce requirements that go against the stage 2 and referenced RTP spec \(TS 26.236\). RTP Tel event should simply be the same as the current H.248 DTMF detection package.](#)

Status: **Postponed to next meeting**

6.8 TRFO/Codec control

No contributions in this meeting

6.9 MAP specification

N4-031274 Message Segmentation Mechanisms; Siemens

CR: **29.002-648r2**

Discussion:

Status: **Agreed**

N4-031151 Clarification on use of Re-attempt Information element in Authentication Failure Report service; NEC

Discussion: CN4 agreed with NEC's proposal to send a LS to SA3

Status: [Noted](#)

N4-031152 **LS to SA3 on Clarification on use of Re-attempt Information element in Authentication Failure Report service; NEC**

Discussion:

Status: [Approved](#)

N4-031315 **Addition of requesting PLMN-ID to Send Authentication Info Request; Siemens**

CR: 29.002-703

Discussion:

Status: [Agreed](#)

6.10 Location services

N4-031113 **Addition of CGI to LCS procedures; Nortel, T-Mobile, AWS**

CR: 29.002-680

Discussion: Nortel: Stage 1 CR is approved, but stage 2 will be approved during the meeting.
This is a correction F.

The condition of parameter is described in stage 2. Stage 2 reference needs to be added.

Status: [Revised to N4-031343](#)

↓ [REVISED](#) ↓

N4-031343 **Addition of CGI to LCS procedures; Nortel, T-Mobile, AWS**

CR: 29.002-680r1

Discussion:

Status: [Revised to N4-031372](#)

↓ [REVISED](#) ↓

N4-031372 **Addition of CGI to LCS procedures; Nortel, T-Mobile, AWS**

CR: 29.002-680r2

Discussion:

Status: [Agreed](#)

N4-031170 **Include v-gmlc parameter in RESTORE DATA MAP message; Ericsson**

CR: 29.002-696

Discussion: Siemens: Informative annex in not needed to update because it will be updated automatically.
Section 17 ASN.1 have to be updated.

Status: [Revised to N4-031344](#)

↓ [REVISED](#) ↓

N4-031344 **Include v-gmlc parameter in RESTORE DATA MAP message; Ericsson**

CR: 29.002-696r1

Discussion:

Status: [Revised to N4-031373](#)

↓ [REVISED](#) ↓

N4-031373 Include v-gmlc parameter in RESTORE DATA MAP message; Ericsson
CR: 29.002-696r2
Discussion:
Status: [Agreed](#)

N4-031176 Include the Ics-Format Indicator to the IcsClientName and IcsRequestorID parameters; Ericsson
CR: 24.080-030
Discussion: Changes are covered in 24.080-031r2 (N4-031345).
Status: [Withdrawn](#)

N4-031298 Deferred MT-LR Area Event; Nokia
CR: 29.002-702r1
Discussion: NEC: Do we have cases where the V-GMLC is equal with the H-GMLC and the R-GMLC?
Nokia will check if this happens
Status: [Revised to N4-031365](#)

⇓ [REVISED](#) ⇓

N4-031365 Deferred MT-LR Area Event; Nokia
CR: 29.002-702r2
Discussion: Because of agreement Ericsson's CR **N4-031167** is withdrawn.
Status: [Agreed](#)

N4-031299 Deferred MT-LR Area Event; Nokia
CR: 24.030-014r1
Discussion:
Status: [Agreed](#)

N4-031300 Deferred MT-LR Area Event; Nokia
CR: 24.080-031r1
Discussion: Siemens: The new operation should be added in " Supported-SS-Operations OPERATION" list.
Status: [Revised to N4-031345](#)

⇓ [REVISED](#) ⇓

N4-031345 Deferred MT-LR Area Event; Nokia
CR: 24.080-031r2
Discussion:
Status: [Agreed](#)

6.11 MBMS

N4-031178 Disc Method for introducing MBMS GTP messages; 3.

Discussion: 3 believe that by introduction of the new MBMS activation timer, along with the new error handling procedure, shall allow the new MBMS GTP message to be introduced, without the need to increment the GTP version.

- It is proposed that the meeting discuss the pros and cons of such an approach, and if the meeting looks favourably upon this proposal, it shall be agreed as a working assumption that no incrementing of the GTP version is required for introducing MBMS GTP messages. Furthermore, the error handling procedure for inter-working with non MBMS nodes, outlined

within this document shall be used as the working assumption for the introduction of MBMS GTP messages.

- If such an agreement can be reached, 3 have brought the necessary CRs to this meeting to introduce new timer within section.

Status: **Noted**

N4-031179 Introduction of MBMS specific error handling; 3.

CR: 29.060-468 (Rel-6)

Discussion:

Status: **Noted**

N4-031180 Introduction of GTP MBMS message; 3.

CR: 29.060-469 (Rel-6)

Discussion:

Status: **Revised to N4-031297**

↓ **REVISED** ↓

N4-031297 Introduction of GTP MBMS message; 3.

CR: 29.060-469r1 (Rel-6)

Discussion:

Status: **Revised to N4-031313**

↓ **REVISED** ↓

N4-031313 Introduction of GTP MBMS message; 3.

CR: 29.060-469r2 (Rel-6)

Discussion:

Status: **Agreed without presentation**

N4-031312 LS to SA2 changes in MBMS activation procedures; 3.

Discussion:

Status: **Revised to N4-031352**

↓ **REVISED** ↓

N4-031352 LS to SA2 changes in MBMS activation procedures; 3.

Discussion:

Status: **Approved without presentation**

N4-031225 Discussion paper on “Introducing MBMS specific timers”; Ericsson.

Discussion: Ericsson is of the opinion that the following can be required from the new solution:

1. The solution shall be general, i.e. application specific timers should not be introduced in a common transport protocol
2. Introducing mechanisms that are resource consuming should be avoided.

Status: **Noted**

N4-031276 Disc Identification of nodal support for MBMS; Nortel Networks.

Discussion: It is proposed that a new Extension Header is defined to indicate support of MBMS. This extension header may be included in two specific situations.

1. When a PDP Context is being created, SGSN will send a Create PDP Context Request to a GGSN, and that GGSN will respond with a Create PDP Context Response.
2. When a subscriber is performing an Inter-SGSN mobility procedure (Inter-SGSN RAU or Inter SGSN SRNS relocation), the new SGSN will send an Update PDP Context Request to a GGSN, and that GGSN will respond with a Update PDP Context Response.

In the identified response messages, the GGSN shall include the MBMS Extension Header if the following conditions are met;

- The GGSN supports MBMS, and
- The GGSN has no prior information about whether the SGSN supports MBMS.

When receiving the MBMS Extension Header, if the SGSN supports MBMS it will either;

- Accept the Create PDP Context Response. The GGSN will assume that MBMS is supported by the SGSN.
- Accept the Create PDP Context Response. If there are additional Extension Headers included in the Create PDP Context Response, the SGSN is required to send a Supported Extension Headers Notification message to the GGSN indicating the Extension Headers that the SGSN supports – this list will include the MBMS Extension Header which will indicate to the GGSN that the SGSN supports MBMS.

If the SGSN does not support MBMS it will send a Supported Extension Headers Notification message to the GGSN indicating the Extension Headers that the SGSN supports – this list will not include the MBMS Extension Header which will indicate to the GGSN that the SGSN does not support MBMS.

Once the GGSN has received indication of whether a SGSN supports MBMS or not, it will not need to include the MBMS Extension Header in messages to that SGSN again. The GGSN shall store the information about whether a SGSN supports MBMS or not in memory.

This proposal would manifest itself as a change to 29.060. The first draft of the changes required are shown in the attached document and may either be submitted as a separate CR for agreement or may be incorporated in the MBMS CR that is Work In Progress.

Status: **Noted**

N4-031296 **Disc Use of Common Flags IE to signal support of MBMS; Vodafone.**

Discussion:

Status: **Noted**

N4-031282 **Discussion Paper on problems found when interworking GSNs of different GTP versions; Vodafone.**

Discussion:

Status: **Noted**

Discussion after N4-031178, N4-031225, N4-031276 and N4-031296:

After discussion two possible solutions were to be considered **accepted:**

- Extension header solution
- GTP upgrade solution.

The use of a new timer shall be avoided.

There will be an active discussion between meetings on email explorer about the subject and the final solution will be decided at the next meeting after comparison of these solutions.

6.12 Subscriber and Equipment Trace

N4-031259 **Input LS Rel-6; LS reply on Rel-6 Subscriber and Equipment Trace impacts to the Core Network [S5-038444], SA5**

Discussion: LS was presented already in CN4#20

Status: **NOTED**

N4-031245 **Input LS Rel-6; Liason statement on Trace [N1-031313], CN1**

Discussion:

Status: **NOTED**

N4-031254 LS Reply on “Trace Management” [N1-032644], SA5

Discussion: SA5 asks CN4 to take into account the issues presented above and to confirm the proposed communication procedures.

Ericsson: We should have CN wide WID about the works that have to be done by CN1 and CN4.

Reply LS **N4-031293** to SA5 should include:

- Existent MAP operation could be extended
- For diameter the solution have to be based solution provided by CN1
- H.248 ~~248~~ [does not currently support tracing.](#)
- The question to SA5 if CAP-interface is included

Status: **NOTED**

N4-031293 Response LS on “Trace Management” , Nokia

Discussion:

Status: **Revised toN4-031381**

↓ **REVISED** ↓

N4-031381 Response LS on “Trace Management” , Nokia

Discussion:

Status: **Revised toN4-031387**

↓ **REVISED** ↓

N4-031387 Response LS on “Trace Management” , Nokia

Discussion:

Ericsson: The new WID is needed in the handle changes in Trace management.

Agreed by CN4

Status: **Approved**

N4-031203 Addition of the Trace package; Nokia.

CR: **23.205-045**

Discussion: [This was presented as “for information only”](#) Have to be checked if we have to use "shall" or "will".

Status: **Noted**

N4-031204 Addition of the Trace package; Nokia.

CR: **29.232-060**

Discussion: [This was presented as “for information only”](#)

Status: **Noted**

N4-031205 Addition of the Trace package; Nokia.

CR: **29.060-470**

Discussion:

Status: **Withdrawn**

6.13 Subscriber Certificate

N4-031244 Input LS Rel-6; Reply LS on stage 3 level specification directions for support for subscriber certificate work item [N1-031200], CN1

Discussion:

Status: **NOTED**

N4-031251 Input LS Rel-6; LS Response on "new interface names" [S3-030635], SA3

Discussion:

Status: **NOTED**

N4-031253 Input LS Rel-6; LS response to Stage 2 requirements for subscriber certificate work item [S3-030635], SA3

Discussion:

Status: **NOTED**

N4-031206 DISC GAA-Application-Profiles definition; Nokia

Discussion: *Nokia*: GAA-Application-Profiles are stored in in the HSS and transferred over the interface. *T-Mobil* support this contribution but they would like to have more detailed description about the use of these interfaces

Status: **NOTED**

N4-031207 TS 29.109: GAA: Zh and Zn Interfaces based on the Diameter protocol

Discussion: *Nokia*: Section 7.4 Application Id values will be removed until we have got clarification.

Ericsson: Can we use the same application id for both interfaces?

Nokia: We should use separate Ids.

It needs to be checked if more then one vector needs to be send from the HSS.

Status: **Revised to N4-031302**

↓ **REVISED** ↓

N4-031302 TS 29.109: GAA: Zh and Zn Interfaces based on the Diameter protocol

Discussion: Agreed by CN4 to use as basis document for future development.

Status: **Approved**

6.14 Mp-interface protocol

No contributions in this meeting.

6.15 AOB

6.15.1 Supplementary Service

N4-031145 Notify of forced erasure to previously regisstered subscriber of his deregistration; Siemens.

CR: 23.094-003

Discussion: In section B.6 process "Forwarding Service" should be "Handle Remote Party Erasure"

Status: **Revised to N4-031303**

↓ **REVISED** ↓

N4-031303 Notify of forced erasure to previously regisstered subscriber of his deregistration; Siemens.

CR: 23.094-003
Discussion:
Status: [Agreed without presentation](#)

7 Release 5 maintenance

7.1 Subscriber data handling for the IMS

N4-031232 Registration status; Orange.

CR: 23.008-126

Discussion: This is an essential correction.

Status: [Agreed](#)

N4-031236 Services related to unregistered state; Orange.

CR: 23.008-127

Discussion: Nortel and Ericsson: The CR is not needed. The proposed information is duplication.
Nokia believes the CR is not complete - revision is needed.

Status: [Revised to N4-031339](#)

↓ REVISÉ ↓

N4-031339 Services related to unregistered state; Orange.

CR: 23.008-127r1

Discussion: CR is Rel-6 correction.
Ericsson believe this is duplicated information and we should avoid it.

Status: [Revised to N4-031384](#)

↓ REVISÉ ↓

N4-031384 Services related to unregistered state; Orange.

CR: 23.008-127r2

Discussion: CR is Rel-6 correction.

Status: [Revised to N4-031388](#)

↓ REVISÉ ↓

N4-031388 Services related to unregistered state; Orange.

CR: 23.008-127r3

Discussion: After discussion Ericsson accepted a CR. They still have a strong opinion that this is duplicated information [\(the information is already present in the filter criteria\) -in the HSS](#) that is not needed to implement.

This is agreed only for Rel-6 because there are no frequent and serious misoperations.

Status: [Revised to N4-031390](#)

↓ REVISÉ ↓

N4-031390 Services related to unregistered state; Orange.

CR: 23.008-127r4

Discussion:

Status: [Agreed](#)

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

N4-031111 Conditions for inclusion of Charging Information; Nortel Networks, Lucent.

CR: 29.228-056

Discussion: Also 23.008, 29.229 and 29.328 have to be corrected

Status: [Revised to N4-031331](#)

↓ REVISED ↓

N4-031331 Conditions for inclusion of Charging Information; Nortel Networks, Lucent.

CR: 29.228-056r1

Discussion:

Status: [Revised to N4-031376](#)

↓ REVISED ↓

N4-031376 Conditions for inclusion of Charging Information; Nortel Networks, Lucent.

CR: 29.228-056r2 (Rel-5)

Discussion:

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

Status: [Email approval](#) [Approved after email approval](#)

N4-031377 Conditions for inclusion of Charging Information; Nortel Networks, Lucent.

CR: 29.228-057r2 (Rel-6)

Discussion: This is a mirror CR.

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

Status: [Email approval](#) [Approved after email approval](#)

N4-031378 Clarification of inclusion of elements in charging information; Nortel Networks.

CR: 29.229-029 (Rel-5)

Discussion:

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

Status: [Email approval](#) [Approved after email approval](#)

N4-031380 Correct table of IMS elements; Nortel Networks.

CR: 23.008-128 (Rel-5)

Discussion: This is a mirror CR.

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

Status: [Email approval](#) [Approved after email approval](#)

N4-031249 Input LS Rel5; Liaison statement on IMS AKA: UE populating RAND and AUTN parameters in responding to challenge [S3-030616], SA3

Discussion:

Status: **Noted**

N4-031210 MAR in synchronisation failure case; Nokia.

CR: 29.228-059

Discussion:

Status: **Revised to N4-031310**

↓ **REVISED** ↓

N4-031310 MAR in synchronisation failure case; Nokia.

CR: 29.228-059r1 (rel-5)

Discussion:

Status: **Agreed**

N4-031311 MAR in synchronisation failure case; Nokia.

CR: 29.228-060r1 (Rel-6)

Discussion: This is a mirror CR

Status: **Agreed**

N4-031280 The S-CSCF name needs to be checked always in MAR; Nokia.

CR: 29.228-054r3 (Rel-5)

Discussion:

Status: **Agreed**

N4-031281 The S-CSCF name needs to be checked always in MAR; Nokia.

CR: 29.228-061r1

Discussion: This is mirror CR.

Status: **Agreed**

N4-031220 The S-CSCF name needs to be checked always in MAR; Nokia.

CR: 29.229-021r1 (Rel-5)

Discussion:

Status: **Agreed**

N4-031222 Conditional AVPs in answer commands; Nokia.

CR: 29.228-062 (Rel-5)

Discussion:

Status: **Agreed**

N4-031223 Conditional AVPs in answer commands; Nokia.

CR: 29.228-063 (Rel-6)

Discussion: This is a mirror CR.

Status: **Agreed**

N4-031283 Server-Assignment-Request; Orange.

CR: 29.228-064r1 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031284 Server-Assignment-Request; Orange.

CR: 29.228-065r1 (Rel-6)

Discussion: This is a mirror CR.

Status: [Agreed](#)

N4-031237 Determination of User-Authorization-Type AVP based on registration expiration; Orange.

CR: 29.228-066 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031238 Determination of User-Authorization-Type AVP based on registration expiration; Orange.

CR: 29.228-067 (Rel-6)

Discussion: This is a mirror CR.

Status: [Agreed](#)

N4-031304 Not registered state after deregistration with S-CSCF deleted at the HSS; Orange.

CR: 29.228-068r2 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031305 Not registered state after deregistration with S-CSCF deleted at the HSS; Orange.

CR: 29.228-069r2 (Rel-6)

Discussion: This is a mirror CR

Status: [Agreed](#)

N4-031241 User-Authorization-Type; Orange.

CR: 29.229-027 (Rel-5)

Discussion: This is a mirror CR

Status: [Agreed](#)

N4-031356 The extensibility of the XML schema; Nokia.

CR: 29.328-041 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031357 The extensibility of the XML schema; Nokia.

CR: 29.228-070 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031358 The extensibility of the XML schema; Nokia.

CR: 29.228-071 (Rel-6)

Discussion: This is a mirror CR

Status: [Agreed](#)

7.1.2 HSS – SIP AS (Sh) interface

N4-031097 XML Schema Correction; Siemens.

CR: 29.328-038

Discussion: There were discussed that if it's necessary to have a one or several tags inside the service data.
After discussion CR was agreed by CN4.

Status: [Agreed](#)

N4-031379 Clarification of inclusion of elements in charging information; Nortel Networks.

CR: 29.328-042 (Rel-5)

Discussion:

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

Status: [Email approval](#) [Agreed after email approval](#)

N4-031334 Make primary event charging function mandatory; Nortel Networks.

CR: 29.328-040

Discussion:

Status: [Withdrawn](#)

7.2 CAMEL phase 4

N4-~~031132~~031131 More spare bits for CAMEL4 enhancements; Nokia.

CR: 29.002-685 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031132 More spare bits for CAMEL4 enhancements; Nokia.

CR: 29.002-686 (Rel-6)

Discussion: This is a mirror CR.

Status: [Agreed](#)

[N4-031137 Correction to MAP RCH – GMSC shall check Supported CAMEL4 subsets; Ericsson.](#)

[CR:](#) [23.079-027 \(Rel-5\)](#)

[Discussion:](#)

[Status:](#) [Revised to N4-031306](#)

[⇓ REVISED ⇓](#)

N4-031306 Correction to MAP RCH – GMSC shall check Supported CAMEL4 subsets; Ericsson.

CR: 23.079-~~xxxr1~~ [027r1](#) (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031162 ~~Editorial clarification~~ [Clarification](#) on D-CSI segmentation; Ericsson.

CR: 29.060-691 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031163 ~~Editorial e~~Clarification on D-CSI segmentation; Ericsson.
CR: 29.060-692 (Rel-6)
Discussion: This is a mirror CR.
Status: [Agreed](#)

7.3 GPRS

N4-031099 Correction of incorrect reference; Lucent.
CR: 29.060-435r1 (R99)
Discussion:
Status: [Agreed](#)

N4-031100 Correction of incorrect reference; Lucent.
CR: 29.060-475 (Rel-4)
Discussion:
Status: [Agreed](#)

N4-031101 Correction of incorrect reference; Lucent.
CR: 29.060-476 (Rel-5)
Discussion: This is a mirror CR.
Status: [Revised to N4-031322](#)

↓ [REVISED](#) ↓

N4-031322 Correction of incorrect reference; Lucent.
CR: 29.060-476r1 (Rel-5)
Discussion: This is a mirror CR.
Status: [Agreed](#)

N4-031102 Correction of incorrect reference; Lucent.
CR: 29.060-477 (Rel-6)
Discussion: This is a mirror CR.
Status: [Agreed](#)

N4-031115 [Restoration of data in RA Update](#)~~Correction of incorrect reference~~; Alcatel.
CR: 23.007-009 (R99)
Discussion: "In case of" should be changed "for"
Status: [Revised to N4-031323](#)

↓ [REVISED](#) ↓

N4-031323 [Restoration of data in RA Update](#)~~Correction of incorrect reference~~; Alcatel.
CR: 23.007-009r1 (R99)
Discussion:
Status: [Agreed without presentation](#)

[N4-031116 Restoration of data in RA Update; Alcatel.](#)
[CR: 23.007-010 \(Rel-4\)](#)
[Discussion: "In case of" should be changed "for"](#)

Status: [Revised to N4-031324](#)

[↓ REVISED ↓](#)

N4-031324 [Restoration of data in RA Update](#)~~Correction of incorrect reference~~; Alcatel.

CR: 23.007-010r1 (Rel-4)

Discussion: This is a mirror CR

Status: [Agreed without presentation](#)

N4-031117 [Restoration of data in RA Update; Alcatel.](#)

CR: 23.007-011 (Rel-4)

Discussion: "In case of" should be changed "for"

Status: [Revised to N4-031325](#)

[↓ REVISED ↓](#)

N4-031325 [Restoration of data in RA Update](#)~~Correction of incorrect reference~~; Alcatel.

CR: 23.007-011r1 (Rel-5)

Discussion: This is a mirror CR

Status: [Agreed without presentation](#)

N4-031118 Removal of RAB Context IE in Forward Relocation Request; Alcatel, NEC.

CR: 29.060-456 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031119 Removal of RAB Context IE in Forward Relocation Request; Alcatel, NEC.

CR: 29.060-457 (Rel-6)

Discussion: This is a mirror CR.

Status: [Agreed](#)

N4-031120 Correction of Sequence Number Up handling; Alcatel

CR: 29.060-458 (R99)

Discussion: Consequences if not approved needs to be development.

Status: [Agreed](#)

N4-031121 Correction of Sequence Number Up handling; Alcatel

CR: 29.060-459 (Rel-4)

Discussion: This is a mirror CR.

Status: [Agreed](#)

N4-031122 Correction of Sequence Number Up handling; Alcatel

CR: 29.060-460 (Rel-5)

Discussion: This is a mirror CR.

Status: [Agreed](#)

N4-031123 Correction of Sequence Number Up handling; Alcatel

CR: 29.060-460 (Rel-6)

Discussion: This is a mirror CR.

Status: **Agreed**

N4-031326 QoS profile data parameter in the Quality of Service (data) profile IE extended when one octet; MCC

CR: 29.060-473 (Rel-5)

Discussion: Depends on outcome of email approval N4-031374. If the email CR is approved, this CR is not needed

Status: **Conditionally approved**

N4-031327 QoS profile data parameter in the Quality of Service (data) profile IE extended when one octet; MCC

CR: 29.060-474 (Rel-6)

Discussion: Depends on outcome of email approval N4-031375. If the email CR is approved, this CR is not needed

Status: **Conditionally approved**

7.4 Bearer Independent Architecture

No documents in this meeting.

7.5 TrFO/Codec control

No documents in this meeting.

7.6 SCUDIF

No documents in this meeting.

7.7 Mobile Number Portability

N4-031092 Incorrect implementation of CR 023r1; Siemens

CR: 23.066-027

Discussion:

Status: **Agreed**

N4-031175 Editorial correction in implementation of CR 026r1; Ericsson, ~~Siemens~~

CR: 23.066-029 (Rel-5)

Discussion: Changes co-operated with N4-031340

Status: **Withdrawn**

N4-031271 Editorial correction in implementation of CR 026r1; Siemens

CR: 23.066-028r1 (Rel-5)

Discussion:

Status: **Revised to N4-031340**

↓ **REVISED** ↓

N4-031340 Editorial correction in implementation of CR 026r1; Ericsson, Siemens

CR: 23.066-028r2 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031272 MNP correction for prepaid charging; Siemens

CR: 29.002-675 (Rel-5)

Discussion:

Status: [Revised to N4-031341](#)

↓ **REVISED** ↓

N4-031341 MNP correction for prepaid charging; Siemens

CR: 29.002~~9~~-675r1 (Rel-5)

Discussion:

Status: [Agreed without presentation](#)

N4-031342 MNP correction for prepaid charging; Siemens

CR: 29.002-676r2 (Rel-6)

Discussion: This is a mirror CR.

Status: [Agreed without presentation](#)

7.8 MAP specification

N4-031124 Increasing the Max length of the APN data Type; Lucent

CR: 29.002-681 (R99)

Discussion: Siemens: This might cause incompatible problems with re-release 99.
Vodafone: Operators already have R99 on the network so we can't approve this CR.
Ericsson: We would like to see solution in 23.003.

Status: [Rejected](#)

N4-031125 Increasing the Max length of the APN data Type; Lucent

CR: 29.002-682 (Rel-4)

Discussion:

Status: [Rejected](#)

N4-031126 Increasing the Max length of the APN data Type; Lucent

CR: 29.002-683 (Rel-5)

Discussion:

Status: [Rejected](#)

N4-031127 Increasing the Max length of the APN data Type; Lucent

CR: 29.002-684 (Rel-6)

Discussion:

Status: [Rejected](#)

N4-031183 On the length of the APN NI; Lucent

CR: 23.003-075 (R99)

Discussion: Vodafone: We do not believe this cause frequent and serious miss operations. We prefer would like to see these changes from Rel-6 onwards.
CN4 decided to approve CR from R99 onwards.

Status: [Agreed](#)

N4-031184 On the length of the APN NI; Lucent

CR: 23.003-076 (Rel-4)
Discussion: This is a mirror CR.
Status: [Agreed](#)

N4-031185 On the length of the APN NI; Lucent

CR: 23.003-077 (Rel-5)
Discussion: This is a mirror CR.
Status: [Agreed](#)

N4-031186 On the length of the APN NI; Lucent

CR: 23.003-078 (Rel-6)
Discussion: This is a mirror CR.
Status: [Agreed](#)

N4-031168 Remove redundant option for retrieval of routing information in figure 21.2.3; Ericsson

CR: 29.002-694 (Rel-5)

Discussion: Vodafone: We do not believe this cause frequent and serious miss operations. We prefer would like to see these changes from Rel-6 onwards. After discussion Vodafone agreed CR from Rel-5 upwards.

Nokia: Consequences if not approved needs to be strengthen.

Status: [Revised to N4-031337](#)

↓ **REVISED** ↓

N4-031337 Remove redundant option for retrieval of routing information in figure 21.2.3; Ericsson

CR: 29.002-694r1 (Rel-5)

Discussion:

Status: [Agreed](#)

N4-031338 Remove redundant option for retrieval of routing information in figure 21.2.3; Ericsson

CR: 29.002-695r1 (Rel-6)

Discussion: This is a mirror CR.

Status: [Agreed](#)

7.9 Location Services

NP-031291 Liaison on "Introduction of Positioning Methods over lu"; [R3-031254] RAN3

Comments:

Status: [NOTED.](#)

N4-031107 Positioning Data for UTRAN LCS; Nortel Networks, AWS

CR: 29.002-678 (Rel-5)

Discussion: Nokia: Coding at GERAN is different than in RAN. We should wait until we have found the correct solution to solve a problem. RAN uses PER coding

Proposal accepted by the meeting. CR is postponed to next meeting.

Status: [Postponed to CN4#22](#)

N4-031108 Modification of description for conditions on inclusion of Positioning Data; Nortel Networks, AWS

CR: 29.002-679 (Rel-6)

Discussion:

Status: **Agreed**

N4-031164 Wrong message appears in message flow; Ericsson

CR: 29.010-093 (Rel-4)

Discussion:

Status: **Agreed**

N4-031165 Wrong message appears in message flow; Ericsson

CR: 29.010-094 (Rel-5)

Discussion: This is a mirror CR

Status: **Agreed**

N4-031166 Wrong message appears in message flow; Ericsson

CR: 29.010-095 (Rel-5)

Discussion: This is a mirror CR

Status: **Agreed**

N4-031171 Clarify format of Positioning Data parameter; Ericsson

CR: 29.002-697 (Rel-5)

Discussion: *Siemens:* The sentences are not needed because current text in section 17 covers the changes.

Ericsson believes the clarification should be clearer.

Nokia: 49.031 clarifies this clear enough so a change is not needed.

CN4 agreed this is not an essential correction for Rel-5

Status: **Withdrawn**

N4-031172 Clarify format of Positioning Data parameter; Ericsson

CR: 29.002-698 (Rel-6)

Discussion:

Status: **Withdrawn**

N4-031173 Change the length of Positioning Data parameter; Ericsson

CR: 29.002-699 (Rel-5)

Discussion: Nortel proposed to add "maxPositioningDataInformation" to 20 instead of 11. Ericsson CR propose to change it from 10 to 11.

CN4 didn't believe this is an essential correction to Rel-5 and it might cause backwards compatibility problems.

Status: **Rejected**

N4-031174 Change the length of Positioning Data parameter; Ericsson

CR: 29.002-700 (Rel-6)

Discussion:

Status: **Rejected**

7.10 HSDPA

NP-031260 Reply LS on alignment of maximum bit rate for HSDPA in UMTS system; [N1-021194] CN1

Comments:

Status: **NOTED.**

NP-031267 HSDPA impacts to MAP; NEC
CR: 29.002-688r1 (Rel-5)
Comments:
Status: **REVISED to N4-031316**

↓ **REVISED** ↓

NP-031316 HSDPA impacts to MAP; NEC
CR: 29.002-688r2 (Rel-5)
Comments:
Status: **Agreed**

NP-031268 HSDPA impacts to MAP; NEC
CR: 29.002-689 (Rel-6)
Comments:
Status: **Revised to N4-031317**

↓ **REVISED** ↓

NP-031317 HSDPA impacts to MAP; NEC
CR: 29.002-689r1 (Rel-6)
Comments: This is a mirror CR.
Status: **Agreed**

NP-031318 HSDPA impacts to GTP; NEC
CR: 29.060-462r2 (Rel-5)
Comments:

[In CR cover page 'If a Release '99 capable terminal is served' needs to rephrase to 'If a Release '99 or Release 4 capable terminal is served'.](#)

[In section 7.7.34, 'The maximum length is up to 254 octets' needs to rephrase to 'The maximum length is 254 octets'.](#)

[The both CRs would be revised to 'rev1' with the same CR# and these CR would be subject for the E-mail approval.](#)

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

If CR is agreed after email discussion the approved tdoc-number will be **N4-031374**

Status: **Email approval** [Approved 15th November as N4-031374](#)

NP-031319 HSDPA impacts to GTP; NEC
CR: 29.060-463r2 (Rel-6)
Comments:

Deadline for email discussion is 6th November 18:00 CET

Revised version will be available on 10th November 2003, 18:00 CET

Deadline for email approval is 14th November 2003 18:00 CET, objection should be raised till this time.

If CR is agreed after email discussion the approved tdoc-number will be **N4-031375**.

Status: **Email approval**

7.11 Any Other Business for Release 5 or earlier

NP-031247 Input LS Rel-5; LS on DNS domains used in 3GPP TS 23.003 [NP-030370]; CN plenary

Comments:

Status: **NOTED**

NP-031288 Liaison Statement to 3GPP TSG CN WG4 on DNS top level domains [GSMA IREQ Doc 098_03]; GSMA IREG

Comments: Two actionpoints after discussion:

1. LS to GSMA IREQ that CN4 can't implement this before we get promise from IETF to use this. **N4-031359**

Status: **NOTED**

NP-031359 LS on DNS top level domains; Ericsson

Comments:

Status: **Revised to N4-031367**

⇓ **REVISED** ⇓

NP-031367 LS on DNS top level domains; Ericsson

Comments:

Status: **Approved**

NP-031346 Changes to enable the GSMA root DNS architecture; Vodafone

CR: 23.003-074r4 (Rel-5)

Comments: The CR is conditionally approved.

Status: **Agreed**

NP-031347 Changes to enable the GSMA root DNS architecture; Vodafone

CR: 23.003-075r4 (Rel-6)

Comments: The CR is conditionally approved.

Status: **Agreed**

NP-031348 Changes and corrections to DNS names; Vodafone

CR: 23.003-080 (Rel-5)

Comments:

Status: **Agreed**

NP-031349 Changes and corrections to DNS names; Vodafone

CR: 23.003-081 (Rel-6)

Comments: This is a mirror CR

Status: **Agreed**

NP-031360 Changes to enable the GSMA root DNS architecture using ".3gppnetwork.org" TLD; Vodafone

CR: 23.003-082 (Rel-5)

Comments: The CR is conditionally approved.

Status: **Agreed**

NP-031361 Changes to enable the GSMA root DNS architecture using ".3gppnetwork.org" TLD; Vodafone

CR: 23.003-083 (Rel-6)

Comments: The CR is conditionally approved.

Status: [Agreed](#)

8 ~~GMS~~-GSM maintenance

8.1 Camel 2

NP-031290 MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter; Nokia

CR: 03.18-A070r1 (R97)

Comments:

Status: [Agreed](#)

NP-031130 MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter; Nokia

CR: 03.18-A071 (R98)

Comments:

Status: [Agreed](#)

9 AOB

NP-031354 Wrong radio access protocol name used; Ericsson-~~Networks~~

CR: 23.009-??? (Rel-4)

Comments:

Status: [Endorsed by CN4](#)

NP-031355 Wrong radio access protocol name used; Ericsson-~~Networks~~

CR: 23.009-??? (Rel-5)

Comments:

Status: [Endorsed by CN4](#)

10 Update of the Work Plan

Work Plan was updated during the meeting. The changes will be effected in the new version of the Work Plan that is published before CN#22.

11 Future meetings

NP-031091 Future meetings; MCC

Comments: The meeting decided: An additional meeting is not needed at this point. Seems that Rel-6 will be frozen on June 2004. CN4 decided to insert placeholder for extra meeting in April 12th 2004. Decision about the need of the meeting will be made in CN4#22.

Status: [NOTED](#)

Comments: The PCG has decided that in order to reduce cost, there will be a restriction on the amount of MCC support provided to 3GPP working groups. The plan is to have one MCC supported WG meeting in between each pair of plenary meetings. Any additional WG meeting will not have the guarantee of MCC support. Working groups can request exceptional MCC support for additional WG meetings from the PCG (via Stephen Hayes). There was also support to leave at least 2 weeks between WG meetings and the Plenary.

TITLE	TYPE	DATES	LOCATION	CTRY
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<u>3GPPCN#22</u>	OR	10 - 12 Dec 2003	Maui, Hawaii	USA
<u>3GPPCN1 - CN4 co-located meetings</u>	WG	16 - 20 Feb 2004	Atlanta	USA
<u>3GPPCN#23</u>	OR	10 - 12 Mar 2004	TBC	USA
CN4#22bis (Rel-6 issues)	WG	13-16 April 2004		
<u>3GPPCN1 - CN4 co-located meetings</u>	WG	10 - 14 May 2004	Zagreb	Croatia
<u>3GPPCN#24</u>	OR	2 - 4 Jun 2004	KOREA	South Korea
<u>3GPPCN1 - CN4 co-located meetings</u>	WG	16 - 20 Aug 2004	Sophia Antipolis	France
<u>3GPPCN#25</u>	OR	8 - 10 Sep 2004	US	USA
<u>3GPPCN1 - CN4 co-located meetings</u>	WG	15 - 19 Nov 2004	Asia??	ASIA???
<u>3GPPCN#26</u>	OR	8 - 10 Dec 2004	Athens	Greece

12 Check of approved output documents

NP-031088 Output documents; Chairman

Comments:

Status: **APPROVED**

13 Closing of the meeting (17:30 Friday)

Meeting was closed exactly 17:04.

ANNEX A: OUTPUT MATERIAL

A.1 Liaisons Approved

Tdoc	Tdoc Title	LS to	LS cc	LS Attachment
N4-031152	LS to SA3 on Clarification on use of Re-attempt Information element in Authentication Failure Report service	SA3		
N4-031289	LS on Special-RAND mechanism	SA3	CN1, GERAN2, T2	N4-031315
N4-031320	LS on Clarification for the WLAN D'Gr' interface standardization	SA2		
N4-031351	LS on identifying MMS Enabled devices and MMS Capabilities of those devices	T2	SA1, SA2	N4-031328
N4-031352	LS to SA2 changes in MBMS activation procedures	SA2		
N4-031367	Response LS To GSMA on DNS top level domains	GSMA IREG PACKET	CN	
N4-031387	LS (S5-038444) on Rel-6 Subscriber and Equipment Trace impacts to the Core Network from WG SA5	SA5	CN1, CN2	

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

TDoc #	Type	Spec	Tdoc Title	N_Versio	Source

A.3 New / Revised Work Items Approved

Tdoc	Tdoc Title	Source	Rel

N4-031279	Updated WID: Support of WLAN, stage 3	Nokia	Rel-6
N4-031366	Updated WID: Support for subscriber certificates, stage 3	Nokia	Rel-6

A.4 Approved CRs

Tdoc	Title	Source	Result
N4-031092	Incorrect implementation of CR 023r1	Siemens	Agreed
N4-031097	XML Schema Correction	Siemens	Agreed
N4-031098	Enhancements for the Partial Implementation for "Change of position procedure armed with criteria"	Alcatel	Agreed
N4-031099	Correction of incorrect reference	Lucent Technologies	Agreed
N4-031100	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	Agreed
N4-031102	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	Agreed
N4-031108	Modification of description for conditions on inclusion of Positioning Data	Nortel Networks, AWS	Agreed
N4-031118	Removal of RAB Context IE in Forward Relocation Request	Alcatel, NEC	Agreed
N4-031119	Removal of RAB Context IE in Forward Relocation Request	Alcatel, NEC	Agreed
N4-031120	Correction of Sequence Number Up handling	Alcatel	Agreed
N4-031121	Correction of Sequence Number Up handling	Alcatel	Agreed
N4-031122	Correction of Sequence Number Up handling	Alcatel	Agreed
N4-031123	Correction of Sequence Number Up handling	Alcatel	Agreed
N4-031130	MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter	Nokia	Agreed
N4-031131	More spare bits for CAMEL4 enhancements	Nokia	Agreed
N4-031132	More spare bits for CAMEL4 enhancements	Nokia	Agreed
N4-031133	Collective CR for Rel-6 Enhanced Dialed Services	Nokia	Agreed
N4-031135	Collective CR for Rel-6 Enhanced Dialed Services	Nokia	Agreed
N4-031155	Correction of a mis-implementation of CR 29.060-410	Vodafone	Agreed
N4-031162	Editorial clarification on D-CSI segmentation	Ericsson L.M.	Agreed
N4-031163	Editorial clarification on D-CSI segmentation	Ericsson L.M.	Agreed
N4-031164	Wrong message appears in message flow	Ericsson L.M.	Agreed
N4-031165	Wrong message appears in message flow	Ericsson L.M.	Agreed
N4-031166	Wrong message appears in message flow	Ericsson L.M.	Agreed
N4-031183	On the length of the APN NI	Lucent Technologies	Agreed
N4-031184	On the length of the APN NI	Lucent Technologies	Agreed
N4-031185	On the length of the APN NI	Lucent Technology	Agreed

		es	
N4-031186	On the length of the APN NI	Lucent Technologies	Agreed
N4-031220	The S-CSCF name needs to be checked always in MAR and SAR	Nokia	Agreed
N4-031222	Conditional AVPs in answer commands	Nokia	Agreed
N4-031223	Conditional AVPs in answer commands	Nokia	Agreed
N4-031232	Registration status	Orange	Agreed
N4-031237	Determination of User-Authorization-Type AVP based on registration expiration	Orange	Agreed
N4-031238	Determination of User-Authorization-Type AVP based on registration expiration	Orange	Agreed
N4-031241	User-Authorization-Type	Orange	Agreed
N4-031274	Message Segmentation Mechanisms	Siemens	Agreed
N4-031280	The S-CSCF name needs to be checked always in MAR	Nokia	Agreed
N4-031281	The S-CSCF name needs to be checked always in MAR	Nokia	Agreed
N4-031283	Server-Assignment-Request	Orange	Agreed
N4-031284	Server-Assignment-Request	Orange	Agreed
N4-031290	MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter	Nokia	Agreed
N4-031299	Deferred MT-LR Area Event	Nokia	Agreed
N4-031303	Notify of forced erasure to previously registered subscriber of his deregistration	Siemens	Agreed
N4-031304	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	Agreed
N4-031305	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	Agreed
N4-031306	Correction to MAP RCH – GMSC shall check Supported CAMEL4 subsets	Ericsson	Agreed
N4-031310	MAR in synchronisation failure case	Nokia	Agreed
N4-031311	MAR in synchronisation failure case	Nokia	Agreed
N4-031313	Introduction of GTP MBMS message	3	Agreed
N4-031315	Addition of parameter requesting PLMN-ID to Send Authentication Info Request	Siemens	Agreed
N4-031316	HSDPA impacts to MAP	NEC, Fujitsu	Agreed
N4-031317	HSDPA impacts to MAP	NEC, Fujitsu	Agreed
N4-031322	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	Agreed
N4-031323	Restoration of data in RA Update	Alcatel	Agreed
N4-031324	Restoration of data in RA Update	Alcatel	Agreed
N4-031325	Restoration of data in RA Update	Alcatel	Agreed

N4-031336	Introduction of Presence Stage 3 (Ph) to the Sh interface	Lucent Technologies	Agreed
N4-031337	Remove redundant option for retrieval of routing information in figure 21.2.3	Ericsson L.M.	Agreed
N4-031338	Remove redundant option for retrieval of routing information in figure 21.2.3	Ericsson L.M.	Agreed
N4-031340	Editorial correction in implementation of CR 026r1	Ericsson L.M., Siemens	Agreed
N4-031341	MNP correction for prepaid charging	Siemens	Agreed
N4-031342	MNP correction for prepaid charging	Siemens	Agreed
N4-031345	Deferred MT-LR Area Event	Nokia	Agreed
N4-031346	Changes to enable the GSMA root DNS architecture	Vodafone	Agreed
N4-031347	Changes to enable the GSMA root DNS architecture	Vodafone	Agreed
N4-031348	Changes and corrections to DNS names	Vodafone	Agreed
N4-031349	Changes and corrections to DNS names	Vodafone	Agreed
N4-031356	The extensibility of the XML schema	Nokia	Agreed
N4-031357	The extensibility of the XML schema	Nokia	Agreed
N4-031358	The extensibility of the XML schema	Nokia	Agreed
N4-031360	Changes to enable the GSMA root DNS architecture using ".3gppnetwork.org" TLD	Vodafone	Agreed
N4-031361	Changes to enable the GSMA root DNS architecture using ".3gppnetwork.org" TLD	Vodafone	Agreed
N4-031365	Deferred MT-LR Area Event	Nokia	Agreed
N4-031372	Addition of CGI to LCS procedures	Nortel Networks, T-Mobile, AWS	Agreed
N4-031373	Include v-gmlc parameter in RESTORE DATA MAP message	Ericsson L.M.	Agreed
N4-031374	HSDPA impacts to GTP	NEC, Fujitsu	Agreed after Email approval
N4-031375	HSDPA impacts to GTP	NEC, Fujitsu	Agreed after Email approval
N4-031376	Conditions for inclusion of Charging Information	Nortel Networks, Lucent	Agreed after Email approval
N4-031377	Conditions for inclusion of Charging Information	Nortel Networks	Agreed after Email approval
N4-031378	Clarification of inclusion of elements in charging information	Nortel Networks	Agreed after Email approval
N4-031379	Clarification of inclusion of elements in charging information	Nortel Networks	Agreed after Email approval
N4-031380	Correct table of IMS elements	Nortel Networks	Agreed after Email approval
N4-031390	Services related to unregistered state	Orange	Agreed

ANNEX B Tdoc List with Status

TDoc #	Age	Type	Title	Source	WI	CR	R	C	Spec	Rel	Versio	Revision	Conclusion
N4-031081	1	Agenda	Preliminary agenda for CN4 #20	CN4 chairman									Revised to N4-031082
N4-031082	1	Agenda	Detailed agenda & time plan for CN4 #21: status at document deadline	CN4 chairman									Revised to N4-031083
N4-031083	1	Agenda	Detailed agenda & time plan for CN4 #21: status on eve of meeting	CN4 chairman									Agreed
N4-031084	2	DAD	Proposed allocation of documents to agenda items for CN4 #21: status at document deadline	CN4 chairman									Revised to N4-031085
N4-031085	2	DAD	Proposed allocation of documents to agenda items for CN4 #21: status on eve of meeting	CN4 chairman									Revised to N4-031085rev
N4-031085rev	2	DAD	Proposed allocation of documents to agenda items for CN4 #21: status on eve of meeting	CN4 chairman									Agreed
N4-031086		DAD	Proposed allocation of documents to agenda items for joint session with CN2 on CAMEL	CN2/CN4 chairman									Agreed
N4-031087	3.2	Report	Summary report from CN #21 & SA #21, Frankfurt, Germany	CN4 chairman									Noted
N4-031088	12	Info	List of approved output documents	CN4 chairman									Agreed
N4-031089		Report	CN#20 meeting report, Sophia Antipolis	MCC									Agreed
N4-031090		WID	Work Plan	MCC									Noted
N4-031091		Info	Future meetings	MCC									Noted
N4-031092	7.7	CR	Incorrect implementation of CR 023r1	Siemens	MNP	027		F	23.066	Rel-5	5.2.0		Agreed
N4-031093	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	028		F	23.066	Rel-5	5.2.0		Revised to N4-031271
N4-031094	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	675		F	29.002	Rel-5	5.7.0		Revised to N4-031272
N4-031095	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	676		A	29.002	Rel-6	6.3.0		Revised to N4-031273
N4-031096	6.9	CR	Message Segmentation Mechanisms	Siemens	TEI	648	1	D	29.002	Rel-6	6.3.0		Revised to N4-031274
N4-031097	7.1.2	CR	XML Schema Correction	Siemens	IMS	038		F	29.328	Rel-5	5.5.0		Agreed

N4-031098	6.5	CR	Enhancements for the Partial Implementation for "Change of position procedure armed with criteria"	Alcatel	TEI6	677	-	F	29.002	Rel-6	6.3.0		Agreed
N4-031099	7.3	CR	Correction of incorrect reference	Lucent Technologies	TEI	435	1	F	29.060	Rel-99	3.h.0		Agreed
N4-031100	7.3	CR	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	GTP Enhancements	475		F	29.060	Rel-4	4.9.0		Agreed
N4-031101	7.3	CR	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	GTP Enhancements	476		A	29.060	Rel-5	5.7.0		Revised to N4-031322
N4-031102	7.3	CR	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	GTP Enhancements	477		A	29.060	Rel-6	6.2.0		Agreed
N4-031103	6.3	CR	Introduction of Presence Stage 3 (Ph) to the Sh interface	Lucent Technologies	PRESNC	026	2	B	29.328	Rel-6	5.5.0		Revised to N4-031336
N4-031104	6.6	Disc	Successful Recovery from Path Failure with no Dangling Contexts	Nortel Networks									Noted
N4-031105	6.6	CR	Change of Restart Counter definition for enhanced GTP recovery procedures	Nortel Networks	GTP enhancements	008	1	C	23.007	6	5.0.0		Revised to N4-031275
N4-031106	6.6	CR	Enhancement of Recovery IE to reduce number of dangling PDP Contexts	Nortel Networks	GTP enhancements	431	1	C	29.060	6	6.2.0		Revised to N4-031266
N4-031107	7.8	CR	Positioning Data for UTRAN LCS	Nortel Networks, AWS	LCS2	678		F	29.002	5	5.7.0		Postponed to CN4#22
N4-031108	7.8	CR	Modification of description for conditions on inclusion of Positioning Data	Nortel Networks, AWS	LCS2	679		F	29.002	6	6.3.0		Agreed
N4-031109	6.1, 6.3, 6.4, 6.11, 6.13 (?)	Disc	Cx, Dx and Sh re-use and evolution management	Nortel Networks, Ericsson									Noted
N4-031110	6.4	Disc	Documentation of protocols related to IMS for R6 and beyond.	Nortel Networks									Noted
N4-031111	7.1.1	CR	Conditions for inclusion of Charging Information	Nortel Networks, Lucent	TEI5	056		F	29.228	5	5.5.0		Revised to N4-031331
N4-031112	7.1.1	CR	Conditions for inclusion of Charging Information	Nortel Networks, Lucent	TEI5	057		A	29.228	6	6.0.0		Revised to N4-031332
N4-031113	6.10	CR	Addition of CGI to LCS procedures	Nortel Networks, T-Mobile, AWS	LCS2	680		F	29.002	6	6.3.0		Revised to N4-031343
N4-031114	6.4	CR	Addition of 'Node-Type AVP' to CER/CEA	Nortel Networks, Ericsson	TEI6	023		F	29.229	6	5.5.0		Withdrawn

N4-031115	7.3	CR	Restoration of data in RA Update	Alcatel	GPRS	009		F	23.007	99	3.5.0		Revised to N4-031323
N4-031116	7.3	CR	Restoration of data in RA Update	Alcatel	GPRS	010		A	23.007	4	4.11.0		Revised to N4-031324
N4-031117	7.3	CR	Restoration of data in RA Update	Alcatel	GPRS	011		A	23.007	5	5.0.0		Revised to N4-031325
N4-031118	7.3	CR	Removal of RAB Context IE in Forward Relocation Request	Alcatel, NEC	GPRS	456		F	29.060	5	5.7.0		Agreed
N4-031119	7.3	CR	Removal of RAB Context IE in Forward Relocation Request	Alcatel, NEC	GPRS	457		A	29.060	6	6.2.0		Agreed
N4-031120	7.3	CR	Correction of Sequence Number Up handling	Alcatel	GPRS	458		F	29.060	99	3.17.0		Agreed
N4-031121	7.3	CR	Correction of Sequence Number Up handling	Alcatel	GPRS	459		A	29.060	4	4.9.0		Agreed
N4-031122	7.3	CR	Correction of Sequence Number Up handling	Alcatel	GPRS	460		A	29.060	5	5.7.0		Agreed
N4-031123	7.3	CR	Correction of Sequence Number Up handling	Alcatel	GPRS	461		A	29.060	6	6.2.0		Agreed
N4-031124	7.8	CR	Increasing the Max length of the APN data Type	Lucent Technologies	TEI	681		F	29.002	Rel-99	3.18.0		Rejected
N4-031125	7.8	CR	Increasing the Max length of the APN data Type	Lucent Technologies	TEI	682		A	29.002	Rel-4	4.13.0		Rejected
N4-031126	7.8	CR	Increasing the Max length of the APN data Type	Lucent Technologies	TEI	683		A	29.002	Rel-5	5.7.0		Rejected
N4-031127	7.8	CR	Increasing the Max length of the APN data Type	Lucent Technologies	TEI	684		A	29.002	Rel-6	6.3.0		Rejected
N4-031128	6.1	DISC	Re-use of Cx protocol for Wx interface	Ericsson	WLAN				29.234	6	1.0.0		Revised to N4-031321
N4-031129	6.2	CR	MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter	Nokia	CAMEL2	A070		F	03.18	R97	6.7.0		Revised to N4-031290
N4-031130	6.2	CR	MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter	Nokia	CAMEL2	A071		A	03.18	R98	7.4.0		Agreed
N4-031131	7.2	CR	More spare bits for CAMEL4 enhancements	Nokia	CAMEL4	685		F	29.002	Rel5	5.7.0		Agreed
N4-031132	7.2	CR	More spare bits for CAMEL4 enhancements	Nokia	CAMEL4	686		A	29.002	Rel6	6.3.0		Agreed
N4-031133	8.2	CR	Collective CR for Rel-6 Enhanced Dialed Services	Nokia	EDCAMEL	126	1	B	23.018	Rel6	5.9.0		Agreed
N4-031134	8.2	CR	23.078-CR553 Collective CR for Rel-6 Enhanced Dialed Services	Nokia	EDCAMEL	553	2	B	23.078	Rel6	5.5.0		Noted

N4-031135	8.2	CR	Collective CR for Rel-6 Enhanced Dialed Services	Nokia	EDCAME L	687		B	29.002	Rel6	6.3.0		Agreed
N4-031136	8.2	CR	Collective CR for Rel-6 Enhanced Dialed Services	Nokia	EDCAME L	332		B	29.078	Rel6	5.5.0		Noted
N4-031137	7.2	CR	Correction to MAP RCH – GMSC shall check Supported CAMEL4 subsets	Ericsson	CAMEL4			F	23.079	Rel-5	5.3.0		Revised to N4-031306
N4-031138	6.2	DISC	Query	Ericsson					29.240	6	0.1.0		Postponed to CN4#22
N4-031139	7.5	CR	Codec Modification/ Mid-Call Codec Negotiation after Inter-MSC Relocation	Siemens	OoBTC	667	2	F	29.002	5	5.7.0		Withdrawn
N4-031140	7.5	CR	Codec Modification/ Mid-Call Codec Negotiation after Inter-MSC Relocation	Siemens	OoBTC	668	2	A	29.002	6	6.3.0		Withdrawn
N4-031141	7.5	CR	Correction of Inter-MSC SRSN Relocation procedure	Siemens	OoBTC	068	2	F	23.153	5	5.6.0		Withdrawn
N4-031142	7.5	CR	Correction of Inter-MSC SRSN Relocation procedure	Siemens	OoBTC	669	2	F	29.002	5	5.7.0		Withdrawn
N4-031143	7.5	CR	Correction of Inter-MSC SRSN Relocation procedure	Siemens	OoBTC	670	2	A	29.002	6	6.3.0		Withdrawn
N4-031144	7.5	CR	Renaming of the Available Codecs List to lu Supported Codecs List	Siemens	OoBTC	under CN1		F	23.009	5	5.6.0		Withdrawn
N4-031145	6.15	CR	Notify of forced erasure to previously registered subscriber of his deregistration	Siemens	TEI6	003		B	23.094	6	5.0.1		Revised to N4-031303
N4-031146	7.10	CR	HSDPA impacts to MAP	NEC	HSDPA	688		F	29.002	5	5.7.0		Revised to N4-031267
N4-031147	7.10	CR	HSDPA impacts to MAP	NEC	HSDPA	689		A	29.002	6	6.3.0		Revised to N4-031268
N4-031148	7.10	CR	HSDPA impacts to GTP	NEC	HSDPA	462		F	29.060	5	5.7.0		Revised to N4-031269
N4-031149	7.10	CR	HSDPA impacts to GTP	NEC	HSDPA	463		A	29.060	6	6.2.0		Revised to N4-031270
N4-031150	6.6	CR	IE Type Value to be corrected for Common Flags	NEC	TEI6	464		D	29.060	6	6.2.0		Withdrawn
N4-031151	6.9	DISC	Clarification on use of Re-attempt Information element in Authentication Failure Report service	NEC									Noted
N4-031152	6.9	LS OUT	Proposed LS to SA3 on Clarification on use of Re-attempt Information element in Authentication Failure Report service	NEC									Approved
N4-031153	6.6	DP	Network solution to the security issue with multiple, concurrent PDP Contexts in GPRS	Vodafone									Revised to N4-031363
N4-031154	6.6	CR	Controlling the creation of multiple, concurrent PDP Contexts	Vodafone	TEI_6	465		B	29.060	6	6.2.0		Revised to N4-031364

N4-031155	6.6	CR	Correction of a mis-implementation of CR 29.060-410	Vodafone	TEI_6	466		F	29.060	6	6.2.0		Agreed
N4-031156	7.11	CR	Changes to enable the GSMA root DNS architecture	Vodafone	TEI5	074	3	F	23.003	5	5.7.0		Revised to N4-031346
N4-031157	6.4	CR	Control version AVP in CER/CEA commands	Nortel, Ericsson	TEI6	024		F	29.229	6	5.5.0		Revised to N4-031277
N4-031158	6.1	CR	TS 29.234, RADIUS based Ws reference point	China Mobile, Huawei, Intel	WLAN				29.234	Rel-6	1.0.0		Noted
N4-031159	6.1	CR	TS 29.234, Radius based Wr Information Elements	China Mobile, Huawei	WLAN				29.234	Rel-6	1.0.0		Revised to N4-031350
N4-031160	6.1	CR	Addition of D'/Gr' reference point description	China Mobile, Huawei	WLAN	690		B	29.002	Rel-6	1.0.0		Postponed to CN4#22
N4-031161	6.1	CR	TS 29.234, Addition of D'/Gr' reference point description	China Mobile, Huawei	WLAN				29.234	Rel-6	1.0.0		Postponed to CN4#22
N4-031162	7.2	CR	Editorial clarification on D-CSI segmentation	Ericsson L.M.	CAMEL4	691	-	D	29.002	5	5.7.0		Agreed
N4-031163	7.2	CR	Editorial clarification on D-CSI segmentation	Ericsson L.M.	CAMEL4	692	-	A	29.002	6	6.3.0		Agreed
N4-031164	7.9	CR	Wrong message appears in message flow	Ericsson L.M.	LCS1	093	-	F	29.010	4	4.6.0		Agreed
N4-031165	7.9	CR	Wrong message appears in message flow	Ericsson L.M.	LCS1	094	-	A	29.010	5	5.4.0		Agreed
N4-031166	7.9	CR	Wrong message appears in message flow	Ericsson L.M.	LCS1	095	-	A	29.010	6	6.0.0		Agreed
N4-031167	6.9	CR	Correction of definition for R-GMLC	Ericsson L.M.	LCS2	693	-	D	29.002	6	6.3.0		Withdrawn
N4-031168	7.8	CR	Remove redundant option for retrieval of routing information in figure 21.2.3	Ericsson L.M.	TEI5	694	-	F	29.002	5	5.7.0		Revised to N4-031337
N4-031169	7.8	CR	Remove redundant option for retrieval of routing information in figure 21.2.3	Ericsson L.M.	TEI5	695	-	A	29.002	6	6.3.0		Revised to N4-031338
N4-031170	6.10	CR	Include v-gmlc parameter in RESTORE DATA MAP message	Ericsson L.M.	LCS2	696		F	29.002	6	6.3.0		Revised to N4-031344
N4-031171	7.9	CR	Clarify format of Positioning Data parameter	Ericsson L.M.	LCS1	697	-	F	29.002	5	5.7.0		Withdrawn
N4-031172	7.9	CR	Clarify format of Positioning Data parameter	Ericsson L.M.	LCS1	698	-	A	29.002	6	6.3.0		Withdrawn
N4-031173	7.9	CR	Change the length of Positioning Data parameter	Ericsson L.M.	LCS1	699	-	F	29.002	5	5.7.0		Rejected
N4-031174	7.9	CR	Change the length of Positioning Data parameter	Ericsson L.M.	LCS1	700	-	A	29.002	6	6.3.0		Rejected

N4-031175	7.7	CR	Editorial correction in implementation of CR 026r1	Ericsson L.M.	MNP	029	-	F	23.066	5	5.2.0		Withdrawn
N4-031176	6.10	CR	Include the lcs-Format Indicator to the lcsClientName and lcsRequestorID parameters	Ericsson L.M.	LCS2	030	-	F	24.080	6	5.4.0		Withdrawn
N4-031177	6.6	CR	TS 29.060, Clarification of SGSN handling of RAI Information Element in Create PDP Context Request and Update PDP Context Request	Huawei	TEI6	467		A	29.060	Rel-6	6.2.0		Withdrawn
N4-031178	6.1.1	Disc	Method for introducing MBMS GTP messages	3	MBMS								Noted
N4-031179	6.1.1	CR	Introduction of MBMS specific error handling	3	MBMS	468		B	29.060	6	6.2.0		Noted
N4-031180	6.1.1	CR	Introduction of GTP MBMS message	3	MBMS	469		B	29.060	6	6.2.0		Revised to N4-031297
N4-031181	6.4	CR	Addition of 'Node-Type AVP' to CER/CEA	Nortel Networks, Ericsson	TEI6	020		F	29.329	6	5.5.0		Withdrawn
N4-031182	6.3	CR	Introduction of Presence Stage 3 (Ph) to the MAP interface	Lucent Technologies	PRESNC	701		B	29.002	Rel-6	6.3.0		Revised to N4-031292
N4-031183	7.8	CR	On the length of the APN NI	Lucent Technologies	TEI	075		F	23.003	Rel-99	3.13.0		Agreed
N4-031184	7.8	CR	On the length of the APN NI	Lucent Technologies	TEI	076		A	23.003	Rel-4	4.7.0		Agreed
N4-031185	7.8	CR	On the length of the APN NI	Lucent Technologies	TEI	077		A	23.003	Rel-5	5.7.0		Agreed
N4-031186	7.8	CR	On the length of the APN NI	Lucent Technologies	TEI	078		A	23.003	Rel-6	6.0.0		Agreed
N4-031187	6.1	DISC	TS 29.234, Addition of 3GPP WLAN-IW overview	Nokia	WLAN								Withdrawn
N4-031188	6.1	DISC	TS 29.234, Updates to definitions and abbreviations	Nokia	WLAN								Revised to N4-031353
N4-031189	6.1	DISC	TS 29.234, Wn and Wm reference points	Nokia	WLAN								Withdrawn
N4-031190	6.2	DISC	TS 29.240, Addition of References	Nokia	GUP								Noted
N4-031191	6.2	DISC	TS 29.240, XML Schema Structure	Nokia	GUP								Noted
N4-031192	6.2	DISC	TS 29.240, General Guidelines	Nokia	GUP								Revised to N4-031330
N4-031193	6.2	DISC	TS 29.240, GUP Schemas	Nokia	GUP								Noted

N4-031194	6.2	DISC	TS 29.240, ResourceID contents	Nokia	GUP														Noted
N4-031195	6.2	DISC	TS 29.240, GUP Procedure/Redirect Update	Nokia	GUP														Postponed to CN4#22
N4-031196	6.2	DISC	TS 29.240, Rp reference point description improvements	Nokia	GUP														Postponed to CN4#22
N4-031197	6.2	DISC	TS 29.240, Authorisation	Nokia	GUP														Postponed to CN4#22
N4-031198	6.2	DISC	TS 29.240, GUP Procedures Schema	Nokia	GUP														Postponed to CN4#22
N4-031199	6.2	DISC	TS 29.240, GUP Component Schema Template	Nokia	GUP														Postponed to CN4#22
N4-031200	6.6	CR	Robust authentication during Attach and RAU	Nokia	TEI6	445	1	F	29.060	Rel-6	6.2.0								Postponed to CN4#22
N4-031201	6.7	DISC	TS 29.332, Mn interface procedures	Nokia	IMS-CCR-Mn														Revised to N4-031314
N4-031202	6.7	DISC	TS 29.332, Mandatory IMS packages	Nokia	IMS-CCR-Mn														Postponed to CN4#22
N4-031203	6.12	CR	Addition of the Trace package	Nokia	OAM-Trace	045		B	23.205	Rel-6	5.6.0								Noted
N4-031204	6.12	CR	Addition of the Trace package	Nokia	OAM-Trace	060		B	29.232	Rel-6	5.6.0								Noted
N4-031205	6.12	CR	Additional Trace information	Nokia	OAM-Trace	470		C	29.060	Rel-6	6.2.0								Withdrawn
N4-031206	6.13	DISC	GAA-Application-Profiles definition	Nokia	SEC1-SC														Noted
N4-031207	6.13	DISC	TS 29.109: GAA: Zh and Zn Interfaces based on the Diameter protocol	Nokia	SEC1-SC														Revised to N4-031302
N4-031208	6.4.1	CR	Forking indication	Nokia	IMS2-CCR	125		B	23.008	Rel-6	5.6.0								Revised to N4-031294
N4-031209	6.4.1	CR	Forking indication	Nokia	IMS2-CCR	058		B	29.228	Rel-6	6.0.0								Revised to N4-031295
N4-031210	7.1.1	CR	MAR in synchronisation failure case	Nokia	IMS-CCR	059		F	29.228	Rel-5	5.5.0								Revised to N4-031310
N4-031211	6.4.1	CR	MAR in synchronisation failure case	Nokia	IMS2-CCR	060		A	29.228	Rel-6	6.0.0								Revised to N4-031311
N4-031212	6.15	DISC	Separation of Diameter applications and their versions	Nokia, Siemens															Noted
N4-031213	6.4	CR	Originating S-CSCF name	Nokia	IMS2-CCR	123	2	B	23.008	Rel-6	5.6.0								Postponed to CN4#22
N4-031214	6.4.1	CR	Originating S-CSCF name	Nokia	IMS2-CCR	053	1	B	29.228	Rel-6	5.5.0								Postponed to CN4#22

N4-031215	6.4.1	CR	Originating S-CSCF name	Nokia	IMS2-CCR	020	1	B	29.229	Rel-6	5.5.0		Postponed to CN4#22
N4-031216	6.4.2	CR	Originating S-CSCF name	Nokia	IMS2-CCR	037	1	B	29.328	Rel-6	5.5.0		Postponed to CN4#22
N4-031217	6.4.2	CR	Dh interface	Nokia	IMS2-CCR	036	1	B	29.328	Rel-6	5.5.0		Revised to N4-031307
N4-031218	7.1.1	CR	The S-CSCF name needs to be checked always in MAR	Nokia	IMS-CCR	054	2	F	29.228	Rel-5	5.5.0		Revised to N4-031280
N4-031219	6.4.1	CR	The S-CSCF name needs to be checked always in MAR	Nokia	IMS2-CCR	061		A	29.228	Rel-6	6.0.0		Revised to N4-031281
N4-031220	7.1.1	CR	The S-CSCF name needs to be checked always in MAR and SAR	Nokia	IMS-CCR	021	1	F	29.229	Rel-5	5.5.0		Agreed
N4-031221	7.5	CR	Codec Modification/ Mid-Call Codec Negotiation after Inter-MSC Relocation	Siemens	OoBTC	068	2	F	23.153	5	5.6.0		Withdrawn
N4-031222	7.1.1	CR	Conditional AVPs in answer commands	Nokia	IMS-CCR	062		F	29.228	Rel-5	5.5.0		Agreed
N4-031223	6.4.1	CR	Conditional AVPs in answer commands	Nokia	IMS2-CCR	063		A	29.228	Rel-6	6.0.0		Agreed
N4-031224	6.4.2	CR	Multiple terminals	Nokia	IMS2-CCR	039		B	29.328	Rel-6	5.5.0		Revised to N4-031308
N4-031225	6.11	DISC	Introducing MBMS specific timers	LM Ericsson	MBMS								Noted
N4-031226	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	702		B	29.002	Rel-6	6.2.0		Revised to N4-031298
N4-031227	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	014		B	24.030	Rel-6	5.1.0		Revised to N4-031299
N4-031228	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	031		B	24.080	Rel-6	5.3.0		Revised to N4-031300
N4-031229	6.2	Disc	API	Lucent Technologies	GUP								Postponed to CN4#22
N4-031230	6.2	Disc	Proposed XML schema for GUP	Lucent Technologies	GUP								Noted
N4-031231	6.2	Disc	3GPP GUP vs Liberty Alliance	Lucent Technologies	GUP								Noted
N4-031232	7.1	CR	Registration status	Orange	IMS	126		F	23.008	5	5.6.0		Agreed
N4-031233	7.1.1	CR	Server-Assignment-Request	Orange	IMS	064		F	29.228	5	5.5.0		Revised to N4-031283
N4-031234	6.4.1	CR	Server-Assignment-Request	Orange	IMS	065		F	29.228	6	6.0.0		Revised to N4-031284
N4-031235	7.1.1	CR	Server-Assignment-type AVP	Orange	IMS	026		F	29.229	5	5.5.0		Withdrawn

N4-031236	7.1	CR	Services related to unregistered state	Orange	IMS	127	F	23.008	5	5.6.0		Revised to N4-031339
N4-031237	7.1.1	CR	Determination of User-Authorization-Type AVP based on registration expiration	Orange	IMS	066	A	29.228	5	5.5.0		Agreed
N4-031238	6.4.1	CR	Determination of User-Authorization-Type AVP based on registration expiration	Orange	IMS	067	F	29.228	6	6.0.0		Agreed
N4-031239	7.1.1	CR	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	IMS	068	F	29.228	5	5.5.0		Revised to N4-031285
N4-031240	6.4.1	CR	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	IMS	069	A	29.228	6	6.0.0		Revised to N4-031286
N4-031241	7.1.1	CR	User-Authorization-Type	Orange	IMS	027	F	29.229	5	5.5.0		Agreed
N4-031242	4	Input LS	LS on identifying MMS Enabled devices and MMS Capabilities of those devices	T2	T-Mobile	to:			Rel-6		T2-030535	Noted
N4-031243	4	Input LS	LS Response to "Inclusion of IMS Signalling Indicator in S-CDR"	BARG	GSMA	cc:			Rel-5		BARG Doc 226/03	Noted
N4-031244	4	Input LS	Reply LS on stage 3 level specification directions for support for subscriber certificate work item	CN1	Ericsson	to:			Rel-6		N1-031200	Noted
N4-031245	4	Input LS	Liaison statement on Trace	CN1	Nokia	cc:			Rel-6		N1-031313	Noted
N4-031246	4	Input LS	LS on P-TMSI signature validation in R99	CN1	Nokia	cc:			R99		N1-031334	Noted
N4-031247	4	Input LS	LS on DNS domains used in 3GPP TS 23.003	CN	Vodafone	cc:			Rel-5 onwards		NP-030440	Noted
N4-031248	4	Input LS	LS on Reporting of attempted UE positioning methods over lu	RAN2	Vodafone	cc:			Rel-5		R2-032264	Noted
N4-031249	4	Input LS	Liaison statement on IMS AKA: UE populating RAND and AUTN parameters in responding to challenge	SA3	Nokia	to:			Rel-5 onwards		S3-030616	Noted
N4-031250	4	input LS	Reply LS on "Security issues regarding multiple PDP contexts in GPRS"	SA3	Ericsson	to:			Rel-6		S3-030634	Noted
N4-031251	4	Input LS	LS Response on "new interface names"	SA3	Nokia	to:			Rel-6		S3-030635	Noted
N4-031252	4	Input LS	LS on Special-RAND mechanism	SA3	Siemens	to:			Rel-6		S3-030652	Noted
N4-031253	4	Input LS	LS response to Stage 2 requirements for subscriber certificate work item	SA3	Nokia	to:			Rel-6		S3-030653	Noted
N4-031254	4	Input LS	LS Reply on "Trace Management"	SA5	Nokia	to:			Rel-6		S5-032644	Noted
N4-031255	4	Input LS	LS Reply on GUP	SA5	T-Mobile	to:			Rel-6		S5-032645	Noted

N4-031256	4	Input LS	LS reply on sending the SGSN's MNC and MCC to the GGSN	SA5 SWGB	Nortel Networks	to:				R97 onwards		S5-034557	Noted
N4-031257	4	Input LS	LS on principles for overlapping issues with OMA regarding PoC	SA	Ericsson	cc:				Rel-6		SP-030530	Noted
N4-031258	4	Input LS	LS response on usage of GUP reference points	T2	T-Mobile	cc:				Rel-6		T2-030518	Noted
N4-031259	4	Input LS	LS reply on Rel-6 Subscriber and Equipment Trace impacts to the Core Network	SA5	Nokia	to:				Rel-6		S5-038444	Noted
N4-031260	4	Input LS	Reply LS on alignment of maximum bit rate for HSDPA in UMTS system	CN1	NEC	to:				Rel-5		N1-031194	Noted
N4-031261	6.1	LS OUT	LS on clarification for the WLAN D/Gr' interface standardization	Ericsson									Revised to N4-031320
N4-031262	7.3	CR	Charging characteristics in inter SGSN RAU	Nokia	TEI5	471	F	29.060	Rel-5	5.7.0			Withdrawn
N4-031263	7.3	CR	Charging characteristics in inter SGSN RAU	Nokia	TEI5	472	A	29.060	Rel-6	6.2.0			Withdrawn
N4-031264	7.11	CR	Changes to enable the GSMA root DNS architecture	Vodafone	TEI5	079	3	A	23.003	6	6.0.0		Revised to N4-031347
N4-031265	4	Input LS	Liaison Statement on EC Requirements on Emergency Telecommunications	OCG EMTEL	Marconi	to:						EM04td014r2 (NP-030401)	Noted
N4-031266	6.6	CR	Enhancement of Recovery IE to reduce number of dangling PDP Contexts	Nortel Networks	GTP enhancements	431	1	C	29.060	6	6.2.0	N4-031106	Withdrawn
N4-031267	7.10	CR	HSDPA impacts to MAP	NEC, Fujitsu	HSDPA	688	1	F	29.002	5	5.7.0	N4-031146	Revised to N4-031316
N4-031268	7.10	CR	HSDPA impacts to MAP	NEC, Fujitsu	HSDPA	689	1	A	29.002	6	6.3.0	N4-031147	Revised to N4-031317
N4-031269	7.10	CR	HSDPA impacts to GTP	NEC, Fujitsu	HSDPA	462	1	F	29.060	5	5.7.0	N4-031148	Revised to N4-031318
N4-031270	7.10	CR	HSDPA impacts to GTP	NEC, Fujitsu	HSDPA	463	1	A	29.060	6	6.2.0	N4-031149	Revised to N4-031319
N4-031271	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	028	1	F	23.066	Rel-5	5.2.0	N4-031093	Revised to N4-031340
N4-031272	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	675	1	F	29.002	Rel-5	5.7.0	N4-031094	Revised to N4-031341
N4-031273	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	676	1	A	29.002	Rel-6	6.3.0	N4-031095	Revised to N4-031342
N4-031274	6.9	CR	Message Segmentation Mechanisms	Siemens	TEI	648	2	D	29.002	Rel-6	6.3.0	N4-031096	Agreed
N4-031275	6.6	CR	Enhancement of Recovery IE to reduce number of dangling PDP Contexts	Nortel Networks	GTP enhancements	431	2	C	29.060	6	6.2.0	N4-031105	Withdrawn
N4-031276	6.4	DISC	Identification of nodal support for MBMS	Nortel Networks									Noted

N4-031277	6.4	CR	Control version AVP in CER/CEA commands	Nortel, Ericsson	TEI6	024		F	29.229	6	5.5.0	N4-031157	Withdrawn
N4-031278	6.13	WID	WID: Support for subscriber certificates, stage 3	LM Ericsson	SSC								Withdrawn
N4-031279	6.1	WID	Updated WLAN WID	Nokia	WLAN								Approved
N4-031280	7.1.1	CR	The S-CSCF name needs to be checked always in MAR	Nokia	IMS-CCR	054	3	F	29.228	Rel-5	5.5.0	N4-031218	Agreed
N4-031281	6.4.1	CR	The S-CSCF name needs to be checked always in MAR	Nokia	IMS2-CCR	061	1	A	29.228	Rel-6	6.0.0	N4-031219	Agreed
N4-031282	6.11	Disc	Discussion Paper on problems found when interworking GSNs of different GTP versions	Vodafone									Withdrawn
N4-031283	7.1.1	CR	Server-Assignment-Request	Orange	IMS	064	1	F	29.228	5	5.5.0	N4-031233	Agreed
N4-031284	6.4.1	CR	Server-Assignment-Request	Orange	IMS	065	1	F	29.228	6	6.0.0	N4-031234	Agreed
N4-031285	7.1.1	CR	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	IMS	068	1	F	29.228	5	5.5.0	N4-031239	Revised to N4-031304
N4-031286	6.4.1	CR	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	IMS	069	1	A	29.228	6	6.0.0	N4-031240	Revised to N4-031305
N4-031287	4	Input LS	Reply LS to 3GPP on principles for overlapping issues with OMA regarding PoC	OMA Req WG	Cingular Wireless	cc:						OMA-REQ-2003-0676R02	Noted
N4-031288	4	Input LS	Liaison Statement to 3GPP TSG CN WG4 on DNS top level domains	GSMA IREG	Vodafone	to:						GSMA IREQ Doc 098_03	Noted
N4-031289	4	Output LS	LS response on Special-RAND mechanism	Siemens									Approved
N4-031290	6.2	CR	MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter	Nokia	CAMEL2	A070	1	F	03.18	R97	6.7.0	N4-031129	Agreed
N4-031291	4	Input LS	Liaison on "Introduction of Positioning Methods over Iu"	RAN3	Nortel Networks	to:						R3-031254	Noted
N4-031292	6.3	CR	Introduction of Presence Stage 3 (Ph) to the MAP interface	Lucent Technologies	PRESNC	701		B	29.002	Rel-6	6.3.0		Postponed to CN4#22
N4-031293	6.12	Output LS	Response LS on "Trace Management"	Nokia									Revised to N4-031381
N4-031294	6.4.1	CR	Forking indication	Nokia	IMS2-CCR	125	1	B	23.008	Rel-6	5.6.0	N4-031208	Postponed to next meeting
N4-031295	6.4.1	CR	Forking indication	Nokia	IMS2-CCR	058	1	B	29.228	Rel-6	6.0.0	N4-031209	Postponed to next meeting
N4-031296	6.11	Disc	On use of common flag on signal support of MBMS	Vodafone									Noted

N4-031297	6.1.1	CR	Introduction of GTP MBMS message	3	MBMS	469	1	B	29.060	6	6.2.0	N4-031180	Revised to N4-031313
N4-031298	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	702	1	B	29.002	Rel-6	6.2.0	N4-031226	Revised to N4-031365
N4-031299	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	014	1	B	24.030	Rel-6	5.1.0	N4-031227	Agreed
N4-031300	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	031	1	B	24.080	Rel-6	5.3.0	N4-031228	Revised to N4-031345
N4-031301	6.13	WID	Subscriber Certificates revised WID	Nokia	SEC1-SC								Revised to N4-031366
N4-031302	6.13	DISC	TS 29.109: GAA: Zh and Zn Interfaces based on the Diameter protocol	Nokia	SEC1-SC								Approved
N4-031303	6.15	CR	Notify of forced erasure to previously registered subscriber of his deregistration	Siemens	TEI6	003	1	B	23.094	6	5.0.1		Agreed
N4-031304	7.1.1	CR	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	IMS	068	2	F	29.228	5	5.5.0	N4-031285	Agreed
N4-031305	7.1.1	CR	Not registered state after deregistration with S-CSCF deleted at the HSS	Orange	IMS	069	2	A	29.228	6	6.0.0	N4-031286	Agreed
N4-031306	7.2	CR	Correction to MAP RCH – GMSC shall check Supported CAMEL4 subsets	Ericsson	CAMEL4			F	23.079	Rel-5	5.3.0	N4-031137	Agreed
N4-031307	6.4.2	CR	Dh interface	Nokia	IMS2-CCR	036	2	B	29.328	Rel-6	5.5.0	N4-031217	Withdrawn
N4-031308	6.4.2	CR	Multiple terminals	Nokia	IMS2-CCR	039	1	B	29.328	Rel-6	5.5.0	N4-031228	Revised to N4-031371
N4-031309	7.3		QoS Profile Data parameter in the Quality of Service (Data) Profile IE extended with one octet	MCC	TEI5	474		A	29.060	Rel-6	6.2.0		Revised to N4-031327
N4-031310	7.1.1	CR	MAR in synchronisation failure case	Nokia	IMS-CCR	059	1	F	29.228	Rel-5	5.5.0	N4-031210	Agreed
N4-031311	6.4.1	CR	MAR in synchronisation failure case	Nokia	IMS2-CCR	060	1	A	29.228	Rel-6	6.0.0	N4-031211	Agreed
N4-031312	6.11	Output LS	LS to SA2 changes in MBMS activation procedure	3	MBMS								Revised to N4-031352
N4-031313	6.1.1	CR	Introduction of GTP MBMS message	3	MBMS	469	2	B	29.060	6	6.2.0	N4-031180	Agreed
N4-031314	6.7	DISC	TS 29.332, Mn interface procedures	Nokia	IMS-CCR-Mn							N4-031201	Postponed to CN4#22
N4-031315		CR	Addition of parameter requesting PLMN-ID to Send Authentication Info Request	Siemens		703			29.002	6	6.3.0		Agreed
N4-031316	7.10	CR	HSDPA impacts to MAP	NEC, Fujitsu	HSDPA	688	2	F	29.002	5	5.7.0	N4-031267	Agreed
N4-031317	7.10	CR	HSDPA impacts to MAP	NEC, Fujitsu	HSDPA	689	2	A	29.002	6	6.3.0	N4-031268	Agreed

N4-031318	7.10	CR	HSDPA impacts to GTP	NEC, Fujitsu	HSDPA	462	2	F	29.060	5	5.7.0	N4-031269	Revised to N4-031374
N4-031319	7.10	CR	HSDPA impacts to GTP	NEC, Fujitsu	HSDPA	463	2	A	29.060	6	6.2.0	N4-031270	Revised to N4-031375
N4-031320	6.1	LS OUT	LS on clarification for the WLAN D'/Gr' interface standardization	Ericsson								N4-031261	Approved
N4-031321	6.1	DISC	Re-use of Cx protocol for Wx interface	Ericsson	WLAN				29.234	6	1.0.0	N4-031128	Revised to N4-031368
N4-031322	7.3	CR	Correction of incorrect reference to a withdrawn specification	Lucent Technologies	GTP Enhancements	476	1	A	29.060	Rel-5	5.7.0	N4-031101	Agreed
N4-031323	7.3	CR	Restoration of data in RA Update	Alcatel	GPRS	009	1	F	23.007	99	3.5.0	N4-031115	Agreed
N4-031324	7.3	CR	Restoration of data in RA Update	Alcatel	GPRS	010	1	A	23.007	4	4.11.0	N4-031116	Agreed
N4-031325	7.3	CR	Restoration of data in RA Update	Alcatel	GPRS	011	1	A	23.007	5	5.0.0	N4-031117	Agreed
N4-031326	7.3		QoS Profile Data parameter in the Quality of Service (Data) Profile IE extended with one octet	MCC	TEI5	473		F	29.060	Rel-5	5.7.0		Conditionally Approved/Withdrawn
N4-031327	7.3		QoS Profile Data parameter in the Quality of Service (Data) Profile IE extended with one octet	MCC	TEI5	474		A	29.060	Rel-6	6.2.0		Conditionally Approved/Withdrawn
N4-031328			Proposed revision of T2-030461	Siemens									Noted
N4-031329	4	Output LS	LS on identifying MMS Enabled devices and MMS Capabilities of those devices	Siemens									Revised to N4-031351
N4-031330	6.2	DISC	TS 29.240, General Guidelines	Nokia	GUP							N4-031192	Withdrawn
N4-031331	7.1.1	CR	Conditions for inclusion of Charging Information	Nortel Networks, Lucent	TEI5	056		F	29.228	5	5.5.0		Revised to N4-031376
N4-031332	7.1.1	CR	Conditions for inclusion of Charging Information	Nortel Networks, Lucent	TEI5	057		A	29.228	6	6.0.0		Revised to N4-031377
N4-031333	7.1.1	CR	Make primary event charging function mandatory	Nortel Networks,	IMS-CCR	028			29.229	5	5.5.0		Withdrawn
N4-031334	7.1.2	CR	Make primary event charging function mandatory	Nortel Networks	IMS-CCR	040			29.328	5	5.5.0		Withdrawn
N4-031335	7.1.1	CR	Correct table of IMS elements	Nortel Networks	IMS-CCR	128			23.008	5	5.6.0		Revised to N4-031380
N4-031336	6.3	CR	Introduction of Presence Stage 3 (Ph) to the Sh interface	Lucent Technologies	PRESNC	026	3	B	29.328	Rel-6	5.5.0	N4-031103	Agreed
N4-031337	7.8	CR	Remove redundant option for retrieval of routing information in figure 21.2.3	Ericsson L.M.	TEI5	694	1	F	29.002	5	5.7.0	N4-031168	Agreed

N4-031338	7.8	CR	Remove redundant option for retrieval of routing information in figure 21.2.3	Ericsson L.M.	TEI5	695	1	A	29.002	6	6.3.0	N4-031169	Agreed
N4-031339	7.1	CR	Services related to unregistered state	Orange	IMS	127	1	F	23.008	5	5.6.0	N4-031236	Revised to N4-031384
N4-031340	7.7	CR	Editorial correction in implementation of CR 026r1	Ericsson L.M., Siemens	MNP	028	2	F	23.066	5	5.2.0	N4-031271	Agreed
N4-031341	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	675	2	F	29.002	Rel-5	5.7.0	N4-031341	Agreed
N4-031342	7.7	CR	MNP correction for prepaid charging	Siemens	MNP	676	2	A	29.002	Rel-6	6.3.0	N4-031342	Agreed
N4-031343	6.10	CR	Addition of CGI to LCS procedures	Nortel Networks, T-Mobile, AWS	LCS2	680	1	F	29.002	6	6.3.0	N4-031113	Revised to N4-031372
N4-031344	6.10	CR	Include v-gmlc parameter in RESTORE DATA MAP message	Ericsson L.M.	LCS2	696	1	F	29.002	6	6.3.0	N4-031170	Revised to N4-031373
N4-031345	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	031	2	B	24.080	Rel-6	5.3.0	N4-031300	Agreed
N4-031346	7.11	CR	Changes to enable the GSMA root DNS architecture	Vodafone	TEI5	074	4	F	23.003	5	5.7.0	N4-031156	Agreed
N4-031347	7.11	CR	Changes to enable the GSMA root DNS architecture	Vodafone	TEI5	079	4	A	23.003	6	6.0.0	N4-031264	Agreed
N4-031348	7.11	CR	Changes and corrections to DNS names	Vodafone	TEI5	080			23.003	5	5.7.0		Agreed
N4-031349	7.11	CR	Changes and corrections to DNS names	Vodafone	TEI5	081			23.003	6	6.0.0		Agreed
N4-031350	6.1	CR	TS 29.234, Radius based Wv Information Elements	China Mobile, Huawei	WLAN				29.234	Rel-6	1.0.0	N4-031159	Revised to N4-031369
N4-031351	4	Output LS	LS on identifying MMS Enabled devices and MMS Capabilities of those devices	Siemens								N4-031329	Approved
N4-031352	6.11	Output LS	LS to SA2 changes in MBMS activation procedure	3	MBMS							N4-031312	Approved
N4-031353	6.1	DISC	TS 29.234, Updates to definitions and abbreviations	Nokia	WLAN							N4-031188	Revised to N4-031386
N4-031354	9	CR	"Wrong radio access protocol name used	Ericsson	Handover			F	23.009	Rel-4			Endorsed by CN4
N4-031355	9	CR	"Wrong radio access protocol name used	Ericsson	Handover			A	23.009	Rel-5			Endorsed by CN4
N4-031356	7.1.1	CR	The extensibility of the XML schema	Nokia	IMS-CRR	041		F	29.328	Rel-5			Agreed
N4-031357	7.1.1	CR	The extensibility of the XML schema	Nokia	IMS-CRR	070		F	29.228	Rel-5			Agreed

N4-031358	7.1.1	CR	The extensibility of the XML schema	Nokia	IMS-CRR	071		A	29.228	Rel-6			Agreed
N4-031359	7.11	Output LS	LS on DNS top level domains	Ericsson									Revised to N4-031367
N4-031360	7.11	CR	Changes to enable the GSMA root DNS architecture using ".3gppnetwork.org" TLD	Vodafone	TEI5	082		F	23.003	Rel-5			Agreed
N4-031361	7.11	CR	Changes to enable the GSMA root DNS architecture using ".3gppnetwork.org" TLD	Vodafone	TEI5	083		A	23.003	Rel-6			Agreed
N4-031362	6.2	DiSC	Liberty Alliance presentation	Nokia									Postponed to CN4#22
N4-031363	6.6	DP	Network solution to the security issue with multiple, concurrent PDP Contexts in GPRS	Vodafone									Noted
N4-031364	6.6	CR	Controlling the creation of multiple, concurrent PDP Contexts	Vodafone	TEI_6	465		B	29.060	6	6.2.0		Postponed to CN4#22
N4-031365	6.10	CR	Deferred MT-LR Area Event	Nokia	LCS2	702	2	B	29.002	Rel-6	6.2.0	N4-031298	Agreed
N4-031366	6.13	WID	Subscriber Certificates revised WID	Nokia	SEC1-SC							N4-031301	Revised to N4-031389
N4-031367	7.11	Output LS	LS on DNS top level domains	Ericsson									Approved
N4-031368	6.1	DISC	Re-use of Cx protocol for Wx interface	Ericsson	WLAN				29.234	6	1.0.0	N4-031321	Agreed
N4-031369	6.1	CR	TS 29.234, Radius based Wr Information Elements	China Mobile, Huawei	WLAN				29.234	Rel-6	1.0.0	N4-031350	Revised to N4-031370
N4-031370	6.1	CR	TS 29.234, Radius based Wr Information Elements	China Mobile, Huawei	WLAN				29.234	Rel-6	1.0.0	N4-031369	Agreed
N4-031371	6.4.2	CR	Multiple terminals	Nokia	IMS2-CCR	039	2	B	29.328	Rel-6	5.5.0	N4-031308	Email approval
N4-031372	6.10	CR	Addition of CGI to LCS procedures	Nortel Networks, T-Mobile, AWS	LCS2	680	2	F	29.002	6	6.3.0		Agreed
N4-031373	6.10	CR	Include v-gmlc parameter in RESTORE DATA MAP message	Ericsson L.M.	LCS2	696	2	F	29.002	6	6.3.0		Agreed
N4-031374	7.10	CR	HSDPA impacts to GTP	NEC, Fujitsu	HSDPA	462	3	F	29.060	5	5.7.0		Email Approval
N4-031375	7.10	CR	HSDPA impacts to GTP	NEC, Fujitsu	HSDPA	463	3	A	29.060	6	6.2.0		Email Approval
N4-031376	7.1.1	CR	Conditions for inclusion of Charging Information	Nortel Networks, Lucent	TEI5	056	2	F	29.228	5	5.5.0		Email Approval
N4-031377	7.1.1	CR	Conditions for inclusion of Charging Information	Nortel Networks,	TEI5	057	2	A	29.228	6	6.0.0		Email Approval

				Lucent									
N4-031378	7.1.1	CR	Clarification of inclusion of elements in charging information	Nortel	IMS-CCR	029		F	29.229	5	5.5.0		Email Approval
N4-031379	7.1.2	CR	Clarification of inclusion of elements in charging information	Nortel	IMS-CCR	042		F	29.328	5	5.5.0		Email Approval
N4-031380	7.1.1	CR	Correct table of IMS elements	Nortel Networks	IMS-CCR	128	1	F	23.008	5	5.6.0	N4-031335	Email Approval
N4-031381	6.12	Output LS	Response LS on "Trace Management"	Nokia								N4-031293	Revised to N4-031387
N4-031382	4	Input LS	LS on IETF work for WLAN network selection	SA2	Intel	cc:						S2-033792	Noted
N4-031383	4	Input LS	LS on IETF work on RADIUS enhancements	SA2	Intel	to:						S2-033793	Noted
N4-031384	7.1	CR	Services related to unregistered state	Orange	IMS	127	2	F	23.008	5	5.6.0	N4-031339	Revised to N4-031388
N4-031385	4	Input LS	Reply LS on Clarification for the WLAN D'/Gr' interface standardization	SA2	France Telecom	to:						S2-033795	Noted
N4-031386	6.1	DISC	TS 29.234, Updates to definitions and abbreviations	Nokia	WLAN							N4-031353	Agreed
N4-031387	6.12	Output LS	Response LS on "Trace Management"	Nokia									Approved
N4-031388	7.1	CR	Services related to unregistered state	Orange	IMS	127	3	F	23.008	5	5.6.0	N4-031384	Revised to N4-031390
N4-031389	6.13	WID	Subscriber Certificates revised WID	Nokia	SEC1-SC							N4-031366	Approved
N4-031390	7.1	CR	Services related to unregistered state	Orange	IMS	127	4	F	23.008	5	5.6.0	N4-031388	Agreed

ANNEX C. TSG CN meeting Participants List

Mr. Shinichiro Aikawa	Fujitsu	3GPPMEMBER (TCC)	JP	+81 447548511	saikawa@jp.fujitsu.com
Mr. Arturo Arreaga	Rogers Wireless Inc.	3GPPMEMBER (T1)	CA	+1 (416)9357659	aarreaga@rci.rogers.com
Mrs. Maria-Carmen Belinchon	Ericsson Korea	3GPPMEMBER (TTA)	KR	+34913393535	maria.c.belinchon@ericsson.com
Mr. Paolo Belloni	TELECOM ITALIA S.p.A.	3GPPMEMBER (ETSI)	IT	+39 3351326560	paolo.belloni@tilab.com
Mr. Nigel. H Berry	Lucent Technologies N. S. UK	3GPPMEMBER (ETSI)	GB	+44 1793 88 3245	nhberry@lucent.com
Mr. Hyung Joon Cho	Sk Telecom	3GPPMEMBER (TTA)	KR	+82 317105235	hjcho@sktelecom.com
Dr. Manoj Choughany	Samsung Electronics	3GPPMEMBER (ETSI)	IND		manojc@samsung.com
Dr. Luca Dell'Uomo	TELECOM ITALIA S.p.A.	3GPPMEMBER (ETSI)	IT	+39 3351326560	luca.delluomo@tilab.com
Mr. Panagiotis Drouzas	ERICSSON L.M.	3GPPMEMBER (ETSI)	GR	+30 2610465011	drpa@intracom.gr
Mr. Rouzbeth Farhoumand	Ericsson Inc.	3GPPMEMBER (T1)	US	+19725838061	rouzbeth.farhoumand@ericsson.com
Mr. Emmanuel Gay	ORANGE FRANCE	3GPPMEMBER (ETSI)	FR	+33 145295583	emmanuel.gay@francetelecom.com
Mr. Thomas Goldbeck-Löwe	ERICSSON L.M.	3GPPMEMBER (ETSI)	GE		thomas.goldbeck-low@ericsson.com
Mr. Mark Gullett	HEWLETT-PACKARD France	3GPPMEMBER (ETSI)	FR	+1 3036884802	mg@hp.com
Mr. Phil Hodges	ERICSSON L.M.	3GPPMEMBER (ETSI)	DE	+61 404069546	philip.hodges@ericsson.com
Mr. Baleji Holu	Samsung Electronics	3GPPMEMBER (ETSI)	IND		balejih@samsung.com
Dr. Peter Hupperich	ALCATEL S.A. P.Hupperich@alcatel.de	3GPPMEMBER (ETSI)	DE	FR	+49 71182147819
Mr. Jari Jansson	NOKIA Corporation	3GPPMEMBER (ETSI)	FI	+358 40 5550719	jari.jansson@nokia.com
Ms. Anna Jernryd	ERICSSON L.M.	3GPPMEMBER (ETSI)	SE	+46 317472197	anna.jernryd@ericsson.com
Mr. Zdravko Jukic	Nanjing Ericsson Panda Com Ltd	3GPPMEMBER (CCSA)	HR	+46 455395439	zdravjo.jukic@ericsson.com
Mr. Seppo Kauntola	NOKIA Corporation	3GPPMEMBER (ETSI)	FI	+358 405569959	seppo.kauntola@nokia.com
Mrs. Yvette Koza	T-Mobile AUSTRIA	3GPPMEMBER (ETSI)	AT	+43 1795856176	yvette.koza@t-mobile.at
Mr. Kimmo Kymäläinen	ETSI MCC	3GPPMEMBER (ETSI)	FR	+33 674408365	kimmo.kymalainen@etsi.com
Dr. Victor Lortz	Intel	3GPPMEMBER (ETSI)	US	+1 5032643253	victor.lortz@intel.com
Mr. Long Luo	HuaWei Technologies Co. Ltd.	3GPPMEMBER (CCSA)	CN	+86 75528970895	luolong@huawei.com
Mr. Giuseppe Mazzarella	TELECOM ITALIA S.p.A.	3GPPMEMBER (ETSI)	IT	+39 0639009119	gmazzarella@tim.it
Mr. Lionel Morand	France Telecom	3GPPMEMBER (ETSI)	FR	+33 14529 6257	lionel.morand@rd.francetelecom.com
Mr. Alex Moukalled	Lucent Technologies	3GPPMEMBER (T1)	US	+1 6309792946	aim5@lucent.com
Ms. Minna Myllymäki	NOKIA Corporation	3GPPMEMBER (ETSI)	FI	+358 505216209	minna.myllymaki@nokia.com
Mr. Klaus Mäkeläinen	TeliaSonera AB	3GPPMEMBER (ETSI)	FI	+358 204063246	klaus.makelainen@teliasonera.com
Mr. Katsunobu Ohtsuki	NTT DoCoMo Inc.	3GPPMEMBER (TTC)	JP	+81 468403370	ohtsuki@nw.yrp.nttdocomo.co.jp
Mr. Nick Russell	VODAFONE Limited	3GPPMEMBER (ETSI)	GB	+44 1635 682 699	nick.russell@vf.vodafone.co.uk
Mr. Arnaud Sahuguet	Bell Labs/Lucent Technologies	3GPPMEMBER (T1)	FR	+1 9085826491	sahuguet@lucent.com
Mr. Peter Schmitt	AT&T	3GPPMEMBER (T1)	US	+1 4255806898	hugh.shieh@attws.com
Mr. Hugh Shieh	SIEMENS AG	3GPPMEMBER (ETSI)	DE	+49 6621169152	peter.schmitt@gksag.de
Dr. Paul Sitch	NOKIA Corporation	3GPPMEMBER (ETSI)	FI	+358 405315259	paul.sitch@nokia.com
Dr. Osok Song	Samsung Electronics	3GPPMEMBER (TTA)	KR	+82 312795840	osok.song@samsung.com
Mr. Toshiyuki Tamura	NEC Corporation	3GPPMEMBER (TTC)	JP	+81 471857167	tamurato@aj.jp.nec.com
Mr. Arto Vaaraniemi	ALCATEL S.A.	3GPPMEMBER (ETSI)	DE	+49 71182141174	a.vaaraniemi@alcatel.de
Dr. Daniel Warren	NORTEL NETWORKS (EUROPE)	3GPPMEMBER (ETSI)	GB	+44 1628 431098	dlwarren@nortelnetworks.com
Mr. Ulrich Wiehe	SIEMENS ATEA NV	3GPPMEMBER (ETSI)	FR	+49 6621 169 139	ulrich.wiehe@gksag.de
Mrs. Johanna Wild	Motorola	3GPPMEMBER (ETSI)	GE	+49 8992103177	johanna.wild@motorola.com
Mr. Wenhui Zhou	China Mobile Com. Corp.	3GPPMEMBER (CCSA)	CN	+86 10631503003	zhouwenhui@chinamobile.com

History

Document History	
up to 31 ^h October 2003	DRAFT v0.0.1, 002, 003 distributed in meeting.
2 th October <u>November</u> , 2003	<p>DRAFT v1.0.0 placed to meeting server and dispatched to the TSG-CN mail exploder for comments.</p> <p>Comments to be addressed to:</p> <p>Mr. Kimmo Kymäläinen, 3GPP TSG CN4 MCC Support MCC - ETSI Secrétariat Tel :+33 (0)4 92 94 42 38 E-mail: mailto:kimmo.kymalainen@ETSI.org</p> <p>A deadline of 2 weeks was given to the CN delegates for e-mail comments on the draft report.</p> <p>E-mail comments back by 17th November 2003</p>
<u>3rd December</u>	DRAFT v1 <u>v2.0</u> X .0 (with rev marks placed to FTP server)
<i>February 2004</i>	<i>Final v2.0.0 approved at TSG#21 Meeting– Made version 3.0.0 and placed to server as the official meeting report.</i>