



## Third Generation Partnership Project

**REPORT v3.0.0**

**3GPP TSG-CN3 / ETSI SMG3 WPD**  
Meeting # 9

10<sup>th</sup> – 14<sup>th</sup> April 2000  
Berlin, Germany



Hosted by Siemens

**SIEMENS**

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## 1 Opening of the Meeting

The 9<sup>th</sup> CN3 meeting took place from 10<sup>th</sup> – 14<sup>th</sup> April in Berlin hosted by Siemens. Norbert Klehn welcomed the N3 delegates to Berlin on behalf of Siemens, and explained the logistical details for the week.

The meeting took place at the Blue Band Hotel Berlin near the new centre of Berlin. The meeting room was initially equipped with a LAN, that allowed the meeting documents to be distributed simply and quickly.

The N3 Chairman Mr. Norbert Klehn, opened the meeting at 10:00 on Monday 10<sup>th</sup> April. He set the objectives for the meetings as follows:

- Finalise all outstanding R99 work items
- Review project management for R2000

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## 2 Approval of the Agenda

**N3-000130: Draft Meeting Agenda.** Presented by the N3 Chairman.

**Content:** Contains the draft Agenda for CN3#9 Meeting.

**DISCUSSION:** Norbert introduced the agenda document and outlined the schedule of the meeting for the rest of the week. It was agreed that due to the nature of the documents presented for discussion, there would not be parallel Packet and Circuit sessions. Also Norbert explained that he would leave on Thursday in order to attend the joint S2/CN meeting in Helsinki. Achim Braun, the CS vice chairman chaired the meeting on Thursday and Friday.

**RESULT:** The Agenda was **APPROVED**.

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## 3 Registration of documents

The meeting documents are available on the 3GPP server at:  
[ftp://ftp.3gpp.org/TSG\\_CN/WG3\\_interworking/TSGN3\\_09/tdocs/](ftp://ftp.3gpp.org/TSG_CN/WG3_interworking/TSGN3_09/tdocs/)

The input documents were assigned to the draft agenda by the N3 chairman.

**N3-000130: Draft Meeting Agenda.** Presented by the N3 Chairman.

**DISCUSSION:** The draft agenda also shows the allocation of the temporary documents to the agenda various items. The initial allocation was discussed at the beginning of the meeting, and the allocations agreed and/or modified. This exercise is reflected in the structure of this meeting report and the original Agenda document is not revised.

**RESULT:** The allocation of documents was **AGREED**.

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## 4 Approval of the meeting report of TSG-CN3 #8

### 4.1 CN3#8 Meeting Report

The meeting report can be found at: [ftp://ftp.3gpp.org/TSG\\_CN/WG3\\_interworking/TSGN3\\_08/Report/](ftp://ftp.3gpp.org/TSG_CN/WG3_interworking/TSGN3_08/Report/)

**N3-000142: CN3#8 Draft Meeting Report.** Presented by David Boswarthick, MCC.

**CONTENT:** Contains the latest version of the draft meeting report for the CN3#8 meeting held in Sophia March 2000.

**DISCUSSION:** The CN3#8 report was completed and distributed at the end of the meeting. There was the usual 2-week deadline for comments by e-mail, and these comments have been integrated in the revised meeting report presented in this document.

*Some additional comments were made to the text, for clarification and these were incorporated into a revised version of the report.*

**RESULT:** The document was **REVISED to 0169**.

↓ REVISED ↓

**N3-000169: Rev. CN3#8 Meeting Report.**

**DISCUSSION:** The revised meeting report was approved and was placed to the meeting server as the final CN3#8 meeting report, (v3.0.0)

**RESULT:** The document was **APPROVED**.

#### 4.2 TSG\_N#7 Meeting Reports.

**N3-000141: CN#7 Draft Meeting Report.** Presented by David Boswarthick, MCC.

**CONTENT:** Contains the latest version of the draft meeting report for the TSG\_N#7 meeting held in Madrid, March 2000.

**DISCUSSION:** The CN#7 meeting report was completed and distributed by the MCC at the end of the meeting. It has been open for comments by e-mail, and these comments have been integrated in the revised meeting report presented in this document.

**RESULT:** The document was **NOTED for information to N3**.

**N3-000140: N3 Status Report to TSG\_N#7.** Presented by CN3 Chairman

**CONTENT:** Contains the status report presented by N3 Chairman to the N3 TSG\_N#7 meeting held in Madrid, March 2000. This status report was agreed by TSG\_N.

**RESULT:** The document was **NOTED for information to N3**.

**N3-000139: Notice from TSG\_N#7 to N3.** Presented by CN3 Chairman.

**CONTENT:** Contains the email sent to N3 by Norbert summarising the outcome of the CN Plenary meeting #7. The main topics included:-

1. The status report given in tdoc NP-000041 was accepted.
2. Fax: Version 1.1.0 of TS 23.146 was acknowledged. The Work Item was moved from R'99 to R'00. However, CN3 is urged to finish this work as soon as possible.
3. Data: TR 23.910 version 2.0.0 was approved and the version number was increased to 3.0.0. The TR is now under change request control.
4. All of the CN3's change requests were approved.
5. The Work Item Description Sheet on Multimedia (NP-000051) was approved.
6. New Chairman of CN is Stephen Hayes (Ericsson, T1P1). New Vice Chairman is Ian Park (Vodafone, ETSI) beside the existing one: Dr. Masami Yabusaki (NTT DoCoMo Europe, ETSI).
7. CN2 was closed. Instead of this, 3 new Working Groups were established:
  - CN2: Camel
  - CN4: MAP
  - CN5: OSA
8. There was no decision on the work split for R'00 / IP based Mobile Networks in CN. At the moment this work will be continued in so-called ad hoc meetings until a decision can be made and the work is mature enough to be handled in CN WGs. The next ad hoc will be on 13/14.4.2000 in Helsinki hosted by Nokia and another one very likely in the beginning of May in UK offered by BT.

**RESULT:** The document was **NOTED for information to N3**.

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## 5 Reports / Liaisons from other groups

**N3-000159: Request for clarification on Transfer Delay value for the Streaming class.**

Presented by Erik of Ericsson

**CONTENT:** Contains a LS from S2 where they request further clarification from CN3 on the reason behind the value of <250 ms for the Transfer Delay in the Streaming class, and the choice to map the non-transparent data bearer service to this class.

**DISCUSSION:** Additional information from Erik: Some discussions have taken place within S2, where they suggest 500ms as the lower limit.

A Proposed response to this LS is provided by Erik in **N3-000153**

**RESULT:** The LS was **NOTED**.

**N3-000153: Response to LS (S2-000604) on Clarification on Transfer Delay value for the streaming class.** Presented by Erik of Ericsson.

**CONTENT:** Contains a proposed LS from N3 to S2 relating to their LS (S2-000604 / N3-000159), where S2 request clarification on N3s choice of transfer delay value.

**DISCUSSION:** N3 confirms the proposal to keep the streaming class, as opposed to conversational class.

Addition of Erik as a contact person.

**RESULT:** The document was **REVISED to 0170**

↓ **REVISED** ↓

**N3-000170: REV. Response to LS (S2-000604) on Clarification on Transfer Delay value for the streaming class.** Presented by Erik of Ericsson.

**RESULT:** The document was **APPROVED to be SENT**

**N3-000157: Liaison Statement on Push Services for GPRS.**

**CONTENT:** Contains a LS from S1 to S2, copied N3 for information. S1 requests the use of dynamic IP address for push services because of the convenience, and easier management. S1 would like to realise push services to users that are active and inactive.

**DISCUSSION:** The Issue was already tackled by N3 in the Sophia meeting #8, and a LS has been sent from N3 to S1/S2.

This topic should be re-visited once N3 have received the reply.

The contact person on the LS is from NTT DoCoMo. Hagiwara-San kindly offered to contact this person and check on progress, and what N3 should do with this LS.

Later in the meeting it was clarified by Hagiwara-San that N3 was not requested to do any action.

**RESULT:** The LS was **NOTED for information to N3.**

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## 6 Administrative issues

### 6.1 Project Co-ordination.

**N3-000162: Examples of Features, Building Blocks and Work Tasks.** Presented by David B of MCC.

**CONTENT:** The document contains a PowerPoint presentation with examples of Features, Building Blocks and Work Tasks.

**RESULT:** The document was **NOTED for information to N3.**

- N3-000163:** **Proposed definitions of "Feature", "Building Block" and "Work Task".** Presented by David B of MCC.
- CONTENT:** The document contains a clear definition of the terms "Feature", "Building Block" and "Work Task".
- RESULT:** The document was **NOTED for information to N3.**
- N3-000164:** **Proposal for the Release 2000 Features, Building Blocks and Work Tasks v.0.1.0.** Presented by David B of MCC.
- CONTENT:** This document is an initial attempt to describe the work items of R00 in terms of their function as feature, building block and work task. This top-down structure is established to ease monitoring the work progress for R00.
- This document will be presented in v.0.10 to all the 3GPP Working Groups.
- The purpose of the presentations to all the WGs is to collect comments so that a stable version can be reached on April, 20th.
- DISCUSSION:** The document was discussed on-line. N3 did not fully agree with some of the features, and found it difficult to provide Work Tasks for those Features.
- Norbert revised the document to include input from the circuit SWG, and Graham revised the document to include input from the packet SWG.
- RESULT:** The document was **DISCUSSED and REVISED to 0171 (CS) and 172 (PS).**
- N3-000171:** **Counter-Proposal for the Release 2000 Features, Building Blocks and Work Tasks from N3 (CS).** Presented Norbert.
- CONTENT:** Contains the counter-proposal from N3 Circuit switched SWG. The original S2 proposal has been commented upon, with the addition and modification of various work items that relate to the work as by within N3.
- DISCUSSION:** Bearer Modification is changed to Service Modification because the related Work Item Description Sheet was changed accordingly.
- RESULT:** The document was **MERGED with 0172 into 0199.**
- ↓ **MERGED** ↓
- N3-000172:** **Counter-Proposal for the Release 2000 Features, Building Blocks and Work Tasks from N3 (PS).** Presented by Graham.
- CONTENT:** Contains the counter-proposal from N3 Packet switched SWG. The original S2 proposal has been commented upon, with the addition and modification of various work items that relate to the work as by within N3.
- DISCUSSION:**
- RESULT:** The document was **MERGED with 0171 into 0199.**
- ↓ **MERGED** ↓
- N3-000199:** **Merged Counter-Proposal for the Release 2000 Features, Building Blocks and Work Tasks from.**
- CONTENT:** Contains the complete counter-proposal from N3. The original S2 proposal has been commented upon, with the addition and modification of various work items that relate to the work as perceived within N3.
- DISCUSSION:** The document was agreed to be taken to the joint CN/S2 meeting in Helsinki, and it will also be sent to the ICG co-ordinators.
- RESULT:** The document was **AGREED**
- N3-000161:** **Proposal for the Release 2000 Features, Building Blocks and Work Tasks v.0.9 as revised by N4.**

**CONTENT:** This document contains N4s comments on S2s initial attempt to describe the work items of R00 in terms of their function as feature, building block and work task. This top-down structure is established to ease monitoring the work progress for R00, as detailed in companion documents.

**DISCUSSION:** N4 have provided a lot of useful comments to the initial S2 proposal. As well as identifying their work areas, N4 have made suggestions as to where other SWGs including N3 may have responsibilities.

N3 took N4 work into consideration when preparing their input to S2.

**RESULT:** The document was **NOTED for information to N3**.

## 6.2 Information

No input documents on this subject

## 6.3 Next meetings, allocation of hosts

**N3-000138: Future N3 meetings** Presented by Norbert.

**CONTENT:** Contains the listing of future N3, as well as other CN SWG meetings

**DISCUSSION: Note.** TSG\_N plenary meeting in Hawaii has moved forward one week, and the TSG\_SA meeting will extend from 3 to 4 days.

As a result the CN3#12 meeting has to move from its original date.

Also due to the fact that R00 work items will not be fully clarified until June Plenaries, it was proposed to move the N3#11 meeting back. Ericsson will check the Hotel availability for these dates.

The dates and hosts for September and October meetings will be further studied in the May CN3#10 meeting.

**RESULT:** The document was **DISCUSSED**

Meeting	Date	Host, Location	Comments
TSG-CN3#10	22 – 26 May 2000	T1P1 USA, Hawaii	same location as N1 and N2
TSG-CN3#11	10 <sup>th</sup> – 14 <sup>th</sup> July 2000 [moved]	Ericsson - Oslo, Norway	<b>Date to be agreed</b>
TSG-CN3#12	Date moved [Sep 2000]	T1P1 – USA	<b>Date to be agreed</b>
TSG-CN3#13	17th – 19th Oct 2000	Alcatel, Stuttgart	<b>Date to be agreed</b>
TSG-CN3#14	13 <sup>th</sup> – 17 <sup>th</sup> Nov 2000	<b>Host required</b>	<b>Host required</b>



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## 7 Circuit Switched Work Items:

### 7.1 Circuit switched Bearers in UMTS

**N3-000149:** CR to 23.910 v3.0.0 on Deletion of T 56 Kbit/s for UDI. Presented by Erik of Ericsson.

**CONTENT:** Removes the T 56Kbit/s which is not relevant for UDI.

**RESULT:** The CR was **AGREED**

**N3-000151:** CR to 27.001 v3.4.0 on Missing Asymmetry preference indication in Table B. 5.a. Presented by Erik of Ericsson.

**CONTENT:** Adds the Missing Asymmetry preference indication in Table B. 5.a.

**RESULT:** The CR was **AGREED**

**N3-000156:** Discussion on SDU segmentation on the lu UP in case of 56 and 64 kbit/s T bearer services.

**RESULT:** The document was **WITHDRAWN**

**N3-000178:** Discussion on QoS attribute (Residual Bit Error Ratio) in Transparent Data. Presented by Hagiwara San of NTT DoCoMo

**CONTENT:** Contains a report on the QoS attribute (Residual Bit Error Ratio) in Transparent Data, and includes extracts of the various mails and LSs sent between S1 and N3.

NTT DoCoMo asks N3 to examine the following:

*Section 5.2.2 in 23.910 has already described that RBER is operator tuning. But it is still unclear that RBER for each transparent bearer type can be different. N3 should discuss necessity for that. If N3 agree to that, a CR to 23.910 shall be made. If not, N3 should issue LS back to S1 including result of discussion.*

**DISCUSSION:** Clarification, a radio bearer for  $10^{-4}$  does already exist.

Juha suggests that this is not a R99 issue. Changes need to be made to set-up signalling to the fixed network. NTT do not support this view, and believe the only change is within the mobile network.

In summary - BER is presently specified as 'operator tuning'. NTT ask – the possibility to allow the operators to allow different tuning for *multimedia* and *bit transparent*.

A CR shall be made to 23.910 to reflect these changes. [**Provided in N3-000184**]

**RESULT:** The document was **DISCUSSED**

**N3-000184:** CR to 23.910 v3.0.0 on QoS attribute (Residual Bit Error Ratio) in Transparent Data. Presented by Hagiwara San of NTT DoCoMo

**CONTENT:** **Reason for Change:** Residual bit error ratio (RBER) for each transparent bearer type can be different because each transparent bearer type has different requirement for RBER. For example, if operator assumes that  $RBER=10^{-4}$  is enough for Multimedia, but Bit Transparent Mode should have high quality in consideration of connection to N-ISDN, the operator may choose following values.

$RBER=10^{-4}$  for Multimedia

$RBER=10^{-6}$  for Bit Transparent Mode

Therefore, it should be added to TR 23.910 so that operator may choose different values for different bearer type.

**DISCUSSION:** Suggested suggests keeping  $10^{-4}$  in 2<sup>nd</sup> column. Also including a reference to 23.107 allowing the removal to of BER values.

A change will also be required to 27.001 to reflect this.[N3-000189]

**RESULT:** The document was **REVISED to 0188**

↓ **REVISED** ↓

**N3-000188:** **REV. CR to 23.910 v3.0.0 on QoS attribute (Residual Bit Error Ratio) in Transparent Data.** Presented by Hagiwara San of NTT DoCoMo

**RESULT:** The CR was **AGREED**

**N3-000189:** **CR to 27.001 v3.3.0 on QoS attribute (Residual Bit Error Ratio) in Transparent Data.** Presented by Hagiwara San of NTT DoCoMo

**RESULT:** The CR was **AGREED**

**N3-000179:** **CR to 23.910 v3.0.0 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**CONTENT:** The document contains a CR that adds NT services which guarantees 28.8kbit/s or 57.6kbit/s to TR23.910.

**DISCUSSION:** Some modifications to the text of Note 1.

A CR is also required to 27.001. [Provided in N3-000186]

**RESULT:** The document was **REVISED to 0185**

↓ **REVISED** ↓

**N3-000185:** **Rev CR to 23.910 v3.0.0 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**DISCUSSION:** Deletion of sentence in Note 1. Also keep 14.4 in 2<sup>nd</sup> column, whilst allowing the operator to choose other rates.

**RESULT:** The document was **REVISED to 0190**

↓ **REVISED** ↓

**N3-000190:** **Rev CR to 23.910 v3.0.0 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**DISCUSSION:** Revision to the text of Note 1.

**RESULT:** The document was **REVISED to 0196**

↓ **REVISED** ↓

**N3-000196:** **Rev CR to 23.910 v3.0.0 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**RESULT:** The CR was **AGREED**

**N3-000186:** **CR to 27.001 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**DISCUSSION:** Same comments as were made to 0185

**RESULT:** The document was **REVISED to 0191**

↓ **REVISED** ↓

**N3-000191:** **Rev. CR to 27.001 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**DISCUSSION:** Modification to the text of Note 1.

**RESULT:** The document was **REVISED to 0197**

↓ **REVISED** ↓

**N3-000197:** **Rev. CR to 27.001 on Adding the value of GBR of NT services.** Presented by Hagiwara San of NTT DoCoMo

**RESULT:** The document was **AGREED**

### 7.1.1 Handover

**N3-000131:** **CR to 29.007 v3.4.0 on Handover between 3G MSCs.** Presented by Achim of Alcatel.

**CONTENT:** To support handover between two 3G MSCs the definition of the user plane protocols on the interface between the anchor and the visited MSC is required. The definition of this protocol is missing.

**DISCUSSION:** With a TDM backbone – A-TRAU' would be used, however in a pure ATM network, lu UP would be used.

**RESULT:** The CR was **REVISED to 0176**

↓ **REVISED** ↓

**N3-000176:** **Rev. CR to 29.007 v3.4.0 on Handover between 3G MSCs.** Presented by Achim of Alcatel.

**RESULT:** The CR was **AGREED**

### 7.1.2 Lower user rates for NT services

**N3-000160:** **CR [for information] to 22.002 on Lower User Rates in UMTS for Circuit Switched Data Services.** Presented by Norbert

**CONTENT:** Corrections and clarifications based on N3 proposal. This CR aligns stage 1 with rel 99 system functionality.

**RESULT:** The document was **NOTED**

**N3-000119:** **CR to 29.007 v3.3.0 on Rejection of lower user rates.** Presented by Norbert

**CONTENT:** Contains a CR that was approved at the last N3 meeting, but put on hold pending confirmation from S1, that they agree with the change, and modify 22.002 accordingly.

**DISCUSSION:** Some comments were made to the notes, also the CR is made to a previous version.

**RESULT:** The document was **REVISED to 0177**

↓ **REVISED** ↓

**N3-000177:** **REV. CR to 29.007 v3.4.0 on Rejection of lower user rates.** Presented by Erik

**DISCUSSION:** Change to the text of Note 15.

**RESULT:** The document was **REVISED to 0192**

↓ **REVISED** ↓

**N3-000192:** **REV. CR to 29.007 v3.4.0 on Rejection of lower user rates.** Presented by Erik

**DISCUSSION:** The CR is agreed within N3, on the condition that S1 agree the corresponding CR to 22.002 this week. MCC will check this and inform N3 of the outcome.

**NOTE: Confirmation on 18<sup>th</sup> April that the CR to 22.002 has been approved by S1.**

**RESULT:** The document was **AGREED**

## 7.2 Facsimile

**N3-000158: Discussion Paper; Current state of 23.146.** Presented by Mr Erik, of Ericsson.

**CONTENT:** Contains a discussion paper presented to TSG\_N#7 in Madrid on the current state of 23.146.

**DISCUSSION:** Hi lights from the main issues raise in the document:

- 1) There is missing consensus in N3 on the model applied for the UE.
- 2) The document is inconsistent with respect to the application of the UE model.
- 3) The document is unclear, imprecise and thus prone to misinterpretations.
- 4) The document is not aligned with other specifications, in particular 27.007 and 27.002.
- 5) The language needs improvements.

**RESULT:** The document was **NOTED as a basis for the discussion of 0168**

**N3-000148: Response of "Current state of 23.146.** Presented by NTT DoCoMo.

**CONTENT:** Contains the response from NTT to the Ericsson document **NP-000158**.

**DISCUSSION:** NTT have provided answers to Ericssons concerns.

**RESULT:** The document was **NOTED as a basis for the discussion of 0168**

**N3-000132: 3G TS 23.146 version 1.1.0.** Presented by NTT DoCoMo.

**CONTENT:** Contains changes to v1.1.0 of this TS that incorporate the changes and suggestions made since the last N3 meeting.

**DISCUSSION:** Some minor editorial modifications were made before the meeting

**RESULT:** The document was **REVISED to 0168 before the meeting.**

↓ **REVISED** ↓

**N3-000168: Rev. 3G TS 23.146 version 1.1.0.** Presented by NTT DoCoMo.

**CONTENT:** Contains changes to v1.1.0 of this TS that incorporate the changes and suggestions made since the last N3 meeting.

**DISCUSSION:** Comments to the document:-

***During the Thursday and Friday session, the document 0168 was edited on-line. The document was flashed up on the screen and comments made to each section.***

The document must be updated with the latest TS template and the ANNEXES re-numbered.

Annex B (ASN.1 Notation) must be **NORMATIVE**.

SDL Diagrams must be **NORMATIVE**. ALSO SDL source code to be provided to MCC.

Addition of a sentence to the ANNEX expressing that SDLs will be contained as a reference model for implementations. The external behaviour of an implementation shall comply with this model however internal behaviour may be implementation dependent.

Need to align the notation for the term Fax Adapter. Suggest T-FA and R-FA.

**COMMENTS SHALL BE PROVIDED TO THE DIAGRAMS BY E-MAIL**

**RESULT:** The document was **REVISED to 0200**

↓ **REVISED** ↓

**N3-000200: Rev. 3G TS 23.146 version 1.2.0.**

**CONTENT:** Contains a clean version of 23.146 v1.2.0, which incorporates the changes made to document 0168 – without revision marks..

**DISCUSSION:** NTT DoCoMo shall provide a version 1.3.0 with revision marks to v1.2.0 by 5<sup>th</sup> May (2 weeks before CN#10).

23.146 v1.3.0 will resolve the remaining issues indicated as ACTION POINTS in N3-000200.

The CR to 27.007 shall be presented to T2 and copied to N3 for information.

The main points are:

Technical:

Disconnect procedure timing see section 7.2.6. *The outband Disconnect procedure triggered by the PSTN FAX may release the call before the R-FA completed the document transmission to the R-FAX – hence results in an abnormal termination of the transmission. This problem is caused by the independent handling of the document transmission on Transmitting and Receiving side.*

The disconnect procedure must be checked off-line. NTT shall provide clarification on REQUIREMENT of DCN CONFIRM PACKET, in most cases this packet will not be received by the transmitting side as the call will be cleared via by the out band Disconnect procedure. To overcome this problem it is necessary to delay the DCN from T-FAX

Clarification of the 1<sup>st</sup> case in 7.2.2.3, provision of FTT and CFR.

Provide references from the text to the figures and SDLs

Formatting and Style:

Application of the 3T TS template and styles throughout the document.

Usage of the correct terms as defined in the 3GPP Drafting Rules.

Use of the correct Drawing Software for the diagrams

Provision of the SDL source codes

**△ ACTION: N3 delegates shall provide comments to section 7.2.3.1 and ANNEXES C and D to the N3 exploder.**

**RESULT:** The document was **DISTRIBUTED BY E-MAIL AFTER THE MEETING.**

### 7.3 Multimedia

**N3-000152:** **CR to 27.001 v3.4.0 on Application of multimedia to GSM.** Presented by Erik of Ericsson.

**CONTENT:** Introduces the changes so that Multi media shall also be applicable to GSM.

**RESULT:** The document was **AGREED**

## 7.4 Services clean up R99

**N3-000137:** **Discussion paper on Bearer Service 30.** Presented by Norbert of Siemens.

**CONTENT:** Siemens propose the following:

The BS 30 NT was mostly specified under the headline "packet access". Therefore, some material specifying the BS 30 NT was removed and has to be incorporated again in a modified manner.

1. Material from 29.006 relevant for BS 30 NT should be included in 29.007 because it is now a normal service for interworking towards PSTN/ISDN.
2. The sections on support for packet services in 27.003 deleted in the last CN3 meeting should be replaced by appropriate material.
3. The diagrams in 27.001 for BS 30 should be modified.

**DISCUSSION:** Question from Erik, is BS 30 NT really implemented in the mobile network, hence is the change required? Erik suggested putting on hold the CRs to allow companies to check with their S1 delegates.

**RESULT:** The document was **DISCUSSED**

**N3-000133:** **CR to 29.007 v3.4.0 on Removal of packet access service.** Presented by Norbert of Siemens.

**CONTENT:** The packet access services were removed, but BS 30 NT still exists. Needed information coming from 29.006 (that was removed as a consequence of the removal of the packet access service) and needed for the specification of BS 30 NT have to be incorporated in 29.007.

**DISCUSSION:** Requirement to check with S1 on certain elements of this work

**RESULT:** The document was **POSTPONED until CN3#10**

**N3-000134:** **CR to 27.003 v3.3.0 on Removal of packet access service.** Presented by Norbert of Siemens.

**CONTENT:** The packet access services were removed, but BS 30 NT still exists. It allows a direct interworking between X.25 DTEs. The former CR 27.003-004 has removed all material concerning packet access and X.25. Needed information for the specification of BS 30 NT have to be incorporated again.

**DISCUSSION:** Requirement to check with S1 on certain elements of this work

**RESULT:** The document was **POSTPONED until CN3#10**

**N3-000135:** **CR to 27.001 v3.4.0 on Removal of packet access service.** Presented by Norbert of Siemens.

**CONTENT:** The packet access services were removed. This CR comprises the needed changes.

**DISCUSSION:** Erik mentioned that re-numbering of sections can be dangerous – especially if there are references to those sections in other specs. Norbert will check this

**RESULT:** The document was **REVISED to 0187.**

⇓ **REVISED** ⇓

**N3-000187:** **Rev. CR to 27.001 v3.4.0 on Removal of packet access service.** Presented by Norbert of Siemens.

**CONTENTS:** Includes the addition of missing reference.

**RESULT:** The document was **AGREED**

## 7.5 UMTS maintenance

**N3-000136:** **CR to 29.007 v3.4.0 on Faxes.** Presented by Norbert of Siemens.

**CONTENT:** GSM 02.03 on teleservices was transferred to 3G 22.003. So, the notations TS 61 and 62 are also applicable for 3G. Corrections are presented here to in table 7A of 29.007.

**RESULT:** The document was **AGREED**

## 7.6 GSM maintenance

**N3-000173:** **Discussion paper on RLP timer T4 in UMTS.** Presented by Juha, of Nokia.

**CONTENT:** CN3 is invited to optimise the specifications concerning the timer T4.

At least the following possibilities exist:

- Leave the TS 24.022 as it is.

- Allow negotiation of T4 downwards, down to zero. In this case single mode UMTS phones (or non-GSM mode UMTS phones) can negotiate T4 to zero in the beginning of the call.

- Define T4 to be zero in case of UTRAN. In this case both the MSC IWF and the MS use a zero T4 when UTRAN is used. In a handover to GSM both parties automatically adopt the GSM value of T4. In a handover from GSM to UMTS both parties automatically start using zero T4.

**DISCUSSION:** Erik, not in favour of 2<sup>nd</sup> option [*negotiation of T4 downwards*], and support the 3<sup>rd</sup> option. Achim also supported the 3<sup>rd</sup> solution [*define T4 to be zero in case of UTRAN*].

Erik suggested possibility of **Not using the timer T4** in UMTS. A CR to 24.022 must be generated to remove T4 for UMTS. This CR is presented in **N3-000180**.

We shall be able to use RLP versions 1 and 2.

**RESULT:** The document was **DISCUSSED**

**N3-000180:** **CR to 24.022 v3.2.0 on theT4 Timer.** Presented by Juha, of Nokia.

**CONTENT:** **Reason for Change:** Timer T4 is not required in when UTRAN is used because there is no multi-link configuration in the traffic channel with UTRAN.

**DISCUSSION:** The text is incorrect as it also relates to Timers T1 and T2 as opposed to T4 only.  
Addition of a new note for T4 only.

**RESULT:** The document was **REVISED to 0193**

↓ **REVISED** ↓

**N3-000193:** **Rev. CR to 24.022 v3.2.0 on theT4 Timer.** Presented by Juha, of Nokia.

**DISCUSSION:** **NOTE to MCC - MISTAKE IN HEADER of 24.022 v3.2.0 from PAGE 6 onward**

**RESULT:** The CR was **AGREED**

**N3-000143:** **Discussion paper on Harmonisation of the split/combine function.** Presented by Juha, of Nokia.

**CONTENT:** CN3 is invited to harmonise the TS 04.21 by applying the operation specified for TCH/F14.4 also to the other multislot cases (i.e. TCH/F9.6 and TCH/F4.8).

**DISCUSSION:** Erik asks why is the change needed if it has no impact on implementation.

**Response** Although do not need to do a change, it could improve implementation. The advantage is if we want to have DTX over longer period of time, we may have DTX on one or more channels, as opposed to distributed DTX on all channels.

- RESULT:** The document was **DISCUSSED**. It was agreed to correct this by a CR, to 04.21 see **N3-000144**.
- N3-000144:** **CR to 04.21 v8.0.0. on Harmonisation of the split/combine function.** Presented by Juha, of Nokia.
- CONTENT:** The distribution of RLP frames in the available subchannels is limited to be cyclical for TCH/F9.6 whereas in the newer TCH/F14.4 case is more flexible offering the possibility of optimisation of the use of the available channels.
- RESULT:** The CR was **AGREED**
- N3-000145:** **CR to 04.21 v7.0.3. on Harmonisation of the split/combine function.** Presented by Juha, of Nokia.
- CONTENT:** The distribution of RLP frames in the available subchannels is limited to be cyclical for TCH/F9.6 whereas in the newer TCH/F14.4 case is more flexible offering the possibility of optimisation of the use of the available channels.
- RESULT:** The CR was **AGREED**
- N3-000146:** **CR to 04.21 v6.0.0. on Harmonisation of the split/combine function.** Presented by Juha, of Nokia.
- CONTENT:** The distribution of RLP frames in the available subchannels is limited to be cyclical for TCH/F9.6 whereas in the newer TCH/F14.4 case is more flexible offering the possibility of optimisation of the use of the available channels.
- RESULT:** The CR was **AGREED**
- N3-000147:** **CR to 04.21 v5.6.1. on Harmonisation of the split/combine function.** Presented by Juha, of Nokia.
- CONTENT:** The distribution of RLP frames in the available subchannels is limited to be cyclical for TCH/F9.6 whereas in the newer TCH/F14.4 case is more flexible offering the possibility of optimisation of the use of the available channels.
- RESULT:** The CR was **AGREED**
- N3-000150:** **Contains CR to 27.001 v3.4.0 on WAIUR in case of HO between UMTS and GSM.** Presented by Erik of Ericsson.
- CONTENT:** Contains the CR and a supporting discussion paper.
- The value of the WAIUR signalled by the UE cannot exceed the product of mTCH and the highest value of the ACC. For instance, the MS may not signal WAIUR=57.6 unless the mTCH=2 and TCH/F28.8 is signalled in the ACC or mTCH=4 and TCH/F14.4 is in the ACC. This rule has a drawback. A dual mode UMTS+GSM UE may be capable of supporting a higher user rate in UMTS than in GSM and the user may want to take advantage of this by signalling a higher value for WAIUR. As long as the user is connected through a UMTS there is no problem, because mTCH and ACC are ignored. However, if there is a handover to GSM or if the call starts in GSM, the legitimacy of the parameter combination is checked and the call may be rejected.
- Ericsson proposes to loosen the rules in Section B.1.12.2 by allowing higher values of the WAIUR parameter.
- DISCUSSION:** The CR should be for R99, and not create the R00 specification at this point..
- The effect on 02.34 and 03.34 needs to be checked.
- RESULT:** The CR was **REVISED to 0183**



**N3-000183:** **REV.CR to 27.001 v3.4.0 on WAIUR in case of HO between UMTS and GSM.**  
Presented by Erik of Ericsson.

**RESULT:** The CR was **AGREED**

## 7.7 Other Work Items

**N3-000154:** **Proposed WI description for Bearer Modification without pre-notification between Speech and FAX.**

**RESULT:** The document was **REVISED before the meeting to 0165**

↓ **REVISED** ↓

**N3-000165:** **REV. Proposed WI description for Bearer Modification without pre-notification between Speech and FAX.** Presented by Mr Toshiyuki Tamura, of NEC.

**CONTENT:** Contains a proposed W.I sheet for Bearer Modification without pre-notification between Speech and FAX

During the SA1#6 meeting, S1 had issued LS (S1-991034) as a response for the LS from N3 (N3-99373) which asked service scenario and requirements of bearer modification without pre-notification. S1-991034 explained detail requirements on the candidates for bearer modification without pre-notification. Then, on the N3#8 meeting, N3 recognised that no requirements were detected that seem to be technically impossible. And N3 asked to publish the work item description regarding this feature.

NEC also asks for additional supporting companies for this work item.

**DISCUSSION:** Erik asks what the additional features of this new Work Item above the existing work item for R99.

Juha mentions possible problems with the realisation of this work item.

Also 23.146 needs to be added as an impacted specification.

This work relies on transcoder free operation Work Item being completed.

MMI and AT commands must be added.

Also the MS is impacted. This needs to be added to the document.

Note: We already have an alternate teleservice TS 61. The only difference with this new W.I is the initial signalling.

**We should re-use TS 61 where possible. This new work item should specify only new aspects.**

**There are a number of inconsistencies in the document that must be rectified.**

**RESULT:** The document was **MERGED with 0166 into 0181**

**N3-000155:** **Proposed WI description for Bearer Modification without pre-notification between Speech and Modem.** Presented by Mr Toshiyuki Tamura, of NEC.

**RESULT:** The document was **REVISED to 0166**

↓ **REVISED** ↓

**N3-000166:** **Proposed WI description for Bearer Modification without pre-notification between Speech and Modem.**

**CONTENT:** Contains a proposed W.I sheet for Bearer Modification without pre-notification between Speech and Modem

**DISCUSSION:** The document was not presented. Similarly to the W.I sheet in N3-000165, this document contains inconsistencies and must be revised.

**RESULT:** The document was **MERGED with 0165 into 0181**

↓ **MERGED** ↓

- N3-000181:** **MERGED. WI description for Bearer Modification without pre-notification between Speech and Modem / Fax.** Presented by Daisuke Igarashi, of NTT DoCoMo
- CONTENT:** Contains a MERGED W.I sheet for Bearer Modification without pre-notification between Speech and Modem and Speech and Fax.
- DISCUSSION:** Reference to subscription checking must to be added. Also the modifications to Charging Aspects needs to be reflected.
- It is not clear if the Work Item is for Speech to Modem / Fax only or if it is two way swap. NTT will modify the text to reflect the 2-way nature of the swap function.
- Also AT Commands reference is missing 27.007, and facsimile spec 23.146.
- T2 and N4 must be added to secondary responsibility.
- RESULT:** The document was **REVISED to 0194**
- ↓ **REVISED** ↓
- N3-000194:** **Rev. Proposed WI description for Bearer Modification without pre-notification between Speech and Modem / Fax.** Presented by Daisuke Igarashi, of NTT.
- CONTENT:** Contains a MERGED W.I sheet for Bearer Modification without pre-notification between Speech and Modem and Speech and Fax.
- DISCUSSION:** Removal of word 'concerned' and slight modification of the text..
- RESULT:** The document was **REVISED to 0198**
- ↓ **REVISED** ↓
- N3-000198:** **Rev. Proposed WI description for Bearer Modification without pre-notification between Speech and Modem / Fax.** Presented by Daisuke Igarashi, of NTT.
- RESULT:** The document was **AGREED**
- N3-000167:** **Proposed LS on Bearer Modification without Pre-notification.** Presented by NEC.
- DISCUSSION:** Title of Work item changed from BEARER to SERVICE modification without pre-notification. Reason for change is to indicate the swap between SERVICES as opposed to the bearer modification within the GSM alternate services.
- RESULT:** The document was **REVISED to 0182 before presentation**
- ↓ **REVISED** ↓
- N3-000182:** **Rev. LS on Service Modification without Pre-notification.** Presented by Daisuke Igarashi, of NTT.
- DISCUSSION:** Addition of T2 to the LS and request action upon their effected specification.
- RESULT:** The document was **REVISED to 0195**
- ↓ **REVISED** ↓
- N3-000195:** **Rev. LS on Service Modification without Pre-notification.** Presented by Daisuke Igarashi, of NTT.
- RESULT:** The document was **APPROVED**
- N3-000174:** **Asymmetric EDGE channels** Presented by Juha of Nokia.
- CONTENT:** Contains a discussion paper that invites CN3 is invited to decide how to harmonise the specifications with regards to the issue of Asymmetric EDGE channels.
- Certain two-channel combinations are available in the radio network but cannot be requested by the user or MS (because the network is not allowed to allocate such a combination when the MS requests an uplink or downlink bias.
- DISCUSSION:** Erik questioned the use of these two-channel combinations, and would like time to study this further.

It was suggested that this work is not urgent and it can be postponed until the next meeting and discussed by e-mail until then.

**RESULT:** The document was **POSTPONED until N3#10**.

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## **8 Packet Switched Work Items**

### **8.1 UMTS Maintenance**

No input here

### **8.2 GPRS Maintenance**

No input here

### **8.3 Other Work Items**

**N3-000175: DHCP end-to-end issues** Presented by Laurent Andriantsiferana, of Alcatel France.

**CONTENT:** We propose to update 3G TS 29.061 as follows:

- When inter-working with DHCP on the Gi interface, the PDP address needs not to be updated in the MT. However an update to 23.060 is also needed, the update PDP context message towards the MT shall be optional.

- 3G TS 29.061 shall clearly specify that using DHCP, the allocated PDP address is the same during the corresponding PDP session. This can be achieved either by using infinite DHCP lease, or to configure the DHCP server to reassign the same IP address when the lease time expires.

**DISCUSSION:** As the DHCP server is External – questions were raised as how to specify this. Also problems may arise if an IP address changes during the session without the GGSN/SGSN being aware of this change.

Note, this is R99 maintenance. It has been discussed in S2, and all that is required is a change to 29.061.

Due to the outstanding issues, Graham proposed off-line e-mail discussion to move this topic forward.

**RESULT:** The document will be **DISCUSSIED via E-mail**

## 9 Output of CN3#9 Meeting

### 9.1 Work Items

The following new Work items were agreed by N3 to be sent to the next TSG\_N plenary for Approval:

DOC N3-00	Subject	Release	1 <sup>st</sup> Respo.	2 <sup>nd</sup> Respo.	Delivery
0198	Service Modification without pre-notification between Speech and FAX / between Speech and Modem	R00	N3	N1,N2,T2	Dec 2000

### 9.2 Liaison Statements

The following Liaison Statements are agreed to be sent by N3:

DOC N3-00	Subject	To	Cc	Attachment	Sent
0170	Clarification on Transfer Delay value for the streaming class.	S2		None	17/04/00
0195	Bearer Modification without Pre-notification	N1, N4, T2		N3-000198	17/04/00

### 9.3 Change Requests

The following CRs will be sent to TSG CN and / or SMG Plenary for approval:-

Tdoc #	Spec	CR #	Rel	Tdoc Title	CAT	Version	WI
N3-000144	04.21	A018	R99	Harmonization of the split/combine function,	A	8.0.0	GSM maintenance
N3-000145	04.21	A017	R98	Harmonization of the split/combine function,	A	7.0.3	GSM maintenance
N3-000146	04.21	A016	R97	Harmonization of the split/combine function,	A	6.0.0	GSM maintenance
N3-000147	04.21	A015	R96	Harmonization of the split/combine function,	F	5.6.1	GSM maintenance
N3-000196	23.910	003	R99	Adding the value of GBR of NT services	F	3.0.0	Circuit Switched Bearers in UMTS
N3-000188	23.910	002	R99	Residual bit error ratio in Transparent Data	F	3.0.0	Circuit Switched Bearers in UMTS
N3-000149	23.910	001	R99	56 kbit/s T not applicable to UDI	F	3.0.0	CS Data Services
N3-000193	24.022	004	R99	RLP timer T4 in UMTS	F	3.2.0	UMTS maintenance
N3-000189	27.001	016	R99	Residual bit error ratio in Transparent Data	F	3.4.0	Circuit Switched Bearers in UMTS
N3-000151	27.001	015	R99	Missing Asymmetry preference indication in Table B. 5.a	F	3.4.0	CS Data Services
N3-000152	27.001	018	R99	Application of multi media in GSM	F	3.4.0	Multimedia
N3-000197	27.001	017	R99	Adding the value of GBR of NT services	F	3.4.0	Circuit Switched Bearers in UMTS
N3-000183	27.001	020	R99	WAIUR in case of HO between UMTS and GSM	F	3.4.0	CS Bearers in UMTS
N3-000187	27.001	019	R99	Removal of packet access service	F	3.4.0	R99 service clean-up
N3-000136	29.007	017	R99	Fax	F	3.4.0	TEI
N3-000192	29.007	016	R99	Rejection of lower user rates	F	3.4.0	CS Data Services
N3-000176	29.007	015	R99	Handover between 3G MSCs	F	3.4.0	CS Data Services

### 9.4 New TRs / TSs

The following TR/TSs were agreed by N3 to be sent to the next TSG\_N plenary for Approval:

DOC	Type	Number	Version	Title

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## 10 Any other business

No other business.

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## 11 Close of meeting

The meeting was closed by the Vice-Chairman Achim, who has chaired the last two days of the meeting which were dedicated to facsimile issues.

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## Annex A: <PS SWG Report> None in this Meeting

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## Annex B: List of N3 Meeting Participants

The following delegates attended the CN3#8 meeting.

	First Name	Family Name	Company
Dr.	Erik Andreas	Colban	LM Ericsson
Mr.	Achim	Braun	Alcatel SEL
Mr.	David	Boswarthick	ETSI
Mr.	Juha	Räsänen	Nokia Networks
Mr.	Rune Werner	Wiik	LM Ericsson
Mr.	Graham	Heaton	Brand Communication Ltd.
Mr.	Laurent	Andriantsiferana	Alcatel
Mr.	Jean	Rzeznik	Alcatel France
Mr.	Mitsuru	Murata	NTT DoCoMo
Mr.	Toshitaka	Miura	NTT DoCoMo
Mr.	Toshiyuki	Tamura	NEC
Mr.	Paul	Jones	Vodafone
Mr.	Junichirou	Hagiwara	NTT DoCoMo
Mr.	Daisuke	Yokota	Lucent Technologies Japan Ltd.
Mrs.	Yoko	Mitera	NTT DoCoMo
Mr.	Henrik S.	Pedersen	Dansk Mobiltelefon I/S
Mr.	Daisuke	Igarashi	NTT DoCoMo
Mr.	Norbert	Klehn	Siemens AG
Mr.	Uwe	Föll	Siemens AG
Ms.	Chizuko	Yamada	NTT DoCoMo
Mr	Kevin J	Bye	BT Cellular Systems

## Annex C: List of documents

Full details can be found in the file [CN3#8-Tdoclist](#) on the meeting server.

TDoc #	Tdoc Title	Type	Spec	C_Version	Status
N3-000130	Draft Agenda	AGENDA			APPROVED
N3-000131	Handover between 3G MSCs	CR	29.007	3.4.0	REVISED to 0176
N3-000132	DRAFT CR TO TS 23.146, NT RT FAX	TR	23.146		REVISED to 0168
N3-000133	Removal of packet access service	CR	29.007	3.4.0	POSTPONED
N3-000134	Removal of packet access service	CR	27.003	3.3.0	POSTPONED
N3-000135	Removal of packet access service	CR	27.001	3.4.0	REVISED to 0187
N3-000136	Fax	CR	29.007	3.4.0	AGREED
N3-000137	Bearer Service 30	REPORT			DISCUSSED
N3-000138	N3 meeting dates	OTHER			DISCUSSED
N3-000139	Brief notice from CN#7 plenary to CN3	REPORT			NOTED
N3-000140	Status report of CN3 to CN#7 plenary	REPORT			NOTED
N3-000141	DRAFT Report of CN#7	REPORT			NOTED
N3-000142	DRAFT Report of last CN3#8	REPORT			REVISED to 0169
N3-000143	Harmonization of the split/combine function, discussion doc	OTHER			DISCUSSED
N3-000144	Harmonization of the split/combine function, discussion doc	CR	04.21	8.0.0	AGREED
N3-000145	Harmonization of the split/combine function, discussion doc	CR	04.21	7.0.3	AGREED
N3-000146	Harmonization of the split/combine function, discussion doc	CR	04.21	6.0.0	AGREED
N3-000147	Harmonization of the split/combine function, discussion doc	CR	04.21	5.6.1	AGREED
N3-000148	Response of "Current state of 23.146" (NP-00128)	REPORT			NOTED
N3-000149	56 kbit/s T not applicable to UDI	CR	23.910	3.0.0	AGREED
N3-000150	WAIUR in case of HO between UMTS and GSM	CR	27.001	3.4.0	REVISED to 0183
N3-000151	Missing Asymmetry preference indication in Table B. 5.a	CR	27.001	3.4.0	AGREED
N3-000152	Application of multi media in GSM	CR	27.001	3.4.0	AGREED
N3-000153	Proposed LS to S2 on Clarification on Transfer Delay value for the streaming class	LS OUT			REVISED to 0170
N3-000154	Proposed WI description for Bearer Modification without pre-notification between Speech and FAX	W.I SHEET			REVISED to 0165
N3-000155	Proposed WI description for Bearer Modification without pre-notification between Speech and modem	W.I SHEET			REVISED to 0166
N3-000156	Discussion on SDU segmentation on the lu UP in case of 56 and 64 kbit/s T bearer services				WITHDRAWN
N3-000157	Response to the Liaison Statement on Push Services for GPRS	LS IN			NOTED
N3-000158	comments on 23.146				NOTED
N3-000159	LS from S2 on Request for clarification on Transfer Delay value for the Streaming class	LS IN			NOTED
N3-000160	CR to 22.002 for lower user rates	[CR]	22.002		NOTED
N3-000161	N4 proposal on R00 Work Package				NOTED
N3-000162	R00 Work Program Examples				NOTED
N3-000163	Proposed definitions of "Feature", "Building Block" and "Work Task"				NOTED
N3-000164	Proposal for the Release 2000 Features, Building Blocks and Work Tasks v.0.10				NOTED
N3-000165	Proposed WI description for Bearer Modification without pre-notification between Speech and FAX	W.I SHEET			MERGED with 0166 into 0181
N3-000166	Proposed WI description for Bearer Modification without pre-notification between Speech and modem	W.I SHEET			MERGED with 0165 into 0181
N3-000167	Proposed LS on bearer modification without pre-notification	LS OUT			REVISED to 0182
N3-000168	DRAFT CR TO TS 23.146, NT RT FAX	TS	23.146		REVISED to 0200
N3-000169	DRAFT Report of last CN3#8	REPORT			APPROVED
N3-000170	Proposed LS to S2 on Clarification on Transfer Delay value for the streaming class	LS OUT			APPROVED
N3-000171	REV of S2s Proposal for the Release 2000 to include CS comments				MERGED with 0172 to 0199
N3-000172	REV of S2s Proposal for the Release 2000 to include PS comments				MERGED with 0171 to 0199
N3-000173	RLP Timer T4 in UMTS				DISCUSSED

<b>TDoc #</b>	<b>Tdoc Title</b>	<b>Type</b>	<b>Spec</b>	<b>C_Version</b>	<b>Status</b>
N3-000174	Asymmetric EDGE Channels				POSTPONED
N3-000175	DHCP End to End Issues				DISCUSSED via E-mail
N3-000176	Handover between 3G MSCs	CR	29.007	3.4.0	AGREED
N3-000178	Discussion on QoS attribute (Residual Bit Error Ratio) in Transparent Data				DISCUSSED
N3-000179	Adding the value of GBR of NT services	CR	23.910	3.0.0	REVISED to 0185
N3-000180	RLP timer T4 in UMTS	CR	24.022	3.2.0	REVISED to 0193
N3-000181	Proposed WI description for Bearer Modification without pre-notification between Speech and FAX and MODEM	W.I SHEET			REVISED to 0194
N3-000182	Proposed LS on bearer modification wither pre-notification	LS OUT			REVISED to 0195
N3-000183	WAIUR in case of HO between UMTS and GSM	CR	27.001	3.4.0	AGREED
N3-000184	Residual bit error ratio in Transparent Data	CR	23.910	3.0.0	REVISED to 0188
N3-000185	Adding the value of GBR of NT services	CR	23.910	3.0.0	REVISED to 0190
N3-000186	Adding the value of GBR of NT services	CR	27.001	3.4.0	REVISED to 0191
N3-000187	Removal of packet access service	CR	27.001	3.4.0	AGREED
N3-000188	Residual bit error ratio in Transparent Data	CR	23.910	3.0.0	AGREED
N3-000189	Residual bit error ratio in Transparent Data	CR	27.001	3.4.0	AGREED
N3-000190	Adding the value of GBR of NT services	CR	23.910	3.0.0	REVISED to 0196
N3-000191	Adding the value of GBR of NT services	CR	27.001	3.4.0	REVISED to 0197
N3-000192	Rejection of lower user rates	CR	29.007	3.4.0	AGREED
N3-000193	RLP timer T4 in UMTS	CR	24.022	3.2.0	AGREED
N3-000194	Proposed WI description for Bearer Modification without pre-notification between Speech and FAX and MODEM	W.I SHEET			REVISED to 0198
N3-000195	Proposed LS on bearer modification without pre-notification	LS OUT			APPROVED
N3-000196	Adding the value of GBR of NT services	CR	23.910	3.0.0	AGREED
N3-000197	Adding the value of GBR of NT services	CR	27.001	3.4.0	AGREED
N3-000198	Proposed WI description for Bearer Modification without pre-notification between Speech and FAX and MODEM	W.I SHEET			AGREED
N3-000199	REV of S2s Proposal for the Release 2000 to include N3s comments				AGREED
N3-000200	TS 23.146, NT RT FAX	TS	23.146		E-Mail Distribution

## Annex D: Status of N3 Specifications after TSG\_N#7

	2G	TITLE	R96	R97	R98	R99	3G TR / TS	TITLE	R99	Rapporteur Company	Comments
TS	03.10	GSM PLMN Connection Types	5.4.0	6.0.0	7.0.1	8.1.0	23.910	Circuit switched data services	3.0.0	Achim Braun, Alcatel	
TS	03.45	Technical Realisation of Fax G.3 Service-transparent	5.2.1	6.0.1	7.0.0	8.0.0	X	X	X		
TS	03.46	Technical Realisation of Fax G.3 Service-Non-transparent	5.0.0	6.0.0	7.0.0	8.0.0	23.146	Technical realisation of facsimile group 3 non-transparent	1.1.0	J. Hagiwara, NTT	23.146 to be created for UMTS 03.46 is the GSM solution
TS	03.54	Description of the use of a shared interworking function in a PLMN S2	5.2.0	6.0.0	7.0.0	X	23.054	Description for the use of a Shared Inter Working Function (SIWF) in a GSM PLMN - Stage 2	3.0.0	Tommy Röstö, Telia	
TS	03.70	Routing of calls to / from Public data Network (PDN)	5.0.0	6.0.0	7.0.0	X	X	X	X		GSM ONLY - Not required after R98
TS	04.21	Rate Adaptation on MS-BSS Interface	5.6.1	6.0.1	7.0.2	8.0.0	X	X	X	Juha Räsänen, Nokia	GSM ONLY
TS	04.22	Radio Link Protocol for Data and Telematic services on the MS-BSS and the MS-MSC Interfaces	5.6.0	6.21.0	7.1.0	X	24.022	Radio Link Protocol for Data and Telematic services on the MS-BSS and the MS-MSC Interfaces	3.2.0	N. Klehn, Siemens	
TS	07.01	General on Terminal Adaptation Functions (TAF) for Mobile Stations	5.9.1	6.1.0	7.1.1	X	27.001	General on Terminal Adaptation Functions (TAF) for Mobile Stations	3.4.0	Erik Colban, Ericsson	CRs @ TSG#7
TS	07.02	TAF for services using Asynch bearer capabilities	5.5.1	6.0.0	7.0.1	X	27.002	TAF for services using Asynch bearer capabilities	3.3.0	Erik Colban, Ericsson	CRs @ TSG#7
TS	07.03	TAF for services using Synch bearer capabilities	5.4.1	6.0.0	7.0.0	X	27.003	TAF for services using Synch bearer capabilities	3.3.0	Erik Colban, Ericsson	CRs @ TSG#7
TS	07.60	Mobile Station (MS) Supporting GPRS	5.1.0	6.5.0	7.2.0	X	27.060	Mobile Station (MS) supporting Packet Switched Services	3.4.0	Graham Heaton, Brand	CRs @ TSG#7
TS	08.20	Rate Adaptation on BSS - MSS Interface	5.3.0	6.0.0	7.0.1	8.1.0	X	X	X	Juha Räsänen, Nokia	GSM ONLY
TS	09.03	Signalling requirements on interworking between (ISDN) or (PSTN) and (PLMN)	5.0.0	6.0.0	7.0.0	X	X	X	X		GSM ONLY - Not required after R98
TS	09.04	Interworking between the PLMN and the CSPDN	5.0.0	6.0.0	7.0.0	X	X	X	X		GSM ONLY - Not required after R98
TS	09.05	Interworking between the PLMN and PSPDN for Packet Assembly / Disassembly (PAD) Access	5.0.0	6.0.0	7.0.0	X	X	X	X		GSM ONLY - Not required after R98
TS	09.06	Interworking between PLMN and PSPDN / ISDN for support of packet switched data transmission services	5.0.2	6.0.0	7.0.0	X	X	X	X		GSM ONLY - Not required after R98
TS	09.07	General requirements on interworking between PLMN and ISDN or PSTN	5.10.0	6.2.0	7.2.0	X	29.007	General requirements on interworking between PLMN and ISDN or PSTN	3.2.0	N. Klehn, Siemens	CRs @ TSG#7
TS	09.61	Interworking between the PLMN supporting GPRS and Packet Data Networks (PDN)	X	6.4.0	7.2.0	X	29.061	Interworking between the Public Land Mobile Network (PLMN) supporting Packet Based Services and Packet Data Networks (PDN)	3.3.0	G. Heaton, Brand Comms	CRs @ TSG#7



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## Annex E: Access to 3GPP documents

This document briefly outlines some of the more important locations of information that all TSG\_CN WG3 members should be aware of.

### 3GPP email lists:

To receive information about CN3 issues, all delegates and other interested parties MUST register for email list **3GPP\_TSG\_CN\_WG3**. This can be done by sending an email to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG) with the following single line of text in the body of the message:

**subscribe 3GPP\_TSG\_CN\_WG3 YourFirstName YourLastName**

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

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

**QUERY \***

### Email archives:

All 3GPP lists have an associated archive of every email sent via that list. Information on how to access the archive is sent to you when you subscribe to the list. This means that if you have temporary email problems, or have just joined the group, you can check to see if you have missed any messages. The easiest way to search the archive is first to request a list of all messages sent to the particular group you are interested in. For example, to get a list of messages sent via the **3GPP\_TSG\_CN\_WG3** list between 1<sup>st</sup> Jan 1999 and the current date, send the following command to [LISTSERV@LIST.3GPP.ORG](mailto:LISTSERV@LIST.3GPP.ORG):

**search \* in 3GPP\_TSG\_CN\_WG3 since Jan 1999**

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

Some 3GPP archives are also available via a new user-friendly WWW interface. For CN3, go to: [http://list.3gpp.org/archives/3gpp\\_tsg\\_cn\\_wg3.html](http://list.3gpp.org/archives/3gpp_tsg_cn_wg3.html)

### Meeting calendar:

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

### Documents on the server:

All documents submitted to CN3 meetings will be made available on the 3GPP document server in a directory (related to the number of the meeting) under: [ftp://ftp.3gpp.org/TSG\\_CN/WG3/](ftp://ftp.3gpp.org/TSG_CN/WG3/)  
e.g. the documents for CN3 meeting #8 can be found at:  
[ftp://ftp.3gpp.org/TSG\\_CN/WG3\\_interworking/TSGN3\\_08/Tdocs/](ftp://ftp.3gpp.org/TSG_CN/WG3_interworking/TSGN3_08/Tdocs/)

## History

<b>Document History</b>	
<b>14<sup>th</sup> April 2000</b>	Draft <b>v1.0.x</b> distributed during the meeting for comments
<b>22<sup>nd</sup> April 2000</b>	<p>DRAFT <b>v1.3.0</b> dispatched by e-mail exploder to the N3 list.</p> <p>Comments, if any, to be addressed to:</p> <p style="text-align: center;"><b>David Boswarthick, 3GPP TSG-CN3 Secretary</b> MCC - ETSI Secretariat Tel :+33 (0)4 92 94 42 78 e-mail: <a href="mailto:david.boswarthick@etsi.fr">david.boswarthick@etsi.fr</a></p> <p>A deadline of 2 weeks was given to the N3 delegates for e-mail comments on the draft report.</p> <p style="text-align: center;"><b>Comments back by 5<sup>th</sup> May 2000</b></p>
<b>6<sup>th</sup> May 2000</b>	<i>Updated DRAFT v2.0.0 distributed by mail and placed to the server as N3-000206</i>
<b>22<sup>nd</sup> May 2000</b>	<i>N3-000206 presented to CN3#10 meeting, Some comment integrated on-line and document revised to N3-000235 which was approved without comment. N3-000235 was placed to the server as v3.0.0.</i>