3GPP TSG_CN#6 ***NP-99422***
Meeting #6, December, France
13th - 15th October 1999

3GPP TSG-CN3 / ETSI SMG3 WPD ***N3-99xxx***
Meeting #7 ***DRAFT***
Sophia Antipolis, France
29th November – 3rd December 1999

DRAFT REPORT v1.0.0

3GPP TSG-CN3 / ETSI SMG3 WPD

29th November – 3rd December 1999
Sophia Antipolis, France

Hosted by ETSI

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1 Opening of the Meeting

The 7th CN3 meeting took place from 29th November to 3rd of December in Sophia Antipolis hosted by ETSI. David Boswarthick welcomed the N3 delegates to Sophia Antipolis on behalf of ETSI and explained the logistical details. Meeting took place at the Mediathel and Espace Beethoven buildings.

The Chairman, Mr. Norbert Klehn opened the meeting at 10:00 on Monday 29th November. He set the objectives for the meetings as follows:

- Finalize R99 work items.
- Provide submission sheets for all work items for R99 indicating which W.Is are complete and what WI will not be complete and the impact of this on R99.
- Prepare the facsimile voting for CN Plenary in the case of no agreement being reached in this meeting,

2 Approval of the Agenda

N3-99408: **Draft Meeting Agenda.** Presented by the N3 Chairman.

DISCUSSION: The N3#7 meeting took place in two meeting rooms (Soleil and Neptune), at Mediathel. There were simultaneous meetings of the Packet and Circuit Switched SWGs on Monday p.m. – Thursday. The Friday session took place in Espace Beethoven.

RESULT: The Agenda was **AGREED.**

3 Registration and assignment of input documents

The meeting documents are available on the 3GPP server at:
ftp://ftp.3gpp.org/TSG_CN/WG3_interworking/TSGN3_07/tdocs/

The input documents were assigned to the draft agenda by the N3 chairman as shown in *N3-99408.*

N3-99408: **Draft Meeting Agenda.** Presented by the N3 Chairman.

DISCUSSION: The draft agenda also shows the allocation of the temporary documents to the agenda items. These were discussed at the beginning of the meeting, and the allocations agreed or modified. A number of new documents were registered and allocated to the agenda. This exercise is reflected in the structure of this meeting report.

RESULT: The document was **AGREED.**

4 Approval of the meeting report of TSG-CN3 # 6

4.1 Approval of the meeting report

The meeting report can be found at: ftp://ftp.3gpp.org/TSG_CN/WG3_interworking/TSGN3_06/Report/

N3-99375: Revised CN3#6 Meeting Report. Presented by David Boswarthick, MCC.

DISCUSSION: The CN3#6 meeting report was completed and distributed by the secretary 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.

RESULT: The document was **AGREED**

4.2 Review of the Facsimile Ad Hoc meeting between DoCoMo and Alcatel.

A meeting was held between Alcatel and NTT DoCoMo in order to resolve the differences for the Facsimile solution. NTT DoCoMo gave a brief summary of the discussions.
No agreement could be reached during the meeting and the topic is discussed further in section 7.3.

5 Reports / Liaisons from other groups

N3-99381: **LS from N1 on SERVICE/BASELINE IMPLEMENTATION CAPABILITIES.**

CONTENT: A Liaison addressed to TSG CN SS ad hoc, TSG T WG2, and copied N3, describing service baseline capabilities and the modifications made by CN SS ad hoc to the table showing Terminal Baseline Implementation Capabilities for NAS.

The table was seen at the last N3 meeting, and comments were sent to N1 in a Liaison. The LS shows the table is not up to date and does not include the comments made by N3 in the LS.

RESULT: The LS was **NOTED.**

N3-99382: **LS from S2 on Handover issues for CS Data from 2G to 3G PLMNs.**

CONTENT: A Liaison addressed to N3, (N3-99228) in response an earlier Ls from N3. S2 welcomes any simplification proposals in the protocol architecture and encourages changes in the 2G MSC specifications if the resulting saving in the complexity of handover procedures between 2G and 3G entities is substantial.

S2 advises N3 to continue the work indicated in the LS. In order to get more benefits from a possible change in 2G MSC, S2 would like N3 to study also, whether it is possible to extend the UMTS protocol framing (Iu UP and/or AAL2) to the 2G MSC IWF, i.e. to reuse the 3G protocol frame structures in the 2G MSC IWF.

DISCUSSION: To be discussed in the CS group in the handover section.

RESULT: The document was **NOTED for DISCUSSION in section 7.1.3**

N3-99385: **LS from R2 on DEFINITION OF ACTIVE COMMUNICATION FOR PACKET DOMAIN**.

CONTENT: A liaison thanking CN3 for their liaison R2-99g06. RAN WG2 consider the definition of 'active communication' to be once a radio access bearer is established.

DISCUSSION: R2 disagree with N3s definition of 'active communication

RESULT: The document was **DISCUSSED in the PC SWG**

N3-99384: **LS from R2 on RADIO ACCESS BEARER ATTRIBUTES**.

CONTENT: A liaison to S2 and R3, copied to N3 concerning Radio Access Bearer attributes.

DISCUSSION: Ericsson has a proposed LS (N3-99419) to S2 on Bearer attributes. Note the original LS from S2 is missing.

RESULT: The document was **NOTED, response to be provided by CIRCUIT, see section 7.1.4.**

N3-99386: **LS from R3 on RADIO ACCESS BEARER ATTRIBUTES**.

CONTENT: LS to SA2, RAN2 and copied CN1, CN3, SA4.

DISCUSSION: R3 are seeking guidance from N3 on Value Ranges (Question 3)

RESULT: The document was **NOTED.**

N3-99511: **Re. LS from S1 on 3G Services**.

CONTENT: 1. S1 have agreed the deletion of the work item of Modem / ISDN interworking as S1 do not see any market requirement in this area for R99.

2. S1 sees no need for support of <PDP type> "X.25" in release '99 and onwards, therefore S1 has agreed the deletion of X.25

DISCUSSION: Have S1 received agreement from T1P1 that they no longer require the continued support of <PDP type> "X.25"? This has to be double checked, see LS back in N3-99514,

The LS came far too later to enable N3 to modify their output before the next CN Plenary. N3 will not modify their output for this meeting.

RESULT: The document was **DISCUSSED.**

N3-99512: **Re. LS from S1 on Release'99 clean up**.

CONTENT: S1 agrees to the deletion CS PAD and basic packet services, and the relevant CR to 22.002 shall be produced.

DISCUSSION: We do not require the update 03.70 and 09.06. N3 will request to CN plenary the removal of 23.070 and 29.060. R99 versions of 03.70 and 09.06 shall also be deleted.

Requirement of additional clean up of N3's specifications (at least 03.10) to reflect the removal of the service.

RESULT: The document was **DISCUSSED.** Rapporteurs to check the impact of this decision on their specifications.

N3-99513: **LS from S1 on HSCSD specifications**.

CONTENT: S1 has started to update the HSCSD stage 1 for 3GPP. S1 understanding is that GBS concept is fully applicable to 3GPP systems, but multislot is only relevant for GERAN. Stage 1 has been updated accordingly. However S1 is not fully aware of all the implications of these changes and thus S1 wishes CN1 to study the issue. S1 proposes that Stage 1 and Stage 2 would be aligned and relevant CR's would be approved at the same plenary meetings.

Includes a CR for information to 22.034.

DISCUSSION: N3 has already incorporated the described principles in their work.

N3 will send a LS to S1 *(N3-99514)* stating they can accept the changes proposed in the CR, and also mentioning the X.25 T1P1 concern.

RESULT: The document was **NOTED.**

⇓ **RELATED LS** ⇓

N3-99514: **Reply LS to S1 on HSCSD specifications**.

RESULT: The document was **AGREED.**

6 Administrative issues

6.1 Project Co-ordination

No input documents to this meeting

6.2 Maintenance of Specifications

N3-99410: **STATUS LIST OF N3 SPECIFICATIONS.** Presented by David Boswarthick, ETSI MCC.

CONTENT: The document contains a list of all 2G and 3G specifications presently under the domain of N3 or SMG3D. It also lists the latest versions following and TSG_N#5 and SMG#31 as well as the last issued CR number for each specification. The purpose of the document is to allow the author to have a clear understanding of which specifications are under the control of his working groups, and also to allow delegate to be aware of the latest versions, useful when preparing CRs.

DISCUSSION: **Note:** 09.13 is the responsibility of NSS Ad Hoc. The table needs modification to reflect this and confirmation obtained form NSS Ad Hoc.

09.03 the ownership is not clear and needs to be clarified at the TSG_N plenary.

09.04 no R99 version is required, as these services no longer exist after R98.

Note: the 3G specification titles are sometimes not up to date and have to be improved.

△ **ACTION 7/2: To be presented at each meeting, and attached to each meeting report as an Annex.**

RESULT: The document was **REVISED to N3-99452** and noted.

6.3 Information

N3-99400: **TR 25.990 V2.0.0 (1999-10) VOCABULARY** Presented by the Norbert.

CONTENT: R5 maintain this document and request all TSGs to provide comments and information to be included in the vocabulary document.

TR 25.990 is a collection of terms, definitions and abbreviations related to the baseline documents defining 3GPP objectives and systems framework. This document provides a tool for further work on 3GPP technical documentation and facilitates their understanding. The terms, definitions and abbreviations as given in this document are either imported from existing documentation (ETSI, ITU or elsewhere) or newly created by 3GPP experts whenever the need for precise vocabulary was identified.

DISCUSSION: The chairman encourages delegates to provide comments in order to provide more clarity as well as improving understanding between TSGs and their working groups.

Note: Possible duplication of TR vocabulary document (see 21.101), Erik suggests that there is only one document.

Considering the present workload, this is not a priority but the chairman invites the SWG to provide contributions to this document for the next meeting.

RESULT: The document was **POSTPONED to CN3#8 meeting.**

N3-99412: **3G TR/TS TEMPLATES.** Presented by the David of MCC.

CONTENT: The document contains the latest versions of the templates for 3G Technical reports and specification as produced by the MCC. The documents were not presented for discussion, but only for information to ensure that all N3 delegates present in the meeting were aware of the existence and location of these templates.

RESULT: The document was **NOTED.**

N3-99413: **PRESENTATION OF TS / TR to the TSG.** Presented by the David of MCC.

CONTENT: This is the template produced by MCC at the request of SA Plenary. The purpose of the document is to accompany any TR/TS presented at future TSG Plenaries, and provide a brief summary of major changes to the document the reason that it is being presented.

RESULT: The document was **NOTED.**

6.4 Next meetings, allocation of hosts

Meeting	Date	Host, Location	Comments
TSG-CN3#8	31st Jan – 4th Feb 2000	ETSI, Sophia Antipolis, France	In new MCC offices
TSG-CN3#9	10th – 14th April 2000	**Host required**	**Host required**
TSG-CN3#10	22 – 26 May 2000	USA	same location as N1 and N2
TSG-CN3#11	3rd – 7th July 2000	**Host required**	**Host required**
TSG-CN3#12	11th – 15th Sep 2000	USA	Same location as N1 and N2
TSG-CN3#13	17th – 19th Oct 2000	**Host required**	**Host required**
TSG-CN3#14	27th Nov – 1st Dec 2000	**Host required**	same date as N1 (Lucent)

Apart for the invitations for the May and September meetings in the USA, there are currently no proposals of hosts for N3 meeting for the year 2000.

△ **Delegates are asked to check with their companies to see if it is possible to host N3 meetings in year 2000**

7 Circuit Switched Work Items:

7.1 Circuit switched Bearers in UMTS

7.1.1 Concept

N3-99402: **TR 23.910 v0.1.0 Circuit Switched Data Bearer Services.** Presented by Erik of Ericsson.

CONTENT: Presented at the last N3 meeting, has now been revised to include the correct TR template, and minor changes to references within the document. Was provided by e-mail several days ago to allow preparation for comments in this meeting.

DISCUSSION: New section numbers do not follow in text, should be updated.

Section 5.1.1 Transparent data for multimedia 32Kbps ITC UDI is missing. NTT DoCoMo supported the addition of this 32Kbps in the text. Section 9 needs also to be updated to present the current state of knowledge.

RESULT: The document was **MERGED with N3-99420 in N3-99473.**

⇓ **MERGED** ⇓

N3-99420: **Changes to 23.910 that require discussion.** Presented by Erik of Ericsson.

CONTENT: Incorporates the issues that have been raised in various discussion papers.

DISCUSSION: 57.6 for non-transparent fax should be limited to 28.8Kps

6.2 requires a statement that the transparent mode shall be used

Alcatel propose that section 10 be split into two sub-sections 1) signaling issues and 2) inter-MSC user plane issues. This agreed to be included in revised doc.

Non guaranteed bit rate should be kept at 14.4kbps also for NT fax.

Questions raised to the use of support mode of IUUP for non-transparent services for in-band flow control as opposed to out-band flow control. Out band flow control is considered to be slower by Ericsson.

Inclusion of elements of *N3-99389* and *N3-99490* should be added to section 6.2

➢ **N3 agreed the use of In-band flow or rate control.**

- **N3 agreed that in-band flow or rate control requires use of support mode of IUUP for non-transparent services.**
- **OPEN ISSUE: It was NOT agreed by N3 whether flow or rate control shall be used.**

RESULT: The document was **MERGED with N3-99402 in N3-99473.**

⇓ **MERGED** ⇓

N3-99473: **TR 23.910 v1.0.0 CS Data Bearer Services.** Presented by Erik of Ericsson.

DISCUSSION: Summarizes the present situation, but there are a number of outstanding issues.

RESULT: The document was **AGREED**

△ **This document will be presented to the TSG_CN Plenary for information – An accompanying document is required for presentation – provided in N3-99505**

N3-99432: **Paper on end-to-end synchronization in UMTS.** Presented by Erik of Ericsson.

CONTENT: The end-to-end synchronization for GSM is currently described in 27.001 and 29.007. In GSM, the PLMN link is synchronized, which results in procedures that are more complex than what would be required for UMTS. The document proposes a solution to the synchronization issues in UMTS.

DISCUSSION: Questions raised as to the saving of resources on the Iu interface and/or Radio interface. It was not possible to reply to these questions in the meeting.

Possible requirement for an Information exchange that indicates to both sides that the traffic channel is present when there is not traffic present, (similar to the technique employed in GSM).

△ **ACTION 7/3: This content of this document is to be incorporated into the CRs to 29.007 and 27.001**

RESULT: The document was **DISCUSSED.**

7.1.2 Iu User Plane

N3-99389: **Iu interface protocol adaptation.** Presented by Juha of Nokia.

CONTENT: The purpose of this document is to clarify the use of the Iu UP protocol, the RLP frame delimitation and user data sequencing in the CS data traffic channel.

To solve the following issues, with a solution as simple as possible, in the Iu interface:

- RLP frame delimitation

- Timing deviations and sequence errors due to the loss of ATM cells

- Mode of operation of the Iu UP protocol,

SSSAR functionality (mentioned in TS 25.415 and specified in ITU-T I.366.1) with fixed CPS packet lengths of 39 octets (in non-transparent case) and 47 octets (in transparent case) is proposed to be used.

The Iu UP protocol can be used in the transparent mode for both T and NT CS bearer services with this solution.

DISCUSSION: SDU sizes should match the SDU sized on the RLC MS side. If not the RLC will have to perform segmentation and assembly. Several solutions were proposed:

- Provide fill to cells which are not full
- Divide data equally into two cells
- Fill these cells with data, requires waiting for the next frame i.e. 40ms.

DoCoMo raised concerns as to the additional delay. Erik provided an explanation of the whiteboard to the group, showing that the overall end – to - end delay is not effected.

The additional delay is overwritten by the existing delay in emptying the buffer. NTT requested further time to consider these issues

NTT DoCoMo prefers support mode from IU user plane protocol because time alignment is necessary. Framing can be provided above the IUUP frame. NTT do not feel that delay and cell loss can be treated separately.

RESULT: The document was **MERGED into N3-99473.**

N3-99490: **Discussion paper on Iu interface in transparent case.** Presented by Juha of Nokia.

CONTENT: Contains description of various elements of the Iu interface, and how delay can be avoided at the RNC. Also the recovery from the loss of ATM cells.

DISCUSSION: AAL2 – should read " The loss of an ATM cell **is** reported to the Layer Management".

NTT DoCoMo suggests using this solution in both the uplink and downlink. Nokia confirmed that this proposal does not interfere with the operation of GSM.

NTT DoCoMo originally proposed the use of Support mode, but upon seeing this proposal *DoCoMo agree with the use of transparent mode for transparent data services.*

It is accepted by N3 to use *transparent mode for transparent data services*

Non-transparent mode N3 agrees that a method of signaling flow control is required.

Ericsson proposes the use of the IU user plane in support mode. Overhead is an important issue (especially for handover), and it is desirable to provide the smallest overhead possible. The Ericsson solution gives an overhead of 3 octets and will be presented to next week's R3 meeting.

Note: there are different values for the *maximum* and *guaranteed* bit rate, and thus we must know the *actual* bit rate. If it is not known there is a requirement for flow control.

RESULT: The document was **DISCUSSED.**

7.1.3 2G-3G-Handover

N3-99403: **Updated DISCUSSION PAPER ON CS DATA SERVICES IN UMTS** Presented by Achim of Alcatel.

CONTENT: The document presents handover scenarios for 2G to 3G and 3G to 2G. It proposes the use of a modified (or new) protocol between 3G and 2G MSC. This requires changes to 2G specifications, but according to 22.101 it is allowed to modify 2G specifications to allow handover.

DISCUSSION: There is an additional 3rd possibility proposed by S2, which is requested in *N3-99382.*

RESULT: The document was **NOTED.**

N3-99390: **Handover between a 2GMSC and a 3GMSC.** Presented by Juha of Nokia.

CONTENT: **Background:** A handover between a 2G MSC and a 3G MSC was discussed in the CN3#6. It was stated that a handover from 2G to 3G leads to a configuration wherein the 3G MSC shall support the 2G A-interface multislot protocols towards the 2G MSC IWF. It was stated that the required multislot protocol functionality is quite complicated. A new protocol was proposed to be used between the 3G MSC and the 2G MSC IWF in order to simplify the required operation in the 3G MSC. The proposed solution would have an impact on the 2G MSC IWF – the 2G IWF should support the proposed new protocol. It was questioned whether we can change the operation off 2G network elements in order to simplify operations in the 3G network elements.
A liaison statement was sent to TSG-S2 (the architecture group) to get a clarification on what kind of changes, if any, are allowed in the 2G MSC IWF on the ground of simplifying operation in the 3G MSC. *(N3-99228)*
S2 responded with a liaison statements S2-99c36 (delivered to CN3 delegates by the CN3 chairman on e-mail - *(N3-99382)*. In their response S2 request N3 to study the possibility of extending the UMTS protocol framing (Iu UP and/or AAL2) to the 2G MSC IWF instead of inventing a new protocol between the 3G MSC and the 2G MSC IWF.

This document responds to the request from S2, and describes how the extension of the AAL2 sublayers can be used to support the required interworking.

For the sake of simplicity it is proposed that the 3G protocol framing (i.e. the AAL2 sublayers CPS Packet and SSSAR) is extended from the 3G MSC to the 2G IWF to support a handover from a 2G MSC to a 3G MSC.

DISCUSSION: Nokia and Alcatel proposed solutions are similar. Both require a modified protocol between the 3G MSC and the 2G MSC IWF. The only differences are the frame format and the termination points of the IUUP.

Problem 1 – Architecture of CS bearers in UMTS – which user plane mode we use (support or transparent)?

Problem 2 – How do we perform the handover?

Note: Ericsson also made a proposal now that the decision on UP mode is agreed.

RESULT: The decision was **POSTPONED to N3#8.**

N3-99471: **PROPOSAL FOR A-TRAU' PROTOCOL** Presented by Achim of Alcatel.

CONTENT: The content of this document is well known and was not presented again.

RESULT: The decision was **POSTPONED to N3#8.**

N3-99477: **Handover between a 2GMSC and a 3GMSC.** Presented by Erik of Ericsson.

CONTENT: The document describes Ericssons proposed solution for handover between a 2GMSC and a 3GMSC. The background for the issue of this document is presented in *N3-99390* and *N3-99403.*

Proposed solution: The 3G MSC supports the ATM/TDM interworking providing a 64 Kbit/s circuit switched connection towards the 2G MSC IWF. For the T bearer services where the user rate is 64 Kbit/s, there is no rate adaptation on the TDM link. The payload of the AAL2, which is the Iu UP payload assuming that the transparent mode of the Iu UP is used, is transported directly on a 64 Kbit/s timeslot on the TDM link.

The case of a transparent bearer service at 56 Kbit/s is handled in the same manner since the rate adaptation between 56 and 64 Kbit/s is done at the MS and at the remote side, or at the border between the UDI and RDI networks, i.e. it is transparent to the CN.

For other T cases and all NT cases, it is proposed to use the protocol stack depicted in Figure 1. The AAL2 protocol including the SSSAR layer is terminated in the 3G-MSC. The payload of the AAL2, i.e., the Iu UP frames are relayed from/to the TDM link using HDLC flags as frame delimiters. The Iu UP frames are transmitted between the RNC and the 2G-MSC.

DISCUSSION: This a third proposal to the handover between 2GMSC and 3GMSC. Nokia and Alcatel have also provided different proposals (*N3-99471* and *N3-99390*).

Working Assumption: We do not realize handover via the A-interface. It is performed by the use of a new protocol. Either:

1. A-TRAU' as proposed by Alcatel (see N3-99403 and 471),
2. extension of the AAL2 to the 2G MSC as proposed by Nokia in (N3-99390),
3. HDLC framing (X.31 flag stuffing) presented by Ericsson (N3-99477),

It was decided that the decision on which solution is to be used would be postponed until CN3#8, hence not presented to TSG_N#6.

NTT DoCoMo expressed concerns that the delaying of this decision may delay the overall realization of UMTS for R99.

N3 do not believe that delaying this decision would effect a pure 3G system, only the handover of 3G to 2G.

RESULT: The decision was **POSTPONED to N3#8.**

7.1.4 Signalling

N3-99418: **Mapping of UMTS Bearer Capability Information Element Parameters into UMTS QoS Radio Access Parameters for Circuit Switched Services.** Presented by Erik of Ericsson.

CONTENT: This contribution proposes changes to the mapping of the BC IE into QoS parameters for circuit switched data services previously introduced by *N3-99184*.

Some refinement of the proposed QoS parameter values for parameters Delivery of erroneous SDUs, SDU error ratio, Residual bit error ratio is due to refinement of definitions and parameters in **3G TS 23.107** v3.0.0 QoS Concept and Architecture.

Another change on the Guaranteed bit rate and Maximum bit rate for non-transparent services results from the fact that QoS negotiation is not possible in release 99, which increases the risk that non-transparent data calls are released due to non-provision of the requested guaranteed bit rate.

DISCUSSION: The proposed rate control mechanism is an extension of the Iu user plane in support mode. This mechanism uses the PDUs of type1 (no period change) with an overhead of 3 octets, and PDU type14 with 5 octet overhead when the period is changed.

RLP entity requires this indication of the frequency at which it may send its' RLP frames to avoid excessive re-send of missed frames.

NTT DoCoMo agreed with the requirement, but suggested the need for further thought as to the best solution. Suggest it is possible to do layer 2 flow control in the RLP frames. This may improve the realization of a solution for R99.

Erik replied that finding the best solution over the IU interface should be left to the experts in RAN3.

Juha mentioned flow control mechanism should be under the RLP layer and we could define a simple flow control mechanism on the Adaptation layer 2. Also if we use the IU user plane in transparent mode, we would have direct access to the layer 2 protocols.

N3 agrees the need rate/flow control for non-transparent data services. The rate/flow control is initiated by the RNC to the IWF.

The question is where locate this function?

- PDU in the IU user plane protocol
- out of band

RESULT: The document was **DISCUSSED**

N3-99417: **Handover Procedure for Mapping of UMTS Bearer Capability Information Element Parameters into UMTS QoS Radio Access Parameters for Circuit Switched Services.** Presented by Erik of Ericsson.

CONTENT: This contribution proposes an adequate method for mapping of BC IE information into QoS parameters in the case of a handover from UMTS to GSM. It is proposed to generate the BSSMAP parameters needed for handover to GSM using the standard GSM procedure by mapping the BC IE into BSSMAP parameters.

It is proposed to describe the mapping procedure for handover in 3G TS 23.107.

DISCUSSION: S2 have the responsibility of 3G TS 23.107. A Liaison statement is required to S2 to express the N3 proposal for mapping, it should also be copied to N1. This LS will be provided in *N3-99491*.

RESULT: The document was **DISCUSSED**

⇓ RELATED LS ⇓

N3-99491: **LS to S2 cc N1 on QoS mapping in case of HO from 3G to 2G.** Presented by Erik of Ericsson.

DISCUSSION: Some spelling and grammatical errors to be corrected.

RESULT: The document was **AGREED.**

N3-99419: **RE. LS to S2, on UMTS and RAB PARAMETER VALUE RANGES AND GRANULARITY.** Presented by Erik of Ericsson.

CONTENT: The document contains the proposed LS to SA WG2 in response to their LS on UMTS and RAB parameter value ranges and granularity *(Tdoc S2-99990)*.

CN3 has evaluated QoS values for circuit switched data, and defined the following:

1. Appropriate value for Residual bit error ratio and service limits for SDU error ratio and transfer delay

2. Possible values for maximum bit rate and guaranteed bit rate

3. Possible SDU sizes and maximum SDU sizes.

DISCUSSION: Should not include zero size SDU for transparent case. Also cc RAN 2 and RAN 3

RESULT: The document was **REVISED to N3-99474.**

⇓ **REVISED** ⇓

N3-99474: **Rev. Re. LS to S2 on UMTS and RAB PARAMETER VALUE RANGES AND GRANULARITY.** Presented by Erik of Ericsson.

RESULT: The document was **AGREED**

7.1.5 Change Requests

N3-99379: **CR TO 24.022 on INITIAL UPDATES FOR UMTS.** Presented by Norbert of Siemens.

CONTENT: Presented at previous meetings, and now updated to incorporate the comments from the last meeting.

DISCUSSION: Section 5.5.1 RAB parameters 250ms for transfer delay (service limit) In general it will be less hence the 520 ms timer t1 should be adequate in UMTS.

Note added to section 5.5.1 In UMTS the values of 14.4kbps shall be used

Also the title of the document requires updating. Proposed “Radio Link Protocol for Circuit Switched Bearer and Teleservices”

RESULT: The document was **REVISED to N3-99492.**

⇓ **REVISED** ⇓

N3-99492: **CR TO 24.022 on INITIAL UPDATES FOR UMTS.** Presented by Norbert of Siemens.

RESULT: The document was **AGREED**

N3-99380: **CR TO 29.007 on INITIAL UPDATES FOR UMTS.** Presented by Norbert of Siemens.

CONTENT: Presented at previous meetings, and now updated to incorporate the comments from the last meeting.

Reason for change: The introduction of the GSM Bearer Services in UMTS needs changes of this specification. The changes are related to the following items:

a) Notations are generalized because the text has to be applicable for GSM and UMTS

b) Some sections were restructured to incorporate changes needed for UMTS in a proper manner

c) GSM references are replaced by 3G references where applicable

d) CCITT references are replaced by ITU references

e) Reference to ETS 300 102-1 was replaced by Q.931 (05/98)

f) Some minor editorial corrections are made.

DISCUSSION: Concerning the structure of an MS (table 1) we can refer to 27.001 – for advice we must refer to T2.

RESULT: The document was **REVISED to N3-99493.**

⇓ **REVISED** ⇓

N3-99493: **CR TO 29.007 on INITIAL UPDATES FOR UMTS.** Presented by Norbert of Siemens.

DISCUSSION: Addition that 56kbps is not applicable to PIAFS to figure 10.

RESULT: The document was **REVISED to N3-99504.**

⇓ **REVISED** ⇓

N3-99504: **rev. CR TO 29.007 on INITIAL UPDATES FOR UMTS.** Presented by Norbert of Siemens.

RESULT: The document was **AGREED.**

N3-99416: **CR TO 27.001 on INITIAL UPDATES FOR UMTS.** Presented by Erik of Ericsson.

CONTENT: Presented at previous meetings, and now updated to incorporate the comments from the last meeting.

DISCUSSION: Various wording changes were proposed and were incorporated into a revised CR.

RESULT: The document was **REVISED to N3-99495.**

⇓ **REVISED** ⇓

N3-99495: **Rev. CR to 27.001 on INITIAL UPDATES FOR UMTS.** Presented by Erik of Ericsson.

DISCUSSION: This CR does not align to the initial S1 requirements regarding low speed modem (see N3-99145). S1 shall take the decision on low speed requirements.

△ **This fact can be included on the W.I. submission forms to be input to the SA plenary. N3 has not realised lower user rates for non-transparent services.**

It will be up to SA to decide on the inclusion of this service for R99/00.

RESULT: The document was **AGREED.**

7.2 Frame Tunnelling Mode

N3-99340: **CR TO 27.001 INTRODUCTION OF FTM.** Presented by Erik of Ericsson.

CONTENT: Presented at previous meetings, and now updated to latest version of 27.001. Additional changes to references and new section added for flow control.

DISCUSSION: Note 9 missing and minor changes to format of front cover. Also some clarification provided to the format of tables and notes.

RESULT: The document was **REVISED to N3-99453.**

⇓ **REVISED** ⇓

N3-99453: **REV. CR TO 27.001 INTRODUCTION OF FTM.** Presented by Erik of Ericsson.

DISCUSSION: NTT DoCoMo propose using the same note 7 in their PIAFS CR (N3-99430),

7) For RDI, V.120, PIAFS, and 'H.223 and H.245'

Changes in wording ‘must’ to ‘shall’.

RESULT: The document was **REVISED to N3-99497.**

⇓ **REVISED** ⇓

N3-99497: **REV. CR TO 27.001 INTRODUCTION OF FTM.** Presented by Erik of Ericsson.

DISCUSSION: DoCoMo s presenting a related CR to 22.002 to the S1 meeting this week.

RESULT: The document was **AGREED.**

N3-99341: **CR TO 29.007 INTRODUCTION OF FTM.** Presented by Erik of Ericsson.

CONTENT: Presented at previous meetings, and now updated to latest version of 27.001. Changes to abbreviations and references. Addition of section 10.2.4.15 "Interworking in FTM"

DISCUSSION: **Q.** This proposal allows for Mobile originated cases only – is it not possible to provide mobile terminated also?

R. This is covered in a related CR from NTT DoCoMo (N3-99350)

The proposed modifications to figure 9 are to be removed to avoid conflict when implementing the PIAFS CR.

Requirement for a Note and modifications to figure 9 to be included in the NTT DoCoMo CR for PIAFS.

RESULT: The document was **REVISED to N3-99429.**

⇓ **REVISED** ⇓

N3-99429: **CR TO 29.007 INTRODUCTION OF FTM.** Presented by Erik of Ericsson.

DISCUSSION: * Minor changes required to the change in *9.2.2.1 Multi-numbering Scheme, removal of ref to 07.01 and spelling on negotiating**

RESULT: The document was **AGREED.**

7.3 Facsimile

N3-99405: **03.46 Error Scenarios for Fax.** Presented by Achim of Alcatel.

CONTENT: This document provides the 03.46 Error Scenarios as requested by NTT DoCoMo.

These were presented during the fax ad hoc but NTT DoCoMo did not have time to digest and comment.

DISCUSSION: **NTT:** When there is an error in the fixed network, the 03.46 has an adequate recovery method. However if there are errors in the TCF, NTT suggest that the NTT proposal for 23.046 is better. Comments to error scenario (DCS error #2) on the transmission side TCF, the delay from error to facsimile transmission is 7.5s (NTT) as opposed to 11.5s (03.46). **Alcatel**: requested to see the NTT scenario (café break).

NTT: In 03.46, the number of signals transmitted over the radio link is greater that the NTT proposal that could mean to a higher probability of error. **Alcatel:** reply that these errors are negligible, as the transmission rate over the radio link is much greater than the 300 bps. **NTT:** wish to maximize the radio resources in IMT2000, by reducing the number of radio messages, reducing the chance of error and hence re-transmission.

RESULT: The document was **DISCUSSED.**

N3-99439: **FAX ad hoc document from NTT DoCoMo: DoCoMo's comments -.** Presented by NTT DoCoMo.

CONTENT: This document replies to the comments raised during the last CN3#6 meeting to the input N3-99249 and N3-99365.

The FAX ad hoc between NTT DoCoMo and Alcatel was held on the 22nd of November. NTT DoCoMo submitted following documents to the meeting.

DISCUSSION: The following comments are DoCoMos responses to the points raised in the CN3#6 meeting report. ***Comments in blue were made during the CN3#7 meeting***

Comments to N3-99249
Point 1: Alcatel: Why is it proposed to introduce a completely new protocol handling the FAX3 application?
DoCoMo: In our experience, which is about the influence of the burst errors in PDC system, should be made good use for IMT-2000 system.

Point 2: In **Alcatel**'s opinion that it is not necessary to modify the handling of BCS-data.
DoCoMo: It is necessary to simplify the signals across the radio network, and to modify the handling of BCS-data.

Point 3: Is it correct that during a FAX connection that due to autonomous DCS/TCF handling the message speed of the FAX-transmitter and the FAX-receiver is different. As a result of our discussion, such a phenomenon happens in the PDC system because the PDC system doesn't implement 'ECM 4800bps' service. In the IMT-2000, if ' ECM 4800bps' service is implemented, there will be no problems. ***Alcatel requested scenarios that show this (provided during café break)***

Point 4: What happens when the 'TCF Error Detection 'indication is delayed due to transmission errors? Alcatel check Round trip delay:
The meeting report describes that DoCoMo consider a delay between a fixed and MS of 20ms based on the current system. For clarification, we consider that the transmission delay is about 300ms in PDC system. (see file: Transmission delay in PDC system)

Comments to N3-99365
Point 1: Accepted

Point 2: Alcatel are to examine if long bursts are considered in the GEM.
DoCoMo: considered the long bursts, too. According to the CR23.046, we found that the facsimile communication is possible, even though the long burst delay happens (15-60s). (see file: - The fill insertion control algorithm for the picture signal memory,
- A measure for the burst errors,
- The maximum endurance delay in PDC system)
According to the simulation results, we found that it is ok to use the GEM error pattern as an error pattern in the IMT-2000 network. (see file: The appropriateness of using the GEM as the evaluation of Layer2 delay in IMT2000)

Point 3: Confirmed by Alcatel that 03.46 is running with lower speeds.
DoCoMo: Done.

Point 4: Based on the assumption that layer 2 provides an error free transmission, the proposed fax solution is independent of the layer 2 protocol used.
DoCoMo: Done.

Q. from Erik – why keep 03.46 if it is not implemented in GSM? **R.** from Achim: Alcatel are convinced that the NTT solution will not work in the initial stage and prefers that Alcatel have the freedom to implement the 03.46 solution which is shown to work.

NTT: Our proposal is based on PDC, but it can be simply applied to IMT2000 without modification. DoCoMo would like to understand Alcatel's concerns as they are also not convinced that 03.46 will work in the UMTS environment. **Achim:** replied that he believes that DoCoMo do not presently fully understand the 03.46 and has doubts that it will be possible to provide a completely new solution in the limited time remaining for R99. DoCoMo suggested that the technical misunderstanding of GSM and PDC works in the two directions.

- Alcatel are not willing to agree to the PDC solution in the GSM environment.
- DoCoMo are not willing to accept the 03.46 solution in UMTS.

Chairman's comments – It is not possible to get an agreement on the technical level. Alcatel prefers to keep the 03.46 solution. DoCoMo wishes to modify the facsimile solution using their PDC experience.
Suggested way forward
- Create a new specification 23.146 that covers NTT DoCoMos solution, and DoCoMo will be rapporteur for this new specification. In addition DoCoMo will provide all necessary SDL diagrams and detailed stack information early
- 03.46 will remain unchanged as the GSM only solution.

RESULT: The document was **DISCUSSED.**

N3-99440: Transmission delay in PDC system**.** Not presented by NTT DoCoMo.

DISCUSSION: **Document already presented to the Fax ad hoc meeting. Skipped in this meeting because of the decision mentioned above.**

RESULT: The document was **NOT PRESENTED.**

N3-99441: A measure for the burst errors**.** Not presented by NTT DoCoMo.

DISCUSSION: **Document already presented to the Fax ad hoc meeting. Skipped in this meeting because of the decision mentioned above.**

RESULT: The document was **NOT PRESENTED.**

N3-99442: The maximum endurance delay in PDC system**.** Not presented.

DISCUSSION: **Document already presented to the Fax ad hoc meeting. Skipped in this meeting because of the decision mentioned above.**

RESULT: The document was **NOT PRESENTED.**

N3-99443: **GEM as the evaluation of Layer2 delay in IMT2000.** Not presented.

DISCUSSION: **Document already presented to the Fax ad hoc meeting. Skipped in this meeting because of the decision mentioned above.**

RESULT: The document was **NOT PRESENTED.**

N3-99422: **Necessity for improvement of intervention in T.30/T.4.** Presented by Mitsuru Murata of NTT DoCoMo.

CONTENT: NTT DoCoMo has proposed an improvement of intervention in T.30/T.4. The necessity for the improvement has been discussed between NTT DoCoMo and Alcatel. This document shows one example that indicates necessity for these improvements.

RESULT: The document was **NOTED.**

N3-99423: **CR to 23.046 Enhancement of TS 23.046.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

CONTENT: The document contains changes to 23.046 to introduce UMTS and include only changes that are non-contentious. Following the comments made in N3-99439 it is possible that this should be changes to 23.146 the new specification.

Reasons for change:

1. Introduction of UMTS to 23.046

2. Co-ordination with T.38

3. Introduction of Asynchronous interface between FA Protocol and TAF

4. Change related to user rate

5. Editorial correction of references

DISCUSSION: Erik suggests in section 6. FNUR should be 14.4 12.0 or 9.6 kbit/s facsimiles rate and the WAIUR should be 28.8Kbps. DoCoMo agree to double check and change these type errors as required.

In Annex 2 the figures for alternate speech have been removed as they are believed to be included in 27.007 and 24.008. this needs to be checked to ensure that the procedure is adequately explained.

RESULT: The document was **MERGED with N3-99450 in N3-99489.**

⇓ **MERGED** ⇓

N3-99450: **Rev CR to 23.046 for IMPROVEMENT OF INTERVENTION IN T.30/T.4-.** Presented by Ryoko Okigi of NTT DoCoMo.

CONTENT: *Reason for change:* Improvement of delay resistance in FAX protocol such as T.30/T.4

DISCUSSION: Requirement to separate fax adapter and TAF in the text.

RESULT: The document was **MERGED with N3-99423 in N3-99489.**

⇓ **MERGED** ⇓

N3-99489: **Merged CR to 24.036.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: Due to time limitation this will provided and approved by e-mail.

RESULT: The document will be provided by e-mail next Tuesday for e-mail approval by Thursday 17:00 GMT. **E-mail APPROVAL.**

N3-99425: **Rev. Fax related CR to 27.001.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

CONTENT: The CR contains a single change to section B.1.10.2 for BC-IE setting for Real-time non-transparent FAX.

Reason for change:

1. Introduction of Asynchronous interface between FA Protocol and TAF

2. Change related to user rate

DISCUSSION: Alcatel suggests the GSM table should be unchanged and new table for UMTS added.

Change required for Teleservice 62. DoCoMo will check the requirement.

RESULT: The document was **REVISED to N3-99487.**

⇓ **REVISED** ⇓

N3-99487: **Rev. Fax related CR to 27.001.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: If fax machine on terminal side can only support 9.6kbps, this should be added.

B.1.10.3 should be marked to show it is a new table and not a rev. of 10.2.2

RESULT: The document was **REVISED to B3-99503.**

⇓ **REVISED** ⇓

N3-99503: **Rev. Fax related CR to 27.001.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

RESULT: The document was **AGREED**

N3-99426: **CR to 27.003 on Introduction of Asynchronous interface for Real-time non-transparent FAX.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

CONTENT: *Reason for Change: Introduction of Asynch. interface between FA protocol and TAF.*

DISCUSSION: We cannot delete this as it is still relative to GSM. A note should be added to say it is relevant to GSM only.

RESULT: The document was **REVISED to N3-99488.**

⇓ REVISED ⇓

N3-99488: **REV CR to 27.003 v3.1.0 on Introduction of Asynchronous interface for Real-time non-transparent FAX.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

RESULT: The document was **AGREED**

7.4 PIAFS

N3-99349: **REV CR to 27.001 on DETAILED INFORMATION OF PIAFS IN UMTS.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

CONTENT: This CR introduces PIAFS and the enhancement of processing the mobile terminated call. Also the appropriate bearer selection in case of FTM, PIAFS and Multimedia mobile terminated call.

DISCUSSION: Note 12 to table B.1 is also applicable to FTM, and is stated elsewhere, hence redundant information – hence can be deleted from this CR.

Agree to delete for note 3 for octet-5a and replace with a reference to a modified note yx to include the RDI parameter.

Comment to Table B.4f Note 5. Requirement for clarification to parameter settings. Also modification to table contents should be broken down by work item PIAFS – FTM and multimedia to be presented in the relative CRs to 27.001.

RESULT: The document was **REVISED to N3-99430.**

⇓ REVISED ⇓

N3-99430: **REV CR to 27.001 on DETAILED INFORMATION OF PIAFS IN UMTS.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: Table numbering should be aligned with Eriks CR.

△ **DAB to check DRAFTING rules and apply correct numbering of notes**

Only one category may be used in a CR – propose change to cat. B.

NTT DoCoMo propose using the same note 7 in the FTM CR (N3-99453),

7) For RDI, V.120, PIAFS, and 'H.223 and H.245'

Replace the terms ‘must have’ with ‘shall’ or ‘is’

RESULT: The document was **REVISED to N3-99496.**

⇓ REVISED ⇓

N3-99496: **REV CR to 27.001 on DETAILED INFORMATION OF PIAFS IN UMTS.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

RESULT: The document was **AGREED.**

N3-99350: **MERGED CR TO 29.007on PIAFS and Negotiated parameter extension.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

CONTENT: Possible requirement to revisit the CR following the comments on separation FTM, PIAFS and multimedia (in N3-99349).

DISCUSSION: If you only signal UDI at 64Kbps you cannot deduce the UMTS BS. Question is how to derive the correct service if it is not clearly defined.

Solutions: Either use the ISDN service description, or this is not available then we must use the HLR BC description. Several delegates will discuss off-line to provide the correct text for this part.

Q. Do we have ambiguity ISDN BC contains 64kb UDI? **R.** If the user indication layer one protocol indicates H.223 or H.245 there is no problem of ambiguity. However if this is not signaled, there may be confusion between FTM PIAFS and Multimedia.

- **The outcome of the discussion is as follows:- When the information in the ISDN BC indicates UDI 32K, 56K 64K and if the UIL1 protocol is not set to "H.223 & H.245" we take the BC as stored in the HLR. RESULT: The document was REVISED to N3-99455.**

⇓ **REVISED** ⇓

N3-99455: **REV. MERGED CR TO 29.007on PIAFS and Negotiated parameter extension.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: Certain statements introduce backward incompatibility problems. Suggest rewording the document avoid these problems.

There were some objections to the proposed solution for multimedia. The author of the CR proposed to revise the document to resolve these problems, whilst incorporating both multi numbering and single numbering.

RESULT: The document was **REVISED to N3-99498.**

⇓ **REVISED** ⇓

N3-99498: **REV. MERGED CR TO 29.007on PIAFS and Negotiated parameter extension.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: Modifications to the text for clarity.

RESULT: The document was **REVISED to N3-99506.**

⇓ **REVISED** ⇓

N3-99506: **REV. MERGED CR TO 29.007on PIAFS and Negotiated parameter extension.** Presented by Achim of Alcatel.

DISCUSSION: Requires update to ANNEX A. Also some formatting and "kbps" -> "kbit/s".

RESULT: The document was **REVISED to N3-99507.**

⇓ **REVISED** ⇓

N3-99507: **REV. MERGED CR TO 29.007on PIAFS and Negotiated parameter extension.** Presented by Achim of Alcatel.

DISCUSSION: Presented to N3 plenary without further presentation

RESULT: The document was **AGREED.**

7.5 Services clean up R99

N3-99351: **REV. CR TO 03.10 v8.0.0 for R99 service clean up.** Presented by Achim of Alcatel.

CONTENT: Presented at the previous N3 meeting, and now incorporates comments from Norbert. Main changes include changes to references to GSM specifications, and include references to CCITT.

RESULT: The CR was **AGREED.**

N3-99352: **CR to 27.001 v3.2.0 for R99 service clean up.** Presented by Erik of Ericsson.

CONTENT: Presented at the previous N3 meeting. Main changes include removal of V.23

RESULT: The document was **AGREED.**

N3-99353: **CR to 27.002 v3.1.0 for R99 service clean up.** Presented by Erik of Ericsson.

CONTENT: Presented at the previous N3 meeting. Main changes include removal of V.23

RESULT: The document was **AGREED.**

N3-99354: **CR to 27.003 v3.1.0 for R99 service clean up.** Presented by Erik of Ericsson.

CONTENT: Presented at the previous N3 meeting.

RESULT: The document was **AGREED.**

N3-99355: **CR to 27.007 v3.2.0 for R99 service clean up.** Presented By Norbert of Siemens.

CONTENT: Presented at the previous N3 meeting.

RESULT: The document was **AGREED.**

7.6 Multimedia

N3-99358: **CR TO 29.007 - INTERWORKING WITH H.324/I.** Presented by –Daisuke of NTT DoCoMo

CONTENT: The existing “mapping of bearer capability values” and “multi numbering mechanism” are enhanced to provide 3G-H.324/M calls.

DISCUSSION: Requires some modification to incorporate comments made in earlier discussions regarding different bearer capabilities. Also changes to wording proposed by the author.

Suggestion: The Multimedia changes are interleaved in the existing section 9.2. It may be useful to collect all of the multimedia contributions into a separate section for multimedia. NTT DoCoMo supported this proposal, and agrees to revise this CR to incorporate the new section.

The chairman added that we combine all of the Multimedia contributions to reflect this.

Q. Is there a real requirement for a use rate of 33.6kbps? There could be problems if we have user rates of 28.8 and 33.6 and we can only signal one of them to the ISDN. The mapping of this service needs to be studied.

RESULT: The document was **REVISED to N3-99475.**

⇓ **REVISED** ⇓

N3-99475: **Rev. CR TO 29.007 v3.2.0- INTERWORKING WITH H.324/I.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: Addition of the phrase ”H.223 protocol is transparent to the IWF“ to section 10.4) 3G-H.324/M calls over UDI/RDI.

Removal of Comments from the CR.

RESULT: The document was **REVISED to N3-99501.**

⇓ **REVISED** ⇓

N3-99501: **Rev. CR TO 29.007 v3.2.0- INTERWORKING WITH H.324/I.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

DISCUSSION: Improvement to text to align with previous comments

RESULT: The document was **REVISED to N3-99508.**

⇓ **REVISED** ⇓

N3-99508: **Rev. CR TO 29.007 v3.2.0- INTERWORKING WITH H.324/I.** Presented by JUNICHIROU HAGIWARA of NTT DoCoMo.

RESULT: The document was **AGREED.**

N3-99391: **MOBILE MULTIMEDIA CALL INVOLVING PSTN TERMINAL.** Presented by Juha of Nokia.

CONTENT: Multimedia is one of the new applications to be part of the mobile system and H.324 based 3G-324M is agreed to be multimedia solution for the CS part of the system.

Interworking with equivalent multimedia terminal having PSTN access is also agreed requirement for Release 99.

The calling/called end does not know from called/calling number if the peer-end has PSTN access. Due to different nature of transmitting characteristics available in PSTN environment, the connection with PSTN access needs different type of Bearer Service and thus different call setup procedure from where there is end-to-end digital connection. Out-band indication about this PSTN access during call setup is very important, as it could trigger the inclusion of IWF in switching nodes right in time and thus allow automatic fallback to PSTN compatible call setup procedure.

This paper mentions about an out-band approach to let the digital end (PLMN/ISDN) know about existence PSTN access while establishing mobile multimedia call. The approach uses existing PLMN/ISDN out-band signaling parameters – Access Indicator (AI) and Progress Indicator (PI).

This report and related CRs *(N3-99393)* are submitted to both 3GPP N1 Meeting # 9 and N3 Meeting #7.

DISCUSSION: Comments to figure 1 by NTT DoCoMo. There is a requirement for additional UDI information during the set-up. Nokia reiterated that this document is purposely simplistic, as it is only background information for the CR contained in N3-99393.

Q. ISUP parameters were introduced at what date? It is possibly that they are not widely used in the public network. Juha replied that these are secondary mechanisms that complement the main mechanism that is independent of these ISDN parameters.

RESULT: The document was **NOTED.**

N3-99392: **INDICATION OF MULTIMEDIA CAPABILITY AT CALL SETUP.** Presented by Juha of Nokia.

CONTENT: A multimedia H.324 communication requires certain bearer characteristics; i.e. normal speech call bearer can not support a multimedia call. Specifically a synchronous data bearer, Information Transfer Capability (ITC) UDI/RDI is required for digital communication and '3.1kHz audio' for analogue communication. The document suggests that:

1. Support of functionality 'Swap from speech to multimedia' requires that multimedia ITC needs to be signaled at setup of the speech call, and that.
2. These additional characteristics are signaled by adding a corresponding BCIE element to the SETUP-message.

DISCUSSION: In clarification, the modification is made ‘during the call’. Example we set up a voice call and want to change to a multimedia call during the same call.

RESULT: The document was **DISCUSSED.**

N3-99393: **CR to 29.007 TO SUPPORT A CIRCUIT SWITCHED MULTIMEDIA CALL.** Presented by Juha of Nokia.

CONTENT: Relates to *N3-99392* and *N3-99391*.

NOTE: the document is not presented for approval at this meeting, but only for information and comments.

△ **ACTION 7/4: The delegates are encouraged to study the text, and make comments in this CR back to the author via e-mail.**

Reason for change: Addition of user friendliness through fallbacks in a multimedia call setup, a possibility to start a multimedia call with speech and a possibility to swap between speech and multimedia during the call.

Note: Subscription requires clarification - **this is an open issue.**

Q. How does IWF fall back from multimedia to speech if it sees only a transparent bit-stream? **R.** The fall back is done during the call set-up. If the multimedia call fails during

set-up the IWF initiates an in call modification to fall back to a speech call. This can also with UDI to 3.1Khz, as well as UDI to speech.

DoCoMo raised a question on fall back of UDI audio to speech – **this is an open issue.**

With swap to multimedia there is a known problem that the calling modem must be on line. Possible solution would be to make the use of A.8bis mandatory. This was left open to further discussion.

DISCUSSION: The review of this document was postponed due to lack of time – discussion must take place via e-mail before the next N3 meeting.

RESULT: The document was **POSTPONED until CN3#8.**

N3-99394: **CR to 27.001 TO SUPPORT A CIRCUIT SWITCHED MULTIMEDIA CALL.** Presented by Juha of Nokia.

CONTENT: This CR was provided for information only.

DISCUSSION: Skipped due to lack of time – discuss via e-mail before the next N3 meeting

RESULT: The document was **POSTPONED until CN3#8.**

N3-99395: **CHANGES IN 24.008 TO SUPPORT A CIRCUIT SWITCHED MULTIMEDIA CALL -.** Presented by Juha of Nokia for Information.

CONTENT: This CR was provided for information only

DISCUSSION: Skipped due to lack of time – discuss via e-mail before the next N3 meeting

RESULT: The document was **POSTPONED until CN3#8.**

N3-99454: **REV CR to 27.001 for INTRODUCTION OF MULTIMEDIA.** Presented by Erik of Ericsson.

CONTENT: The document presents changes to TS 27.001 for the introduction of Multimedia.

DISCUSSION: **Note: In table** B.1.3.1.7 the FNUR can also be 32.kbps. This is missing and will be added in a revised version of the CR.

N3 previously agreed that there is no requirement for a multimedia call in GSM. Note 2 in section B.1.3.1.7 states, *This value is interpreted as "No rate adaptation" in GSM.* This note is required for handover between 3G – 2G. This will be covered in more detail in the handover section.

The author seeks clarity on the abbreviation 3G.324(m) – Comments that S4 use 3G-H.324/M. This will be used in future and added to the vocabulary document.

RESULT: The document was **REVISED to N3-99485.**

⇓ **REVISED** ⇓

N3-99485: **REV CR to 27.001 for INTRODUCTION OF MULTIMEDIA.** Presented by Erik of Ericsson.

DISCUSSION: Table 4f 'must have been' to be replaced. **Add Reason for change.**

RESULT: The document was **REVISED to N3-99502**

⇓ **REVISED** ⇓

N3-99502: **REV CR to 27.001 for INTRODUCTION OF MULTIMEDIA.** Presented by Erik of Ericsson.

DISCUSSION: Careful of potential numbering clashes to notes with other CRs to 27.001.

RESULT: The document was **AGREED.**

N3-99494: **WID sheet for CS Multimedia features in R00.** Presented by Juha of Nokia.

CONTENT: The document contains a proposed W. I. description sheet for CS Multimedia in R99.

DISCUSSION: Question raises in document at to who should have 1st responsibility for this WI, N1 or N3. – Propose N3 to take the main responsibility as the improvements relate mostly to interworking. If the nature of the work changes these responsibilities shall be revisited.

RESULT: The document was **REVISED to N3-99510**

⇓ **REVISED** ⇓

N3-99510: **WID sheet for CS Multimedia features in R00.** Presented by Juha of Nokia.

DISCUSSION: Additional supporting company NTT DoCoMo. Lucent will also check this.

RESULT: The document was **AGREED.**

7.7 GSM maintenance

N3-99388: **CLARIFICATION OF MSC BEHAVIOUR IN CASE OF INTERWORKING.** Presented by Achim of Alcatel.

CONTENT: Document was originated by T-Mobile and is supported by Alcatel and Siemens. The CR **N3-99346** to 29.007 "Clarification of the VMSC behavior in case of interworking" was agreed at the last N3 meeting.

DISCUSSION: The originator of the original CR has been notified of this proposal and does not object to postponing the CR.

RESULT: The content of the document was **AGREED,** and the content of CR in **N3-99346** will be postponed until the next N3 meeting.

The CR shown below is postponed until CN3#8 in Jan 2000.

N3-99346	29.007	3.2.0	005	D	R99	Clarification of the VMSC Behavior in case of interworking

N3-99409: **CR to 04.22 R96 for CORRECTION TO REMAP PROCEDURE IN RLP.** Presented by Norbert.

CONTENT: This document presents changes to CRs presented and agreed at the last N3

RESULT: The document was **AGREED.**

N3-99414: **CR to 04.22 CORRECTION TO REMAP PROCEDURE IN RLP.** Presented by Norbert.

CONTENT: Equivalent CR for R97.

RESULT: The document was **AGREED.**

N3-99415: **CR to 04.22 CORRECTION TO REMAP PROCEDURE IN RLP.** Presented by Norbert.

CONTENT: Equivalent CR for R98.

RESULT: The document was **AGREED**.

N3-99428: **CR to 24.022 CORRECTION TO REMAP PROCEDURE IN RLP.** Presented by Norbert.

CONTENT: Equivalent CR for R99.

RESULT: The document was **AGREED**.

The above CRs replace the following CRs that were approved at CN3#6 meeting.

N3-99361	04.22	5.5.0	A024	F	R96	Correction to REMAP procedure in RLP	Replaced by 409
N3-99362	04.22	6.1.0	A025	A	R97	Correction to REMAP procedure in RLP	Replaced by 414
N3-99363	04.22	7.0.1	A026	A	R98	Correction to REMAP procedure in RLP	Replaced by 415
N3-99364	24.022	3.1.0	002	A	R99	Correction to REMAP procedure in RLP	Replaced by 428

N3-99431: **Correction to 09.07 R96 regarding Intermediate rate.** Presented by Erik of Ericsson.

CONTENT: In Table 6B of GSM TS 09.07 Release 96, there is no code point for IR 32 kbit/s in the ISDN BC. This leads to an error in case of a UDI V.110 MT call, when the user rate is 14.4 or 19.2 Kbit/s. this paper proposes to reintroduce this point code.

DISCUSSION: Related CRs to R97, R98 and R99 in N3-99456, N3-99457, N3-99458)

RESULT: The document was **AGREED.**

7.8 Other Work Items

8 Packet Switched Work Items

The results of the Packet SWG meeting are presented in the Chairman's report in **ANNEX A**

9 Approval of results

9.1 Report of the subgroups

N3-99483: **Report of the Packet SWG.** Presented by Graham Heaton.

CONTENT: The chairman's report from the 4 day meeting of the Packet SWG.

RESULT: The document was **AGREED and is included in ANNEX A**

The Report of the Circuit SWG was given by Norbert Klehn, and the status of documents is reflected in this meeting report.

9.2 Work Items

9.2.1 State of existing Work Items

N3-99401: **R99 Submission forms.** Presented by N3 Chairman.

CONTENT: Contains a 1st draft of the Work Item R99 Submission Forms, as completed by the N3 chairman. These sheets are to be presented to the next TSG_N and SA Plenaries. CN3 is requested to fill out Release 1999 a Submission form for all of the Work Items CN3 has to contribute. This document provides these forms with initial information. The WI rapporteurs are requested to complete these forms.

DISCUSSION: Comments were made to each Work Item sheet. During the discussion, and edited directly into a revised version of the document.

RESULT: The document was **REVISED to N3-99509.**

⇓ **REVISED** ⇓

N3-99509: **R99 Submission forms from CS SWG.** Presented by N3 Chairman.

RESULT: The document was **MERGED with N3-99500 to N3-99515.**

N3-99500: **R99 Submission forms from PS SWG.** Presented by N3 PS SWG Chairman.

CONTENT: Contains a 1st draft of the Work Item R99 Submission Forms, as completed by the N3 PS WSG. These sheets are to be combined with the similar document from the CS SWG and presented to the next TSG_N and SA Plenaries.

DISCUSSION: Comments were made to each Work Item sheet. During the discussion, and edited directly into a revised version of the document.

RESULT: The document was **MERGED with N3-99509 to N3-99515.**

N3-99515: **R99 Submission forms from PS and CS SWGs.**

DISCUSSION: To be provided by e-mail by Norbert.

RESULT: The document was **AGREED.**

9.2.2 New Work Items

The following Work items were agreed:

DOC	Subject	For	1st Respo.	2nd Respo.	Delivery
N3-99510	Complementary features to the CS Multimedia bearer service	R00	N3	N1	Dec 2000

9.3 Liaison Statements

The following Liaison Statements will be sent:

DOC	Subject	To	Cc	Attachment	Sent
N3-99491	LS on QoS Mapping	S2	N1	None	6th Dec 99
N3-99474	Re. LS on UMTS and RAB parameter value ranges and granularity	S2	R2, R3	None	6th Dec 99
N3-99514	HSCSD specifications	S1		None	6th Dec 99
N3-99460	Definition of Active Communication for Packet Domain	TSG RAN2, TSG T2 WG5		None	6th Dec 99

9.4 New TRs TSs

The following TR/TSs were agreed to be sent to the next TDG_N plenary:

DOC	Number	Sent
N3-99505	TR 23.910 v1.0.0	Circuit Switched Data Bearer Services

9.5 Change Requests

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

N3 tdoc	SPEC	To Ver	CR#	CAT.	Rel.	W. Item	Subject
N3-99351	03.10	8.0.0		C	R99	Service Clean up R99	Service clean-up for Release 99
N3-99415	04.22	7.0.1		A	R98	T.E.I	REMAP PROCEDURE IN RLP
N3-99414	04.22	6.1.0		A	R97	T.E.I	REMAP PROCEDURE IN RLP
N3-99409	04.22	5.5.1		F	R96	T.E.I	REMAP PROCEDURE IN RLP
N3-99462	07.60	7.1.0		D	R98	GPRS	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP
N3-99461	07.60	6.4.0		D	R97	GPRS	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP
N3-99456	09.07	6.1.0		A	R97	HSCSD	Intermediate rate
N3-99431	09.07	5.9.0		F	R96	HSCSD	Intermediate rate
N3-99457	09.07	7.1.1		A	R98	HSCSD	Intermediate rate
N3-99465	09.61	7.1.0		D	R98	GPRS	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP
N3-99464	09.61	6.3.0		D	R97	GPRS	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP
N3-99489	**23.046**	**3.2.0**	**X**	**x**	**R99**	**x**	**e-mail approval by 17:00 next Thursday**
N3-99428	24.022	3.1.0		A	R99	T.E.I	REMAP PROCEDURE IN RLP
N3-99492	24.022	3.1.0		B	R99	Updates for UMTS	INITIAL UPDATES FOR UMTS
N3-99352	27.001	3.2.0		C	R99	Service Clean up R99	Service clean-up for Release 99
N3-99497	27.001	3.2.0		B	R99	FTM	Introduction of FTM
N3-99496	27.001	3.2.0		B	R99	Support of PIAFS in UMTS	DETAILED INFORMATION OF PIAFS IN UMTS
N3-99495	27.001	3.2.0		B	R99	Updates for UMTS	INITIAL UPDATES FOR UMTS
N3-99502	27.001	3.2.0		B	R99	Multimedia	INTRODUCTION OF MULTIMEDIA
N3-99503	27.001	3.2.0		C	R99	Real-time non-transparent FAX in UMTS	INTRODUCTION OF ASYNCHRONOUS INTERFACE FOR REAL-TIME NON-TRANSPARENT FAX
N3-99353	27.002	3.1.0		C	R99	Service Clean up R99	Service clean-up for Release 99
N3-99354	27.003	3.1.0		C	R99	Service Clean up R99	Service clean-up for Release 99
N3-99488	27.003	3.1.0		A	R99	Real-time NTFAX in UMTS	Introduction of Asynchronous interface for Real-time non-transparent FAX
N3-99463	27.060	3.2.0		D	R99	GPRS	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP
N3-99468	27.060	3.2.0		B	R99	GPRS	Parallel handling of multiple user application flows

N3-99469	27.060	3.2.0		D	R99	GPRS	CLARIFICATION ON THE TASKS OF THE MT FOR PDP TYPE PPP
N3-99484	27.060	3.2.0		B	R99	GPRS	STREAMLINING
N3-99355	29.007	3.2.0		C	R99	Service Clean up R99	Service clean-up for Release 99
N3-99458	29.007	3.2.0		A	R99	HSCSD	Intermediate rate
N3-99429	29.007	3.2.0		B	R99	FTM	Introduction of FTM
N3-99504	29.007	3.2.0		B	R99	Updates for UMTS	INITIAL UPDATES FOR UMTS
N3-99507	29.007	3.2.0		B	R99	Support of PIAFS in UMTS	PIAFS and Negotiated parameter extension
N3-99508	29.007	3.2.0		B	R99	Multimedia	INTERWORKING WITH H.324/I.
N3-99396	29.061	3.1.0		B	R99	Access to ISPs Intranets Wireless/Remote access to LANs	ACCESS TO AN INTRANET/ISP WITH DHCP END TO END
N3-99466	29.061	3.1.0		D	R99	GPRS	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP
N3-99470	29.061	3.1.0		D	R99	GPRS	CLARIFICATION ON THE PPP LCP NEGOTIATION FOR PDP TYPE PPP
N3-99481	29.061	3.1.0		B	R99	GPRS Mobile IP interworking	MOBILE IP ISSUES
N3-99482	29.061	3.1.0		C	R99	GPRS	ENHANCEMENT TO NUMBERING AND ADDRESSING TO INCLUDE THE APN
N3-99499	29.061	3.1.0		B	R99	GPRS	STREAMLINING

10 Any other business

No other business.

11 Close of meeting

The Chairman thanked ETSI for hosting the meeting and for the meeting support given to the CN delegates, which made it possible to make progress in the work.

Annex A: Report from the Packet SWG.

Administrative items

Packet Switched sub-group attendees

Name	Company
HEATON Graham	Brand Communications
HOLMSTRÖM Tomas	Ericsson LM
JONES Paul	Vodafone
TAMURA Toshiyuki	NEC
HELGE Johan	Telia
JANSON Loeiz	France Telecom
ANDRIANTSIFERANA Laurent	Alcatel

General TSG-CN3 Packet switched (TSG-CN3/PS) issues

Meeting Report.

483 (This document) is the Meeting Report.

TSG-CN3/PS Liaisons Statements

385 – LS from RAN2 regarding definition of 'Active Communications"

This is a response to an LS from CN3 on the Definition on 'Active communication'. RAN3 propose a definition for this term that disagrees with the definition CN3/PS proposed for this term.

<RAN2 Definition: "Active Communication>" 'active communication' to be once a radio access bearer is established."

CN3/PS believe that this definition is not helpful for Packet Switched communication.

<outcome> output of LS (Tdoc 460) to RAN2 disagreeing with their definition – see also Tdoc 459

459 – LS from T2 regarding definition of 'Active Communications"

T2 agree with the definition of 'Active Communication' proposed by CN3/PS.

<CN3 and T2 Definition: "Active Communication>" Active Communications: A UE is in active communication when it has a CS connection established. For PS active communication is defined by the existence of one or more Activated PDP contexts. Either one or both of the mentioned active communications may occur in the UE."

<outcome>T2 will be copied the LS (Tdoc 460) to T2 as previous item.

472 – LS from SMG2 WPA titled: Proposed answer Liaison Statement to SA WG2 on "Basic principles of QoS interoperation".

CN3/PS looked at this Liaison Statement – did not understand the context, could not find the references in the time available and could progress no further.

<outcome> document reviewed: As this was only copied to CN3 no further action taken.

486 – LS from T2-SWG2 "Rejection on GPRS ATD R97 modification"

<context>" TSG-T-WG2-SWG2 (Terminal Interfaces) has agreed that CR on 07.07 R97 (tdoc T2-99955) dealing with GPRS ATD command syntax modification could not be approved.

SWG2 has noted that the CR was referring to the PDP type PPP that is not defined in GSM 07.07 and 07.60 R97.

Furthermore, SMG has already mentioned that GSM phase 2+ R97 was completed and consequently CRs on R97 specifications could not contain functional modification or addition of feature so that the existing implementations should not be modified."

<CN3/PS understanding of present status of this issue>" The 'ATD*99*' command will remain unchanged for releases 97, 98 and 99. The 'ATD*98*' command (with IP as the default PDP type) will be introduced by T2 for releases 98 and 99, and NOT added to release 97."

<outcome> LS read – approach taken by T2 SWG2 is ACCEPTED.

TSG-CN3/PS Change requests

447 & 446

<source>" NEC"

<outcome> Withdrawn – agreement with Ericsson's that inputs 444 & 445 cover this issue.

433 – CR to 07.60 Release 97

<source>" Ericsson"

<context> "During the PDP context activation procedure for PDP type IP, the MT may receive PPP IPCP packets, carried in the Protocol Configuration Options IE, from the network. It is not entirely clear in the current text how the MT shall act upon the reception of Configure-Ack, Configure-Nak and Configure-Reject packets."

Extra text inserted about Protocol Configuration Option IEs for uplink.

<outcome> small change required - new Tdoc 461 was ACCEPTED

434 – CR to 07.60 Release 98

<source>" Ericsson"

As per 461 with new text inserted

<outcome> small change required - new Tdoc 462 ACCEPTED.

435 – CR to 27.060 Release 99

<source>" Ericsson"

As per 461 with new text inserted

<outcome> small change required - new Tdoc 463 ACCEPTED.

436 – CR to 09.61 Release 97

<source>" Ericsson"

<context> "During the activation of a PDP Context for non-transparent IP the GGSN may receive PPP IPCP Configure-Request packets, from the MS, contained in the Protocol Configuration Options IE. Depending on the options and/or the requested values for the options the GGSN may choose to either acknowledge or reject the options and/or their proposed values. It is not entirely clear in the current text how this should be done."

Ref to RFC 1661 added

<outcome> small change required - new Tdoc 464 ACCEPTED.

437 – CR to 09.61 Release 98

<source>" Ericsson"

As per 464 – new text inserted

<outcome> small change required - new Tdoc 465 ACCEPTED.

438 – CR to 29.061 Release 99

<source>" Ericsson"

As per 464 – new text inserted

<outcome> small change required - new Tdoc 466 ACCEPTED.

427 – CR to 27.060

<source>" Ericsson"

<context> "This CR introduces changes necessary due to the new feature of parallel handling of multiple user application flows."

This document just gives an "Example mapping of functions between the R reference point and the Packet Domain bearer for IP over MCML PPP"

Tdoc 467 (a PowerPoint presentation) was presented to assist the understanding of relevant issues.

<outcome> small change required - new Tdoc 468 ACCEPTED.

444 – CR to 27.060

<source>" Ericsson"

<context>"During the R2#7 meeting a number of issues were brought up concerning PPP LCP negotiation for PDP type PPP. This CR clarifies these issues."

There were a number of changes added to this document for further clarification, particularly the inclusion of a second example for the use of PPP relayed negotiation in addition to the previous transparent PPP negotiation.

<outcome> change required - new Tdoc 469 ACCEPTED.

445 – CR to 29.061 Release 99

<source>" Ericsson"

<context>"During the R2#7 meeting a number of issues were brought up concerning PPP LCP negotiation for PDP type PPP. This CR clarifies these issues."

<outcome> change required - new Tdoc 470 ACCEPTED.

396 – CR to 29.061 (DHCP)

<source>" Ericsson"

<context>" The access to an Intranet or ISP by running DHCP between the TE and a server in the Intranet/ISP domain is introduced. The corresponding interworking with the PDN is described in a new section.

At PDP context activation the MS requests an APN offering the DHCP service. The IP address of the PDP context is provisionally set to 0.0.0.0 as no IP address is allocated at this moment.

The TE runs a DHCP client, after the PDP context has been successfully activated, to retrieve the IP address and other configuration parameters from a DHCP server located in the Intranet/ISP domain. The PDP context is then updated through the GGSN-initiated modification procedure to reflect the newly allocated IP address.

A Packet Domain-specific DHCP Relay Agent is needed in the GGSN to allow for the correct routing of broadcast DHCP messages."

This CR was considered at the previous CN3/PS meeting – small changes were made to submit it to this meeting.

<outcome> ACCEPTED without change

449 – CR to 29.061 - Mobile IP

<source>" Telia"

<context>" The definition of the APN has been enlarged in 23.060 to also include external PDN address allocation. This CR covers step 1 of a three phase implementation of Mobile IP as defined by S2."

Bulk of changes are in a new section: "11.x.x - Access to Internet, Intranet or ISP with Mobile IPv4"

<outcome> Reviewed – minor changes - new Tdoc 481 ACCEPTED.

383 – CR to 29.061 – Changes for NRCAP (Network Requested Context Activation Procedure)

<source>" Vodafone"

<context>" This CR proposes an enhancement to the section on Numbering and Addressing, where a second scenario is added for interworking with private networks. It explains that PDP Address can not be used alone to establish uniqueness during Context Activation collisions, but that the pair of values APN and PDP address can. This is a clarification in line with changes to specifications: 27.007, 29.060, 24.008, and 23.060. These changes add the functionality and message parameters required for correct behaviour during Context Activation collisions."

<outcome> Corrections made to CR front sheet - new Tdoc 482 ACCEPTED

Other Input Documents (TSG-CN3/PS TDocs)

399 – 23.060v3.1.0 draft3

Document submitted for reference only, used for streamlining 29.061 and 27.060.

<outcome> NONE.

448 – Clarification of documents on PPP

<source>" NEC"

<context>" There is a unclear point about application of RFC documents on PPP based service. The UMTS PPP peers at the MS and GGSN handle the PPP protocol as specified in RFC 1661, which sentence is described in TS23.060 section 12.6.3. On the other hands, the PPP in the 'general DTE' is based on RFC 1661 and RFC 1662. The 'conversion' that the MT has to perform is to remove (uplink) and add (downlink) the 'L2' (e.g. RFC 1662 compliant) framing."

Document provided for information.

<outcome> Document read offline and agreed as useful input.

467 – Presentation of "Enhanced QoS support - TE-MT 'L2'"

<source>" Ericsson"

Document provided for information regarding The PPP Multilink Protocol (MP) and The Multi-Class Extension to Multi-Link PPP.

<outcome> NONE

401 – R99 Submission Forms submitted to CN3/PS by CN3 Chairman

<source>" CN3 Chairman"

<context>" CN3 is requested to fill out Release 1999 Submission forms for all of the Work Items CN3 has to contribute. This document provides these forms with initial information. The WI rapporteurs are requested to complete these forms."

<outcome> Submission Forms completed for CN3/PS in Tdoc 500.

Release 99 Streamlining for docs 3G TS 23.060 & 3G TS 29.061

484 (prev. 397) – CR to 27.060 v3.2.0

<context>" Alignment to 23.060 v3.1.0 draft 3 (CN3/PS most recent version of 23.060)"

<outcome>" Significant changes made - new Tdoc 484 ACCEPTED – new version 27.060 will be v3.3.0"

398 – CR to 29.061 v3.1.0

<context>" Alignment to 23.060 v3.1.0 draft 3 (CN3/PS most recent version of 23.060)"

<outcome>" Significant changes made - new Tdoc 499 ACCEPTED – new version 29.061 will be v3.2.0"

Output document table:

N3-99	TITLE	TYPE	SPEC.	VER	REL.	STATUS
396	ACCESS TO AN INTRANET/ISP WITH DHCP END TO END	CR	29.061	3.1.0	R99	REV OF 328 (DEFERRED FROM CN#6)
460	LS TO R2 AND T2 WG5 ON DEFINITON OF ACTIVE COMMUNICATION	LS				
461	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	CR	07.60	6.4.0	R97	REVISED 433
462	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	CR	07.60	7.1.0	R98	REVISED 434
463	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	CR	27.060	3.2.0	R99	REVISED 435
464	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	CR	09.61	6.3.0	R97	REVISED 436
465	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	CR	09.61	7.1.0	R98	REVISED 437
466	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	CR	29.061	3.1.0	R99	REVISED 438
467	PRESENTATION OF MCML PPP	INFO				
468	ENHANCED QOS SUPPORT	CR	27.060	3.2.0	R99	REVISED 427
469	CLARIFICATION ON THE TASKS OF THE MT FOR PDP TYPE PPP",	CR	27.060	3.2.0	R99	REVISED 444
470	CLARIFICATION ON THE PPP LCP NEGOTIATION FOR PDP TYPE PPP"	CR	29.061	3.1.0	R99	REVISED 445
481	MOBILE IP ISSUES	CR	29.061	3.2.0	R99	REVISED 449
482	ENHANCEMENT TO NUMBERING AND ADDRESSING TO INCLUDE THE APN	CR	29.061	3.2.0	R99	REVISED 383
483	CN3 PS REPORT	REPORT				
484	3G TS 27.060 STREAMLINING	CR	27.060	3.2.0	R99	REVISED 397
499	3G TS 29.061 STREAMLINING	CR	29.061	3.1.0	R99	REVISED 398
500	RELEASE 99 W.I. FORMS	TDOC				REVISED 401

Annex B: List of N3 Meeting Participants

The following delegates attended the CN3#7 meeting.

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Mr. Daisuke Yokota	Lucent Technologies Japan	+81 3 5561 3609	+81 3 5561 9011	yokota@lucent.com

Annex C: List of documents

Full details can be found in the file *CN3#7-Tdoclist.zip* on the meeting server.

N3-99	TITLE	STATUS
340	REV. CR TO 27.001 INTRODUCTION OF FTM	REV. TO 453
341	REV. CR TO 29.007 INTRODUCTION OF FTM	REV. TO 429
349	REV DETAILED INFORMATION OF PIAFS IN UMTS	REV. TO 430
350	REV MERGED CR TO 29,007	REV. TO 455
351	REV. CR TO 03.10 FOR SERVICE CLEAN-UP	AGREED
352	CR FOR R99 SERVICE CLEAN-UP	AGREED
353	CR FOR R99 SERVICE CLEAN-UP	AGREED
354	CR FOR R99 SERVICE CLEAN-UP	AGREED
355	CR FOR R99 SERVICE CLEAN-UP	AGREED
358	CR TO 29.007 - INTERWORKING WITH H.324/I.	REV TO 475
375	MEETING REPORT FROM N3#6 MEETING	AGREED
377		
378	N3#7 DRAFT AGENDA	REV. TO 408
379	INITIAL UPDATES FOR UMTS	REV, TO 492
380	INITIAL UPDATES FOR UMTS	REV. TO 493
381	SERVICE/BASELINE IMPLEMENTATION CAPABILITIES	NOTED
382	HANDOVER ISSUES FOR CS DATA FROM 2G TO 3G PLMNS	NOTED
383	ENHANCEMENT TO NUMBERING AND ADDRESSING TO INCLUDE THE APN	AGREED
384	RE. LS ON RADIO ACCESS BEARER ATTRIBUTES	NOTED
385	RE. LS ON DEFINITION OF ACTIVE COMMUNICATION FOR PACKET DOMAIN	NOTED
386	RADIO ACCESS BEARER ATTRIBUTES	NOTED
387	HANDOVER ISSUES FOR CS DATA FROM 2G TO 3G PLMNS	WITHDRAWN - DUPLICATE
388	CLARIFICATION OF MSC BEHAVIOUR IN CASE OF INTERWORKING	AGREED
389	IU INTERFACE PROTOCOL ADAPTATION	MERGED INTO 473
390	HANDOVER BETWEEN A 2GMSC AND A 3GMSC	POSTPONED TO CN3#8
391	MOBILE MULTIMEDIA CALL INVOLVING PSTN TERMINAL	DISCUSSED
392	INDICATION OF MULTIMEDIA CAPABILITY AT CALL SETUP	DISCUSSED
393	CHANGES IN 29.007 TO SUPPORT A CIRCUIT SWITCHED MULTIMEDIA CALL	POSTPONED CN3#8
394	CHANGES IN 27.001 TO SUPPORT A CIRCUIT SWITCHED MULTIMEDIA CALL	POSTPONED CN3#8
395	CHANGES IN 24.008 TO SUPPORT A CIRCUIT SWITCHED MULTIMEDIA CALL	POSTPONED CN3#8
396	ACCESS TO AN INTRANET/ISP WITH DHCP END TO END	AGREED
397	CR ON WORKING DRAFT OF 27.060	REV. TO 484
398	CR ON WORKING DRAFT OF 29.061	REV OF 370
399	23.060 V310 DRAFT 2 FROM S2	REV OF 261
400	TR 25.990 V2.0.0 (1999-10) VOCAB.	POSTPONED TO N3#8
401	R99 SUBMISSION SHEETS FOR N3	REV. TO 509
402	DRAFT TR 23.910	MERGED WITH 420 INTO 473
403	DISCUSSION PAPER ON CS DATA SERVICES IN UMTS	NOTED
404	PROPOSAL FOR A-TRAU' PROTOCOL	REV. TO 471
405	03.46 ERROR SCENARIOS	DISCUSSED
406	CHANGES TO SUPPORT A HANDOVER BETWEEN A 2G MSC AND A 3G MSC	WITHDRAWN
407	ANSWER TO THE LIAISON STATEMENT ON PPP ENCAPSULATION	NOTED
408	N3#7 DRAFT AGENDA	AGREED
409	CORRECTION TO REMAP PROCEDURE IN RLP	AGREED
410	STATUS LIST OF N3 SPECIFICATIONS	REV. TO 452
411	LIST OF N3 WORK ITEMS	WITHDRAWN
412	3G TR/TS TEMPLATES	NOTED
413	PRESENTATION OF SPECS / REPORTS TO THE TSG	NOTED
414	CORRECTION TO REMAP PROCEDURE IN RLP	AGREED
415	CORRECTION TO REMAP PROCEDURE IN RLP	AGREED
416	INTRODUCTION OF UMTS	REV. TO 495
417	DISCUSSION PAPER ON HO FROM UMTS TO GSM	DISCUSSED
418	DISCUSSION PAPER ON QOS UPDATES FOR CS DATA BEARER SERVICES	DISCUSSED
419	PROPOSAL FOR RESPONSE LIAISON ON UMTS AND RAB PARAMETER VALUE RANGES AND GRANULARITY	REV TO 474
420	NUMBER FOR MODIFICATIONS TO 23.910	MERGED WITH 402 INTO 473
421	ENHANCEMENT OF MULTINUMBERING SCHEME	WITHDRAWN
422	NECESSITY FOR IMPROVEMENT OF INTERVENTION IN T.30/T.4	NOTED
423	ENHANCEMENT OF TS 23.046	MERGED WITH 450 INTO 489
424	IMPROVEMENT OF INTERVENTION IN T.30/T.4	REV. TO 450

N3-99	TITLE	STATUS
425	BC-IE SETTING FOR REAL-TIME NON-TRANSPARENT FAX	REV TO 487
426	INTRODUCTION OF ASYNCHRONOUS INTERFACE FOR REAL-TIME NON-TRANSPARENT FAX	REV. TO 488
427	ENHANCED QOS SUPPORT	REV. TO 468
428	REV. CR TO 24.022	AGREED
429	REV. CR TO 29.007 INTRODUCTION OF FTM	AGREED
430	REV DETAILED INFORMATION OF PIAFS IN UMTS	REV. OF 349
431	CORRECTION TO 09.07 REGARDING INTERMEDIATE RATE	AGREED
432	DISC PAPER IUC / IU	DISCUSSED
433	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	REV. TO 461
434	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	REV. TO 462
435	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	REV. TO 463
436	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	REV. TO 464
437	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	REV. TO 465
438	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	REV. TO 466
439	FAX ADHOC DOCOMO'S COMMENTS	DISCUSSED
440	FAX ADHOC: TRANSMISSION DELAY IN PDC SYSTEM	NOT PRESENTED
441	FAX ADHOC: A MEASURE FOR THE BURST ERRORS	NOT PRESENTED
442	FAX ADHOC HE MAXIMUM ENDURANCE DELAY IN PDC SYSTEM	NOT PRESENTED
443	FAX ADHOC: THE APPROPRIATENESS OF USING THE GEM AS THE EVALUATION OF LAYER2 DELAY IN IMT2000	NOT PRESENTED
444	CLARIFICATION ON THE TASKS OF THE MT FOR PDP TYPE PPP",	REV. TO 469
445	CLARIFICATION ON THE PPP LCP NEGOTIATION FOR PDP TYPE PPP"	REV. TO 470
446	CLARIFICATION ON PPP BASED SERVICE	WITHDRAWN
447	CLARIFICATION ON PPP BASED SERVICE	WITHDRAWN
448	CLARIFICATION FOR USAGE OF RFC1661 TO UMTS ON PPPBASED SERVICE	READ OFFLINE
449	MOBILE IP ISSUES	REV. TO 481
450	IMPROVEMENT OF INTERVENTION IN T.30/T.4	MERGED WITH 423 INTO 489
451	INTRODUCTION OF MULTI MEDIA	WITHDRAWN AND REPLACED BY 454
452	STATUS LIST OF N3 SPECIFICATIONS	REV FROM 410
453	REV. CR TO 27.001 INTRODUCTION OF FTM	REV. TO 453
454	REV CR TO INTRODUCTION OF MULTI MEDIA	REV. TO 485
455	REV MERGED CR TO 29,007	REV. TO 498
456	CORRECTION TO 09.07 REGARDING INTERMEDIATE RATE	AGREED
457	CORRECTION TO 09.07 REGARDING INTERMEDIATE RATE	AGREED
458	CORRECTION TO 09.07 REGARDING INTERMEDIATE RATE	AGREED
459	LS ON CONFIRMATION OF DEFINITION FOR “ACTIVE COMMUNICATION” FOR THE PS DOMAIN	NOTED ANS REPLY LS
460	LS TO R2 AND T2 WG5 ON DEFINITON OF ACTIVE COMMUNICATION	AGREED
461	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	AGREED
462	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	AGREED
463	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	AGREED
464	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	AGREED
465	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	AGREED
466	IPCP NEGOTIATION AT THE GGSN FOR NON-TRANSPARENT IP	AGREED
467	PPP MP PRESENTATION	NOTED
468	ENHANCED QOS SUPPORT	AGREED
469	CLARIFICATION ON THE TASKS OF THE MT FOR PDP TYPE PPP",	AGREED
470	CLARIFICATION ON THE PPP LCP NEGOTIATION FOR PDP TYPE PPP"	AGREED
471	PROPOSAL FOR A-TRAU’ PROTOCOL	POSTPONED TO CN3#8
472	BASIC PRINCIPLES OF QOS INTEROPERATION	NOTED
473	DRAFT TR 23.910	MERGE OF 402 AND 420
474	REV LS ON UMTS AND RAB PARAMETER VALUE RANGES AND GRANULARITY	REV OF 419
475	CR TO 29.007 – INTERWORKING WITH H.324/I.	REV TO 501
476	REV CR TO INTRODUCTION OF MULTI MEDIA	REV. OF 454
477	PROPOSAL ON XXX	POSTPONED TO CN3#8
478	FAX ADHOC: A MEASURE FOR THE BURST ERRORS	REV FROM 441
479	IU UPLINK DELAY IN TRANSPARENT DATA	WITHDRAWN
480	SPARE	
481	MOBILE IP ISSUES	AGREED
482	ENHANCEMENT TO NUMBERING AND ADDRESSING TO INCLUDE THE APN	AGREED
483	CN3 PS MEETING REPORT	NOTED
484	3G TS 27.060 STREAMLINING	AGREED
485	REV CR TO INTRODUCTION OF MULTI MEDIA	REV. TO 502
486	REJECTION ON GPRS ATD R97 MODIFICATION	NOTED

N3-99	TITLE	STATUS
487	BC-IE SETTING FOR REAL-TIME NON-TRANSPARENT FAX	REV. TO 503
488	INTRODUCTION OF ASYNCHRONOUS INTERFACE FOR REAL-TIME NON-TRANSPARENT FAX	AGREED
489	MERGE OF 450+423	FOR E-MAIL APPROVAL (TUES)
490	IU INTERFACE IN TRANSPARENTY CASE	DISCUSSED
491	LS TO S2 CC N1 ON QOS MAPPINF	AGREED
492	INITIAL UPDATES FOR UMTS	AGREED
493	INITIAL UPDATES FOR UMTS	REV. TO 504
494	DRAFT WI DESCRIPTION SHEET FOR CS MULTIMEDIA FEATURES IN R00	REV. TO 510
495	INTRODUCTION OF UMTS	AGREED
496	REV DETAILED INFORMATION OF PIAFS IN UMTS	AGREED
497	REV. CR TO 27.001 INTRODUCTION OF FTM	AGREED
498	REV MERGED CR TO 29,007	REV. TO 506
499	3G TS 29.061 STREAMLINING	AGREED
500	RELEASE ’99 W.I FORMS	MERGED TO 515
501	CR TO 29.007 – INTERWORKING WITH H.324/I.	REV TO 508
502	REV CR TO INTRODUCTION OF MULTI MEDIA	AGREED
503	INTRODUCTION OF ASYNCHRONOUS INTERFACE FOR REAL-TIME NON-TRANSPARENT FAX	AGREED
504	INITIAL UPDATES FOR UMTS	AGREED
505	23.910 V1.0.0 + INFO SHEET	AGREED TO PRESENT TO NEXT CN PLENARY
506	REV MERGED CR TO 29,007	REV TO 507
507	REV MERGED CR TO 29,007	AGREED
508	CR TO 29.007 – INTERWORKING WITH H.324/I.	AGREED
509	R99 SUBMISSION SHEETS FOR N3	MERGED TO 515
510	DRAFT WI DESCRIPTION SHEET FOR CS MULTIMEDIA FEATURES IN R00	AGREED
511	RE. LS FROM S1 ON 3G SERVICES	DISCUSSED
512	RE. LS FROM S1 ON RELEASE'99 CLEAN UP.	DISCUSSED
513	LS FROM S1 ON HSCSD SPECIFICATIONS.	DISCUSSED
514	LS TO S1 ON HSCSD SPECIFICATIONS	AGREED
515	R99 SUBMISSION SHEETS FOR N3	MERGE OF 509 AND 500

nnex D: Status of N3 Specifications

2G TR / TS	TITLE	R96	R97	R98	R99	Last CR	3G TR / TS	TITLE	R99	Last CR	Rapporteur Company	Comments
03.10	GSM PLMN Connection Types	5.4.0	6.0.0	7.0.1	8.0.0	A010	23.910	Working assumption for 3G Bearer services	0.1.0	-	Achim Braun, Alcatel	V0.1.0 Provided by Erik
03.45	Technical Realization of Fax G.3 Service- transparent	5.2.1	6.0.1	7.0.0	8.0.0	A004	23.045	X	X	X		
03.46	Technical Realization of Fax G.3 Service- Non-transparent	5.0.0	6.0.0	7.0.0	8.0.0	A012	23.146	Technical realization of facsimile group 3 non-transparent	3.0.0	-	Junichiro Hagiwara, NTT	23.146 to be created for UMTS 03.46 is the GSM solution
03.54	Description of the use of a shared inter-working function in a PLMN S2	5.2.0	6.0.0	7.0.0	X	A007	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	
03.70	Routeing of calls to / from Public data Network (PDN)	5.0.0	6.0.0	7.0.0	X	A002	23.070	Routeing of calls to/from Public Data Networks (PDN)	3.0.0	-		
04.21	Rate Adaptation on MS-BSS Interface	5.6.1	6.0.1	7.0.2	8.0.0	A014	X	X	X	X	Juha Räsänen, Nokia	GSM ONLY
04.22	Radio Link Prototcol for Data and Telematic services on the MS-BSS and the MS-MSC Interfaces	5.5.1	6.1.0	7.0.1	X	A023	24.022	Radio Link Prototcol for Data and Telematic services on the MS-BSS and the MS-MSC Interfaces	3.1.0	001	Norbert Klehn, Siemens	
07.01	General on Terminal Adaptation Functions (TAF) for Mobile Stations	5.9.1	6.1.0	7.1.1	X	A037	27.001	General on Terminal Adaptation Functions (TAF) for Mobile Stations	3.2.0	003	Erik Colban, Ericsson	
07.02	TAF for services using Asynch bearer capabilities	5.5.1	6.0.0	7.0.1	X	A014	27.002	TAF for services using Asynch bearer capabilities	3.1.0	001	Erik Colban, Ericsson	
07.03	TAF for services using Synch bearer capabilities	5.4.1	6.0.0	7.0.0	X	A011	27.003	TAF for services using Synch bearer capabilities	3.1.0	001	Erik Colban, Ericsson	
07.60	Mobile Station (MS) Supporting GPRS	5.1.0	6.4.0	7.1.0	X	A018	27.060	Mobile Station (MS) supporting Packet Switched Services	3.2.0	005	Graham Heaton, Brand	
08.20	Rate Adaptation on BSS - MSS Interface	5.3.0	6.0.0	7.0.1	8.1.0	A007	X	X	X	X	Juha Räsänen, Nokia	GSM ONLY
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	X		GSM ONLY - Not required after R98
09.04	Interworking between the PLMN and the CSPDN	5.0.0	6.0.0	7.0.0	X	-	29.005	X	X	X		GSM ONLY - Not required after R98
09.05	Interworking between the PLMN and PSPDN for Packet Assembly / Disassembly (PAD) Access	5.0.0	6.0.0	7.0.0	X	010	29.004	X	X	X		GSM ONLY - Not required after R98
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	A003	29.006	Interworking between PLMN and PSPDN / ISDN for support of packet switched data transmission services	3.0.0	-	Achim Braun, Alcatel	
09.07	General requirements on interworking between PLMN and ISDN or PSTN	5.9.1	6.1.0	7.1.1	X	A051	29.007	General requirements on interworking between PLMN and ISDN or PSTN	3.2.0	004	Norbert Klehn, Siemens	
09.13	Signaling interworking between ISDN SS (ASE) and (MAP)	X	6.0.0	7.0.0		-	29.013	Signaling interworking between ISDN SS (ASE) and (MAP)	3.0.0	-		Belongs to NSS Ad Hoc
09.61	Interworking between the PLMN supporting GPRS and Packet Data Networks (PDN)	X	6.3.0	7.1.0	X	A012	29.061	Interworking between the Public Land Mobile Network (PLMN) supporting Packet Based Services and Packet Data Networks (PDN)	3.1.0	002	Graham Heaton, Brand Comms	

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 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 sent a message to 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 was 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 1st Jan 1999 and the current date, send the following command to 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

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/
e.g. the documents for CN3 meeting #7 can be found at:
ftp://ftp.3gpp.org/TSG_CN/WG3_interworking/TSGN3_07/Tdocs/

History

Document History	
7th December 1999	DRAFT v.1.0.0 dispatched by e-mail exploder to the N3 list. Comments, if any, to be addressed to: **Mr David Boswarthick, 3GPP TSG-CN3 Secretary** MCC - ETSI Secretariat Tel :+33 (0)4 92 94 42 78 e-mail: david.boswarthick@ETSI.fr A deadline of 2 weeks was given to the N3 delegates for e-mail comments on the draft report. **Comments back by 21st December 1999**
Xxth December 1999	*Comments integrated to tdoc number **N3-99xxx**, DRAFT v.2.0.0, and distributed by e-mail to N3 list.*
29th Jan 2000	*N3-99xxx v3.0.0 agreed without comments by N3 at the beginning of CN3#8 meeting.*