

**3GPP TSG-CN-WG1, Meeting #10**  
**11 - 14 January . 2000**  
**Abiko, Japan**



**NEC**



**Report of the**  
**3GPP TSG-N WG1 MM/CC/SM (UI) / Meeting #10**  
**11-14 January 2000**  
**Abiko, Japan**

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Report of the Chairman [ftp://ftp.3gpp.org/TSG\\_CN/WG1\\_mm-cc-sm/TSGN1\\_10/Report/Abiko0001\(Chairman's Report\).rtf](ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_10/Report/Abiko0001(Chairman's Report).rtf)  
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Document list [ftp://ftp.3gpp.org/TSG\\_CN/WG1\\_mm-cc-sm/TSGN1\\_10/Documents/CN1-Tdoclist-10.doc](ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_10/Documents/CN1-Tdoclist-10.doc)

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## 0 Administrative Issues and meeting's highlights

- CRs related to TS 23.009: should always be sent to N2 for endorsement.
- After splitting the responsibility/area of GSM 03.22, for R99 and on, between CN1/SMG3WPA and SMG2WPA, TS 23.022 is rounded and is substituted by TS 23.122 for CN1 issues. 03.22 for releases =< R98, is still a shared responsibility with SMG2WPA as a main responsible for this GSM specification. I.e. all CRs for =<R98 need to be sent to SMG2 for approval.
- Responsibility of LCS specification GSM 04.71, and GSM 09.31 are moved to SMG2 WPA.
- LCS R99 specifications are expected to be presented to the TSGN#7 as the deadline, where it should contain R99 functionality.
- Each LS out needs a contact person with name, E-mail address and Mobile tel. number. It makes it easier to contact one person if any question or more clarification is required which reduces the amount of LSeS sent to other working groups.
- R99 open issues reported to the TSGN#6 by the working groups are the only functions were changes for R99 completion is accepted. Any new functionality to the WI will be rejected by the plenary. This means they are functionally frozen for any new functional changes.
- A proposal to use more E-mail discussion when it comes to changes in technical issues.
- Ad-hoc meeting for GPRS and other old releases corrections is required. It will be an informal meeting without approving the contributions but to have consensus about them. Motorola will hold it in Norwegian between 19 and 20 th Jan.2000, in Oslo to make sure that Mr. Hans Petter Naper could attend, otherwise meet in Sofia Antipolis at the 2-3 Feb.2000 which allows no time for SMG approval. Mr. Mark Fenton the Vice Chairman will Chair it, commenting the results in a Chairman report. It will be difficult to make a N1 and SMG3 E-mail approval before SMG#31. Contact person for the GPRS Ad-hoc is Hans Petter Naper or Mark Fenton depends on the choice of the date. **Decided to be the Oslo alternative.**
- Next meeting CN1#11 is suggested to be 5 days
- Mr. Janne Muhonen/ Nokia is nominated as rapporteur for this WI-EDGE to report to SA2-rapporteur.
- Document approved in this meeting should go to SMG3 E-mail approval, to go to the SMG#31 for final approval. In this case the Ad-hoc should take place at least 4 weeks earlier + 2 days preparation to go to the SMG#31 for approval.

## 1 Opening of the meeting

The 3GPP TSGN WG1 Chairman, Hannu Hietalahti, welcomed the delegates and thanked NEC for hosting the meeting. Mr. Masahiko Yahagi/ NEC welcomed the delegated in the 4<sup>th</sup> 3GPP meeting held in NEC /Abiko. Some logistics are made clear and declared that there are 3 LAN PCs which are connected to the 3GPP web site, which are found very helpful and practical during the meeting.

## 2 Approval of the Agenda, Reports and documents allocation

The agenda was approved as below and will be as in Abiko0001.rtf specifying document allocation as well, which is the chairman's report by the end of the meeting..

Due to the plenary results, the Agenda has been adapted in accordance. New agenda items for R2000 is introduced, where also new WIs are to be defined.

Multicall and Multimedia call will be treated today as well as the LSin . GPRS will be discussed tomorrow. Out of band controller has contentious issues , so NEC would like to discuss it with higher priority than other R99 issues. It will be on Wednesday. Time slot allocation will be provided by the chairman.

### 1. Opening of the meeting

2. Approval of the agenda, reports and documents allocation
3. Input Liaison statements
4. Maintenance of R98 and older releases
  - 4.1. Corrections
5. Work Plan for TSGN WG1 for 2000
6. Release 99
  - 6.1. Multicall
  - 6.2. Multimedia call
  - 6.3. GSM / UMTS interworking
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  - 6.10. Other R99 Issues
7. Release 2000
  - 7.1. New r200 Work Item proposals
  - 7.2. L3 Segmentation
  - 7.3. TurboCharger
8. Output Liaison Statements
9. Any other business

### 3 Input Liaison statements

#### **Tdoc-N1-000007 Reply to Liaison Statement on MS CM3 clarification CR/ SMG2**

This LS is sent to CN1.

Content: Some changes to CR34 / 24.008.

Discussion: This CR is already implemented in 24.008 as CR34r1 in version 3.2.0 after approval of TSGN#6.

Conclusion: Noted

#### **Tdoc-N1-000008 LS to SA1 cc CN1, SMG2 on urgent need for requirements on Idle Mode/ TSG-RAN**

Content: TSG-RAN would like to emphasise the importance of a timely completion of the requirements applicable to Idle mode for UMTS and GSM/UMTS terminals for R99.

Discussion: We are already working on our part of the WI.

Conclusion: Noted.

#### **Tdoc-N1-000009 LS on QoS mapping in case of HO from 3G to 2G system/ N3**

This LS is copied to CN1.

Content: N3 would like inform S2 about the current working assumption, where BSSMAP parameters needed for handover to GSM are generated using the standard GSM procedure by mapping the BC IE into BSSMAP parameters. This working assumption is reflected in TS 27.001.

Proposal: It is proposed to describe the mapping procedure for handover in 3G TS 23.107 V 3.0.0 "QoS Concept and Architecture".

Discussion: This will come later in the meeting during discussing Out Of Band Transcoder Control.

Conclusion: Noted.

#### **Tdoc-N1-000010 Reply to LS to S1 on 3G Services/ N3**

This LS is copied to CN1.

Content: TSG CN3 thanks TSG S1 for the LS on 3G Services (Tdoc S1-991001). After consideration, N3 has agreed the deletion of the work item of Modem / ISDN interworking, as S1 do not see any market requirement in this area for R99. However, CN3 would ask S1 to confirm their requirement to the deletion of PDP type X.25, and that this has been agreed with T1P1. TSG CN3 believe T1P1 would need this to continue support for X.75 as specified in GSM 09.61 (BOC LATA Support).

Also, TSG CN3 has reviewed S1's update to the HSCSD stage 1 specification for 3GPP (Tdoc S1-99938), and have accepted the proposed changes in the accompanying draft CR.

Discussion: WI was deleted in the last plenary.

Conclusion: Noted.

#### **Tdoc-N1-000011 Response to LS (S2-99c45) on Usage of NSAPI, RB identity, RAB Id and TEID/ RAN2**

This LS is copied to CN1.

Content: RAN2 thanks SA2 for its liaison statement on usage of NSAPI, RB identity, RAB ID and TEID. RAN2 would like to inform that the used definitions for RB identity and RAB ID is not in line with the agreed definitions used in RAN. Definitions comparison of RAN2 with SA2 is included in the document

Discussion: Related to N1-000015 which needs a reply.

Conclusion: Noted

#### **Tdoc-N1-000012 Response to LS from R2 on partial SRNS relocation/ RAN2**

This LS is copied to CN1.

Content: 3GPP TSG RAN working group 2 has received the LS from RAN3 titled "LS on partial relocation". RAN2 has noted the requirement that a subset of the current radio access bearers assigned to the UE may need to be released or reconfigured when making SRNS relocation or a handover from UTRAN to GSM.

RAN2 would like to inform RAN3 and CN1 of the current status on how this currently is supported over the radio interface as described in the document.

Discussion: Related to N1-000013 and N1-000016.

Conclusion: Noted.

### **Tdoc-N1-000013 Response to LS on Usage of Uu Interface Sequence Numbers in Relocation of SRNS and in Inter System Handovers/ RAN2.**

This LS is copied to CN1.

Content: RAN WG2 would like to thank RAN WG3 for the LS that asked RAN WG2 kindly to

- 1 examine the provided signalling examples in Annex 1 of the LS and to check whether they are in line with the assumptions in RAN WG2.
- 2 develop the mechanisms required in the UMTS Uu interface for exchanging the necessary sequence numbers for each of these relocation types .
- 3 provide RAN WG3 with the information of the correct naming and range for the Uu interface sequence numbers to be inserted in R3 specifications.

Please find the answers of RAN WG2 to these items in the document.

Discussion: Not requiring CN1 for a reaction.

Conclusion: Noted.

### **Tdoc-N1-000014 Reply to LS on Security Algorithm Information in UE Capability/ RAN WG3**

This LS is sent to CN1.

Content: RAN3 thanks CN1 for the Liaison Statement clarifying the view of CN1 on handling of UE Security Information in CN (Tdoc N1-99D06).

RAN3 has already provided an answer to this LS (Tdoc R3-99G04), but since that answer was written, some changes have been introduced in 25.413 (RANAP Specification) which makes the need for UTRAN to receive UE Security Information from CN not longer necessary. This information is now instead received from the UE during RRC connection establishment. The solution in RANAP is thus now in line with the stated N1 working assumption that UE Security Information shall be regarded as radio related information and thus not included in classmark information for CN.

As was stated in the previous answer, RAN3 is not sure why N1 assumed that MS CLASSMARK 2 was to be put into the Location Update message. This is still not understood by RAN3, but can now hopefully be disregarded. If not, N1 has to come back with some more information regarding this.

Discussion: Some unclear issues need to be declared by N1. The approach is agreed by N1 and it is approved and implemented after TSGN#6. A LS out is suggested by the chairman to clarify the situation. No volunteers so the case is closed in N1 point of view and no response LS will be sent out.

Conclusion: Noted. Closed issue in N1's point of view.

### **Tdoc-N1-000015 LS on usage of NSAPI, RB identity, RAB ID and TEID/ RAN3**

This LS is sent to CN1.

Content: TSG RAN WG3 thanks TSG SA WG2 for their liaison on usage of NSAPI, RB identity, RAB ID and TEID.

This response to that LS comments and tries to further clarify from RAN WG3 point of view the proposed definitions for

- NSAPI, RB identity and RAB ID for UMTS and the relations among them
- The definition and the usage of TEID

Discussion: Response for this LS is required. NTT Comm. SW. will write a LS out in N1-000135.

Discussion is postponed for outside the meeting for not much said during the meeting

Conclusion: LS out in N1-000135.

### **Tdoc-N1-000016 LS on partial SRNS relocation/ RAN3**

This LS is copied to CN1.

Content: TSG RAN WG3 thanks TSG RAN WG2 for their reply for liaison on the partial relocation.

During RAN WG3 meeting #9 in Paris RAN WG3 discussed again partial relocation based on this received LS from R2.

RAN WG3 is incapable to justify whether the indicated existing RRC protocol mechanism are enough to realise the partial relocation in case of UMTS to UMTS and also in case of UMTS to GSM handovers. RAN WG3 realised also that the remaining open issues for the partial relocation problem probably can't be solved by RAN WG3.

Please refer to the document for detailed information.

Discussion: Linked with N1-000012 and N1-000013.

Conclusion: Noted

### **Tdoc-N1-000017 Liaison statement to SA2 concerning HSCSD specifications/ SA1**

This LS is sent to CN1

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.

Discussion: LS out will be prepared by Nokia/Janne in N1-000136, stating that N1 is responsible for Stage 2 according to the above issue.

Conclusion: LS out in N1-000136. Noted

### **Tdoc-N1-000018 SAT Handover notification and termination of call/ S1**

This LS is sent to CN1.

Content: There is a proposal in S1 of adding a handover event as a service requirement in SAT for location based services, which would be extended by a terminate communication command.

S1 would like to ask TSG CN WG1 to study the feasibility of adding this event, since there might be network aspects that may have an impact on the issue. From S1 point of view there should be no difference to a call terminated by the AoC charging service when the charging limit is reached. As setting up, maintenance and clearing of the dedicated channel is signaled between the ME and the network, could there be additional affects on the usage of network resources if SAT terminated a user initiated communication? In addition, since termination of the communication would take place between SIM and ME, which is an open interface, S3 is asked to provide information on the possibility of fraudulent usage based on this command.

It is proposed to change the SAT stage 1 as described in the document

Discussion: It might be necessary in some services to observe the cell change so HO is defined for that.

Which information is required in the destination cell? Cell ID, or other details. It is not described in this LS.

Is it a normal call clearing or is it one with a cause? It is not clear here. It says that it should be no difference to a call terminated by the AoC charging service when the charging limit is reached.

It seems the SIM command is not used only for Ho case but for other cases.

What about Emergency calls? It seems that it does not effect packet access. A rumour of defining AoC for GPRS

Conclusion: LS out in N1-000137 will be written to S1 by the chairman

### **Tdoc-N1-000019 Liaison Statement response to 'Liaison statement on the interaction between MMS, SAT, MExE, non-MExE terminals and Camel/Open Service Architecture/ S2**

This LS is sent to N1.

Content: TSG SA2 would like to thank TSG-CN OSA ad hoc for their LS regarding the interaction between MMS, SAT, MexE, non-MexE terminals and CAMEL / Open Service Architecture.

SA2 recognises the necessity of the availability of advanced user interactions for VHE in the Core Network. At the moment this topic is being discussed in SA1 (MMS and VHE discussion), the Stage 2 cannot be continued before the SA1 discussions are concluded. SA2 would like to be informed of the outcome of this discussion.

We would like to forward the attached LS also to N1, as N1 is currently specifying the Service Classmark.



SA2 also would like to point out that the attach procedure might need to become mandatory in order to make the valid Classmark available in the Core Network.

Attached is the LS as received by SA2: S2-99D56.

Discussion: N1 is asked for the classmark issue and here where it comes in the picture.

Conclusion: No input paper in this meeting for this area. Noted.

### **Tdoc-N1-00020 Liaison Statement concerning TI value extension/ S2**

This LS is sent to CN1.

Content: S2 likes to inform N1 that it agreed the CR70 to 23.060, where additional PDP contexts are identified by different TI values rather than using the TI value of the PDP context which was first activated. This CR is agreed on the condition that the TI number space is extended in 24.008, as agreed by TSG CN1 in 24.007 CR 001r1.

S2 encourages N1 to look at ways to increase the NSAPI number space as it can be foreseen that the 4 bit value might be the limiting factor in the future.

Discussion: The same as N1-99F46 which is seen last year.

Conclusion: Noted

### **Tdoc-N1-00021 Reply to LS to S1 on 3G Services/ S1**

This LS is copied to CN1.

Content: TSG S1 thanks CN WG3 for the LS on 3G Services (Tdoc S1-99985/N3-99335). After consideration, S1 has agreed the following:

- 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:

Conclusion: Noted

### **Tdoc-N1-00022 Proposed liaison statement to N1 and N2 concerning QoS parameter mapping between R97/98 and R99/ S2**

This LS is sent to CN1.

Content: S2 would like to notify N1 and N2 of their progress regarding the QoS interworking between Release 97/98 and Release 99. At the S2 meeting #10 in Abiko, Japan a CR to 23.107 was approved which contains a set of mapping rules between the releases. This CR (S2-99E28, 23.107CR001r3) is attached to this liaison statement so that it can be used by N1 and N2 as a basis for their further work.

Discussion: What should be encoded in R99 for GPRS? Qos should be compatible. We need to look at the attached CR and see how to encode the Qos. We will see if we need to add something, it is up to N1 where S2 did their part.

Conclusion: Noted.

### **Tdoc-N1-00023 Liaison Statement on the concern about the definition of the Service Area identity/SA2**

This LS is sent to CN1

Content: SA2 has discussed the information storage in 3G-SGSN which is described in TS 23.060. Based on R3 agreement, service area identity was introduced, and SAC (service area code) and its age is stored in 3G-SGSN MM context for CN services, e.g. CAMEL instead of Cell identity in GPRS. S2 has understood the concept of service area identity. However, we have some concern which is shown in the document.

Discussion: Main concerns of this to N1 is service area identity (SAI) is used in a similar way to CGI (Cell Global Identity) and service area code (SAC) in a similar way to CI (Cell identity) in GSM/GPRS. S2 has a concern about the format and codepoints to use for CN service (e.g. in CAMEL, MAP and Gs interface specifications).

S2 asks CN1 and CN2 to consider updating their specifications to be able to carry SAI/SAC.

In GPRS with Camel you need cell identity which is introduced with camel services and LCS services and it is not for UMTS only. Relation to the RA and service area identity, it is linked to the location area where you can make the same or different size of Location area and service area.

Impact on specifications under N1 responsibility/ Stage 3 has to be studied.

Conclusion: Noted

### **Tdoc-N1-000024 Response liaison on Radio Access Bearer attributes (update of S2-E27)/ S2**

This LS is copied to CN1

Content: TSG SA WG2 thanks RAN WG3 for the LS on Radio Access Bearer attributes (Tdoc R3-99G18) and RAN WG 2 for sending their answer on the same LS to SA WG2. TSG S2 would like to inform TSG R3 and R2 that a number of CRs to TS 23.107 will be proposed to TSG SA#6. The ambiguity in certain parts of TS 23.107, pointed out by R3 in the LS, is hopefully clarified by the proposed CRs. The latest version of TS 23.107 (v 3.0.0) and the relevant CRs are attached to this response LS.

Further clarifications on the questions raised by TSG R3 are added after a copy of relevant parts of the received LS text (the original LS text in italic). Please refer to the document.

Discussion:

Conclusion: Noted

### **Tdoc-N1-000025 Answer to LS on UE/MS idle mode operation from N1/ S2**

This LS is sent to CN1

Content: S2 thanks N1 from its liaison on UE/MS in Idle mode operation.

S2 is of the opinion that the view expressed by SMG2 in their proposal included in Tdoc SMG21873/99 is perfectly correct. S2 wish also to express that S1 shall be tasked to review and incorporate the requirement in terms of PLMN selection in a new specification or in the existing one for handover. In addition S2 is of the firm opinion that the conclusion reached during the workshop in June on Handover and Cell Selection shall be the basis for the work of all the involved working groups.

If S1 wishes to change any of the conclusion, it is expected that S1 shall immediately inform the different groups involved by providing the CR to the existing specification or new specification depending on the choice of S1 for the documentation agreed within S1.

Discussion: Relates to N1-99E54 which is already treated. We have some more to do in this area.

Conclusion: Noted

### **Tdoc-N1-000026 Liaison Statement on usage of RANAP over MAP/E at intra UMTS inter MSC handover/relocation/ S2**

This Ls is sent to CN1.

Content: S2 have earlier decided that:

*For UMTS to UMTS Inter-MSC Handover the GSM E i/f transporting BSSAP messages with necessary modifications for GSM to UMTS Handover shall be used.*

After further investigations it seems that there are also arguments to use RANAP at UMTS to UMTS inter MSC handover, see attached Tdoc S2-99F02.

S2 seeks guidance from N1, N2, RAN3 and SMG2 on whether the current working assumption should be revised or not.

Discussion: Related to N1-000110, which is a LS out prepared by Ericsson, NTT DoCoMo, Nortel Networks.

MSC-MSC interface is not complete as some companies expressed. In case 2G is part of the HO procedure the BSSMAP should be used. At the same time HO is done between 3G MSCs then RANAP messages should be used.

N1 needs to response to this LS. Some companies show reservation on N1-000110. So Rozbeh/Ericsson will be rapporteur for this LS out in N1-000138.

Conclusion: Noted

### **Tdoc-N1-000027 Response LS on Session Management QoS parameters/ S2**

This LS is sent to CN1

Content: TSG S2 thanks TSG N1 for the LS on Session Management QoS parameters (N1-99C93). S2 would like to give the information and answers to the questions and issues raised by N1. Please refer to the document.

Discussion: Related to N1-000022, where S2-99E28 was also attached. S2-99F37 will be discussed here.

Why delete PDP context when moving from R99 to R97? Could be for not having enough channels! What happens if the MS supports only one PDP contexts in GPRS? The text is not clear in the CR. The attached CR to 23.107 describes the mapping of SM QoS attributed and classes between R97/98 and R99.

Conclusion: A LSout N1-000149 is to be sent out to S2 to clarify the PDP context and QoS/ Siemens-Roland.

### **Tdoc-N1-000028 Liaison Statement clarifying terms related to the naming of PDP contexts created with the 'PDP Context Activation Procedure' and with the 'Secondary PDP Context Activation Procedure'/S2**

This LS is sent to N1

Content: SA2 kindly asks N1 and N2 to take notice of the S2 agreement on the naming of PDP contexts created with the 'PDP Context Activation Procedure' and with the 'Secondary PDP Context Activation Procedure':

Discussion: One PDP context per address and APN is allowed. Once activated, all PDP contexts that share the same PDP address and APN shall be managed equally. Check the necessary sections in 24.008 by N1 delegates.

Conclusion: Noted.

### **Tdoc-N1-000029 LS on Enhanced User Identity Confidentiality/ S3**

This LS is sent to CN1.

Content: To improve the level of security S3 has specified the security feature 'enhanced user identity confidentiality' in the document 3G Security: Security Architecture (3G TS 33.102). This feature has the property, that the permanent user identity (IMSI) of a user to whom a service is delivered cannot be eavesdropped on the radio access link.

To achieve this, the user is normally identified by a temporary identity by which he is known by the visited serving network (like in GSM), or by an encrypted permanent identity (EMUI). In exceptional cases, however, when encryption is forbidden or not required, the IMUI may have to be transmitted in clear. This is a static HE option.

Therefore instead of the IMSI the encrypted IMSI (EMUI) together with some routing information consisting of MCC, MNC, HLR-id and GI may be transmitted between UE and access network. The example mechanism in the annex B of TS 33.103 has a length of the EMUI of 128 bit, GI is 32 bit and HLR-id is 3 digits. It is however required that a variable length field can be transmitted from MS to HLR.

TSG CN1 is kindly requested to clarify all implications with regard to the security feature 'enhanced user identity confidentiality' and to make sure that the appropriate extensions will be added to the relevant documents for R99.

Details on the parameter lengths proposed by S3 will be found in the document 3G Security: Integration guidelines (3G TS 33.103).

Discussion: A document N1-000109 which is prepared by T-mobil introducing the transmission of a new code point named XEMSI. R99 new functionality is to be discussed with the security people. Note that new functionality other than presented to TSGSA#6 is not accepted in R99 in SA's point of view.

Conclusion: LS out N1-000150 to be sent to S3 by T-Mobil/Jacobsohn. See also CR in N1-000109/Security.

### **Tdoc-N1-000044 Information on Common Communication Mechanism to be used by the Cell Broadcast Service/ T2**

This Ls is copied to CN1.

Content: T2 kindly like to thank RAN3 for their LS on common communication mechanism to be used by the cell broadcast service.

T2 like to answer RAN3 questions from the viewpoint of defining requirements for the CBC-RNC protocol. Please refer to the document.

Discussion: No impact on N1

Conclusion: Noted (same as N1-000053).

### **Tdoc-N1-000045 LS on Service/Baseline Implementation Capabilities/ T2**

This LS is copied to CN1

Content: TSG-T2 SWG6 would appreciate comments on the review of “LS on Service/Baseline Implementation Capabilities of the NAS“ in liaison statement *TSG\_CN\_SS-99113* from SS adhoc.

TSG-T2 SWG6 revised the table 2 from previous document originally made by *N1-99B33*, some of them were considered by SWG6 according to the comments from SS adhoc.

In TSG-N1#8 meeting, Discussion was made regarding to Output LS for the received LS from SS adhoc.

The conclusion of N1#8 is as follows,

These issues are not relative to CN1 (on *TSG\_CN\_SS-99113*), the listed specifications for SS adhoc are not in CN1's list of responsibility. T2 should directly communicate with SS adhoc especially in SS adhoc issues.

Discussion: We discussed this issue in the previous meeting and now T2 is talking to SS-Adhoc, where it does not relate to N1.

Conclusion: Noted

### **Tdoc-N1-000046 Liaison Statement on SAPI in Direct Transfer message/ RAN3**

This LS is sent to CN1.

Content: R3 would like to inform N1 and R2 of a decision they made at their last meeting in Paris on the way the RNC can recognize messages used for specific services (e.g. messages with a given priority).

It was decided to use a SAPI for this purpose in all the downlink messages carried with the RANAP “Direct Transfer” procedure. In alignment with GSM to avoid mapping between 24.008 and RANAP, a SAPI of 0 indicates a high priority message, whereas a SAPI of 3 indicates a low priority message.

It seems to R3 that these values are sufficient; R3 would like to ask N1 and R2 to let them know as soon as possible if they are of a different opinion.

Discussion: LCS interested companies, should be informed that if a new codepoint is defined.

New SAPI for LCS purposes is being considered and if that happens then a new GSM SAPI should be reflected in UMTS too.

R3 propose that similarly to GSM SAPI 0 would be high priority and SAPI 3 lower. This solution is accepted by N1.

Conclusion: No need for LS to be sent out. Noted.

### **Tdoc-N1-000047 Liaison statement on BEARER MODIFICATION WITHOUT PRE-NOTIFICATION/ S1**

This LS is sent to CN1

Content: TSG SA WG1 thanks CN WG3 for the LS on Bearer modification without pre-notification (Tdoc S1-99983/N3-99373).

Before discussing any detailed technical implementation S1 would like to clarify the service scenario and requirements. Based on this the TSG CN WG3 and TSG SA WG2 are asked to specify the technical solution. Please refer to the document for more details.

Discussion:

Conclusion: Noted.

### **Tdoc-N1-000048 LS on addition of general bearer services/ S1**

This LS is sent to CN1.

Content: S1 would like to inform to N1, N3 and S2 regarding a requirement of additional general bearer services.

This requirement has been already taken into account in S1 and also the relevant WGs. This is for the adjustment of the general bearer services in the specification TS22.002. See attached.

Discussion: For our information.

Conclusion: Noted.

### **Tdoc-N1-000049 LS on Requirements for Network Selection/ S1**

Content: S1 received an LS from CN1 (Tdoc N1-99D27) asking for confirmation of S1 requirements for the selection of access systems. S1 has reviewed its requirements and has agreed a change request to TS 22.011( S1-991056 attached) to clarify the requirements.

It was agreed that access technology type should be taken into consideration when selecting a network. It was also agreed that an Operator Controlled PLMN Selector list should be available on the USIM/SIM. This will cater for those cases where the Home Environment operates more than one access technology and may use more than one network identity code.

S1 requests that you take these requirements into consideration when developing procedures for PLMN selection.

Discussion: Related to S1 CR in N1-000151. T3 replies in LS in N1-000118.

Conclusion: Attached-missing CR will be distributed in N1-000151. Noted, LS out in N1-000155. Siemens/ Roland

### **Tdoc-N1-000050 Reply to LS on Common Identification for Relocation Co-ordination/ SA1**

This Ls is copied to CN1

Content: 3GPP SA WG1 acknowledges reception of the LS concerning relocation co-ordination in the case of emergency calls.

3GPP SA WG1 would like to clarify that currently no requirement exists for PS emergency calls.

As a result, the current solution for relocation co-ordination is seen as adequate also for emergency calls.

Discussion:

Conclusion: Noted.

### **Tdoc-N1-000051 LS on RAB linking/ RAN3**

This LS is sent to CN1

Content: During TSG-RAN WG3 Iu SWG, some discussion occurred on a feature called "RAB linking" that exists in the current version of the RANAP protocol (25.413 V1.3.1). The "RAB linking" feature would allow the CN to indicate to UTRAN that certain RABs allocated to a UE have to be treated as a set for UTRAN procedures, e.g. all linked RABs are established or released together or failed together.

RAN-WG3 would like to have the confirmation of the need for such a concept in UTRAN for the support of NAS procedures (e.g. multicall).

Since the handling of the "RAB linking" impacts the definition of some RANAP procedure and message definitions, RAN WG3 is kindly asking for a quick answer.

Discussion: Same as N1-000119.

Conclusion: Lucent/ Richard will prepare LS out to RAN3 in N1-000152.

### **Tdoc-N1-000052 RAB pre-emption/ R3**

Content: During its last meeting held in Abiko, RAN3 has adopted a pre-emption mechanism for RABs similar to the one described in GSM TS 08.08. This mechanism uses the "pre-emption capability", "pre-emption vulnerability" and "priority level" indicators.

RAN3 would like to know if this mechanism would be appropriate to deal with pre-emption of RABs belonging to the same UE (e.g. case of a multicall) in the same way as for RABs from different UEs.

Discussion: RNC try to freeze some capacity and get BW from other subscribers to initiate emergence call in case of radio channels congestion using pre-emption. We need to know the requirement for it from S1.

Conclusion: LS out info merged with N1-000152 for same parties involved.

### **Tdoc-N1-000053 Information on Common Communication Mechanism to be used by the Cell Broadcast Service/ T2**

Conclusion: Noted/ withdrawn (same as N1-000044).

### **Tdoc-N1-000054 LS on Service/Baseline Implementation Capabilities/ T2**

Conclusion: Noted /withdrawn (same as N1-000045).

### **Tdoc-N1-000057 Liaison Statement concerning Transcoder Free operation/S2**

This LS is forwarded to CN1 by the TSGN#6

Content: Related to:

not numbered: "LS on TRAU issues", agreed on S2 email list 20.10.1999, revision of S2-99 A02 from 3GPP TSG SA WG2 #8, September 13-17, 1999 Bonn, Germany; attached.

Discussion: No N1 impact.

Conclusion: Noted

### **Tdoc-N1-000117 Capability configuration parameters/ T3**

Content: TSG-T3 (USIM) kindly asks TSG-N1 to provide some information about the configuration and capability parameters to be stored into USIM under EF<sub>CCP</sub> at the light that new bearer capabilities have been (or will be) introduced in 3G.

In particular, TSG-T3 would like to know if the current record length and coding of the EF<sub>CCP</sub> (see below) defined in GSM 11.11 and GSM 04.08 are suitable to store the relevant information for 3G environment defined in 3G TS 24.008.

A fast response would be highly appreciated since the information is needed in order to finalise 3G TS 31.102 for Release 99.

Discussion: Length is 16 octet. We are surprised that the BC in the SIM is too short and we need clarification where it is extended 3 years ago. The BC structure should be the same and we could add new codes point for the existing fields, and we need to prevent adding new fields. Why should we provide the SIM group some information about the configuration and capability parameters to be stored into USIM under EF<sub>CCP</sub> at the light that new bearer capabilities have been (or will be) introduced in 3G, where they should know that.

Conclusion: LS out is to be sent to T3 and SMG9 in N1-000153 by Ericsson/ Mark.

### **Tdoc-N1-000118 Liaison Statement on Network Selection Issues/ T3**

This LS is copied to CN1

Content: T3 thanks S1 for the liaison statement regarding network selection and the attached document S1-991056. From the point of view of T3 the changes required to the USIM to support the requirements in S1-991056 are feasible, however there are some issues that require clarification.

Discussion: suggestion of splitting the PLMN in 2 parts, in defining two lists of preferred PLMNs (one for operator and one for user), the requirements for technology preference may be different in each case:

- An operator defined list (OPLMN) with the ability to define access technology preference for every entry in the list (updatable only by the operator).
- A user defined list (UPLMN) with only one access technology preference entry (updatable upon the correct entry of PIN).

This effects 23.122 which specifies the priority of the PLMN selection to cover 2 lists as well.

This is a response for the LS in N1-000049

Conclusion: See LS out in N1-000155 by Siemens.

### **Tdoc-N1-000119 LS on RAB linking/RAN3**

Conclusion: Noted/Withdrawn ( same as N1-000051)

### **Tdoc-N1-000207 Proposed LS on Clarification of the cell reselection for a GPRS MS/ SMG2WPB**

This is a LS copied to N1

Content: During the GPRS standardisation, the Stage 2 was split over two specifications. The network part is contained in GSM 03.60 or 3G TS 23.060, and the radio interface is contained in GSM 03.64.

As a consequence the text in section 8.1 of the GSM 03.60 and in section 8.1.1 of the 3G TS 23.060 on cell selection and reselection is out of the scope of those specifications, and should be covered in GSM 03.64. (GSM 03.64 already contains the relevant text, and this text is in line with the Stage 3.)

Additionally, the present text is not in line, and is not correct from a radio perspective; The arguments are similar to the ones SMG2 presented in a previous LS to SMG3 WPA (Tdoc SMG2 1301/99). The present text goes against the general principle that cell reselection should be based on radio criteria rather than on the services supported by cells.

This error has already lead to incorrect GPRS MS prototypes that generate radio interference as they try to reselect a cell which support GPRS despite it is not the best cell in the sense of radio criteria as specified in GSM 05.08.

It is suggested the content of this section be replaced by only a reference to GSM 03.64, GSM 03.22 and GSM 05.08, thus removing any potential misinterpretation.

In order to verify the correct behaviour of a GPRS MS in the case where the best cell is not supporting GPRS, a CR to GSM 11.10 will also be submitted to SMG7.

Discussion:

Conclusion: Noted for this meeting and GPRS Ad-hoc should have a look at it because it is related to them.

## **Tdoc-N1-000208 Liaison Statement on CR to 23.122 after split in SMG2 and CN1/ SMG2**

This is a LS sent to N1, attached CR for 23.122 needs to be studied and agreed.

Content: SMG2 has received a CR on PLMN and cell selection for GSM 03.22, presented to SMG2 #34. SMG2 WPB consider the content of the CR to be in line with current discussions in both S1, CN1 and SMG2. However, due to the current split of GSM 03.22 into an MM related and an RR related part, the MM parts of the CR (included herein) is redrafted according to the current version of 23.122. CN1 is kindly asked to address this contribution at its January-00 meeting.

Discussion: It was received late afternoon last day of the evening. No enough time to study the CR.

We need to have an answer from S1 about PLMN selection list to decide on this. In addition some errors need to be corrected.

We need to respond to them, a LS out by the chairman will be issued.

Conclusion: Postponed to the next meeting as a new corrected version of the CR by the originator. LS out in N1-000209. Noted

## **4 Maintenance of R98 and older releases**

### **4.1 Corrections**

#### **Tdoc-N1-000132/R96 Clarification of NITZ time stamp coding/ Ericsson, Nokia**

This is a CR against 04.08

Content: Alignment of the Stage 3 with Stage 1 to avoid misinterpretations and incompatible implementations.

Discussion: all other releases have to be corrected in accordance, in addition GMM has to be considered and sun light saving time for R99 as well.

Everyone outside Switzerland should be happy with this timing!

Some minor and editorial corrections have to be made.

Conclusion: Revised to N1-000194.

#### **Tdoc-N1-000194 /R96 Nokia, Ericsson**

Content: Changes were presented.

Discussion:

Conclusion: Agreed, the equivalent N1-000196/ R97 and N1-000197/ R98 are agreed

#### **Tdoc-N1-000198 /R99 Clarification of NITZ time stamp coding/ Nokia, Ericsson**

This is a CR against

Content: Alignment of the Stage 3 with Stage 1 to avoid misinterpretations and incompatible implementations

Discussion: No objection

Conclusion: Agreed

#### **~~Tdoc-N1-000192 Additions to Draft Stage 1.5 for Multicall on CW and Terminal Capability Handling/ ERICSSON, NTT COMMUNICATIONWARE~~**

~~This is a discussion paper.~~

~~Content: We have looked at the stage1.5 for multicall and terminal capability handling issue. And we propose the followings. The revised stage1.5 is attached as ANNEX.~~

~~□ In order to clarify the NDUB handling for speech call, we propose to add alternative handling in section 2.2~~

~~□ We propose to determine the terminal capability handling in this meeting. Our proposal is Possibility 3 in N1-000082. (No information related to multicall capability is sent to network) In order to clarify the mobile terminal behaviour, we propose to add some context in section CW.~~

~~Discussion: Impact on the technical report.~~

~~Conclusion: Noted~~

### **Tdoc-N1-000128/ R97, N1-000129/R98, N1-000130/R99 XID negotiation while MS suspended, and collision with XID Reset/ Motorola, Siemens AG**

This is a CR against 04.64.

Content: The MS at any time initiate the XID negotiation procedure. The MS may be suspended by GMM before an XID response frame is received, and T200 shall not be stopped. If T200 expires the LLE shall retransmit the XID command according to 8.5.3.4, but this contradicts 7.2.1.4, which states that the MS is not allowed to initiate XID negotiation while suspended. Similar contradictions exist between 7.2.1.4 and 8.5.1.3 (for ABM establishment) and 8.5.2.3 (for ABM release). The proposed solution to this problem is to allow MS-initiated XID negotiation, ABM establishment, and ABM release while the MS is suspended.

While the MS is suspended, the SGSN may transmit an XID command containing the Reset parameter. It is normal for the SGSN to transmit Reset during a routing area update procedure. If the MS ignores the received XID command (see section 8.5.5) then the RA update may fail. The proposed solution to this problem is to state that an XID command containing the Reset parameter shall never be ignored.

Discussion: Error must be solved.

Some differences than the older text which need clarification.

Conclusion: After offline discussion, all are agreed

### **Tdoc-N1-00091/R97, N1-00092/R89, N1-00093/R99 Removal of APN from REQUEST PDP CONTEXT ACTIVATION REJECT message/ Vodafone, Siemens**

These are CRs against 04.08 and 24.008.

Content: The original reason for adding the APN to the REQUEST PDP CONTEXT ACTIVATION REJECT message was to enable the network to tie this message to the corresponding REQUEST PDP CONTEXT ACTIVATION message. However, the TI in each message should be enough to link these messages together.

If the current collision behaviour described in sec. 6.1.3.1.5 is read very correctly, it says that a REJECT should also be send if the MS is able to compare the parameters, but if they are not equal. This is because of the usage of the word "otherwise". In order to clarify this ambiguity it is proposed to replace the term "otherwise" with the explicit condition "is able to compare".

Discussion: Change category, it is essential correction so the system will not work without this change.

Conclusion: All CRs are agreed.

### **Tdoc-N1-000131 Status of 04.64 question list/ Siemens AG**

This is a discussion document.

Content: The attached list is a collections of the answers given by Nokia, Ericsson, Matsushita (Panasonic), Motorola and Alcatel on the 13 questions concerning 04.64 presented on the last CN1#9 (TDoc N1-99E04). The answers are a one to one copy from the responses given in the e-mails received on the N1 mail reflector.

Discussion: All interested delegates to check this document and check the CRs and give feedback CRs before the Ad-Hoc GPRS meeting which will take place in the coming weeks.

Conclusion: Noted.

### **Tdoc-N1-00094 Simple Class A Mobiles**

Content: This document is intended to be a "stages 1+2" description of the practical implementation of GSM-GPRS class A mobiles and a basis for discussion on the changes and additions to the current specifications.



This work is part of the R'99 Work Item "BSS co-ordination of Radio Resource allocation for class A GPRS services - GSM Radio Access (R99)" for which M. Mouly of Nortel is rapporteur. This work item was supported by Nortel, Motorola, Vodafone and Lucent. It is due for completion at SMG #31.

This work is also required as part of R'99 by the 3 GPP specification 23.121, section 4.1.

This document has been updated with comments during the SMG2#33 meeting in Sophia-Antipolis (22<sup>nd</sup>-26<sup>th</sup> November 1999) and contains other modifications with respect to TDoc SMG 2-99-1779.

Conclusion: For information

## 5 Work Plan for TSGN WG1 for 2000

### Meeting dates:

TSGN1 #10 11.-14.1.2000 (Abiko, Japan/NEC)

GPRS Ad-Hoc 19.-20.1.2000 (Oslo/ Motorola)

Please note the additional meeting!!!

SMG#31 14.-18.2.2000

TSGN1 #11 28.2.-3.3.2000 (Umeå, Sweden/Telia)

Please note changed meeting date!!!

TSGN#7 13.-15.3.2000

TSGN1 #12 22.-26.5.2000 (Hawaii, U.S./T1P1)

TSGN#8 19.-21.6.2000

SMG#32 26.-28.6.2000

TSGN1 #13 11.-15.9.2000 (U.S./T1P1)

TSGN#9 25.-27.9.2000

SMG#33 6.-10.11.2000

TSGN1 #14 20.11 – 24.11.2000

Please note changed meeting date!!!

(Tentative invitation Lucent)

TSGN#10 6.-8.12.2000

Please note changed meeting date!!!

### **Tdoc-N1-000003 DRAFT REPORT v2.0.0 / 3GPP TSG-CN / ETSI SMG3/ MCC-CN**

The chairman presented the status and results for CN1 as stated in the report as well.

Discussion: NEC added Multicall issues R99 WI will have a meeting 17 and 18 /Feb to sort out the open issues. Some input is given to this meeting to prepare for this subject.

Conclusion: Noted for information.

### **Tdoc-N1-0000124 Draft Report of TSG SA Meeting #6 - version 0.0.2/ MCC-SA**

Discussion: for information

Conclusion: Noted

### **Tdoc-N1-000126 Working plan to complete Multicall in R99 (Ver.1)/ NTT DoCoMo**

This is a discussion document.

Content: At the CN#6 plenary held in December, categorisation of Multicall and the relationship with the existing Supplementary Service (SS) were questioned by SS Adhoc chairman. As a result, it was recognised that more clarification is necessary on Multicall Stage1 (22.135), and that baseline document (BLD) for Stage2 (introduced as "stage1.5 document" at the CN/SA Plenary) is necessary in order to complete the Multicall work in R99.

Also, since Multicall was recognised as R99 items within CN Plenary, it was agreed among relevant WGs chairmen that Multicall Joint Adhoc shall be held on 17-18, Feb. Since the purpose of the Joint Adhoc is to complete all necessary CRs and documentation for Multicall, a working plan towards the Joint Adhoc was agreed, too.

This contribution summarises all necessary works and remaining open issues within relevant WGs for Multicall, and clarifies working steps in order to complete Multicall as a R99 item.

Discussion: N1's responsibility is in SI where it is optional or mandatory? and necessity of terminal capabilities notification

The rapporteur of the WI should be active and take part in collecting the information from all parties.

CN1 has only one meeting CN1#11 to finish all open issues for R99.

Conclusion: N1 confirms the listed WA in this document. The document is noted.

**Tdoc-N1-000146** is covered as part of N1-000126. It also describes how to assign to the SS-Ad-hoc mail reflector.

## **Tdoc-N1-000165 revision of N1-000002 TSGN1 Terms of Reference (ToR)/**

### **Chairman**

Content: Please refer to the document.

Discussion: The deadline is not practical. 3 week/working days are required prior to the meeting. Ex. Monday is the meeting, then Tuesday 16:00 French time is the dead line.

The submitted document will be provided at the beginning of the meeting by the secretary.

5 days meeting is preferable than the 4 days meeting. This is not a principle in ToR, but we can agree it every time.

Conclusion: Noted for this meeting

## **Tdoc-N1-000005 TSG N Work Items Status List/ MCC**

Content: List of WIs in TSG-N agreed in TSGN#6 and presented to TSG-SA#6.

Discussion:

WIs and ~~t~~The nomination

New: Janne -> EDGE, CS bearer -> Koshimisu... and others as before.

[CS Bearer Service => Koshimizu, DoCoMo](#)

[GSM-UMTS Interworking => Hannu, Nokia](#)

[MS ClassMark => Yokota, Fujitsu](#)

[OBTC => Rouzbeh, Ericsson](#)

[QoS => DoCoMo](#)

[R99 clean up => Ericsson](#)

[Realtime FAX => no N1 issue](#)

[Multimedia => Timo, Nokia](#)

[Security => Duncan, Vodafone Airtouch](#)

Conclusion: Noted

## **Tdoc-N1-000006 Open Issues for Release 99 List/ MCC**

Content: All TSGs results presented and agreed in TSG-SA#6, in a list showing the deadline for R99 for each WI or if it is shifted as a R00 WI.

Discussion:

Conclusion: Noted

## **Tdoc-N1-000174 Project Plan on location and cell broadcast services in UMTS (3G PD 30.806 version 1.2.1)/ Nokia**

Content: [The document contains TR 30.806, Project plan outline on Location services \(LCS\) and Cell Broadcasting \(CBS\) services in UMTS for inter-group co-ordination in 3GPP. Work to be done by N1 has been defined as follows. N1 shall adapt a defined subset of the LCS specifications belonging to N1 developed for GSM LCS Phase 1 in release 98 to include support for UMTS LCS in release 2000 and possibly in release 1999, as defined in UMTS system stage 2 and UTRAN stage 2 specifications. Moreover the work is based on the following basic assumptions for LCS in UMTS:](#)

➤ [GMLC is connected to 3G-MSC and 3G-SGSN over identical interfaces, ie Lg in GSM](#)

➤ [RNC contains SMLC functionality](#)

➤ [There are only two types of LMU: LMU associated with Node B and stand-alone LMU](#)

Discussion: [In TSG SA#6 it was agreed that as LCS is a feature which is difficult to introduce retrospectively, then "hooks" \(UTRAN signalling and functionality\) should be included in the Radio for Release 1999 and the full solution included in Release 2000. It was also noted in TSG SA#7 that if TSG CN find the service can be completed in time without impact on other Release 1999 work, then the full](#)

[service could be included in Release 1999. The intention is to finalize Functional stage 2 description of location services in UMTS \(3G TS 23.171\) and Stage 2 Functional Specification of Location Services in UTRAN \(3G TS 25.305\) in release 1999. The full stage 3 solution is targetted to release 2000. Tdoc N1-000175 contains 3G TS 23.171 v.1.1.0 and Tdoc N1-000175 contains 3G TS 25.305 v.3.0.0.](#)

[Content: In the document, please find TR 30.806, Project plan outline on Location services \(LCS\) and Cell Broadcasting \(CBS\) services in UMTS for inter-group co-ordination in 3GPP.](#)

[Discussion:](#)

[Conclusion:](#) Noted

## 6 Release 99

### 6.1 Multicall

N1-000030 and N1-000082 were presented together.

#### **Tdoc-N1-000030 Draft Stage 1.5 for Multicall/ NTT COMMUNICATIONWARE**

This is a discussion paper.

[Content:](#) Multicall issue was discussed in CN#6 held in Nice, and the necessity of stage1.5 for multicall was identified. The purpose of this stage1.5 is to clarify the basic procedures, interaction with supplementary services, and open issues. Please refer to the document for more details.

[Discussion:](#) This is to be Stage 2 later! Which is not complete this is why we are describing 1.5.

Is it still open describing the Multicall as basic service? Yes it is the same issue discussed in the plenary

[Conclusion:](#) The listed WA are confirmed from N1's point of view. Noted

#### **Tdoc-N1-000082 Terminal capability handling/ NTT COMMUNICATIONWARE**

This is a discussion document.

[Content:](#) Regarding multicall, whether the mobile station indicates its multicall capability to the network was raised as one of open issues in CN#6. (Does the mobile station indicate its multicall capability in MS classmark or does the MSC just attempt to setup the call and see how the mobile station reacts?)

We would like to identify what WG has responsibility of this issue and clarify the terminal capability handling.

It is proposed that N1 has the responsibility to determine whether the mobile station indicates its multicall capability.

It is proposed that mobile station indicates no information related to multicall.

[Discussion:](#) Ericsson opposes the proposal saying that the MS and the network need to know each others capability before allowing to set up multiple bearers. Ericsson is still working on a suggestion for a solution. The case where the MS is capable of supporting only 2 calls and the network offer the MS a new bearer/ call which will be rejected. We could offer CW in the network if we know the capability of the terminal in the network.

There will be no extra signalling as long as we have one active call.

In the uplink we have in the CM-2 only 2 bits left, so they are very precious to use them for this purpose.

DoCoMo proposes that the solution in the paper allows the MS to receive a third setup message "with CW notification". Off-line discussion will take place. [First part of the solution is acceptable by N1.](#)

[N1 accepted that Multicall capability handling in terms of MS CM is a N1 issue.](#)

[Conclusion:](#) [First part of the solution is acceptable by N1.](#)

[N1 accepted that Multicall capability handling in terms of MS CM is a N1 issue.](#)

[Postponed and see N1-000192.](#)

#### **Tdoc-N1-000192 Additions to Draft Stage 1.5 for Multicall on CW and Terminal Capability Handling/ ERICSSON, NTT COMMUNICATIONWARE**

[This is a discussion paper.](#)

[Content:](#) We have looked at the stage1.5 for multicall and terminal capability handling issue. And we propose the followings. The revised stage1.5 is attached as ANNEX.

- [In order to clarify the NDUB handling for speech call, we propose to add alternative handling in section 2.2](#)

- [We propose to determine the terminal capability handling in this meeting. Our proposal is Possibility 3 in N1-000082. \( No information related to multicall capability is sent to network\) In order to clarify the mobile terminal behaviour, we propose to add some context in section CW.](#)

[Discussion: Impact on the technical report.](#)

[Conclusion: Noted. No information related to multicall capability is sent to network is agreed.](#)

## **Tdoc-N1-00031 Addition of the Stream Identifier Information Element/ NTT COMMUNICATIONWARE**

This is a CR against 24.008

Content: Multicall feature shall allow a mobile station to handle more than one bearer service simultaneously. For this case, it is necessary to identify each bearer in order to control the complete call. The name for this element could be Stream Identifier, abbreviated as SI.

Regarding multicall, some open issues were raised in CN#6. But the call control procedure with SI can be discussed independently of the open issues.

According to the stage1, the multicall functionality is optional. Considering the compatibility with GSM R99, SI should be option even in UMTS. The mobile station in UMTS may or may not include the SI for the first call, i.e. when there are no other ongoing calls.

In order to avoid the complexity of network implementation, followings are proposed.

- Value of SI shall be allocated starting from "1".
- In the case of receiving CC messages (e.g. SETUP, CALL CONFIRMED) with no SI, MSC supporting multicall shall recognise that the value of SI is indicated as "1".

Discussion: SI values, how to indicate invalid values? Section 5.2.3.2 , and 5.3.1.2 covers any other values.

In 5.2.1.2 it should describe the reason for the MSC to reject the call and in which phase of the call another call could be offered and when to be able to release a call. It was suggested to require releasing a call by sending the SI, also the MSC is able to send a disconnect to release a call.

In 5.2.1 some more information is to be added on how the network will get the information about the subscribers capability.

Why is the SI element is a common element? It should go under CC element, for R99. Error handling needs to be described.

We should be able to extend the field of the SI in the future as DoCoMo suggested. This needs to be defined now for the compatibility in the future with R99.

Any other comments to go to the originator.

Conclusion: Revised to N1-000156

## **Tdoc-N1-000156**

Content: Contents was changed covering the proposal in N1-000195, in addition the comments done during the discussion. The changes were presented

Discussion: Max of 14 transactions are defined in Multicall specification, 7 identifiers for each direction was discussed if it is defined in this way for Multicall..

The relation between TI and SI are not 1:1, so why limit the value within 14, may be for future use. So the rest of the bits have to be spare to limit the ID and use the spare in the future.

It seems to some delegates a variable length.

All 0 = no Bearer, the whole range other than whole 0s are available for SI. The length was suggested for 3 octets.

Conclusion: Revised to **N1-000210**, which was presented and agreed.

## **Tdoc-N1-000127 Multicall Basic Concept/NTT DoCoMo**

This is a discussion document.

Content: At the previous CN#6 Plenary held in December, categorisation of Multicall was questioned by the SS Ad-hoc chairman. Since stage1 specification (22.135) dose not clearly define the categorisation of Multicall, it was pointed out that the Multicall shall be categorised as s Supplementary Service by SS Ad-hoc Chairman. The reason is that stage1 requires the introduction of subscriber controlled features for future Release.

Since Multicall should be clearly categorised in order for CN WGs to complete stage2/3 work, the issue should be solved as soon as possible. Therefore, this paper clarifies the Multicall category from the ISDN point of view, and also clarifies the relationship with the user controlled procedures. Finally it proposes how to complete Multicall work based on the clarification.

This paper clarifies that;

1. Multicall is a network environment.
2. Multicall and interrogation/registration/configuration features are independent each other.

Based on the above clarification, this paper proposes that;

1. N1/N2 should approve the related CRs postponed at the CN#6 Plenary.
2. After WG's approval, the CRs should be sent to CN-Plenary Mailing Reflector for information/approval.
3. N1/N2/NSS should proceed the remaining tasks, considering the Multicall as a network environment.
4. N1 should send the LS to S1 (cc: N2, NSS) mentioning that interrogation/registration features shall be separately defined.

Discussion: Is it really an N1 issue? It seems more S1 and SS-ad-hoc issue.

The author expressed that maybe N1 delegates are the network experts and they might convince other groups to accept this proposal. The chairman stressed that it is difficult to propose such thing from N1 where it is not our area. This is why not possible to send the LS.

Conclusion: Noted and first 3 proposal was agreed

### **Tdoc-N1-000195 Comments on CR31 (Addition of the Stream Identifier Information Element)/ Siemens**

This is a discussion paper.

Content: The CR 32r6 (Tdoc N1-000031) requests the reservation of code points '0000 0000' to '0000 1111' for SM use. This is not appropriate for different reasons.

The value range of SI code points does not have to be distinct to. The statement 'reserved for SM' gives the reader the (wrong) impression that multicall may also valid for PS-sessions. In addition to that must the error handling for NAS Binding Information regard the domain (NSAPI/SI) or no sensible check can be done at all. However, there must be a different way for the mobile to realize if SI or NSAPI was received. This can not currently be done due to the lack of domain information in appropriate RRC message

Please refer to the document

Discussion: Related to N1-000156

~~NTT DoCoMo do not support this proposal.~~

Conclusion: Noted

## **6.2 Multimedia call**

### **Tdoc-N1-000065 Multimedia TR/ Nokia**

This is a report 23.972.

Discussion: DoCoMo need some time to review the document, they have some concerns to check the fall back mechanism. DoCoMo requested using the mailing list for discussion before submitting it to the meeting to have some more time to look at the technical issues.

Before implementing this new protocol "V.140" there could be architectural impacts where S2 and S1 should be consulted as Ericsson stressed.

The document should be sent to N3 for the fall back mechanism for review. It will be sent to N3 by the originator.

Conclusion: Revised to **N1-000203**, which is noted and presented for information.,next time might go to the plenary

### **Tdoc-N1-000066 Changes to support a circuit switched multimedia call/ Nokia**

This is a CR against 29.007. This CR is only for info where it is the responsibility of N3 to approve it.

Content: Addition of user friendliness through fallbacks in a multimedia call setup.

Discussion: This CR will be discussed in N3 in their Feb. meeting. It will be late to wait till Feb. meeting and assume that the changes are going to be accepted to form changes to 24.008. The delegates would like to check with their N3 counterparts/company to make sure that these changes are acceptable.

IWU does not make the check for the kind of call as stated in ch.9.4.2.2.

Conclusion: post.

### **Tdoc-N1-000064 Changes to support a circuit switched multimedia call/ Nokia**

This is a CR against 24.008.

Content: Description of CS multimedia call setup, including fallback to '3.1 kHz audio' analog communication or to speech, if the attempted call mode can not be supported.

Discussion: BCIE needs a space.

The fallback mechanism was an area of concerns for some of the delegates.

Too much information about the core network functionality, where 24.008 usually specifies the requirement on the mobile and the network. Another CR 09.07 to be introduced to cover the network issues which does not belong here.

In case of automatic fall back, why is the user interaction involved in the scene.

In-band signalling is required to determine the kind of the analogue call.

Document N1-000154 describes fall back mechanism.

Conclusion: New CR for 09.07. Revised to N1-000166.

### **Tdoc-N1-000166**

Content: Changes were presented.

Discussion: No objection.

Conclusion: Agreed.

### **Tdoc-N1-000154 Fallback procedure (comment to Nokia's paper)/ NTT DoCoMo**

This is a discussion document.

Content: This paper comments on Multimedia paper which from Nokia. We think it is required that the fallback procedure (UDI/RDI multimedia to 3.1kHz audio multimedia call, 3.1kHz audio multimedia call to speech call).

Fallback UDI/RDI multimedia call to 3.1kHz audio multimedia call will be necessary when considering interworking with analog network.

Nokia has been proposed the procedure to realized the fallback procedure based on a assumption. But DoCoMo realized that the assumptions have a problem. This paper points the problem and proposes a solution.

Proposal of a Solution:-

In order to the calling terminal recognizes whether the called terminal is H.324 over V.34 or not, the calling terminal or MSC (have to) request 3.1kHz call toward to called side.

Discussion: It is the approach to send a second setup, which should be specified as a CC or other feature?

The originator of the Multimedia report mentioned that this could be mentioned in the report. DoCoMo would like to see this proposal reflected in 24.008 CR097.

Conclusion: Noted.

## **6.3 GSM / UMTS interworking**

### **Tdoc-N1-000032/ R99 SMC-GP SDL modification to transfer SMS messages via GMM/ NTT Communicationware**

This is a CR against 24.011.

Content: In UMTS, the GMM shall be used for PS-SMS transfer and the corresponding modification of SMC-GP was already agreed in CR001r6 (N1-99F53) without SMC-GP SDL. This CR completes SMC-GP SDL for UMTS.

Discussion: For information, Ericsson had some comments which were not incorporated.

04.07 will need some changes too.

Conclusion: Revised to N1-000167

**Tdoc-N1-000167** Since an MS can't release the PS signalling connection by itself, a GMM in MS side has to do nothing when it received a PMMSMS-REL-Req primitive from an SMC-GP. Even though without this primitive, PS signalling connection may release by the NW if it is needed. So PMMSMS-REL-Req primitive in MS side should be deleted.

And in this CR, there also exists a terminology alignment

Content: Changes were presented.

Discussion: No objection. Related to N1-000191.

Conclusion: agreed

### **Tdoc N1-000191/ R99 PMMSMS-REL-Req deletion in MS side/ NTT Communicationware, Ericsson**

This is a CR against 24.007.

Context: Since an MS can't release the PS signalling connection by itself, a GMM in MS side has to do nothing when it received a PMMSMS-REL-Req primitive from an SMC-GP. Even though without this primitive, PS signalling connection may release by the NW if it is needed. So PMMSMS-REL-Req primitive in MS side should be deleted.

And in this CR, there also exists a terminology alignment

Conclusion: Agreed

### **Tdoc-N1-000071 System Information/ Ericsson**

This is a CR against 24.008.

Content: Introduction of Core Network (CN) System Information.

The system information will be sent to the MS in RRC messages and the structure of this information is specified in TS 25.331. For the CN system information, the IE type "GSM-MAP NAS system information" is defined in TS 25.331 v3.1.0. This IE type may contain either information specific to one CN domain (CS or PS) or information common for both CN domains. The contents of the CN common system information, the CS domain specific system information and the PS domain specific system information are to be specified in TS 24.008

The CN System information parameters are not used on the RRC level. Parameters that are relevant for both RRC and upper layers are specified in TS 25.331. Such parameters are e.g.:

PLMN identity (MCC and MNC), information about the absence/presence of a CN domain, the CN CS respective PS domain specific DRX cycle length.

The Access Control Class information should to be specified in TS 25.331 since the setting and use of this parameter is considered to be part of RRC functionality. Emergency call is a CS domain feature, but since the "Emergency call allowed" parameter is close related to the Access Control Class of the MS it is proposed to specify this parameter also in TS 25.331.

Attached, as an Annex, to this CR is a copy of the chapters 10.1.6.5.3 – 10.1.6.5.5 of the TS 25.331.

Discussion: No IEI and length is required! Please define.

Why is a re-establish flag defined?

Usually MM do not pass system information to CC. Some more time for the discussion is required and also to check GSM history.

Emergency call should not be included in the NAS information. IEI length and Emergency call should be incorporated.

Understanding what is the effect on the Access Stratum and NAS is required.

Encoding the message in the ASN.1 in a plane format is to be checked if possible, and make sure it is compatible if we coded in an Octet format.

Conclusion: Revised to N1-000173, merge together with N1-000148.

### **Tdoc-N1-000072 P-TMSI re-allocation in the Service Request/ Ericsson**

This is a CR against 24.008.

Content: This CR:

clarifies that the MS shall send the old RAI and the P-TMSI signature, if available, in the Service Request message;

- corrects that the IMSI is not sent by the MS to the network in the Service Request message;
- corrects that security mode setting procedure is not a GMM common procedure;
- for reject causes #3, #6, #11, #12 and #13, an MS in operation mode A shall in addition delete the SIM data related to CS services;
- corrects the reference in section 9.4.20 to information element 'P-TMSI' to section 10.5.1.4;
- corrects the length of information element 'P-TMSI' to 6 octets;
- if the Service Request message is sent unciphered, then the network has to allocate a new P-TMSI and optionally a new P-TMSI signature to the MS. This CR proposes to add the P-TMSI IE, the P-TMSI signature IE and the RAI IE to the Service Accept message in order for the network to perform a P-TMSI reallocation in the Service Request procedure

Discussion: off-line discussion is required.

Conclusion: Postponed to next meeting. Rejected.

### **Tdoc-N1-000073 P-TMSI re-allocation in the Detach procedure/ Ericsson**

This is a CR against 24.008.

Content: This CR clarifies that the MS shall only send the P-TMSI, the old RAI and the P-TMSI signature, if available, in the Detach Request message in UMTS and not in GSM. It also clarified in this CR that the MS shall stop timer T3321 in GSM and UMTS when receiving a DETACH ACCEPT message from the network.

In UMTS, if the MS is combined attached for GPRS and non-GPRS services in network operation mode I, an MS may initiate a Detach procedure with detach type = "IMSI detach" in order to detach the MS for non-GPRS services. The MS initiated Detach Request message contains a P-TMSI and optionally a P-TMSI signature. If the Detach Request message is sent unciphered, then the network has to allocate a new P-TMSI and optionally a new P-TMSI signature to the MS. This CR proposes to add the P-TMSI, the P-TMSI signature and the RAI information elements to the Detach Accept message in UMTS. Furthermore a new GMM message "Detach Complete" is introduced in UMTS for the MS to acknowledge the P-TMSI re-allocation

Discussion: Comments are expected from the delegates, and will be postponed to the next meeting.

Conclusion: Rejected.

### **Tdoc-N1-000074/R99 Terminology clarifications in Selective Routing Area Update procedure/ Ericsson**

This is a CR against 24.008.

Content: Clarifications and updates to the chapter describing the Selective Routing Area Update regarding the terminology used in 24.008.

Discussion: It would be better to use the ready timer instead of the periodic routing area update timer, where you could be in ready state and the RAU-timer is not running. Ready timer can expire but can run in that case.

This section should be moved to an appropriate place.

Conclusion: Revised to N1-000168.

### **Tdoc-N1-000168**

Content:

Discussion: because of the timer used, it would be convenient to change the MS to Network.

Conclusion: Rejected for this meeting

### **Tdoc-N1-000200**

Content: related to N1-00074, and presented for information

Discussion: The CR number is taken from another CR which will be corrected.

Conclusion: Rejected for this meeting



### **Tdoc-N1-000078 Abnormal cases in Service Request procedure/ Nokia**

This is a CR against 24.008

Content: It may occur that the MS and SGSN have different set of activated PDP context(s). The service request procedure under this type of unsynchronised condition leads to abnormal case. In this CR, an unsynchronised condition where MS has active PDP context(s) while SGSN has de-activated all PDP context(s) is considered

In UMTS, if the MS in PMM-IDLE mode has an upward user packets which need to be send, the MS first sends a SERVICE REQUEST message indicating "data" to the network. It is proposed that in the unsynchronised condition where the SGSN does not have any active PDP context(s) and therefore no RABs may be established, the SGSN rejects the service request by sending a SERVICE REJECT message with a cause value indicating "no PDP context activated" to the MS. Receiving the reject message, the MS shall deactivate all the PDP context locally, after which the MS may perform PDP context activation to re-establish the deactivated PDP context(s).

Discussion: There is no procedure to re-establish PDP context.

The case there is an active PDP context then we need to apply different behaviour to handle this case, be cause of synchronisation.

A proposal to put the value of congestion to be one below this value.

Conclusion: Revised to N1-000169

### **Tdoc-N1-000169**

Content: Changes were presented.

Discussion: No objection.

Conclusion: agreed

### **Tdoc-N1-000122 Recovery from unsynchronised condition of PDP context state/ Fujitsu**

This is a discussion paper.

Content: CR of *Service request* procedure is approved in the CN#6 to be incorporated into 24.008 v3.2.0. This contribution discusses how unsynchronised condition is solved when sending SERVICE REQUEST indicating Service type IE „data“.

The unsynchronised situation of PDP context state should be solved as discussed above. If basic idea described section 3 is agreed, modifications below would be necessary.

Addition of new GMM Cause indicating unsynchronised PDP context state.

Addition of new RANAP Cause indicating invalid contents of NAS Binding Information.

With regard to item b), liaison statement to R3 is proposed to be sent.

Discussion: Case b, is it possible for the Ue to activate PDP context?

Case A, wouldn't it be rejected by the network upon receiving the request, where enough information is available in the network rather that the MS rejecting the call.

This contribution is in line with the previous contribution, in addition it includes more cases for PDP context activation.

There is various independence between the 3 layers, where mixing up all the 3 layers is not a good way.

The mobile should receive the response for the messages on the same layer the request is sent.

Send in the service request all information was suggested.

We need to cover case c, which does not contradict with proposal in N1-000078. Case a and case b could be useful.

Conclusion: Noted. Further study is needed for this topic.

### **Tdoc-N1-000080/ R99 Service Request procedure in the chapter 4.1.1/ Nokia**

This is a CR against 24.008

Content: The purpose of the CR is to introduce the service request procedure into the chapter 4.1.1.

Discussion: A comment was done and then after offline discussion is withdrawn.

Conclusion: Agreed

### **Tdoc-N1-000083/ R99 Updating Session Management (SM) for R99/ Ericsson**

This is a CR against 24.007.

Content: The CR updates 24.007 in accordance with the updates made to 24.008 for GPRS/UMTS SM for R99. It also makes some editorial corrections to faults found in 24.007 for SM.

This CR corrects SMREG-SAP only. Further CRs will be needed for other SAPs.

Anonymous access has not been removed in this CR. Protocol architecture in figure 5.2 and 5.3 have not been updated for UMTS. This is FFS.

Discussion: Is S2 making difference in their LS sent to us defining active PDP contexts as primary and secondary activation? not very clear!!!

It is a lot of work and need to be looked at carefully.

Use the terms indicated in the LS, which was made acceptable in this case.

Conclusion: The content of the CR is acceptable. It will be postponed to the next meeting. Rejected for this meeting.

### **Tdoc-N1-000084/ R99 Removal of Anonymous Access/ Ericsson**

This is a CR against 24.007.

Content: According to SA1 decision (TSG S1 (99) 1043), the AA feature should be removed from R99. No backward compatibility issues is identified (a R99 MS will not request AA and a R99 network will ignore AA request from a pre-R99 MS supporting this feature).

Also Figure 5.3 is re-introduced without AA, since v.3.2.0 does not contain that object

Discussion: The feature is/ will be deleted from all specifications according to the LS from S1 to S2.

What about the error handling? It is inconsistent to delete it from R99 and not previous releases! It will be difficult to upgrade the system. It was suggested by Siemens to send a LS to S2 to remove it from all older releases. Siemens will draft a LS in N1-000170.

Conclusion: Agreed.

### **Tdoc-N1-000085/ R99 Removal of Anonymous access/ Ericsson**

This is a CR against 24.008.

Content: According to SA1 decision (TSG S1 (99) 1043), the AA feature should be removed from R99. No backward compatibility issues is identified (a R99 MS will not request AA and a R99 network will ignore AA request from a pre-R99 MS supporting this feature).

Discussion: Related to previous document N1-000084.

Conclusion: Agreed.

### **Tdoc-N1-000086/ R99 Clarification to the MS handling when receiving detach type 'IMSI detach'./ Ericsson**

This is a CR against 24.008.

Content: Due to lack of co-ordination between 29.018 and 24.008 the complete procedure should also be stated in 24.008.

Discussion: The meaning of the sentence " No cause code should be received with detach type "IMSI detach", means when no cause code is indicated in the message. 09.18 has to be aligned with this change.

Objection from Siemens to agree this CR, as they indicated in the e-mail discussion. The question by Ericsson shall we change our interpretation and implementation, it is only clarification. It is seen as additional feature, Ericsson sees it as correction.

If we reject this CR then we need to make changes to 29.018 and make it clear.

Either no change at all or we go to Siemens proposal to improve the mechanism for R97 and upwards. In both cases we do not need this CR.

Conclusion: Rejected. We need to establish agreement before the previous meeting. Also operators should give feed back where it is interesting for them as well as the rapporteur from Vodafone-Airtouch author of 09.18 is expected to give his opinion.

### **Tdoc-N1-000090/ R99 Paging response in 4.7.9/ Ericsson**

This is a CR against 24.008.

Content: To separate and clarify actions and references between GSM and UMTS.

Also clarifying RAU as paging response according to the selective RAU procedure.

Discussion: this is from Nokia and Ericsson.

The timer T3313 is used for GSM and UMTS. There is contradiction in 2 Ericsson proposals where the timer is cancelled in one and used in the other. Recommendation to use the ready timer instead.  
RR- Entity or RR-sublayer should be added in the terminology to mean for both GSM and UMTS.  
Conclusion: Revised to N1-000171.

#### **Tdoc-N1-000171/ Ericsson, Nokia**

Content: Changes were presented

Discussion: No objection

Conclusion: Agreed

#### **Tdoc-N1-000123/ R99 Coding of NAS Binding Info field/ Fujitsu**

This is a CR against 24.008.

Content: To correlate NAS service (i.e., call, PDP context ...) and Radio Access Bearer in Access Stratum, the NAS entity shall set binding information to NAS Binding Info IE, which is carried by RANAP and RRC messages from CN node to UE.

Currently, either of SI (for CC) or NSAPI (for SM) is set in the IE. This CR proposes coding of content of NAS Binding Info IE.

Discussion: This should be a kind of container similar to the system information we've seen before, so It is missing some references for RANAP and RRC to make the link available and not miss consistency. A LS out to inform RAN3 about the consistency between the specifications.

The definition of the field inside NAS binding information IE to be defined.

We need to make a reference where the NSAPI and SI is defined. Also what should be the higher part of the IE if you put NSAPI in the lower part (4 octets), need to be described.

Do we want to put it in the Annex or in 24.008 text as a new IE is to be defined? Write the IE in a new section under section 10 is decided

Conclusion: Revised to N1-000172.

#### **Tdoc-N1-000172**

Content: Changes were presented.

Discussion: A proposal is to separate the SI for each domain was discussed and accepted.

Spare bit has to be changed with the actual bit.

NSAPI, and SI values are identified here as binary coded.

Conclusion: Revised to **N1-000211** which was agreed.

#### **Tdoc-N1-000148/ R99 Proposed 3<sup>rd</sup> Generation NAS information/ Nippon Telecommunications Consulting CO., LTD.**

This is a CR against 24.008.

Content: It is necessary for network to provide MM system information with broadcasting function in order for UE to perform proper Mobility Management procedure.

Currently the contents of system information broadcast from network have been studied in RAN group. However the NAS system information in SYSTEM INFORMATION message is transparent to RRC and the detail has not been discussed in RAN group. CN1 should be responsible for these NAS related information for Mobility Management.

Discussion: More time is required to study what is related to the Access Stratum and non Access Stratum, as requested by one of the delegates. Ericsson proposal is preferred in N1-000071, where N1-000148 has more information. Both CRs should be merged.

Some information is to be carried on for GSM ex. RA colour, ..etc. should be studied.

Conclusion: The content of this proposal is to be merged with **N1-000173**, which was withdrawn.

## **6.4 MS Classmark**

### **Tdoc-N1-000081/R99 Proposal of Classmark 1, 2, and MS network capability for UMTS/ Siemens AG**

This is a CR against 24.008.

Content:

- 1) A new code point for the revision level was specified for UMTS mobiles only, but all cases in which the new code point is needed (indication that the ME supports the R99 protocol enhancements UMTS authentication, extended TI, and extended send sequence number) can occur also for GSM mobile stations.
- 2) The indication that the ME supports the R99 protocol enhancements UMTS authentication and extended TI is also needed for GPRS.
- 3) Several editorial corrections and correction of an error introduced between v 3.0.0 and 3.1.0 of TS 24.008.

Discussion: Proposal from Fujitsu, to extend the revision level to one Octet where we have now only 2 revisions left, where compatibility issues has to be considered when studying this issue. This will be discussed offline.

Some changes need to be done in the earlier releases as well.

Conclusion: Rejected. Postponed to the next meeting. [Note that this WI is completed in Dec.99 and functionally frozen.](#)

## **6.5 Security**

### **Tdoc-N1-000109/R99 Introduction of a new codepoint within the mobile identity IE, encrypted IMSI/ T-Mobil**

This is a CR for 24.008.

Content: This CR is necessary to introduce Enhanced User Identity Confidentiality according the WI security.

A new code point, named XEMSI will be introduced. This code point addresses the encrypted IMSI and the necessary routing information.

Discussion: GI is the encryption/coding information. Node ID to address a node ex. HLR or to address the subscriber. The network will get the node ID from the SIM, to address the HLR. Node ID is optional. This solution causes the possibility of moving the subscriber to another HLR not possible. This will be done upon inquiry from the MS.

It is not clear whether the encryption will be done in SIM or the ME?

It is for R99. We will get a length problem in CM service request where we have only 3 Octets left, and 20 Octet is the maximum length for the whole initial message. Where it is sent as "L2 message = based on one frame" and not as L3 message.

We need precise criteria for the MS as stage 3 description. MSB, LSB should be considered.

We suppose not to open new concepts for R99 where this is a new functionality. The LS out should cover this N1-000150.

Why is IMSI used for mobile paging? It supposes to be secured?

Conclusion: Post waiting for N1-000150 which is revised to N1-000178

### **Tdoc-N1-000095/R99 Integrity checking of MM and GMM messages/ Vodafone**

#### **Airtouch**

This is a CR against 24.008.

Content: The first point to consider is the threat of a "false network." If this network was connected to the PSTN for example, then there is the possibility for eavesdropping.

Integrity protected signalling messages are supposed to provide the MS with a technique for recognising that messages have come from an unofficial source. However, the following case still poses a threat to security:

The MS has a genuine connection with a genuine network. Authentication and key agreement has taken place, and then the MS sees a strong signal in a neighbouring cell. The MS camps on the new cell and then does a random access. If this new cell is part of a false network, then the network will send an immediate assignment. The network will not bother authenticating the MS. The MS may then send, for instance, a CM SERVICE REQUEST message. The false network cannot cipher or integrity protect, so it immediately sends a CM SERVICE ACCEPT. How does an MS behave when it receives such a message without an integrity signature?

It must NOT accept such a message unless it has already received the SECURITY MODE COMMAND from the RNC.

The second point to consider is that the solution is not just a case of saying that all received messages are integrity checked. Some MM/GMM messages have to be able to get through without integrity protection. (Either the keys have not been agreed or integrity protection has not started).

This CR aims to resolve these problems.

Discussion: Integrity check for lower layers does not exist in GSM, so it is only for UMTS. The title will be changed to say UMTS only.

MS reaction, we need to specify what the MS will do when it receives a paging without the integrity check should be defined. The Author replied that lower layers would take care of it and ignore the message. MS reaction needs to be defined in 24.008.

In case of failure of integrity check, the MS should not try to access in this cell anymore where we need to find out how to define this in the MS.

Missing MS requirement including MM requirement, and is it up to S3 to give the requirement. Also the messages including the reject messages should be considered.

Conclusion: Revised to N1-000183, which was withdrawn.

### **Tdoc-N1-000041 UMTS security parameters, Handling of Ciphering algorithm IE in UMTS/ Ericsson**

This is a CR against 24.008

Content: The Ciphering algorithm IE is not used in UMTS. This CR clarifies how an MS shall handle this information.

Discussion: No objection.

Conclusion: Agreed

### **Tdoc-N1-000042/ R99 UMTS security parameters, Correction of format for IE “Response from SIM”/ Ericsson**

This is a CR against 24.008

Content: The Information Element “Response from SIM” should be of the format “TLV”.

Discussion: No objection.

Conclusion: Agreed

### **Tdoc-N1-000043/R99 UMTS security parameters, Combined reject causes for CS and PS/ Ericsson**

This is a CR against 24.008

Content: Reject cause codes for MAC and Synch failure are available for both CS and PS. This CR proposes to use “MAC failure” and “Synch failure” for both PS and CS and use the same code points for these.

Discussion: Some discussion about the reject cause went on.

Offline discussion will take place.

Conclusion: revised to N1-000186.

### **Tdoc-N1-000186**

Content: changes were presented.

Discussion: No objection

Conclusion: Agreed

### **Tdoc-N1-000069/R99 Clarifications on the MM and GMM Authentication procedures/ Ericsson**

This is a CR against 24.008

Content: Some clarifications and editorial changes are needed for the MM and GMM authentication procedures, e.g. start of ciphering is dependent on radio access system, the calculated security key(s) is dependent on the type of performed authentication

Discussion: Some text is required to describe the invalidity of the Key for which reasons.  
Some old text which is deleted should be considered again., about storing the ciphering key on the SIM.  
Some more offline discussion will take place.  
Conclusion: Revised to N1-000187.

### **Tdoc-N1-000187**

Content: Changes were presented  
Discussion: There will be a following CR to cover some missing information.  
Conclusion: rejected for this meeting. Postponed to the next meeting

### **Tdoc-N1-000070/ R99 Authentication Reject from MS/ Ericsson**

This is a CR against 24.008  
Content: This CR proposes to use the 'Authentication reject' and 'Authentication and Ciphering reject messages' defined in the MS -> network direction at UMTS authentication failure.  
The requirement for the MS to include the parameter RAND<sub>MS</sub> in the AUTHENTICATION FAILURE messages has been removed in new version of 33.102.  
Discussion: Change of messages names are agreed with Vodafone-Airtoch.  
Authentication message type will be removed from the IE in the next revision.  
Some other changes in addition to the above ones will be incorporated in the new revision.  
Conclusion: Revised to N1-000188.

### **Tdoc-N1-000188**

Content: Changes were presented.  
Discussion: No objection  
Conclusion: Agreed

### **Tdoc-N1-000134/R99 Alignment of the procedure "Authentication not accepted by the MS" in MM and GMM/ NTT Software**

This is a CR against 24.008  
Content: CR of Adaptation of MM and GMM messages to incorporate UMTS security parameters (N1-99E95) was approved in Bad Aibling meeting.  
This CR is to add the process that the core network stops the timer T3260 in 4.3.2.5.1 Authentication not accepted by the MS and stops the timer T3360 in 4.7.7.5.1 Authentication not accepted by the MS  
Discussion: Discussion about the timer and where it suites in the spec. Also naming has to be compatible to what is suggested in another CR.  
MAC failure for FFS why?  
Conclusion: Revised to N1-000189

### **Tdoc-N1-000189**

Content: Changes were presented  
Discussion: No objection  
Conclusion: Agreed

## **6.6 QoS**

### **Tdoc-N1-000087/R99 Abnormal cases for TFT handling, TFT IE maximum length/ Ericsson**

This is a CR against 24.008.  
Content: This CR introduces two pieces of missing information related to the use of TFTs:  
1. Abnormal cases involving TFTs. For this purpose, 2 existing cause codes are redefined and two additional cause codes are introduced.  
2. TFT IE maximum length. Currently this is indicated as FFS. It is proposed that TFT IE maximum length is set as 259 bytes which permits to include 8 maximum size IPv4 type packet filters, each of which can have a maximum size of 32 bytes. This maximum length will permit the inclusion of 4

maximum size IPv6 type packet filters, each of which can have a maximum size of 60 bytes. 259 bytes give future expansion flexibility in the messages defined to 400 as max size.

Discussion: The Cause values are defined By Ericsson in 3GPP specs, as the author stated.

The information given in this CR is to ease the implementation and was requested in the last meeting.

Error handling has been specified as network part without specifying which part of the network has to do it. So, there is a reference to SGSN which should be changed to Network. The length of the QoS is indicate in the next CR in N1-000088.

Conclusion: Revised to N1-000184.

#### **Tdoc-N1-000184**

Content: Changes were presented.

Discussion: No objection.

Conclusion: Agreed

#### **Tdoc-N1-000088 Compact coding of QoS IE/ Ericsson**

This is a CR against 24.008.

Content: With CR 086r1 the new Quality of Service (QoS) information element (IE) for Release 99 was introduced in TS 24.008.

One disadvantage with the proposed coding is that the size of the QoS IE has increased considerably, from 4 bytes in R'97 to 19 in R'99 (LV coding).

This IE is used in several L3 protocol messages. Some of which were quite large already in R'97, thereby increasing the likelihood of an overflow in the messages.

A closer look shows that the IE coding has been made more spacious when necessary.

Considering that the QoS IE is also a major part of e.g. the MODIFY PDP CONTEXT REQUEST message and there are reasons to believe that QoS renegotiation will contribute significantly to the SM signalling in a GPRS network, it seems justified that a more compact coding should be strived for.

With this CR a compact coding for the QoS IE is introduced that will bring down the max IE length to 12 octets.

QoS IE Length has also been added, were missing, in the tables in section 9.5.

Discussion: Some problems are spotted by the Author where he is still working on.

S2 has to be informed about the change of max.value of QoS. A LS will be sent after approval of this CR.

Granularity of value changes from reserved to new range?

Conclusion: Rejected. Postponed to the next meeting for more time is requested by the delegates to check the new Qos values.

### **6.7 Out-of-Band Transcoder Control**

#### **Tdoc-N1-000163 Outcome of the Informal Ad-hoc Session on Out-of-Band Transcoder Control/ Ericsson, NTTDoCoMo, Siemens AG**

This is a discussion paper

Content: On the first evening of the CN1#10 meeting, an informal ad-hoc session with participants from interested companies took place to discuss the input papers from Ericsson (N1-000111), NTT DoCoMo (N1-00140, 141 and 143) and Siemens (N1-00033) related to the agenda item Out-of-Band Transcoder Control, focusing on transporting downlink codec information.

As an outcome of this ad-hoc session, Ericsson, NTTDoCoMo and Siemens agreed to propose the working assumption given below to N1 for progressing further works in the area of codec negotiation between MS and MSC. This working assumption is based on a modification of the proposal outlined in the Annex of Tdoc N1-000033, reviewing above Ericsson and DoCoMo contributions. The modification consists in including the whole CC message "Selected Codec" (including TI/PD and message type) in the RANAP and RRC messages, instead of including only the information element of Selected Codec. Please refer to the document.

Discussion:

Working Assumption for the Transport of Codec Information during the Codec Negotiation between MS and MSC:

1. The information about the supported codecs (Supported Codec List) is sent by the MS in the CC messages Setup (mobile originating) or Call Confirm (mobile terminating).
2. The information about the Selected Codec is sent by the MSC via the Iu interface in the RANAP messages RAB Assignment Request and Relocation Request. The CC message Selected Codec is included in these messages as an optional information element. The MSC shall include this information element, if the MS has to assign a codec or has to change the codec together with the radio bearer assignment, re-configuration or handover.
3. If the information element is contained in the RANAP message, it has to be included by the RNC in the corresponding RRC message: Radio Bearer Setup, Radio Bearer Reconfiguration, or Handover message. (Note: this list may be incomplete.)
4. In case of an MSC-MSC handover (2G->3G), or a radio bearer reconfiguration after such a handover, the Supported Codec List is transported with the BSSMAP messages Handover Request and Assignment Request via the E interface. The target MSC selects a transcoder according to the contents of list and includes the Selected Codec message in the Relocation Request or RAB Assignment Request sent to the target RNC. The Selected Codec will also be reported back to the anchor MSC in Handover Request Acknowledge or Assignment Complete, respectively.

Conclusion: The WAs 1 to 3 in this paper are agreed. Noted

### **Tdoc-N1-000139 Clarification of related works for Out of Band Transcoder Control in N1/ NTT DoCoMo**

This is a discussion paper.

Content: During last N1 meeting #9 some issues related Out of Band Transcoder Control are realized. Siemens, Ericsson and NTT DoCoMo have been submitted to this N1 meeting #10 to conclude the open issues.

This paper clarifies that which open issues are considered in each paper and what proposals are described in each paper. Additionally, this paper described working step to conclude the open issues until March.

It is proposed;

This paper to be discussed at first of discussion about Out of Band Transcoder Control, and the followings are clarified before discussion;

1. open issues discussed in this meeting
2. those works that must be completed in this meeting

Discussion: Just presented to reflect DoCoMo's view. **Tdoc-N1-000140, N1-000141 and N1-000142** were presented for the same purpose.

Conclusion: All were noted

### **Tdoc-N1-000143 Information Element for Codec Negotiation/ NTT DoCoMo**

This is a discussion paper

Content: In UMTS, the supported codec information has to be sent from ME to MSC and selected codec information also has to be sent from MSC to ME. In GSM, Bearer Capability IE of CC is used between ME to MSC and Channel Type of BSSMAP is used to send supported codec information from MSC to BSS. BSS selects codec used and send selected codec information to ME by using Channel Mode IE of RR. In UMTS, MSC selects codec used.

During last N1 meeting #9, Ericsson and DoCoMo proposed addition of new CC message (Selected Codec) for notification of selected codec information (N1-99xxx). Additionally, we proposed addition of new IEs for notification of supported codec list and selected codec information.

NTT DoCoMo had studied this issue again. Consequently, NTT DoCoMo proposes addition of new CC message for notification of selected codec information again. But, NTT DoCoMo reaches that addition of new IEs is redundant.

This document proposes;

- using BC IE for notification of supported codec information. (as section 4.1)
- addition of new code (point) that indicates UMTS AMR to distinguish those codec information for UMTS from GSM (as section 4.1)
- using UMTS BC IE for notification of selected codec information(as section 4.2)

Discussion: See N1-000179.

Conclusion: Noted



### **Tdoc-N1-000179/ R99 BC enhancements to cover UMTS AMR speech codec and codec negotiation procedures/ NTT DoCoMo**

This is a CR against 24.008

Content: Codec information for UMTS has to be distinguished from codec information for GSM. This means that a new code point to indicate UMTS AMR have to be added to speech version indicator of BC IE.

No codec information is supported by the Radio Network compared to GSM where the GSM BSC returns chosen speech versions to the mobile terminal via RR messages, thus a CC message is required for this purpose in a UMTS system.

Discussion: Why do we need to include the SI in the message? Where TI should be enough even for considering CH.

If we select the codec to be sent in a CC message, then a statement saying that the message is not to be sent on the Iu interface as a RANAP message and not CC message!!

Table 10.5.1.3, the sentence below code points for different codecs...., Single versions sounds a bit contradictory, should be corrected with some other similar changes.

Conclusion: Revised to **N1-000190**, which is withdrawn on the condition that Ericsson do not revise their CE for the IE N1-000112, unless they agree with NTT DoCoMo. The new IE is to the messages with the structure to carry the codec in the uplink direction.... See 1.6.3 in the document/ second bullet.

### **Tdoc-N1-000112/ R99 BC enhancements to cover UMTS AMR speech codec and codec negotiation procedures/ Ericsson L.M**

This is a CR against 24.008

Content: Supported speech codec information received from the mobile terminal must differentiate between codecs supported in UMTS and codecs supported in GSM for intersystem handover. This means additional information is required to what is currently received by the MSC in the Bearer Capabilities IE.

No codec information is supported by the Radio Network compared to GSM where the GSM BSC returns chosen speech versions to the mobile terminal via RR messages, thus a CC message is required for this purpose in a UMTS system.

The requirement for Out Of Band Transcoder Negotiation highlights the need for a standardised format for this information.

Discussion: Why introducing 2 codec IEs for normal case and one for HO?

Why does the MS need to know the reason for changing the codec and what shall it do with this information? Siemens withdraw its comment done meetings ago suggesting this case!

Radio access system addition will be a problem in the future extension with the existing definition.

Either agrees N1-000190 or N1-000112! Also SMG2, T3 and N3 need to know the outcome.

Conclusion: Rejected and postponed to the next meeting.

### **Tdoc-N1-000180 Explanation of Future Proof of by using BC IE for Codec information Transport/ NTT DoCoMo**

This is a discussion paper

Content: Another issue discussed during the ad-hoc session during CN1#10, was the question how the information about the codecs supported by the MS should be encoded in the CC messages sent by the MS in the uplink direction (i.e. Setup and Call Confirm, respectively). The two alternatives proposed are

1. to add a new code-point for the UMTS AMR codec to the list of speech codecs in octet 3a, etc. of the bearer capability, or
2. to add a new information element to the messages with a structure according to what has been specified in TS 26.103.

The participants could not yet agree on one of these alternatives and will study the matter further.

Using current UMTS BC IE for the transport of the supported codec list and the selected codec is sufficient for R99. Additionally, it is explained for the future enhancement, namely addition of new supported codec list. Therefore, we propose using the BC IE for the transport of supported codec list and the selected codec list.

Discussion: It is possible to add a new information element in the HO message to specify the codec.

Conclusion: Noted

### **Tdoc-N1-000111 Transport of Codec Information/ Ericsson**

This is a discussion document

Content: Information about codecs needs to be exchanged at the access side between UE and MSC. In GSM the Bearer Capability Information Element is used to indicate supported speech codecs from the MS to the MSC. From MSC to BSC to MS the Channel Mode IE in Assignment Command is used to indicate the chosen speech version.

There are three problems discussed in this paper, firstly the issue of distinguishing between UMTS speech versions and GSM speech versions and secondly the issue of informing the UE of the chosen speech version. The latter discussion is a continuation of the discussion introduced to N1 in N1-99632. Thirdly, the handling of speech coding negotiation and control during and after Inter-MSC handover is discussed.

Please refer to the document.

Discussion: Siemens claimed that too much signalling during HO. One of Ericsson arguments for not having BSSAP but RANAP between MSCs in HO is to reduce the signalling.

Error cases have to be covered as well, where the codec has to be released if HO failed.

Conclusion: Noted.

### **Tdoc-N1-000113 New MAP procedure to enable negotiation of codecs & Transcoder control between MSC's./ Ericsson**

This is a CR against 29.002.

Content: UMTS CN architecture defines transcoders residing in the CN and speech coding as part of the Non Access Stratum (Call Control). This means that during and after handover between two MSCs the 'target' MSC does not have call control entity and thus cannot perform codec control (negotiation & selection) if it is to conform to the UMTS principles. Thus a mechanism must be introduced to enable the 'anchor' MSC to perform this task

Discussion: MSC MSC HO in case of 3G-3G HO, need to be completed before completing this CR and introducing the MAP procedures. Siemens has a suggestion for this issue.

Ericsson presents this as a discussion document to collect comments before the next N2 meeting. Presented for N1 for information

Conclusion: Noted

### **Tdoc-N1-000181 Inter MSC handover/ NTT DoCoMo**

This is a discussion document

Content: DoCoMo recognise that there are two issues on inter MSC handover(BSSMAP vs RANAP, transport to codec information). But, there are other issues on inter MSC handover that are not recognized (Multicall handover and additional call setup after inter MSC handover).

This paper applies to clarify other issues on inter MSC handover.

Discussion: We will go for a new IE was agreed

More time was requested for contacting the companies about the other issues.

Conclusion: Noted.

### **Tdoc-N1-000144 Clarification of Transcoder Setting/ NTT DoCoMo**

This is a discussion paper.

Content: During last N1 #9 meeting, it was clarified that transcoder re-setting is performed as inter MSC handover is performed in the case where transport layer between MSC is STM. But, in the other cases(i.e.,the case where transport layer between MSC is ATM) transcoder setting has not been clarified.

This document aims to clarify that transcoder setting at inter MSC handover and after inter MSC handover in all cases.

This document proposes;

1. Transcoder control procedure is considered based on the transcoder setting mentioned in ANNEX A and B
2. N1 sends LS to R3 and S4 in order that R3 and S4 confirm that transcoder setting/re-setting in ANNEX A and B in the document can be performed.

Discussion: Annex C, in the lower part, and the case where only STM connection between the 2 MSCs, where is the transcoder activated? In the target MSC.

LS out with Annex A is to be sent to N2 and RAN2 and Ran3 and S4 is to be prepared in LS out N1-000193.

Conclusion: DoCoMo/ Kushimizu will prepare LS out N1-000193. Noted

## **6.8 CC related Items**

Documents N1-00115 and N1000038 were presented together.

### **Tdoc-N1-000115 Improved Emergency Call Handling due to the Introduction of Emergency Call Categories/ Ericsson**

This is a discussion paper.

Content: Emergency calls are handled as a separate teleservice in GSM. The mobile phone maps the emergency numbers keyed in by the subscriber into teleservice 'Emergency Call'. No number is transferred from the Mobile Station (MS) to the MSC. This has the advantage that the subscriber can always dial the numbers known from his home location, but the MSC routes always to the nearest emergency centre.

The major drawback of this solution is that it cannot be distinguished between different emergency authorities, for example police, ambulance, or fire brigade. Therefore S1 requires in 22.101 that emergency calls shall be routed to different emergency centres. The method discussed so far transfers the dialled number from the MS to the MSC.

However, this method does only work, if the MSC knows the meaning of the transferred emergency number.

An alternative - not discussed so far - is to transfer the actual meaning of the emergency call instead of the dialled number to the MSC. This enables unambiguous routing to the right emergency centre. Please refer to the document.

To conclude, with the emergency category method all drawbacks of the dialled number method can be avoided. As in GSM, the emergency call is set-up fast and with the same level of quality. However, the emergency call is improved by specifying different emergency call cases. The mapping to default categories must only be done for emergency cases not defined - for example dialling the coast guard number in Switzerland. Furthermore, the mechanism can be introduced in a backward compatible manner and works with and without SIM-Card.

Due to all these reasons, Ericsson proposes to declare the emergency call category as an optional IE within the EMERGENCY SETUP message as working assumption and to liaise this to S1 and T2 accordingly.

Discussion: Siemens supports Ericsson's proposal, using code points.

It seems impossible to use the BCD number in different countries, which could interpret the number in different ways.

The chairman reported that S1 has not seen the proposal in N1-000115, where they decided for BCD. So the decision is to send the proposal to S1. Comparison and evaluation between the 2 proposals was done and the decision was

Conclusion: Noted , please refer to conclusion in N1-000206

### **Tdoc-N1-000038 Addition of called party BCD number in Emergency SETUP/ NEC**

This is a discussion paper.

Content: TSG-SA#5 approved S1 requirements concerning Emergency Calls.[TSGS#5(99)435] S1 required that it should be possible for the serving network to obtain the number, which was used to initiate the emergency call. Emergency Number would be stored in the SIM/USIM and the ME would read this and use any entry of these digits to set up an emergency call. This will allow the network to include the option to route the call toward different emergency call centres if appropriate.

This contribution proposal is addition of Called party BCD Number in subsection 9.3.8 Emergency setup message.

Discussion: See N1-000115

Conclusion: Noted , please refer to conclusion in N1-000206

N1-000204 and N1-000206 were presented together.

### **Tdoc-N1-000204 Time-plan for the category method/ Ericsson**

This is a discussion paper.

Content: This time-plan shows how the standardisation of the category method for emergency calls can be finalised until TSG#7.

Please refer to the document

Discussion: DoCoMo does not want to accept the proposal before having enough time to review it. Please refer to N1-000206.

Conclusion: Noted , please refer to conclusion in N1-000206

### **Tdoc-N1-000206 Additional explanation for Emergency SETUP procedure and routing/ NEC**

This is a discussion paper

Content: There was discussion about emergency call comparison between category method (N1-000115) and called party number method(N1-000038). In above comparison, it seemed to be some misunderstanding as called party method is needed to be stored all relevant emergency number all around the world in MSC. Therefore, we will explain how called party method works properly without storing such huge database. *It shall be possible for the serving network to obtain the number, which was used to initiate the emergency call. This will allow the network the option to route the call to different emergency call centres if appropriate. If the dialled digits are not recognized as an emergency service by the serving network, the call shall be routed to the default emergency service.*

Please refer to the document.

Discussion:

In case 2 the user should know the emergency number for the visited country. Case 1 is in line with S1 requirement which puts the burden on the MSC to know all emergency numbers " of the world".

It should be made clear as requirement if this should be fulfilled only in the home network or the roamed network. A LS is to be sent to S1 asking for the service requirements are.

N1 can not decide to the emergency call issue. S1 had made the requirement to use the BCD number. To use the coding for Emergency call world-wide, as proposed by Ericsson is also a possibility, which was presented but not agreed yet because of the maintenance of the system, where only specified categories are supported.

Roaming case is also a big issue.

Conclusion: LS in N1-000212 to S1 proposing both alternatives and asking them to decide, where they are responsible for the service definition. Noted.

## **6.9 R99 packet data**

### **Tdoc-N1-000034/ R99 Extended Transaction Identifier/ Siemens**

This is a CR against 24.008.

Content: To increase the the number of simultaneous calls/sessions the Transaction Identifier (TI) value has been extended (see TS 24.007). The corresponding adaptations to the error handling sections for call control and session management in TS 24.008, section 8, are not consistent and might cause error cases and unnecessary implementation efforts.

To increase the number of simultaneous calls/sessions the Transaction Identifier has been extended. To that purpose the description of the error handling of Session Management and Call Control has been modified. The described behaviour will cause error cases.

Discussion: Fujitsu can not find enough reason to delete this section but agree with the presented problem, and would like to propose the unknown rejection case to be specified. The proposal does not work in case defining an extension beyond the limit now 128.

Ericsson supports Siemens.

Fujitsu solution allows it to be extended to more than 2 octets. Where they are suggesting to define more than one extension octet.

We are not allowed to use the extended octets with the reject message.

Conclusion: .No decision between the 2 alternatives is reached. The problem exists, and will be dealt with in the next meetings. Rejected. It effects other older releases as well.

## **6.10 Other R99 Issues**

### **Tdoc-N1-000151 Network Selection**

Related to N1-00049 ?? which is originated by S1.

Content: To clarify the requirements for network selection, including access technology type

Discussion: Reference to 23.022 does not exist and should be replaced.

Changes were presented by the chairman.

How could the MS determine that the network supports voice service? It is in a cell broadcast referred in EDGE (03.22). For older releases it is Voice as a default for the network.

Backward compatibility on all SIMs in UMTS with older SIMs is required by Vodafone-Airtouch.

The distinction between the frequency band will not be done unless network has the higher priority.

Conclusion: Noted. See LS out N1-000115.

### **Tdoc-N1-000056/ R99 Modifications to Stage 2 service description due to EDGE/**

#### **Nokia**

This is a CR against 23.034.

Content: Additions and changes for HSCSD service description due to EDGE

4. Main concepts; 5.1 Air Interface; 5.2.1.1 Mobile originated call establishment, Figure 3: Mobile originated call establishment; 5.2.1.2 Mobile terminated call establishment, Figure 4: Mobile terminated call establishment; new section 5.2.5 Link Adaptation for ECSD

Discussion:

Conclusion: Withdrawn, as well as N1-00055

### **Tdoc-N1-000177/ R99 Modifications to Stage 2 service description due to EDGE/**

#### **Nokia**

This is a CR against 23.034.

Content: Additions and changes for HSCSD service description due to EDGE

4. Main concepts; 5.1 Air Interface; 5.2.1.1 Mobile originated call establishment, Figure 3: Mobile originated call establishment; 5.2.1.2 Mobile terminated call establishment, Figure 4: Mobile terminated call establishment; new section 5.2.5 Link Adaptation for ECSD.

Discussion: No objection.

Conclusion: Agreed

### **Tdoc-N1-000114 GSM Cleanup – Removal of V.23/ Ericsson**

This is a CR against

Content: SMG1 has requested, among other items, the removal of the user rate option 1200/75 bit/s in R99, which implies that the V.23 modem is no longer needed. V.23 is therefore deleted.

Discussion: No objection

Conclusion: Agreed.

## **7 Release 2000**

### **7.1 New r200 Work Item proposals**

### **7.2 L3 Segmentation**

No contribution for this meeting

### **7.3 TurboCharger**

No contribution for this meeting

## 8 Output Liaison Statements

### **Tdoc-N1-000110 Draft response Liaison Statement on usage of RANAP over MAP/E i/f for UMTS to UMTS inter-MSC SRNS relocation/ Ericsson, Ntt DoCoMo, Nortel Networks**

Answer to N1-000026

Conclusion: Rejected. Revision in N1-000138, which was not handed in the meeting.

### **Tdoc-N1-000136 Proposed response to Liaison statement concerning HSCSD specifications/Nokia**

This is LS out sent to SA1, SA2, N3. Answer to N1-000017.

Content: TSG CN WG1 thank TSG SA WG1 for their LS concerning HSCSD specifications.

TSG CN WG1 do not have any objection to TSG SA WG1's analysis that GBS concept is fully applicable to 3GPP systems, and that multislot is only relevant for GERAN.

Furthermore TSG CN WG1 would like to inform TSG SA WG1 that TSG CN WG1 have not yet analysed in detail what changes needs to be done to HSCSD stage 2 (3G TS 23.034) due to the changes in HSCSD stage 1 (3G TS 23.034).

Discussion: Contact person will be inserted. This is for UMTS

Conclusion: Agreed

### **Tdoc-N1-000149 Proposed LS on questions on the CR 10r1 to TS 23.107/ Siemens**

This is a LS out to S2, S4. Answer to N1-000027.

Content: N1 has reviewed the CR 10r1 to TS 23.107 in Tdoc S2-99F37 and likes to raise the following question:

Why is it necessary to tear down all active PDP contexts except one in the case of a handover from a Release 99 to a Release 97/98 GPRS network. According to our understanding, parallel active PDP contexts are also supported by Release 97/98 GPRS networks.

Or was the intention of this CR to deal with the situation where several PDP context sharing the same PDP address are active and only one of these could be maintained when changing to a R97/98 SGSN, as the concept of PDP contexts sharing the same address is only available in R99? But if this was the background, there seem to be no need to tear down all PDP context except one, but only all PDP context except one sharing the same address.

Discussion: Some questions were raised and answered by the originator.

Conclusion: Agreed.

### **Tdoc-N1-000152 Proposed response to LS on RAB linking/ Lucent, Proposed response to LS on RAB pre-emption/ Lucent**

This is a LS out to S1, R3, S2. Answer to N1-000051 and ??.

Content: 2 LSes are included. Please refer to the document.

Discussion: Some editorial change and will be provided by the Author.

Conclusion: Agreed

### **Tdoc-N1-000153 Proposed response to LS on Capability configuration parameters/ Ericsson**

This is a LS out to T3, SMG9.

Content: TSG-CN WG1 thank T3 for their LS on "Capability configuration parameters" (N1-000117, T3-99420) asking if the configuration and capability parameters to be stored into USIM under EF<sub>CCP</sub> needs to be extended considering new bearer capabilities have been (or will be) introduced in 3G.

Please refer to the document.

Discussion: There was a similar LS send end 94/95 which was considered unnecessary to introduce discontinuity on the SIM card. This is an error and we will see the reaction.

We need to need the structure of the BC IE and add new point codes to existing fields.

Conclusion: Agreed.

### **Tdoc-N1-000155 Proposed Reply to LS on Requirements for Network Selection/ Siemens**

To S1, TSG-S2, TSG-T2, and TSG-T. Answer to N1-000049.

Content: N1 thanks S1 for their LS on Requirements for Network Selection (S1-991056). N1 has reviewed the CR to TS 22.011 on "Network Selection" ( S1-991057, attached to this LS) and like to raise the following concern:

S1 are introducing four new concepts, taking access technology, prioritisation of voice service , operator controlled PLMN selector list and Home Environment Specific Network Selection Procedure into account for PLMN selection. This is clearly against the rules which were agreed in TSG #6 when R99 was functionally frozen. These new features would risk the R99 schedule.

N1 has got only one more meeting to finalise the R99 specifications. As the requirements are still very much open, there is a risk that the requested features can not be completed for R99. Please refer to the document.

Discussion: Some typing error was discovered.

Delete the last sentence in bullet3, to allow the operator more freedom.

Distinguishing the networks, PLMNs by their network codes.

Conclusion: Revised to N1-000201

### **Tdoc-N1-000201**

Content: Changes were presented.

Discussion:

Conclusion: Agreed

### **Tdoc-N1-000164 Proposed LS on the Transport of Codec Information during the Codec Negotiation between MS and MSC/ Siemens**

To R2, R3. Answer to N1-000163.

Content: During the CN1#10 meeting in Abiko, Japan, CN WG1 discussed different alternatives for transport of codec information during codec negotiation between MS and MSC. For this purpose, CN WG1 considered procedures involving only CC signalling as well as other mechanisms using combination of CC and RR messages. The final agreed working assumption is attached in Tdoc N1-000163.

CN WG1 kindly asks RAN WG2 and WG3 to consider this working assumption and take further actions to implement it in the respective specifications under their responsibility.

We attached the most important input documents (Tdocs N1-000033, N1-000111, N1-000140, N1-000141) as background information.

Codec negotiation between MS and MSC is an essential prerequisite for the finalisation of UMTS R99, and therefore CN WG1 kindly asks RAN WG2 and WG3 for response out of their upcoming meetings in January. This will enable CN WG1 to prepare the necessary CRs to its next and last meeting for R99 issues on 28.2.-2.3.2000.

Please refer to the attachments.

Discussion: N2 will be added.

Conclusion: Agreed

### **Tdoc-N1-000170 Proposed LS on removal of Anonymous Access from Release 97 and 98/ Siemens**

To S1, S2. Answer to N1-000029.

Content: As the Anonymous Access feature is deleted in the Release 99 N1 does not see any good use of this feature in the older Releases 97/98 of the GPRS specification. It seems not clear how a network that had implemented the AA feature according to R97/98 could be upgraded to R99 or newer. As there seems to be no support for this feature in R99 from any of the delegations, N1 assumes that there is also no support for AA in R97/98.

Discussion: No objections.

Conclusion: Agreed.

### **Tdoc-N1-000178 LS on Enhanced User Identity Confidentiality – open questions/ T-Mobil**

To S3, N2. Answer to N1-000084.

Content: TSG-CN1 received the LS from TSG-S3 and discussed the proposed solution. To finalise the equivalent CR for 3G TS 24.008 N1 identified the following questions and restrictions.

TSG-CN1 is kindly asking for answers and guidelines:

Please refer to the document.

Discussion: Comments from before were not included.

One of them is, the end user could hack in the network having the HLR node ID on the SIM and accessible to the end user. It seems that it is not an HLR ID which was agreeable.

The first question should be removed.

Conclusion: Revised to N1-000202

### **Tdoc-N1-000202**

Content: Changes were presented

Discussion:

Conclusion: Agreed

### **Tdoc-N1-000182 SAT Handover notification and termination of call/ Nokia**

To S1, TSGS3, TSGT3, SMG9, SMG1/9 SAT ad hoc. Answer to N1-000137.

Content: N1 thanks S1 for their liaison in tdoc TSG S1 (99) 967 / N1-000018. The LS was discussed in TSGN1 #10 and the following questions and comments were made. Please refer to the document.

As a consequence of these comments N1 does not see the feature feasible for R99.

Discussion: Editorial change is spotted by the author, to delete the second bullet point.

Conclusion: Agreed.

### **Tdoc-N1-000193 Draft LS on Iu Userplane Initialization at Inter MSC-HO/ DoCoMo**

To SA WG4, RAN WG3, N2. Answer to N1-000144.

Content: While N1 were looking into the Inter MSC handover for R99, they detected the following problem concerning the transcoder setting and Iu userplane initialization at Inter MSC handover that requires the attention of SA WG4, RAN WG3 and CN2.

N1 discussed the attached Tdoc N1-000114 during their N1#10 meeting. The contribution outlines and analyzes all combinations of transport layer types, i.e. ATM/STM for transcoder setting at, and after inter MSC handovers.

An issue is that in case of an inter MSC handover it may be necessary to insert a transcoder in the anchor MSC (see Annex A3 of the attached Tdoc). If transcoder free operation was established before the handover, it is not clear how the Iu userplane between the remote RNC (connected to the opposite MSC in Annex 3) and the transcoder in the anchor MSC is initialized.

N1 kindly asks SA WG4 and RAN WG3 to study this issue and take further actions to ensure that Inter MSC handover should work properly in R99. Please refer to the document.

Discussion: No objection.

Conclusion: Agreed

### **Tdoc-N1-000199 Draft response Liaison Statement on usage of RANAP over MAP/E i/f for UMTS to UMTS inter-MSC SRNS relocation/ Siemens**

To S2, TSG CN WG2, TSG RAN WG 3, SMG2. Together with N1-000138 ( same topic)

Content: TSG CN WG1 has reviewed the Liaison Statement and the attached contribution (Tdoc S2-99F02) sent by TSG SA WG2 on usage of RANAP instead of BSSAP over the E interface at UMTS to UMTS inter-MSC SRNS relocation.

After a detailed discussion of the arguments given in Tdoc S2-99F02 for the usage of RANAP, TSG CN WG1 proposes that the working assumption stated in 23.121 version 3.1.0 to be changed to read:

*For UMTS to UMTS Inter-MSC Handover the following messages shall be used embedded in MAP at the GSM E i/f:*



i) BSSAP (i.e. BSSMAP and DTAP) messages with necessary modifications for GSM to UMTS Handover, if STM is used on the link between the anchor and the target MSC

ii) RANAP messages, if ATM is used on the link link between the anchor and the target MSC.

Please refer to the document.

Discussion: This suppose to be used as discussion basis. To be studied and compared with SMG2 view.

The author would be glad to receive any feedback and questions.

Conclusion: Noted.

### **Tdoc-N1-000135 Draft LS on reply to LS on usage of NSAPI, RB identity, RAB ID and TEID/ NTT communicationware**

This is LS out sent to TSG RAN WG3, RAN WG2, SA WG2, CN WG2

Content: TSG CN WG1 thanks TSG RAN WG3 for their LS on usage of NSAPI, RB identity, RAB ID and TEID.

In R3-99J88, RAN3 asks three questions to CN1. This response to those questions and informs related TSGs CN1 decisions on these topics.

RAN3 comments and CN1 answers are shown in the document.

Discussion: The references need to be corrected. New copy need to be handed.

Conclusion: Agreed

### **Tdoc-N1-000209 Reply to Liaison Statement on CR to 23.122 after split in SMG2 and CN1/ Chairman**

Content: Presented

Discussion:

Conclusion: Agreed

### **Tdoc-N1-000212 Liaisons for emergency calls/ Chairman**

Content: Presented

Discussion: Will be sent to S1.

Conclusion: Agreed

### **Tdoc-N1-000205 Response LS on on partial SRNS relocation/ Ericsson**

This Ls is sent to TSG RAN WG3, RAN WG2

Content: TSG CN WG1#10 reviewed the recieved Liaison Statements on Partial SRNS relocation from RAN WG2, and RAN WG3.

CN WG1 would like to inform RAN3 and RAN2 about the current Working Assumption in CN1 related to release of calls during partial SRNS relocation.

The Working Assumption in CN WG1 is that 3G\_MSC keeps all the CC instances during the handover and only after the completion of handover of the selected call(s), it starts disconnecting the surplus CC instances in a controlled manner. The disconnection may occur prior to sending the RELEASE COMMAND to Source RNC by 3G\_MSC. (Please see Tdoc N1-99E22)

Discussion: No objection.

Conclusion: Agreed

### **Tdoc-N1-000138 Proposed Response Liaison Statement on Usage of RANAP over MAP/E i/f for UMTS to UMTS Inter-MSC SRNS Relocation/ Ericsson**

This is a LS out sent to TSG SA WG2, SMG2, TSG CN WG2, TSG RAN WG 3

Content: At TSG CN WG1#10 we reviewed the Liaison Statement and the attached contribution (Tdoc S2-99F02) listing advantages of using RANAP, sent by TSG SA WG2 on usage of RANAP instead of BSSAP over the E interface at UMTS to UMTS inter MSC SRNS relocation. For some counter arguments given during an offline discussion see attached Tdoc N1-000199, and the original document Tdoc S2-99F02. The outcome of the detailed discussions is as described in the document. Please refer to the document.

Discussion: Contact details will be provided.

Conclusion: Agreed

## 9 Any other business

GPRS meeting as mentioned in section "Administrative Issues and meeting's highlights"

### **Tdoc N1-000213 Memories from Abiko/ Japan**

Content: Lovely pictures.

Discussion: For your memories in Abiko.

Conclusion: For information

### **Close of the meeting:**

The Chairman closed the meeting thanking the delegates ,host, and secretary.

### **Annex A: List of documents**

  
[CN1-Tdoclist-10.doc](#)

  
[CN1-Tdoclist-10.doc](#)

### **Annex B: Participants**

[Will be provided](#)

  
[cn1#10attendee.doc](#)

### **Annex C: Agreed CRs**

Tdoc 3GPP N1-00	Title	Effectd spec	Source/ Name	WI / Topic	CRs	Rev	Ca
0041	UMTS security parameters, Handling of Ciphering algorithm IE in UMTS	24.008	Ericsson/ Lars Ekeroth	Security-2G/3G interoperability	CR093		C
0042	UMTS security parameters, Correction of format for IE "Response from SIM"	24.008	Ericsson/ Lars Ekeroth	Security-2G/3G interoperability	CR094		F
0080	Service Request procedure in the chapter 4.1.1.	24.008	Nokia/ Jaakko Rajaniemi	GSM-UMTS Interworking	CR109		B
0084	Removal of Anonymous Access	24.007	Ericsson/Per	GSM/UMTS interw	CR007		C
0085	Removal of Anonymous Access	24.008	Ericsson/Per	GSM/UMTS interw	CR111		C

Tdoc 3GPP N1-00	Title	Effectuated spec	Source/ Name	WI / Topic	CRs	Rev	Ca
0091	Removal of APN from REQUEST PDP CONTEXT ACTIVATION REJECT message	04.08	Vodafone/Siemens / Duncan Mills	GPRS	CRA953		F
0092	Removal of APN from REQUEST PDP CONTEXT ACTIVATION REJECT message	04.08	Vodafone/Siemens / Duncan Mills	GPRS	CRA955		A
0093	Removal of APN from REQUEST PDP CONTEXT ACTIVATION REJECT message	24.008	Vodafone/Siemens / Duncan Mills	GPRS	CR117		A
0114	GSM Cleanup – Removal of V.23	24.008	Ericsson/Rouzbeh Farhoumand	TEI	CR123		C
0128	XID negotiation while MS suspended, and collision with XID Reset	04.64	Siemens AG/Roland Gruber	GPRS	CRA125		F
0129	XID negotiation while MS suspended, and collision with XID Reset	04.64	Siemens AG/Roland Gruber	GPRS	CRA126		A
0130	XID negotiation while MS suspended, and collision with XID Reset	04.64	Siemens AG/Roland Gruber	GPRS	CRA127		A
0166	Introduction of support for CS multimedia	24.008	Nokia /Timo kauhanen	Multimedia	CR097	1	B
0167	SMC-GP SDL modification to transfer SMS messages via GMM	24.011	NTT Comware/ Nobuyuki Uda	GSM / UMTS interworking	CR003	1	C
0169	Abnormal cases in Service Request procedure	24.008	Nokia/ Jaakko Rajaniemi	GSM-UMTS Interworking	CR107		B
0171	Paging response in 4.7.9	24.008	Ericsson/Per	GSM/UMTS interw	CR116	1	F
0177	Modifications to Stage 2 service description due to EDGE	23.034	Nokia/Janne Muhonen	EDGE	CR 003	2	B
0184	Abnormal cases for TFT handling, TFT IE maximum length	24.008	Ericsson/Per	QoS	CR113	1	F
0186	UMTS security parameters, Combined reject causes for CS and PS	24.008	Ericsson/ Lars Ekeroth	Security-2G/3G interoperability	CR095	1	C
0188	Authentication Reject from MS	24.008	Ericsson/ Monica Wifvesson	Security-2G/3G interoperability	CR099	1	C
0189	Alignment of the procedure "Authentication not accepted by the MS" in MM and GMM.	24.008	NTT Software/ Takeshi Igarashi	Security-2G/3G interoperability	CR125	1	C

Tdoc 3GPP N1-00	Title	Effectuated spec	Source/ Name	WI / Topic	CRs	Rev	Ca
0191	PMMSMS-REL-Req deletion in MS side	24.007	NTT Comware Nobuyuki Uda	GSM / UMTS interworking	CR008		C
0194	Clarification of NITZ time stamp coding	04.08	Nokia-Ericsson/ Mark Fenton	NITZ	CRA947	2	F
0196	Clarification of NITZ time stamp coding	04.08	Ericsson-Nokia/ Mark Fenton	NITZ	CRA949	1	C
0197	Clarification of NITZ time stamp coding	04.08	Ericsson-Nokia/ Mark Fenton	NITZ	CRA951	1	C
0198	Clarification of NITZ time stamp coding	24.008	Ericsson-Nokia/ Mark Fenton	NITZ	CR096	1	C
0210	Addition of the Stream Identifier Information Element	24.008	NTT Comware/ Kazuo Mitamura	Multicall	CR032	8	B
0211	Coding of NAS Binding Info field	24.008	Fujitsu/ Fumihiko Yokota	GSM-UMTS interw	CR124	2	B

#### Annex D: Liaison Statements from CN1#10

Tdoc 3GPP N1-00	Title	Source/ Name	Type/ CR	To	Cc
0135	LS on reply to LS on usage of NSAPI, RB identity, RAB ID and TEID	TSG N1	LS out + N1-000210 + N1-000211	TSG RAN WG3, RAN WG2	SA WG2, CN WG2
0136	Response to Liaison statement concerning HSCSD specifications	TSG N1	LS out	3GPP TSG SA WG1	3GPP TSG SA WG2, 3GPP TSG CN WG3
0138	Response Liaison Statement on Usage of RANAP over MAP/E i/f for UMTS to UMTS Inter-MSC SRNS Relocation	TSG N1	LS out + N1-000199 + N1-000111 + S2-99F02	TSG SA WG2, SMG2	TSG CN WG2 TSG RAN WG3
0149	LS on questions on the CR 10r1 to TS 23.107	TSG N1	LS out	TSG-S2	TSG S4
0152	Response to LS on RAB linking, Response to LS on RAB pre-emption	TSG N1	LS out	TSG-SA WG1, TSG-RAN WG3	TSG-SA WG2
0153	Proposed response to LS on Capability configuration parameters	TSG N1	LS out	3GPP TSG-T WG3, ETSI SMG9	-

<b>Tdoc 3GPP N1-00</b>	<b>Title</b>	<b>Source/ Name</b>	<b>Type/ CR</b>	<b>To</b>	<b>Cc</b>
0164	Proposed LS to RAN 2, RAN 3, on the Transport of Codec Information during the Codec Negotiation between MS and MSC	TSG N1	LS out + N1-000111 + N1-000163 + N1-000140 + N1-000141 + N1-000033	RAN WG2, RAN WG3, CN WG2	-
0170	LS on removal of Anonymous Access from Release 97 and 98	TSG N1	LS out	TSG-S1	TSG-S2
0182	SAT Handover notification and termination of call	TSG N1	LS out	TSGS1	TSGS3, TSGT3, SMG9 SMG1/9 SAT ad hoc
0193	Draft LS on Iu Userplane Initialization at Inter MSC-HO	TSG N1	LS out	SA WG4, RAN WG3, CN WG2	-
0201	Reply to LS on Requirements for Network Selection	TSG N1	LS out + N1-000151	TSG-S1	TSG-S2, TSG T2, TSG-T1
0202	LS on Enhanced User Identity Confidentiality – open questions	TSG N1	LS out	TSG S3 and TSG N2	-
0205	Response LS on partial SRNS relocation	TSG N1	LS out + N1-99E22	TSG RAN WG3, RAN WG2	-
0209	Reply to Liaison Statement on CR to 23.122 after split in SMG2 and CN1	TSG N1	LS out	SMG2	-
0212	Liaisons for emergency calls	TSG N1	LS out + N1-000038 + N1-000115	S1	-

### **Annex E: Specifications for approval / information at CN#7**

None.