3GPP TSG-CN-WG1, Meeting #11 **DRAFT REPORT V1.0.0 12.3.2000**
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Umea, Sweden

Report of the
3GPP TSG-N WG1 MM/CC/SM (UI) / Meeting #11
28 February - 3 March 2000
Umea, Sweden

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Report of the Chairman ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_11/reports
Documents could be found on: ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_11/Documents

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0 Administrative Issues and meeting's highlights

- Multicall ad-hoc took place at the first day of the meeting asan evening session with informal results which was reported at the second day to the formal CN1 meeting.
- Out of band transcoder off line meeting to discuss codec issues took place at the first day.
- For Emergency call N1 acknowledges that once S1 make up their mind we can start with Stage 3, and it would be R00 WI by S1. This is not to ruin the schedule of R99 and let enough time for studying the issue.

1 Opening of the meeting

The 3GPP TSGN WG1 Chairman, Hannu Hietalahti, welcomed the delegates in TSGNWG1#11, where it is the last meeting to finalise R99 WIs. He thanked Telia for hosting the meeting. Mr. Edgar Lycksell welcomed the delegated in Umea, the city of the Birch trees and said some history about the city.. Some logistics and useful practical arrangements are declared by him. There is a LAN connection which is the first experience in CN1, which was found very helpful and practical during the meeting. On Wednesday we will have an outdoor social event.

2 Approval of the agenda; document allocation and Reports

The agenda was approved as below and will be as in Umea0002.rtf specifying document allocation as well, which is the chairman's report by the end of the meeting..
The chairman proposed to go through the Agenda and time slots were allocated.

1. Opening of the meeting
2. Approval of the agenda, documents allocation, and Reports
3. Input Liaison statements
4. Maintenance of R98 and older releases
   - 4.1. General Corrections
   - 4.2. GPRS Corrections
   - 4.3. ASCI
5. Work Plan for TSGN WG1 for 2000
6. Release 99
   - 6.1. Multicall
   - 6.2. Multimedia call
   - 6.3. GSM / UMTS interworking
   - 6.4. MS Classmark
   - 6.5. Security
   - 6.6. QoS
   - 6.7. Out-of-Band Transcoder Control
   - 6.8. CC related Items
   - 6.9. R99 PLMN Selection and EDGE
   - 6.10. Other R99 Issues
   - 6.11. TEI
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

Reports:

Tdoc-N1-000255 Draft report V1.0.0 - 3GPP TSG-CN R00 Ad Hoc Meeting 31st Jan – 2nd Feb 2000/ Puerto Vallarta, Mexico/ MCC-CN

Content: Draft Report with open question list (NP-000014). Also a conclusion slide by the chairman is available.
Discussion:
Conclusion: For information.

Tdoc-N1-000256 Draft 02 - Minutes of the workshop/tutorial between CN R00 ad-hoc, S2 and T2 on Release 2000 31st of January 2000/ Puerto Vallarta, Mexico/ MCC-SA

Content: Draft Report with questions and answeres.
Discussion:
Conclusion: For information

Tdoc-N1-000275 3GPP "All-IP" vision Long and short term/ SA

Content: Slides about the results of the meeting
Discussion:
Conclusion: For information

3 Input Liaison statements

Tdoc-N1-000260 LS on Clarification of the cell reselection for a GPRS MS/ SMG2

This LS is copied to CN1.

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 criterias 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 criterias 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 no action from N1 is needed.

Tdoc-N1-000261 GPRS Terminal Support of Network Operation Modes I and II/ GSM Association.

This LS is sent to MCC/3GPP

Content: In order to test the GPRS service in a roaming environment, the GPRS-WP has determined that a minimum of a Class C GPRS terminal is to be used for testing. As class C terminals only support GPRS contexts, but not GSM calls, they have the ability to support Network Operation Modes II or III or both.

Request for advice:

IREG GPRS-WP requests advice from 3GPP on the following point:

Will all Class C GPRS terminals support both Network Operation Modes II & III or will terminal manufacturers make devices which support only one of the modes.

Discussion: Discussion will be reflected in the LS out.

Conclusion: Ls out in N1-000443 by Mark Fenton.

Tdoc-N1-000262 LS to TSG-CN1 regarding inclusion of 400 and 850 MHz band in MS Radio Access Capability. " Support of 400 and 850 MHz band"/ SMG2

This LS is sent to CN1, it is a CR for 24.008/ EDGE Compact and support for EGPRS in ANSI-136 networks.

Content: Inclusion of 400 and 850 MHz band in MS Radio Access Capability

Discussion: Maximum LLC (N) is not clear where it is defined. The CR should be revised to define the maximum number N.

Conclusion: Revised to N1-000444 by Ericsson.

Tdoc-N1-000263 Liaison Statement on CR to 23.122 after split in SMG2 and CN1, "PLMN and Cell Selection"/ SMG2

This LS is sent to CN1 it is a CR against 23.122.

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: Handled with EDGE Crs. Hannu will contact Niels to have EDGE CRs to be handled directly by N1 and not forwarded to N1.
Conclusion: Post

Tdoc-N1-000264 Procedure for TrFO break/ N2

This LS is sent to CN1
Content: The ongoing work on Out of Band Transcoder Control has identified the need to define procedures that enable the inclusion of transcoders in a communication path that is operating in the TrFO mode. This situation is referred to as a "TrFO break" and may be invoked in a number of scenarios like:

- for the interaction with Multiparty SS. See Figure A1 in Annex A.
- changes of mode or configuration in the case of multi-rate codecs.

This document provides a summary of the identified open issue and proposed solution. N2 kindly asks R3 to study the procedure and the protocol for TrFO break to finalize TrFO/OoBTC work item as Release 99.
Discussion:
Conclusion: Noted

Tdoc-N1-000265 Liaison Statement on access signalling and mobile station behaviour for Multicall/ N2

This LS is sent to CN1
Content: At its meeting in Kyoto this week, N2 had some extensive discussions on Multicall. We took note of the decisions in the N1 meeting in Abiko the previous week concerning access signalling and mobile station behaviour for Multicall.
Our understanding of these decisions gave rise to some areas of concern described in the document.
Discussion: Will be considered in Multicall - ad-hoc today.
Conclusion: LS out is in N1-000445, by NTT-Commware

Tdoc-N1-000266 Liaison statement on the use of RANAP for intra-UMTS inter-MSC Handover/Relocation/ CN2

This LS is copied to CN1.
Content: TSG CN WG2 thank TSG SA WG2 for their liaison statement (Tdoc S2-99F42). We have noted that N1 believe that RANAP encapsulated in MAP would be a better protocol than BSSAP encapsulated in MAP to use for intra-UMTS inter-MSC handover.
TS 29.002 would require significant enhancement to allow the use of RANAP encapsulated in MAP for inter-MSC handover; a company has volunteered to draft the necessary change request, so that it can be reviewed by email ahead of the next CN WG2 SWGB meeting, 14-16 February. If the CR can be agreed at that meeting then it will be forwarded to the TSG CN plenary meeting, 13 – March, for approval. Some companies had concerns that further work may be needed after the N2B meeting in February, which would require review at the next N2 meeting (27 – 31 March). N2 agreed that the risk of further delay beyond the end of March is very small.
S2 are asked to decide whether it is acceptable that there is a risk that the stable CR to TS 29.002 to support the use of RANAP encapsulated in MAP for intra-UMTS inter-MSC handover may not be available until the end of March.
Drafting work will continue while we awa it the reply from S2.
Discussion:
Conclusion: Noted.

Tdoc-N1-000267 Response to LS on location and control of speech codec/ CN2

This LS is copied to CN1.
Content: N2 thanks S2 for their LS on location and control of speech codec 'S2-99 A02'. This LS answers the questions that raised in their LS 'S2-99 A02'.
Discussion:
Conclusion: Noted

Tdoc-N1-000268 Response liaison statement on Emergency calls using IMEI as UE identifier/ CN2

This LS is sent to CN1.
Content: TSG CN WG2 thanks TSG CN WG1 for their liaison statement (***N1-99E68***). CN2 agrees with CN1's assessment in the 3rd bullet item that there is no relation between the IMEI and any HLR or any other location management mechanism in the network. The other concerns addressed in the document are outside the scope of CN2.
Discussion:
Conclusion: Noted.

Tdoc-N1-000269 Response to LS (N1-99E68) on Emergency calls using IMEI as UE identifier/ R2

This LS is sent to CN1
Content: RAN2 thanks CN1 for the LS response on using IMEI as a UE identifier for mobile terminated calls in relation to the emergency call service. In view of the amount of concern items listed in the response, RAN2 is not proposing addition of this feature/functionality unless there is specific requirement recognised by CN1 making it necessary to build needed functionality.
Discussion:
Conclusion: N1 does not need to take action. Noted

Tdoc-N1-000270 Response to LS (N1-99F55) on Maximum size of N-PDU/ R2

This LS is sent to CN1
Content: TSG-R WG2 would like to thank TSG-N WG1 for the Liason Statement on Maximum size of N-PDU. TSG-R WG2 would like to indicate that there is no limitation on the maximum size of an RLC or PDCP SDU and sees no problem with the need to increase the maximum RLC or PDCP SDU size to 1502 octets.
Discussion:
Conclusion: Noted it goes along with our working assumption.

Tdoc-N1-000271 Response to LS (R3-99j65) on SAPI in Direct Transfer message/ R2

This LS is sent to CN1
Content: RAN WG2 would like to inform RAN3 and CN1 about the current Working Assumption in RAN2 related to SAPI in Direct Transfer Message.
The current Working Assumption in RAN2 is that only 2 levels of priority are specified for the radio bearer for Direct Transfer message, "low priority" and "high priority". Therefore it also seems to R2 that values in the LS from R3 (SAPI=0 and 3) are sufficient.
Discussion:
Conclusion: Aligns with our thinking in using 2 priority levels, Noted

Tdoc-N1-000272 Response to LS (R3-99k17) on Request for clarification on DRX related parameters/ R2

This LS is sent to CN1
Content: In its January meeting R2 received a liaison from R3 on request for clarification on DRX related parameters (R3-99k17). R2 thanks R3 for sending this liaison and provides the requested information below. The questions from the original liaison are included in italics, please refer to the LS.
This liaison is also sent to CN1, because the DRX cycle is under control of the core network for NAS paging, see also question number 2 in the document.
Discussion: N1-000349 and N1-000389 are related documents. And depending on this discussion we will see if we need to answer this LS.
Conclusion: Reply may be needed. LS out in N1-000446.

Tdoc-N1-000273 Response to LS (N1-000163) on Transport of Codec Information during the Codec Negotiation between MS and MSC/ R2

This LS is sent to CN1

Content: RAN 2 thanks CN 1 for the Liaison statement on Transport of Codec Information during the Codec Negotiation between MS and MSC.

RAN 2 sees the working assumption presented within the enclosed document (N1-000163) as feasible within RAN2 and will support the transfer of the CC related signalling (Selected Codec information) contained within RANAP into the affected RRC messages.

Especially in case of Handover the inclusion of the Selected Codec information in the related signalling messages will be supported by RAN2.

Following the discussion RAN2 will update the specifications under RAN2's responsibility accordingly.

RAN2 has not investigated all details and will continue on this issue. RAN 2 will keep CN 1 informed about the further progress on this issue.

Discussion:

Conclusion: Noted.

Tdoc-N1-000274 LS on RRC Connection Re-establishment mechanism/ R2

This LS is sent to CN1

Content: RAN WG2 would kindly like to ask CN1 and SA2 regarding the mechanism of suspend/resume function in the CN.

In the current TS25.331, the RRC connection re-establishment timer (Timer which starts when the UE detect DL out of synchronisation and stops when the UE detect the service area [*1]) can be set to the value of 0 to 4098 sec. In the RAN WG2#10 meeting (Jan17-21,2000), there was a discussion whether maximum 4096 sec is too long or not.

[*1]"Out of service area" is the state that radio environment quality is insufficient and the UE is unable to establish the RRC connection.

RAN WG2 assumes that there is a mechanism of re-establishment of the QoS non-guaranteed calls if the release of the RRC connection is notified from AS to NAS in the UE when the RRC Connection Re-establishment timer expires. In the current TS25.331, it is described that in this case, RRC state will transit to idle mode. In the NAS, RAN WG2 assumes that the UE sends SERVICE REQUEST message (GMM) to the CN to resume the QoS non-guaranteed calls. However, before sending SERVICE REQUEST message (GMM), AS should establish RRC connection beforehand. If the time period of the UE staying in the out of service area is longer than the RRC connection re-establishment timer, AS will fail to establish RRC connection and the SERVICE REQUEST message will not be sent to the CN. It implies that the mechanism of re-establishment of the QoS non-guaranteed calls specified in CN1 will not work.

So RAN WG2 would like to ask the following issues;

- Are there maximum recycle timers and maximum retransmission counters for SERVICE REQUEST message (GMM) notified to the UE in advance to the radio link failure? If not, they should be added.
- What should be the maximum total time period (RRC connection re-establishment timer + maximum recycle timers * maximum retransmission counters) for the NW to allow the UE to maintain the QoS non-guaranteed calls when the UE is in the out of service area? Isn't it operator's choice how to set these timer values since this mechanism is intend to save the resources in the NW?

Discussion: This needs S2-000320 LS which is missing.

Conclusion: Post

Tdoc-N1-000275 Response to LS (R3-99j90, N1-000205) on partial SRNS relocation/ R2

This LS is copied to CN1

Content: TSG RAN WG2 thanks TSG RAN WG3 for their LS on partial relocation.

On the RAN2 meeting 17-21 Januari, 2000, RAN2 discussed and agreed a mechanism for association the radio resources of the target system (e.g. GSM) with NAS binding information for the radio access bearers in the CS domain, when performing network initiated inter-system handover from UTRAN.

RAN2 also identified that the limitation with this scheme is that all the radio resources given to the UE are associated with the same NAS binding information. It is therefore understood currently only one radio access bearer can remain in the CS domain after the inter-system handover from UTRAN. To allow for several CS domain RABs to survive the handover, modifications of GSM specifications would be needed.

The proposed CR (R2-000224), which was agreed, is attached.

Discussion:

Conclusion: Noted

Tdoc-N1-000276 Response to LS (N1-000135) on Usage of NSAPI, RB identity, RAB ID and TEID/ R2

This LS is sent to CN1

Content: TSG RAN WG2 thanks TSG CN WG1 for their reply LS to RAN3 on usage of NSAPI, RB identity, RAB ID and TEID.

Attached to this LS is an agreed CR to 25.331 reflecting the current RAN2 assumptions on this issue.

In this document RAN2 has included its answers and comments to some of questions.

Discussion: The answer which are given are in line with our assumptions and no LS is to be sent out.

Conclusion: Noted.

Tdoc-N1-000277 Liaison Statement on usage of RANAP over MAP/E at intra UMTS inter MSC handover/relocation/ R3

This LS is sent to CN1

Content: RAN WG3 would like to thank SA2 for their liaison (S2-99F42) on usage of RANAP over MAP/E at intra UMTS inter MSC handover/relocation and appreciate being consulted on an issue concerning an interface not primarily under RAN3 responsibility.

RAN3 has designed RANAP among other things for intra UMTS inter MSC handover/relocation, and therefore RANAP is usable for MAP–E interface.

Although not in the scope of RAN3, RAN3 believes that BSSMAP being used over MAP/E would need significant changes to provide RANAP functionalities essential to Radio Access Bearer resource handling in UTRAN such Quality of Service, or execution of the relocation such as the Relocation Cancellation, to name only these two.

It is also not in the scope of R3 to make a recommendation for the protocol to use on MAP/E. However RAN3 Iu SWG would be happy to support the group in charge of defining usage of RANAP over MAP-E i/f (e.g. a 29.008 specification), if such a specification would be created.

It was also reinstated that RANAP is the only Radio Network Layer control signalling on Iu and that it has been designed with the objective to remain independent from the Transport Netwrok Layer.

Discussion:

Conclusion: Noted

Tdoc-N1-000278 Response to LS on Iu User-plane Initialisation at Inter MSC-HO/ R3

This LS is sent to CN1

Content: TSG RAN WG3 thanks TSG CN WG1 for their LS on the Iu User-plane intialisation at inter-MSC handover.

In TSG RAN WG3 Meeting #10, held in Gothenburg, Sweden, through 24 – 28 January 2000, RAN WG3 discussed the LS. RAN WG3 would like to inform the progress of the study to CN WG1.

In the review of the LS, RAN WG3 understood the existing study item and has started the study on the Iu user-plane initialisation. At this point, however, RAN WG3 has not yet found out the solution for the issue. RAN WG3 would like to continue the study and, if possible, provide the solution in R99.

CN WG1 and SA WG4 will be kept informed of the progress of the study in RAN WG3 in the future.

Discussion:

Conclusion: No answer yet, noted

Tdoc-N1-000279 Response to LS on the Transport of Codec Information during the Codec Negotiation between UE and MSC (Transfer of "Selected CODEC" CC Message /R3

This LS is sent to CN1

Content: TSG RAN WG3 thanks TSG CN WG1 for their LS on the transport of CODEC information between UE and MSC.

In TSG RAN WG3 Meeting #10, held in Gothenburg, Sweden, through 24 – 28 January 2000, RAN WG3 discussed the LS. As a result, RAN WG3 has taken the working assumption that is in line with the working

assumption made by CN WG1 related to the "Selected Codec" CC message transfer. The working assumption includes enhancements in RANAP to transfer the CC message both in RAB ASSIGNMENT REQUEST and RELOCATION REQUEST. RAN WG3 has, however, not finally concluded and will continue the discussion on the mail reflector.
Besides the issue, RAN WG3 kindly asks for a confirmation from CN WG1 on RAN WG3's assumption that the CC "Selected Codec" message contains only the selected CODEC type and does not contain the selected modes of the CODEC type.
Discussion: After discussing the codec issues we will write the LS out.
Conclusion: Docomo/ Koshimuzu will write LS out in N1-000447.

Tdoc-N1-000286 Emergency call requirements for rel 99/ S1

This LS is sent to CN1
Content: TSG-SA#4 approved S1 requirements concerning Emergency Calls. S1 would like ensure that relevant WGs are aware of requirements and that implementation of requirements is ongoing.
Attached S1 TDoc 851 includes latest S1 CR to 22.101 giving further clarification to this issue. Note that although 02.03 and 22.030 has not yet been updated these requirements are applicable to both GSM and UMTS release '99.
Discussion: Hannu will call Tommi/ S1 and find out the latest status. It seems for some delegates that we already dealt with this LS. Some questions were sent to S1 from N1 about this subject but the answers are not received!
Conclusion: Noted.

Tdoc-N1-000287 GPRS encryption/ S3/SMG10

This LS is sent to CN1/ GPRS encryption.
Content: The current recommendation does not reflect clearly enough the fact that the encryption of all transaction is mandatory for GPRS.
Discussion: It is up to the network to select the ciphering. Ciphering should be mandatory in the MS the question is in the network if it does not supports ciphering where it is not allowed in that country. The MS should be able to accept only ciphered link, and what the reaction will be when during attach the cipher is disabled, or roam in a country where they do not support ciphering. A solution by a Flag in the SIM wher it describe if ciphering is needed or not which is controlled by the subscriber.
We need to write explicit requirements for the MS to handle this case. It is a precise criteria which might need a test case for approval.
This is needed in R98 and which category is it!! The earliest we can do is R99, Which was not agreed on.
It should be mandatory requirement for the MS to support ciphering, otherwise requirements are required.
This should be studied in R00, and should be proposed to the Plenary as such.
Conclusion: Rejected, LS out in N1-000448 by MCC/ Ban.

Tdoc-N1-000288 USIM triggered authentication and key setting during PS connections/ S3

This LS is sent to CN1
Content: 3G TS 33.102 v3.2.0 section 6.4.3 specifies a mechanism which allows the USIM to trigger authentication at the start of an RRC connection if a counter on the UE exceeds an operator controlled threshold set by the USIM. It is proposed to extend this so that authentication can be triggered by the UE on a value provided by the USIM during a PS connection. Note that section 6.4. in 33.102 v3.2.0 already specifies that the network should be able to initiate authentication and key setting during a PS connection. See also the S3-approved CR to this section in S3-99552 (attached).
USIM triggered authentication and key setting during a connection may be useful in the PS mode where long connections lasting several days might be expected. One of the objectives for 3G security is to minimise the amount of trust that needs to be placed in the serving network. USIM triggered authentication during a PS connection can help to minimise the trust that the home environment needs to place in the serving network to implement an appropriate re-authentication policy for long PS connections.
In order to provide this capability three things are necessary where they are described in the document.

Discussion: The point is whether stage 3 should be changes accordingly. We need to decide how much impact on Stage 3 it has and whether it is for R99 or not! The work amount to satisfy the requirement could be big!! It is not easy to indicate it in the packet network.
What is the reaction of the MS in case of new keys but the network do not authenticate? And other open issues.
It is not R99 enhancement but a R00 proposal and they need a new WI for it by S3 if required.
Conclusion: LS out in N1-000449 Duncan.

Tdoc-N1-000289 5 or 6 digits IMSI HPLMN/ T2 SWG1 (MExE)

This LS is sent to CN1
Content: The MExE group is currently finalising the work for MExE Release 99 and MExE needs to be able to identify the operator, which issued a certain SIM card. For this purpose the IMSI is the best (only (?)) way of identifying the HPLMN, by taking the first 5 or 6 digits of the IMSI, as stated in section 2.2 in 23.003 v3.1.1. It is further mentioned in that section, that the two or three digit MNC topic, is out of that scope, and that further information can be found in GSM 03.22.
But GSM 03.22 only handles the case where a given PLMN, which the handset is registered on, and therefore knows if is five or six digits long, is compared against the IMSI HPLMN.
N2 stated in their answer to MExE's question:

> The question from T2 is: What is the proper way of extracting the right number of digits (five or six) from the IMSI, to find the HPLMN?
> The answer from N2 is:
> By examining the MCC digits, the necessary number of digits to be extracted from the MNC (two or three) is found.

This would mean, that a list of MCCs and the number of digits used to identify the PLMNs in that country, must be present in all MExE handsets. This list will be outdated at as soon as a new country (new MCC) is added to the GSM coverage family.
MExE would like to suggest, that a new mandatory field on the USIMs is dedicated to specifically identify the issuer (operator) of the USIM, by stating how many digits of the IMSI must be used to extract the PLMN.
MExE looks forward to the continued cooperation with the core network groups.
Discussion: New Information field on the SIM which will not be used by MM. It could not be useful for us only for MExE, also changing from 2 to 3 digits require change of all SIM cards which is not practical.
Conclusion: Mark will draft the LS in N1-000450

Tdoc-N1-000295 Response to LS on Enhanced User Identity Confidentiality – open questions/ S3

This LS is sent to CN1
Content: TSG S3 thanks TSG N1 for their LS on open question on Enhanced User Identity Confidentiality (N1-000202 – S3-000056). The open questions and restrictions are discussed within S3 and answers and guidelines are provided.
Discussion:
Conclusion: Noted

Tdoc-N1-000300 LS to SA1 cc CN1, SMG2 on urgent need for requirements on Idle Mode/ TSGR

This LS is copied to CN1
Content: TSG-RAN received a copy of the LS on UE/MS idle mode operation that SMG2 has sent to TSG SA-WG1.
TSG-RAN would like also to amphasize the importance of a timely completion of the requirements applicable to Idle mode for UMTS and GSM/UMTS terminals. This is necessary to ensure that release 99 specifications allow for a behaviour of terminals in Idle Mode which is fully satisfactory for network operators.
TSG-RAN would apreciate if the result of discussion in TSG SA-WG1 on this matter as well as all the available documentation on the subject could be provided to TSG-RAN WG2 before its next meeting 17-21st of January 2000.

Discussion:
Conclusion: Noted

Tdoc-N1-000366 Reply to LS on usage of NSAPI, RB identity, RAB ID and TEID/ N2-B

This LS is sent to CN1
Content: TSG CN WG2 thanks TSG RAN WG3 for their liaison (Tdoc R3#9(99)j88) on usage of NSAPI, RB identity, RAB ID and TEID. CN WG2 discussed and clarified the RAN WG3's assumption within the scope of CN WG2 and the answer is that "the NAS Binding Information is transmitted between CN nodes during inter CN node relocation of SRNS and during Inter SGSN Routing Area Update for both CS and PS domains". Details are as follows.
Discussion:
Conclusion: Noted

Tdoc-N1-000367 Stage 2 description for TrFO break/ N2-B

This LS is copied to CN1
Content: N2 thank R3 for their liaison statement (Tdoc R3-000402).
N2 recognized from the LS that R3 is studying the procedure for TrFO break, and there are two possible solutions, which are RANAP solution and User Plane solution. In addition, N2 find another problem to be solved that is related to a potential source for fraud, and also find two possible solutions. However, N2 could not decide the solution, since the problem is related to the solution for the TrFO break procedure. Attachment 1 of this LS includes the problem and the possible solutions.
N2 ask R3 to study the solution for the problem as well.
N2 has the work of completion of TS 23.153, Out of Band Transcoder Control (OoBTC) Stage 2, which should include the stage 2 procedures for TrFO break. In order to finalize our work on OoBTC stage 2, we describe the stage 2 procedure for TrFO break as Attachment 2 of this LS. The descriptions include two possible solutions for TrFO break and two possible solutions for fraud problem with editor's notes such as "Either Alternative 1 or Alternative 2 will remain, which is adopted by R3." Moreover, N2 will send the TS 23.153 that includes the descriptions to CN#7 at least for information and possibly for approval.
N2 asks R3 to contribute to development of TS 23.153 to add the detail stage 2 description for the TrFO break procedure and the solution for the fraud problem.
Discussion: MSC should terminate the Iu- interface user plane which effect e.g SS. The principle is that the Iu should terminate in the MSC. CC in the MSC should have termination of the Iu-interface and its bearers. Some other documents are related to this issue. It could not be connected from RNC to another without being terminated in the MSC which looks at its CC state. We loose control of the bearer connections in this case. At least the signalling should be terminated in the MSC.
Conclusion: Ls out N1-000451, by Phil/ Ericsson.

Tdoc-N1-000368 Response to LS on the working plan to complete OoBTC in R99/ N2

This LS is copied to N1.
Content: N2 thank S2 for their LS on working plan to complete OoBTC in R99. (S2-000285)
The following item is specified in S2 LS as an open issue in N2.

- N2 clarify the requirement of the Inter MSC link, which type of bearer can be applied.

This issue was treated in N2 and the OoBTC stage 2 specification 23.153 has been properly updated accordingly.
In the last N2B Milan meeting in 14-16 February, N2B has made an OoBTC Ad Hoc meeting in order to inspect the current stage 2 OoBTC specification. It was found that some more update would be necessary as the result.
Accordingly, it was agreed in N2 that the N2 work on OoBTC stage 2 specification would be updated, reviewed and approved by N2 E-mail with the deadline in 25th of February.
However, N2 cannot report with any confidence on the work in other groups which have to contribute to the OoBTC stage 2 specification.
Therefore, the stage 2 OoBTC in R99 will be ready to submit to the CN#7 meeting at least for information and possibly for approval.

in GPRS R97. The maximum N-PDU size is still 1500 octets for all other PDP types.
S2 may consider increasing the maximum N-PDU size for release 2000 or later releases.

The R98 GSM 03.60 CR is attached.
Discussion:
Conclusion: Noted

Tdoc-N1-000409 Liaison statement concerning the change of title of 23.060/ S2

This is a LS sent to N1.
Content: S2 likes to inform N1 about the change of title of 23.060 from "General Packet Radio Service (GPRS)" to " General Packet Radio Service (GPRS) and UMTS Packet Service".
The reason for this change is to adapt to the terminology used throughout that specification and other architectural specifications such as 23.121 and 23.002.
In a R99 network, "GPRS" is used when the service is delivered via the GSM BSS, whereas "UMTS Packet Service" is used, when the service is delivered via the UTRAN. The common core network is referred to as the "Packet Switched Domain", comprising SGSNs and GGSNs (23.002).
S2 is aware that for the finalization of R99 a balance has to be made between a harmonized terminology and the amount of CR's to specifications evolving from GSM/GPRS.
Discussion: Ericsson is planing on a CR for the change of title.
N1 supports the rewording.
Conclusion: Lars/ Ericsson draft the LS in N1-000452

Tdoc-N1-000410 LS on Multiplexing of NSAPIs/ S2

This LS is sent to N1.
Content: S2 approved a CR to 23.060 (23.060 CR 052r2, S2-000209) which removes references to the GPRS R97/98 QoS attributes and replaces them with references to the QoS attributes as defined in 23.107. S2 asks N1 to review section 12.3.2 of this CR, since it was pointed out in S2 that the multiplexing of NSAPIs onto a SAPI is a complicated issue which requires a thorough review by N1. If N1 does not agree with the solution provided in this CR, it would be beneficial, if N1 could provide S2 with a proposal for the QoS attributes which should be used for the decision which NSAPIs can be multiplexed on the same SAPI.
Discussion:
Conclusion: Post with QoS WI.

Tdoc-N1-000411 Response to Liaison Statement on RAB information and Lossless RNS relocation signalling/ S2

This LS is sent to N1.
Content: SA WG2 thanks RAN WG2 for their liaison statement (in Tdoc S2-000074). The LS was only copied to SA2, but SA2 would still like to comment on the second issue raised by RAN WG2.
The received LS states that PDCP PDU sequence numbers per radio bearer on the sending and receiving side are within the range of 0 to 65535. However, TS 25.323 states that the sequence numbers are in the range of 0 to 255. Apparently, there is a conflict between the received LS and the TS 25.323. SA2 ask RAN WG2 for clarification on this issue and also suggest to keep PDCP PDU sequence numbers in the range of 0 to 255, if possible, to make interworking with GPRS R97/98 less problematic (SNDCP N-PDU numbers in the acknowledged mode are coded with 8 bits).
SA WG2 would also like to ask RAN WG2 to make sure that CN WG2 is made aware of any changes to the length of the sequence numbers. CN WG2 should also be aware that RLC sequence numbers need to be replaced with PDCP sequence numbers in the handover procedure.
Discussion:
Conclusion: Noted

Tdoc-N1-000412 Reply to: Liaison statement on Bearer Modification Without Pre-Notification/S2

This LS is sent to N1.
Content: TSG SA WG2 thanks TSG SA WG1 for their liaison statement on bearer modification without pre-notification (S2-000071/S1-991034).
It seems like this topic has been further discussed in TSG SA WG1 and TSG SA. The following statement is found in chapter 6.1.1 in the report from the TSG SA Meeting #6:

"It was noted that the Bearer modification without pre-notification given in slide 13) has been deleted by SA WG1 and is no longer required."
SA WG2 agrees with TSG SA and confirms that the requirement on bearer modification without pre-notification is not included in release 99.
The experience from GSM is that the alternate/followed by services is not used and TSG SA WG2 kindly asks to be involved in the discussions if TSG SA WG1 plans to develop service requirements for bearer modification without pre-notification in release 00.
Discussion:
Conclusion: Noted

Tdoc-N1-000413 Liaison statement on the use of RANAP for intra-UMTS inter-MSC Handover/Relocation/ S2
This Ls is copied to N1.
Content: TSG SA WG2 thank TSG CN WG2 for their liaison statement (Tdoc N2B000126). We note that CN WG2 have identified a risk that the necessary CR to MAP to allow the transport of RANAP messages encapsulated in MAP for intra-UMTS inter-MSC handover may not be available until the end of March.
S2 have confirmed the decision that RANAP encapsulated in MAP will be used for intra-UMTS inter-MSC handover, so we request N2 to progress the development of the changes to the MAP specification as quickly as possible.
The possible delay to the end of March for the MAP changes is acceptable to S2; however any further delay would be the cause of major concern. S2 would like to receive early warning if N2 cannot deliver the MAP changes by the end of March.
Discussion:
Conclusion: Noted

Tdoc-N1-000414 Liaison statement on the working plan to complete OoBTC in R99/ S2

This Ls is sent to N1.
Content: At the last SA#6 Plenary, it was recognised that the coordination among WGs activities on the OBTC (Out-of-Band Transcoder Control) was necessary in order to complete it in R99. At the time, SA WG2 was mandated to take the action item.
At the SA WG2 #11 meeting held on 24 – 28, January 2000, the attached document (S2-000049) clarifying the working plan with remaining open issues was discussed. SA WG2 would kindly ask all relevant WGs to review the attached document and liaise back the comments on if all relevant WGs can solve its remaining open issues in time for R99 or not.
Since the final coordination is necessary at the next SA WG2#12 meeting held on 6-9, March 2000, all relevant WGs are kindly requested to send the above assessments by that meeting.
Attachment: S2-000049 with comments
Discussion:
Conclusion: LS out in N1-000453 by Tani san after discussing the WI.

Tdoc-N1-000415 Response Liaison Statement on Usage of RANAP over MAP/E i/f for UMTS to UMTS Inter-MSC SRNS Relocation (N1-000138)/ S2

This Ls is sent to N1.
Content: At TSG SA WG2 #11 S2 reviewed the following documents sent by N1:

- Liaison Statement "Response Liaison Statement on Usage of RANAP over MAP/E i/f for UMTS to UMTS Inter-MSC SRNS Relocation" (N1-000138)
- and the attached contribution (Tdoc "Comments on usage of RANAP over MAP/E i/f for UMTS to UMTS inter-MSC SRNS relocation" N1-00199)

proposing to encapsulate either a RANAP or a BSSMAP message in MAP-E depending on the transport protocol used between source and target MSC.
After discussion on the subject the S2 decision has been to modify 23.121 sect. 5 "UMTS to UMTS hand-over for circuit switched services" with the following text (see attached Tdoc S2-000162 and explanations on the decision within attached S2-000160):

For UMTS to UMTS Inter-MSC Hand-Over / SRNS relocation the MAP E interface transporting RANAP messages shall be used.

Discussion:

Conclusion: For N1's information. Noted.

Tdoc-N1-000416 Deletion of PDP type X.25/ S2

This Ls is copied to N1.

Content: TSG S2 thanks S1 for the LS on 3G Services (Tdoc S1-991001). S2 agrees that PDP type X.25 can be deleted from the specifications. S2 has agreed on 23.060 CR 096 (Tdoc S2-000100) that removes all mention of PDP type X.25 from the release 99 version of this specification.

Discussion: Removal of X.25 from 23.006. We need to remove X25 from Stage 3 documentation under our responsibility (24.008). only R99 is mentioned

Conclusion: .CR is required!! CR will be found in N1-000456 by Ericsson.

Tdoc-N1-000479 Liaison statement on the answer to the LS on RRC Connection Re-establishment/ S2

This Ls is sent to N1.

Content: SA WG2 would like to thank RAN WG2 for the LS on RRC Connection Re-establishment (R2-000251/S2-000294). Since SA WG2 can understand the situation raised by RAN WG2, SA WG2 would like to explain its opinion based on the current TS 23.060/TS 23.121.

Please refer to the document.

Discussion:

Conclusion: Noted.

Tdoc-N1-000497 Reply to LS on Requirements for Network Selection/ S1

This Ls is sent to N1.

Content: S1 thanks N1 for their reply to our LS on Requirements for Network Selection (N1-00155). S1 has reviewed the LS and would like to answer to the different points raised in this LS. For clarity purposes, the questions are repeated below, each one followed by our answer. Please refer to the document.

Discussion:

Conclusion: Noted and information should be taken into account for next CRs against 23.122.

Tdoc-N1-000498 Proposed LS to N1 about rejection of non ciphered calls for GPRS/S3

This Ls is sent to N1.

Content: SMG10 has identified serious threats upon GPRS systems when ciphering is not activated that can lead to frauds and/or false base station attacks. Encryption control by the network is not deemed sufficient to provide good protection against these attacks.

Since it has proven problematic to make ciphering mandatory in GPRS, SMG10 has agreed that a mechanism that would allow terminals to reject non ciphered connections is required. Such a mechanism would ensure that non ciphered connections cannot be established without the user being aware of it and would provide protection against false base stations attacks. It should be noted that ciphered connections are expected to be the general case for GPRS networks and that non ciphered connections should happen in special cases only (tests phases and maybe in some countries that do not allow the use of encryption).

Such a mechanism would work in the following way:

By default, all terminals shall reject non ciphered connections

It shall be possible for the user to accept non ciphered connections by changing a setting in the MS, either in the SIM or the ME.

SMG10 suggests that both the SIM and the ME contains a parameter to accept or reject non ciphered connections, and that the SIM parameter, if present, shall override the ME parameter. The exact way to control the rejection of non ciphered connections in the MS remains to be completed by SMG10.

SMG10 wants to stress the importance of such a mechanism and that it would be highly desirable to introduce it as soon as possible in GPRS systems.

SMG10 therefore kindly asks N1, T2 and SMG9 to consider the modifications necessary for the introduction of this mechanism and to identify the specifications that require changes to specify this mechanism.

Discussion: Unciphered GPRS connections will be rejected. We need a CR on this issue or change one of existing (revised) Crs to include this information. It is agreed not to do it in R98 and older releases, as well as R99 for lack of time. A work item is required, probably for R00 to cover this issue, where not only N1 is effected but T2, T3, and SMG10. This is to control the work, and SMG10/S3 is the best place to start this WI.
Conclusion: LS out in N1-000539 by Roland.

Tdoc-N1-000519 Response to LS on RANAP Transaction Sequence/ R2

This Ls is sent to N1.
Content: RAN WG2 has studied your LS on on RANAP Transaction Sequence.
First, RAN WG2 would like to summarise the services provided by UTRAN for Direct Transfer in release 99:

- RRC signalling is sent on a separate RLC connection than DTAP signalling. This is important since this allows to efficiently utilise radio resources by not delaying RRC signalling when DTAP signalling has been requested, which was a limitation of GSM.
- DTAP signalling is offered several QoS (priorities) via SAPIs on the Iu interface , each having a corresponding RLC connection on the radio interface.
- In sequence delivery is guaranteed between UE and CN for each SAPI. Transfer is lossless irrespective of radio handovers or reconfigurations, as long as the SRNC is not changed. There is no linkage to the transfer of RRC signalling which is handled separately. In sequence delivery is not guaranteed between different RLC entities.

One of the problems that can arise is what happens in case on SRNS relocation: does UTRAN complete all DTAP transfer or not before this is executed. Both options are possible. The point to consider is that if completion of sending is expected by CN1, this may delay the SRNS relocation. **What is the expected service from CN1 in case of SRNS relocation?** In case DTAP needs to be completed before relocation happens, CN1 should consider that there may be two CN nodes (SGSN and MSC) where downlink transfer should be stopped before relocation can be executed (when the UE has a connection to both the CS and PS domains). Therefore, the GSM principle needs to be extended to cover that scenario.
Regarding the release of the RRC connection, RAN WG2 understands that this requires that DTAP signalling is completed first.
The other problem that seems to be studied in CN1 is the co-ordination of a RAB reconfiguration in case the source codec is modified. The use of DTAP signalling is clearly simpler from UTRAN point of view,, and RAN WG2 understands that for this to work, there needs to be a way whereby the DTAP message with the new speech codec configuration can be linked in the UE with the Radio Bearer reconfiguration procedure used between UE and UTRAN. Since this cannot be achieved by an implicit ordering of messages, **RAN WG2 suggests that the solution for the re-configuration is similar to the solution for establishment** i.e. use explicit binding information, that could be a configuration version applicable to a RAB Id.
RAN WG2 hopes that this responses will allow CN WG1 to complete their activities on the issues mentioned in the LS.
Discussion: A question was raised about Codec negotiation and if we need to involve R3 in it. Basically we need to know if we need to do it or stop it!!
The handling is to be postponed as DoCoMo supports as well as Ericsson.
Conclusion: LS out in N1-000541

Tdoc-N1-000531 Response (to TSG-RAN WG3 and TSG-CN WG1) to LS (R3-000392) on Paging related parameters/DRX cycles; and LS (N1-000460) on Idle mode DRX Control/ R2

Content: This liaison is also sent to TSG-CN WG1, since the DRX cycle is under control of the core network for NAS paging. From TSG-CN WG1 TSG-RAN WG2 would like to get a confirmation on which one of the options listed in question 2 that should be used. Please refer to the document.

and Tdoc-N1-000532 Response to N1 Liaison Statement "Question about Idle-mode DRX control"/ R3

Content: Iu SWG agreed to the inclusion of a paging related parameter, DRX cycle length coefficient, which corresponds to "k" in CN WG1's LS, to RANAP message "PAGING" based on an assumption that

the parameter can be different for each UE and can be given to the UTRAN upon paging request from the CN. Please refer to the document.
Both were sent to N1
Discussion: DRX parameter is to be included in the RANAP paging.
Conclusion: LS out in N1-000542.

Tdoc-N1-000556 Reply to N1 on ACS and ICM/ S4

This LS was sent to N1
Content: S4 thanks N1 for the clear description of the problems regarding ACS and ICM for the AMR.
S4 agrees with the proposed way forward.
Alternatively, S4 would also accept a solution where the ICM is not transferred to the MS and is simply removed from the 3G specifications, including the TS 26.103. For your information the ICM is not transmitted by the TFO Protocol.
Discussion:
Conclusion: Noted

4 Maintenance of R98 and older releases

4.1 General Corrections

Tdoc-N1-000293, N1-000294 Explanation of octets in MS Classmark 1 IE/ Ericsson

These are CRs against 04.08 for R97 and R98 respectively.
Content: Some text about A5/1 algorithm supported were left out in the affected table
Discussion: R99 was made available last meeting CN1#10
Conclusion: Both are agreed.

4.2 GPRS Corrections

Tdoc-N1-000362 , N1-000363 Correction of Gs Cause/ Siemens AG

This is a CR against 09.18 / R97-R98 respectively.
Content: The cause values introduced with CR 09.18-A028, Gs Interface Changes to Support Tunnelling of non-GSM Messages, were implemented also in R97. This was not correct, as CR 09.18-A028 was for R99.
Discussion: R99 is withdrawn.
Conclusion: Both are agreed

Tdoc-N1-000365 Encoding of MS classmark in LUP Request/ Siemens AG

This is a CR against 29.018 / R99
Content: During a combined RAU, the SGSN has to send the information element Mobile Station Classmark (i.e. Mobile Station Classmark 1) in the BSSAP+-LOCATION-UPDATE-REQUEST to the VLR. However, the SGSN does not receive the necessary information from the MS, or at least it is not supposed to read this information, because ES IND, A5/1 and RF power capability are contained only in the MS Radio Access Capability, an IE which the SGSN shall not analyse but only forward to the BSC.
In GSM R97/98 the SGSN could set the values of the parameters revision level, support of early classmark sending and support of A5/1 using some 'background knowledge' from the standard, but in R99 this would be possible only for the revision level.
As the information contained in Mobile Station Classmark 1 is not needed by the VLR, and the VLR deletes MS Classmark 1 as soon as the Location Update procedure has been terminated, it is proposed to define a fixed encoding for MS Classmark 1 to ensure interoperability with old VLR implementations, but not to enhance the GPRS signalling via the Gb or Iu interface.

(Note that according to GSM 03.60 and 04.08, the MS shall perform only normal RAU, but no combined updates as long as a CS connection exists. So there is no possibility of an inconsistency in the VLR between Classmark information received via the A or Iu interface and the Gs interface.).
Discussion: The reference in the (unchanged) text should refer to 24.008 instead of 04.08, where it is a separate subject to be treated all over the specification.
Conclusion: Agreed

Tdoc-N1-000332, N1-000333, N1-000334 SGSN reaction upon a RAU request after VLR failure/ Siemens AG

This is a CR against 09.18 R97/ R98 and R99 respectively.
Content: In the current specification it is defined, that if the VLR-Reliable variable is set to 'false'(i.e. the VLR has indicated a VLR failure) upon reception of a RAU from the MS the SGSN shall request the MS to reattach to non-GPRS services. This could be done by performing a network initiated detach procedure with the detach type indicating "IMSI detach".
As in the case of a VLR failure, the GM M/MM context data is still available in the SGSN, but only the VLR has lost the association to the SGSN, it is also possible that the SGSN immediately performs a location update towards the VLR in the case the MS which is still attached for non-GPRS services request a combined RAU, irrespectively whether the MS has changed the LA or only the RA within the LA, and in the case the MS performs a periodic RAU
Discussion: Is it an essential change for R97? So what is the consequence if this CR is not approved? There is no open hole in the specification even if not an optimal solution exists. We agreed that the MS should support both solutions stated in 24.008, where the IMSI detach procedure was not clear and modified in 24.008.
Conclusion: R97 and R98 are rejected. R99 (N1-000334) is agreed.

Tdoc-N1-000318, N1-000319, N1-000320, Collision of network initiated Detach with the attach and RAU procedure/ Siemens AG

This is CRs against 04.08 R97-R98 and 24.008 R99
Content: In the current version of GSM 4.08/24.008 when the MS is in state REGISTERED-INITIATED and receives a DETACH REQUEST message from the network with type of detach 'IMSI detach' the MS shall abort the attach procedure, which makes no sense. As the type "IMSI detach" triggers a MS initiated combined RAU after a VLR failure, it is proposed to continue the attach procedure.
In the definition for the collision of a network initiated detach during a ongoing RAU the detach types "GPRS detach" and "combined GPRS/IMSI detach" are wrong, as these are MS initiated detach types.
Furthermore in the description of the MS initiated detach procedure, it is proposed to use the correct name "detach type IE" instead of the term "detach cause IE" which is not defined in 04.08
Discussion: Reason for changing R97, it is attach procedure collapsing with detach procedure. The network behaviour contradicts to the network behaviour and it does not work properly. It is a C1 category. Suggested to be only for R99 although it is not the idle situation! R99 needs a new reference version.
Conclusion: R97 and R98 are rejected and the editorial changes will be brought up in new CRs. R99 (N1-000320) is revised to **N1-000457** which was agreed.
Tdoc-**N1-000494/R97** and **N1-000495/R98** are agreed. They are related to N1-000457

Tdoc-N1-000321, N1-000322, N1-000323 Usage of cause code IE in network initiated detach/ Siemens AG

This is CRs against 04.08 R97-R98 and 24.008 R99 respectively.
Content: In the current version of 4.08/24.008 the network-initiated GPRS detach procedure says that if the detach type IE indicates „re-attach required" the MS shall perform a new attach procedure. It is not clear however what is the correct reaction of the MS is in case the network additionally includes a cause code in the DETACH REQUEST message.
As all explicitly listed cause codes for the detach procedure results in a MS behaviour where a reattach is not allowed, this CR proposes that the network should not include a cause code if the detach type IE is „re-attach required" and that the MS shall ignore it.

Discussion: The action of MS towards the cause code is different in 2 sections where to ignore it once and to react on it in another section. The network should not use the cause code if reattach is required.
Changes in R99 are accepted but not older releases although MS requirements need to be corrected.
We used before that the mobile should ignore it and now it is stated that the MS shall not send it, so it will be changed to MS may ignore it. It is implementation dependent case.
Proposal to give Detach type high precedence than the cause value which are sent in the same massage.
Conclusion: R97 and R98 are rejected , R99 (N1-000323) are revised to N1-000458.
N1-000458 , Limitation for the network on the cause values which was revised to **N1-000561** which was agreed.

Tdoc-N1-000324, N1-000325, N1-000326 Conditions when to start the GMM timer T3321/ Siemens AG

This is CRs against 04.08 R97-R98 and 24.008 R99 respectively.
Content: According to the current specification, the DETACH REQUEST message needs also to be retransmitted in the case the MS is not attached for GPRS services. As it is not very sure whether the network responds to a DETACH REQUEST if the MS is not attached, there is the risk that the MS is blocked for a new attach attempt for 5*T3321 = 75 sec. In order to avoid this, it is proposed not to start the retransmission timer T3321 if the MS is not already attached for GPRS service and to transmit the DETACH REQUEST message only once.
Discussion: The detach will be delayed if this CR is not accepted, which is minor correction.
Conclusion: R97 and R98 are rejected and R99 (N1-000326) is agreed.

Tdoc-N1-000327, N1-000328, N1-000329 Timer control for GPRS detach/ Siemens AG

This is CRs against 04.08 R97-R98 and 24.008 R99 respectively.
Content: In the current definition of the MS initiated GPRS detach procedure, there is no time limit specified, when the MS may be deactivated even if the message is not yet transmitted. This CR proposes to define a maximum period of five seconds, until the MS may be switched off.
Discussion: These CRs were presented in the ad-hoc and rejected.
To define the maximum period of time is to allow the maximum time for detach message, to save Battery. It should be implementation matter as Ericsson and Lucent agreed. The objection is at the 5 sec., which should be implementation case. Also they see it from user perspective to wait 5 sec. Before powering down the MS.
For R99 Nokia supports Siemens where it is required by the network to receive the detach request message.
Rewording is required after coming to a conclusion of the principle.
Either to agree to one time or leave it to the manufacturers and not define a range. A test case should be written to it in case it is defined. The RLC suppose to be the last information sent by the MS, so it is the last data frame where the acknowledgement is received for which is found not accepted somehow to let RLC to know about the contents of GMM. Siemens defended the case where the ready timer depends on the lower layer as well as defined in 24.008/ 04.08.
Either implement it in the lower layer communication and switch off when the messages are acknowledged in RLC layer or wait 5 sec.
Conclusion: R97 and R98 are rejected, R99 (N1-000329) is revised to **N1-000459**, which was agreed.

4.3 ASCI :

Tdoc-N1-000424, 425 Priority update by the use of assignment procedure/ STF139, Nortel Networks

This is a CR against 03.67 R97/ R98 respectively.
Content: This CR clarifies that priority can be modified by the use of an ASSIGNMENT_REQUEST procedure.
Discussion:
Conclusion: Both are for info and belongs to CN-NSS group.

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not originator of call' and #24 for 'network wants to maintain the call'/ STF139, NORTEL NETWORKS
This is a CR against 04.69 R96.
Content:
Discussion: The cause values for a normal call clearing, busy and some termination reject situations (user not originator of call for network wants to maintain the call) were not listed in Table 9.4
Conclusion: Agreed, **N1-000470/R97, N1-000471/R98** and **N1-000472/R99** are agreed too

Tdoc-N1-000431 Addition of cause value # 25 'Pre-emption/ STF139, NORTEL NETWORKS

This is a CR against 04.08 R97.
Content: GSM 03.67 states that the RELEASE COMPLETE message is sent in the standard way to the called party with a new cause for pre-emption. Thus a new cause value is required for this scenario. The new cause value 25 fits best with cause class and default value 31
Discussion:
Conclusion: Agreed. **N1-000473/R98** and **N1-000474/R99** are agreed too

5 Work Plan for TSGN WG1 for 2000

Changes to Plenary meetings are changed.

TSGN1 #10 11.-14.1.2000 (Abiko, Japan/NEC)
GPRS Ad-Hoc 19.-20.1.2000 (Oslo/ Motorola)
SMG#31 14.-18.2.2000
TSGN1 #11 28.2.-3.3.2000 (Umeå, Sweden/Telia)
TSGN#7 13.-15.3.2000

TSGS2 – TSGN1 Ad-hoc on CC and Architecture 11.-13.4.2000
TSGS2 – TSGN ad-hoc on R00 work planning 13.-14.4.2000
TSGN1 #12 22.-26.5.2000 (Hawaii, U.S./T1P1)
SMG#32 19.-20.6.2000
TSGN#8 21.-23.6.2000
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 (UK, Lucent)
TSGN#10 6.-8.12.2000

Tdoc-N1-000299 TSGN1 task list for GSM/UMTS interworking and MM in UMTS/ Rapporteur-Nokia

Content: Open items list
Discussion: For information.
Conclusion: Noted

Tdoc-N1-000442 N1 #11 tasks to finalise Release 99/ DoCoMo

Content: Since, however, it was identified that several issues for R99 need to be resolved after TSG #6 until TSG #7, TSG CN#6 established the following principles on the works towards TSG #7.
[The following is quoted from TSF SA #6 meeting report.]
For Release 1999 completion, the CN#6 established principles are:
1) Exception from function freezing only allowed if stated in WI-status sheets (TD SP-99602)
2) Compatibility aspects for WIs to be solved with R'99 ("Hooks")
3) Specification of a restricted WI-subset for R'99
4) If the item is sufficiently stable and there are no contentious issues at CN#7 then the item will be included in Release 1999, otherwise it will be moved to release 2000.
Please refer to the document.
Discussion:
Conclusion: Noted

6 Release 99

6.1 Multicall

Multicall ad-hoc briefing were given by Mark Fenton who chaired the ad-hoc.

N1-000566 will be provided after the meeting to summarise the WI status for R99.

Tdoc-N1-000480 Open Issues on Multicall and Proposed Solutions Toward the open Issues/ NTT DoCoMo / NTT Comware

Discussion paper
Content: The table in th edocument was made from NS-000039, which identifies the open issues and they are outputs of Multicall adhoc held in 17-18 Feb. 2000. We added the last column (Document for solution) to summarise documents that contribute and resolves each issue.
All issues in this list are expected the solutions from N1, except #9 & #11.
When all these issues are solved, N1 would be able to completes the WI of Multicall.
Discussion: A proposed solutions in CRs under N1 responsibility are proposed.
Issue number 6 in N1-000406 was not resolved in the ad-hoc but offline discussion is done to solve the problem suggested in the following documents.
Conclusion: See the following related documents.

Tdoc-N1-000482 Introduction of NW CC Capability for Multicall/ NTT COMWARE

It is CR against 24.008/ R99

Content: The pre-R99 specs don't specify the MSC behaviour for additional bearer initiation from when there is an ongoing call for the MS, since a pre-R99 MS is unable to handle multiple bearers. In the CR on introducing of the SI (N1-000210), it was implicitly assumed that a R99 MS never request multiple bearers in a pre-R99 network as such. To ensure this, the MS CC entity shall know the capability of the CC entity in the network rather than the local information what RAN is engaged.

It is proposed that the network call control capabilities from the NW to the MS shall be introduced as the Call Control capabilities from the MS to the NW and the multicall supported information shall be specified in it.

The Multicall supported information will also solve the following issue: If MS supports Muticall and the MSC/VLR is Release 99 but it does not support multicall, it will reject the setup message including a stream identifier greater than 1. This would mean that non first emergency call would be rejected by the network.

Since MS can recognize that visiting network does not support multiple bearers, it can ensure the emergency call establishment even if there is an ongoing call.

Discussion:

- Section 9 Network control capability is added to the message but in a weak way, we need to write Shall/ should include Network capability to emphasise it.
- In the procedurel text in CC the call establishment procedures some explanation what the MS do when the network is not in CC control capability for multicall and a multicall is initiated, so what is the reactio?
- 10.5.x It is not useful to put mandatory requirements in a note. The MS needs the indication where the note is redundant.
- Interaction with call hold needs to be clear. How does the MS know the number of calls which the network supports? The network should reject the new MS initiated setup when already reached the maximum bearers.
- SS interaction is defined in 24.080

Conclusion: Revised to N1-000488.

N1-000488, Handling of Emergency call is added with other changes as requested. Which was revised to **N1-000560** , which was .agreed.

Tdoc-N1-000486 Stream Identifier IE handling/ NTT COMMUNICATIONWARE

This is a discussion paper

Content: The issues, which ware pointed out in the Multicall ad hoc meeting held on 17-18 February, should be reflected to the CR related to introduction of stream identifier IE. This contribution intends to clarify the impact on the Stream Identifier IE handling.

The following issues ware pointed out in the Multicall ad hoc meeting.

1. When the mobile station is located in the network not supporting multiple traffic channel, it shall not use any other than "1" as SI value.
2. When the mobile station re-use an existing traffic channel, it shall indicate "No Bearer" in the CALL CONFIRMED message, and include the existing SI value in the CONNECT message.

Table-A shows possible Stream Identifier IE handling case.

Proposal: It is proposed that N1 look at N1-000358 (CR against TS 24.008) and approve it.

Discussion: Principles of using SI values.

Reusing of bearer and mobile behaviour is discussed, where bullet 2 seems O.K.

Conclusion: Noted.

Tdoc-N1-000358 Addition of the Stream Identifier Information Element/ NTT COMMUNICATIONWARE, Siemens AG

This is a CR against 24.008 /R99

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

Discussion: Using multiple traffic channel is confusing , so use Multicall.
SS ad-hoc defined the cause code in facility message in 24.080. Existing CC cause values could be used and preferred but need to be mentioned. Using a new cause " max of multicall channels is reached" was suggested and discussed to show the network capability although HO could also cause the change of max. number of multicall channels.
N1-000210 which was agreed in CN1#10 is rejected and substituted by this CR.
Conclusion: Revised to **N1-000489**, which was agreed

Tdoc-N1-000478 Multicall Information in *Call Control Capability* IE/ Fujitsu

This is a CR against 24.008 /R99
Content: For the decision of NDUB, the number of maximum bearers supported in an MS needs to be indicated to the network. Because of the limitation of transcoder, the number of supported speech bearer may be further limited so that it is necessary to be informed to the network. Since these capability is related to call control, the information shall be set in *Call Control Capability* IE defined in CC protocol
Discussion: What does the MS signal when X bearers are supported and what is the indication if the MS supports data only? It is coded all 0es means no speech is supported.
A problem is found in no way to define/ code a MS supporting data only which should be studied. Some suggestions were given. Spare bits are to be located correctly. And other comments were given to the originator.
Conclusion: Revised to N1-000490.
N1-000490: There is no bearer supported terminal as the assumption is. Fixed length of the *Call Control Capability* IE is requested and supported by more than one company. Agreed.

Tdoc-N1-000483 Handover scenario for Multicall/ NTT COMWARE

This is a discussion document.
Content: Throughout this contribution MSC capability means maximum number of bearers per a user supported by the MSC. Please refer to the document.
Evaluation:-

Possibility	Evaluation	Possible counter for each possibilities
A1	Large data administration No additional signalling and delay	Large data administration is not acceptable for operators.
A2	Small data administration No additional signalling and delay	Some operator has strong concern about even small data administration.
A3	No data administration No additional signallin g and delay UTRAN specs also needs modification (25.413 and 25.331) It is difficult to realize the case of Iu Relocation not involving UE	This A3 has technical difficulties in some cases.
B1	No data administration No additional signalling and delay Impose Multicall specific capability to all R99 MSCs (functionality level)	Imposing such a functionality level capability to all R99 MSCs is not acceptable.
B2	No data administration Some additional signalling and delay Impose Multicall specific capability to all R99 MSCs (protocol level)	The delay may be no problem in the case Relocation is performed with Iur soft combine.
C	No data administration No additional signalling and delay No bearer can be handed over to MSC-B if MSC-B does not support Multicall.	It is applicable only when the network is rather homogeneous. It is not practical to take such an assumption.

It is proposed that possibility A2 and possibility B2 are considered to be candidate scenario in R99 and the decision is due to N2.

It is also proposed that N1 discusses and approves CR against 23.009 except for the way in which the MSC-A knows the MSC-B capability.

Discussion: related to N1-000484

Conclusion: Noted, please see CR in N1-000484.

Tdoc-N1-000484 CR to 23.009 on Handover scenario for Multicall/ NTT COMWARE

This is a CR against 23.009/ R99.

Content: In current 23.009, handover procedures for only one bearer are specified.

It is required to align handover procedures to Multicall requirement as an implementation option.

Discussion: The decision of reducing multiple bearers will be in MSC-A in case HO took place to MSC-B' from MSC-B. In 4.4.1 edito's note says that MSCB does not know MSCB'! MSC-B should be the driving MSC.

Conclusion: Case B2 is the preferred solution and will be used as Working assumption. Revised to N1-000491.

Tdoc-N1-000491 CR to 23.009 on Handover scenario for Multicall/ NTT COMWARE

This is a against 23.009 / R99

Content: In current 23.009, handover procedures for only one bearer are specified.

It is required to align handover procedures to Multicall requirement as an implementation option.

Discussion:

Conclusion: Agreed, which will be sent to N2 for approval. N2b revised the document and was approved as **N2B000465**.

Tdoc-N1-000359, N1-000360, N1-000361 Multicall stage1, 2, 3 respectively

They are TSes.

Content:

Discussion: For information.

Conclusion: Noted

Tdoc-N1-000485 Need for clarification on when to release a TCH / NTT COMWARE

This is a discussion document.

Content: In GSM today, the network can provide only single bearer (i.e. TCH). When the network shall release a bearer is clearly specified in TS 23.108.

In GSM when the network offers the new terminating call as a waiting call and then the user release the existing active call, the network retains the bearer because the MS may answer the waiting call. In CH SS case the network shall retain the bearer even after the active call was released.

In Multicall environment, this scheme shall be maintained but some consideration is needed.

For example, assume that the maximum number of bearers supported by the network is three and there are three active calls for each bearer. A new terminating call will be offered as a waiting call in this case. After a new terminating call has been offered as a waiting call, if the user release two calls, how the network shall behave? Which bearer shall be retained and which bearer shall be released?

Multicall does not require modification to the maximum number of waiting call (one) or maximum number of held call (one) per a user.

So, the retained bearer is useful for CW/CH scenario and the number is one for each.

Proposal: A CR against 23.108 is needed.

The attached file is proposed CR for 23.108/ Clarification on timing to release TCH.

In current 23.108 the relationship between releasing a call and releasing a TCH is described. It is required that some clarification is needed for providing multiple TCH capability.

Discussion: Billing, when will it stops with the previous bearer? It should be stopped by call release, where the old rules seems to apply.

How does the mobile know the max number of bearers reached? The MS receives CW indicator so the MS will not assign new bearers. The text needs clarifications. Some additional changes is needed for the normative part of the spec. or a stage 3 spec.
This is the section 7 of 04.08 so this used to be informative.
Conclusion: CR is revised to N1-000.

Tdoc-N1-000492 Clarification on timing to release TCH/ NTT COMWARE

This is a CR against 23.108 / R99
Content: In current 23.108 the relationship between releasing a call and releasing a TCH is described. It is required that some clarification is needed for providing multiple TCH capability.
Discussion :No complains about the written procedure, but some addition on the normative specification is needed. Additions to 24.008 needed in a new CR.
Conclusion: Agreed

Tdoc-N1-000533 Non-multicall R99 Network does not need to check SI value/ Ericsson

This is a discussion paper
Content: After the mechanism to transfer CN multicall capability to the UE has been agreed, we can reconsider the proposed handling of the SI in the R99 networks that do not support multicall.
R99 CN that does not support multicall does not need to check the actual value of the SI. It only needs to send the SI back to the UE as a RABid.

Proposal:

Update all necessary multicall specifications accordingly.
Discussion: The idea was supported and it is taken as working assumption.
Conclusion: It will be reflected in the revised CRs from multicall. Noted

6.2 Multimedia call

Tdoc-N1-000552 Multimedia as R99 Work Item/ Nokia

It is agreed.

Tdoc-N1-000417 Multimedia Telephony/ Nokia

This is a TR.
Content: Changes to the TR.
Discussion: Cover page changes will be for the version to be made V1.0.0 for presentation in the next TSGN#7, also the title will be changed to CS only. A new clean version will be given later.
Conclusion: Agreed as V0.0.6. V1.0.0 was presented in **N1-000557**, which was agreed.

Tdoc-N1-000418 Changes to support a circuit switched multimedia call/ Nokia

This is a CR against 24.008/ R99.
Content: UDI to speech fallback removed, minor corrections.
Discussion: Fall back mechanism is supported in case data call is not supported.
Conclusion: Revised to **N1-000525**. Wording in the note were changes and clarified as fall back to speech, the CR is agreed.

Tdoc-N1-000419 and N1-000420 Changes to support a fallback to speech in a circuit switched multimedia call setup/ Nokia

This is a CR against 27.001 and 29.007/ R99.
Content: Increased user friendliness in a multimedia call setup.
Discussion: Both are for info and comments are welcomed
Conclusion: Noted

6.3 GSM / UMTS interworking

Tdoc-N1-000530 GSM – UMTS Interworking and MM for UMTS as R99 Work Item/ Nokia

It is agreed

Tdoc-N1-000401 MS behavior on T3210 and T3330 expiry/ Nokia

This is a discussion document

Content: The purpose of this contribution is to illustrate the abnormal case which may happen when the MS is executing the location or the routing area updating procedure, and for some reason the lower layers are unable to deliver the MM or GMM messages. In this case the current version of the 24.008 [1] does not specify the details of the MS behavior in UMTS, e.g. does the MS release the PS signaling connection at some point.

Additionally, it is shown in this paper that the MS should be able to request the release of the RR connection or the PS signaling connection in some cases. However, it is not clear whether this is possible by the UTRAN protocols. Therefore, it is propose that a LS is sent to RAN groups asking whether these mechanisms are available in the current RAN specifications.

It is proposed that LS to the RAN WG2 and WG3 is sent in which it is indicated that in the abnormal cases described above the MS needs to have a mechanism to request a release of the lower layer connection, i.e. the RR connection or the PS signaling connection. Please refer to the document.

Also it is proposed that the CR [2] defining the PS signaling connection release is accepted.

Discussion: changing SGSN and informing the HLR need time which is not sufficient to keep the call and the signalling bearer. Different solutions were discussed. The criteria for GMM to release the resources has to be discussed in N1. We need to ask R2 and R3 about their opinion.

2 problems are encountered in CS and PO.

Conclusion: Related to N1-000402 and N1-000403. Noted

Tdoc-N1-000402 MS behavior on T3210 and T3330 expiry/ Nokia

This is a CR against 24.008/ R99

Content: When the MS initiates the normal routing area updating procedure, the MS sends the ROUTING AREA UPDATE REQUEST message to the network and starts timer T3330. It may occur that the network does not respond to the MS and the timer T3330 expires. In this case it is specified in 24.008 that the MS aborts only the routing area updating procedure. This CR proposes that also the PS signaling connection is aborted if the expiry of the timer T3330 occurs.

The MS may have PDP contexts active and radio access bearers (RABs) setup when the MS executes the routing area updating. The release of the PS signaling means that all RABs are also released. Therefore, it may be argued that in this case the MS should release the PS signaling connection only if the routing area updating attempt counter is greater than or equal to 5 in order to save in the signaling load. However, considering the low frequency of this abnormal case and possible fatal error in the signaling connection it is proposed that the MS releases the PS signaling connection every time the timer T3330 expires in the routing area updating procedure.

Discussion: At the moment for the GPRS attach procedure it is defined that only if the GPRS attach attempt counter is greater than or equal to 5 when the timer T3310 expires then MS shall release the PS signaling connection. If the above principle for the routing area updating is accepted then also the GPRS attach should be updated according to that principle.

The timers name is wrong on the title.

Conclusion: Rejected because depends on response from RAN which was not available during the meeting.

Tdoc-N1-000403 Proposed LS on MS initiated signaling connection release/ Nokia

This is LS sent to R2 and R3.

Content: In some abnormal cases (see N1-000401) in the mobility management layer it is a needed that the MS is able to abort the signaling connection with the CN domain with which the abnormal case occurred.

TSG-CN WG1 like to ask from RAN WG2 and RAN WG3 whether the MS initiated signaling connection release is possible according to their specifications. If not, then TSG-CN WG1 kindly asks the possibility to include this into RAN WG2 and RAN WG3 specifications for Release 99.
Discussion: Outline the problem on the CS and PO domains what happens to the signalling connections. Could they explain what is the relation between PS and CS common signalling (RRC) and CC signalling.
Conclusion: Revised to N1-000493

Tdoc-N1-000290 Introduction of two new presence requirement symbols for IE's/ Ericsson

This is a CR against 24.007 R99
Content: Some L3 messages have had new IEs added in order to meet the requirements fo r UMTS. Many of these IEs should be defined as M (mandatory) for UMTS, but for reasons of backwards compatibility with GSM, they have been defined as O (optional) IEs, with text comments to indicate that they shall be sent in UMTS.
However this unfortunately means the incorrect error handling is invoked by the receiver if the IE is missing. This requires study on a case by case basis to determine if the handling is satisfactory or new error handling procedures need to be defined.
There is a great risk that this case by case error handling will not be completed in time for R99, resulting in sub-optimal behaviour by the system in such conditions.
The paper proposes an alternative approach, introducing new rules to allow the correct error handling procedure to be used. This eliminates the need for detailed case by case analysis.
Discussion: Related to N1-000291
The access technology is set to the criteria. The network should know the access technology which it is connected to, so how? What about the MSCs R98 and older releases? Is the CC messages applicable in the future to the MSC- MSC HO. The proposal of analysing it all is suggested by the chairman. Error handling mechanism is to be consider, also missing error handling and mandatory information.
In case of LUP-GSM the CM - information should be ignored, if UMTS -LUP without CM it has to be rejected, or an error cause is to be sent!! A CR for 04.08 is required.
Conclusion: Rejected

Tdoc-N1-000291 Introduction of two new presence requirement symbols for IE's/ Ericsson

This is a CR against 24.008 R99
Content: New symbols for presence requirements for IE's are proposed in 24.007. This paper corrects the

Discussion: See previous document.
Conclusion: Rejected

Tdoc-N1-000304 Support of high speed data in UMTS/UTRAN/ Nokia

This is a CR against 23.034/ R99
Content: In GSM multiple TCHs can be combined into a high speed bearer, which is indicated by some parameters in BC (Bearer Capability information element). Corresponding UMTS parameters are not needed as the UTRAN provides 'any size' bearers.
Discussion: Result of CR from S1 on 22.034.
Dual mode mobile will include always the multislot parameters.
Conclusion: Revised to **N1-000500**, which is agreed.

Tdoc-N1-000305 Support of high speed data in UMTS/UTRAN/ Nokia

This is a CR against 24.008/ R99
Content: In GSM multiple TCHs can be combined into a high speed bearer, which is indicated by some parameters in BC (Bearer Capability information element). Corresponding UMTS parameters are not needed as the UTRAN provides 'any size' bearers.
Discussion: The parameter of identifying GSM or UMTS is significant because of the dual mode mobile.
Comment bit 6 / table 10.5.113 to make it more clear for the implementers of the MS
Encoding rules are to be more clear for the implementers use.

UMTS MS could be coded as GSM for multislot because there are no difference. We do not need to define values for any unset fields, and we need to say it "may" or it "should" ignore them? HO could be a problem so we better say may/should ignore them. Conditions need to be agreed

Conclusion: Revised to N1-000501.We do not to define fixed values to the GSM specific fields and they can be any value, and the network may ignore these fields in some cases (which ones!!), **N1-000501** is agreed.

Tdoc-N1-000310 GSM – UMTS interworking and MM for UMTS/ Nokia

This is a CR against 24.008/ R99

Content: The requirement for different types of mobiles to support the UMTS authentication procedure is not clear and additionally referring to R99 would require a CR for R00 even if there is no need to change the functionality.MS will be changed by ME. S

Discussion: Authentication is performed on the SIM card. GMM Authentication is required.

Conclusion: Proposal is agreed. It updates the same section as Ericsson CR in N1-000349, N1-000379 so they will be checked and merged if necessary.

Revised to N1-000502. In case N1-000535 is rejected the N1-000502 is agreed, otherwise N1-000502 is withdrawn. Conditional agreed.

N1-000502 is withdrawn, where this CR is not necessary after N1-000562 is agreed.

Tdoc-N1-000330 SM IEI value/ Siemens

This is a CR against 24.008/ R99

Content: As the *radio priority* is a type 1 information element, the current value '33' for the IEI in the message definition of the Modify PDP context accept (Network to MS direction) message is wrong. It is proposed to use '8-' instead.

Discussion: Comprehension required, could be 8 so no problem.

Conclusion: Agreed

Tdoc-N1-000331 Initial value for T3302/ Siemens

This is a CR against 24.008/ R99

Content: According to the current definition, the timer T3302, which triggers a new registration attempt is the attempt counter has reached its limit, is initialised with initial value for the periodic location update timer T3212 from the CS domain. With this definition the configuration of the CS domain specific MS reachable functionality has also impact to the PS domain specific registration procedure. This has the drawback that the tow domains could not be configured independently. As the purpose of the GMM timer T3302 and the MM timer T3212 is completely different, it is proposed that the timer value for T3302 could be (optional) indicated by the network in the Attach and Routing area update accept message and for the case no specific value is assigned by the network via a GMM signalling procedure a default value is used by the MS

Discussion: Default value of the timer is proposed to be specified, or make it configurable. It depends on how the timer are to be changed has an effect where to define the timer. It was also suggested to have it in the reject message where it is for error cases. If it should be configurable then it should go in the sys-info.

Conclusion: The decision is to make the timer a default value. The message to carry it is to be defined and agreed off line. Revised to **N1-000503**, which was agreed..

Tdoc-N1-000335 NAS System Information with T3312 included in the CN Common part/ Ericsson

This is a CR against 24.008/ R99

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

In UMTS, 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.

Discussion:

Conclusion: Withdrawn

Tdoc-N1-000336 System Information (version 2)/ Ericsson

This is a CR against 24.008/ R99

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

In UMTS, 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.

The relation between T3212 and T3302 is assumed removed. I.e. the timer T3302 in GMM is assumed loaded with default value or the signalled value at Attach accepts and RA update accept.

Therefore the timer T3212 is included in the CS domain specific system information.

Attached, as an Annex, to this CR is a copy of the chapters 8.5.7.1.2, 10.1.47.5.3 – 10.1.47.5.5 and 10.2.1.9 of the TS 25.331.

Discussion: Offline discussion will take place to clarify some questions.

Conclusion: Agreed.

Tdoc-N1-000337 Intersystem change GSM <-> UMTS/ Ericsson

This is a CR against 24.008/ R99

Content: This CR proposes:

- to clarify the description for an MS which has the READY timer is running in GSM or an MS which is in PMM-CONNECTED mode in UMTS at intersystem change.
- to move the description of the intersystem change GSM <-> UMTS from chapter 4.7.5.3 to a new chapter in 4.7.1.7.

Discussion: Is paging necessary in both UMTS and GSM cells?

"Inter system change" and the "cells", wording need to be corrected. May need to be changed to "shall" for paging.

Conclusion: Revised to **N1-000504**, which was agreed.

Tdoc-N1-000338 Paging response in UMTS/ Ericsson

This is a CR against 24.008/ R99

Content: This CR proposes to add a new chapter in 24.008 to clarify that the MM layer in the MS in UMTS shall use the Paging Response message defined in chapter 9.1.25 in 04.18, in order to respond to a CS Paging request initiated by the CS domain in the network

Discussion: The MS shall response is not correct where there is no paging response in MM layer on the RANAP, so it is not a good place to define it.

On which UTRAN layer message should SAPI be sent (paging response)? Which PD is used? Which TMSI allocation is used here?

Conclusion: Revised to **N1-000505**, which was .agreed.

Tdoc-N1-000339 Corrections to Service Request procedure/ Ericsson

This is a CR against 24.008/ R99

Content: This CR:

-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 to the section where the coding of Service Type is defined (10.5.5.20).
-corrects the reference to the section where the coding of P-TMSI is defined (10.5.1.4);
-corrects the length of information element 'P-TMSI' to 6 octets;
Discussion: The wording is not clear and need clarification. This will be done later in a different CR.
Service request is not required in case a connection is established by attach. Need to be studied with RAU.
Conclusion: Agree the current CR with bringing a new CR to cover the issues above.

Tdoc-N1-000340 Removal of P-TMSI signature in Service Request message/ Erricson

This is a CR against 24.008/ R99
Content: According to 24.008 version 3.2.1, the MS shall delete the P-TMSI signature after a successful completed Service Request procedure if the P-TMSI signature has been sent in the Service Request message. Whenever the P-TMSI signature is deleted, the network has to allocate a new one. In UMTS the P-TMSI signature should only be used whenever it is useful as integrity protection is introduced.
This CR proposes to remove the P-TMSI signature from the Service Request message.
Discussion: If P-TIMSI signature exist then it has a reason and should be used, but according to S2 discussions P-TMSI signature is not to be used. There is no arguments why p-TMSI signature is not necessary!
Conclusion: Rejected

Tdoc-N1-000342 Adding of NSAPI to Service Request procedure / Ericsson

This is a CR against 24.008/ R99
Content: Adding an IE NSAPI bitmap to the Service Request procedure. This enables the MS to request Radio Access Bearer re-establishment for all or a sub-set of all activated PDP-Context(s).
Discussion: It is functional correction and stage 2 is already sent on the S2 list.
10.5.x NSAPI mapping bits are coded as zero but should not be reserved.
Conclusion: Revised to **N1-000506**, which was not provided during the meeting..

Tdoc-N1-000343 Detach procedure/ Ericsson

This is a CR against 24.008/ R99
Content: According to 24.008 version 3.2.1, the MS shall delete the P-TMSI signature after a successful completed Detach procedure if the P-TMSI signature has been sent in the Detach Request message. Whenever the P-TMSI signature is deleted the network has to allocate a new one. In UMTS the P-TMSI signature should only be used whenever it is useful as integrity protection is introduced.
In GSM, there is no need to send the P-TMSI in the Detach Request message as the MS is identified in the network by the TLLI; and there is no need to send the P-TMSI signature in the Detach Request message as the message is always sent ciphered if ciphering mode is on.
In UMTS, if the Detach Request is sent unciphered, then the P-TMSI signature has a certain use, because it avoids randomly detach subscribers from the network by a malicious user.
Furthermore in UMTS, if the MS is performing a Detach procedure with detach type "IMSI detach" (e.g detaches for CS services in the network but stay attached for GPRS services in the network), the MS will delete the P-TMSI signature after a successful completed procedure. The network has to run a P-TMSI reallocation procedure in order to allocate a new P-TMSI signature to the MS. If a new RA is entered before the network has allocated a new P-TMSI signature to the MS, then the MS will not be able to send any P-TMSI signature in the RAU procedure (e.g. inter-system change).
This CR proposes:
- the MS shall only send the P-TMSI and P-TMSI signature in the Detach Request message in UMTS and not in GSM;
- the P-TMSI signature shall only be included in the Detach Request message, if the Detach Request message is sent unciphered and the MS has a valid P-TMSI signature available;
- to add the possibility for the network to allocate a new P-TMSI signature to the MS in the Detach Accept message.

Discussion: Changing the key in one domain will affect the other domain and change it.

Conclusion: Withdrawn.

Tdoc-N1-000349 DRX not applicable in UMTS/ Ericsson

This is a CR against 24.008/ R99

Content: In UTRAN, cycle length of discontinuous reception in idle mode is not configured by each MS but same value is applied to all the MSs in a core network. Therefore, the DRX parameter IE, included in *ATTACH REQUEST* and *ROUTING AREA UPDATE REQUEST* is only used by an MS, which supports both UMTS and GSM, or only GSM.

This CR is for the clarification of it

Discussion:

Conclusion: Withdrawn.

Tdoc-N1-000351 Duplicated PDP context activation/ Fujitsu

This is a CR against 24.008/ R99

Content: If any duplication is identified (e.g. TI, NSAPI, APN + PDP address) regarding newly requested PDP context and existing one, then existing context shall be implicitly deactivated and new request shall be progressed, not rejecting new request, since the duplication clearly indicates that the MS has forgotten the old PDP context

Discussion: Collision of released NSAPI in the MS and the network where the MS deactivate it and the network has it active and the MS has activate a session with that NSAPI, then the network will ignore it.

It is preferred that the network to solve this problem, as in the CR. We need to specify which parameters to be checked? PDP address is the only thing which differ so with PDP address acknowledge is to be sent. It is better to define these conditions in 23.060 and not all in 24.008.

The solution is to make the network always delete the active PDP context for that NSAPI and initiate it according to the new request with the same NSAPI.

Conclusion: Revised to **N1-000507**, which is agreed.

Tdoc-N1-000352 Coding of RAB ID field/ Fujitsu

This is a CR against 24.008/ R99

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 RAB ID 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 RAB ID IE.

Discussion:

Conclusion: Revised to **N1-000547** which is agreed. After the meeting in an e-mail from the originator, this was withdrawn. "Adding to above, I would like to withdraw the CR124 since R3 also agreed a CR which defines the coding of same IE in RANAP specification and the liaison statement informing the decision was sent from R3 to N1, which N1 has not yet received.

To solve the duplication, I propose to take decision in R3 and withdraw
the CR in N1"

Tdoc-N1-000353 Presence of TFT IE in *Activate Secondary PDP Context Request*/ *Fujitsu*

This is a CR against 24.008/ R99

Content: According to 23.060, the presence of TFT IE in *ACTIVATE SCONDARY PDP CONTEXT REQUEST* should be option, not mandatory. This CR is to align stage 3 with stage 2.

Quotation from 23.060 v3.2.1;

9.2.1.1 Secondary PDP Context Activation Procedure

[1 paragraph is skipped]

The Secondary PDP Context Activation procedure may be executed without providing a Traffic Flow Template (TFT) to the newly activated PDP context if all other active PDP contexts for this PDP address and APN already have an associated TFT, otherwise a TFT shall be provided. The TFT contains attributes that specify an IP header filter that is used to direct data packets received from the interconnected external packet data network to the newly activated PDP context.

Discussion: N1-000378 was presented, according to it PDP contexts could be deactivated.
If TFT is there available and mandatory we can not make any new context activation without TFT.
Condition of TFT being there is missing and error cause need to be defined.
Conclusion: Revised to **N1-000509**, which is agreed.

Tdoc-N1-000354 Correction of length of TI/ Fujitsu

This is a CR against 24.008/ R99
Content: For SM protocol, usage of extended TI is allowed, however message content table has not yet been updated.
Discussion:
Conclusion: Agreed

Tdoc-N1-000375 Clarification to the MS handling when receiving detach type 'IMSI detach'/ Ericsson

This is a CR against 24.008/ R99
Content: In the current version of 24.008 the network-initiated GPRS detach procedure results in the deactivation of all PDP contexts and release of all connections. The network-initiated GPRS detach procedure is however also used to indicate to the MS that it has become IMSI detached only, in which case it is still GPRS attached and fully capable to continue to use the activated PDP contexts. The PDP contexts should therefore not be deactivated in the IMSI detach case.
Furthermore, 24.008 fails to describe the MS behaviour after a Detach Request message with detach type "IMSI Detach" is received.
This CR proposes to define the MS behaviour in the IMSI Detach case in accordance with 23.060 (13.6.4) and 29.018 (4.2.1 and 11.3), and that the PDP contexts are not deactivated in this case.
Discussion: Same text for earlier releases was agreed before.
Conclusion: Agreed.

Tdoc-N1-000376 Handling of P-TMSI signature in the MS and the network/ Ericsson

This is a CR against 24.008/ R99
Content: In GSM it is not clearly described how the optional feature "P-TMSI signature" shall work. E.g. the MS shall delete P-TMSI signature after a successful subsequent registration, but it is not mandatory for the network to allocate new P-TMSI signature for each type of RAU procedure. What is the complete network procedures for not receiving and for allocation of P-TMSI signature?
If Periodic RAU requests was sent ciphered, as proposed in this CR, the signalling load due to new P-TMSI signature allocations could be decreased on the air interface. This does not have backward compatibility impacts. Since eg. a R97 MS will indicate to LLC that unciphered PRAU sending shall be used, and the R99 SGSN will not utilize deciphering. R99 MS sends ciphered PRAu and a R97 SGSN detects this and uses the known algorithm to decipher the PRAU.
In UMTS the "P-TMSI signature" is superfluous in many cases due to the Integrity Key protection. For inter SGSN updates it is useful and hence the P-TMSI signature procedure in UMTS should have equal procedures to GSM.
When failing to receive a valid P-TMSI signature in the network, the authentication procedures may be initiated. Meaning that an unsynchronised behaviour between MS and network regarding P-TMSI signature would lead to increased signalling load.
Discussion: Is it mandatory not to include the signature in the ciphered messages, it is a shall for backward compatibility.
Un-ciphered messages should have P-TIMSI signature and ciphered massages should not. This should be the principle of the CR.
In UMTS it should be made to be sent on every message, i.e. also ciphered.
Conclusion: Revised (then rejected) to N1-000510, Siemens has some problem with the principle in N1-000376 so **N1-000510** is withdrawn

Tdoc-N1-000382 Coding of a deleted P-TMSI signature/ Ericsson

This is a CR against 24.008/ R99

Content: This CR proposes to clarify that the network shall reserve the hexadecimal value: FFFFFF and not assign this value in the P-TMSI signature to the MS, as the MS uses this value in order indicate on the SIM that no valid P-TMSI signature is available.
Discussion: Discussions went on about whether it is necessary or not to have this CR!! After discussion the CR is found correct in that matter.
Conclusion: Agreed

Tdoc-N1-000389 DRX parameter for UMTS/ Fujitsu

This is a CR against 24.008/R99
Content: UTRAN applies UE specific DRX cycle length so that "CN Specific DRX cycle length coefficient" is expected to be supplied from the CN. Following the decision, DRX parameter is updated to contain the information. There would be cases that the requested DRX cycle length can not be supported by the CN due to the NW implementation. To indicate "not supported", the IE is added to ATTACH ACCEPT and ROUTING AREA UPDATE ACCEPT as option IE. If *Fixed DRX indicator* is indicated, the MS shall use the DRX cycle length broadcasted in the SYSTEM INFORMATION RRC message
Discussion:
Conclusion: Revised to **N1-000524** , which was agreed.

Tdoc-N1-000390 Updating Session Management (SM) for R99/ Ericsson

This is a CR against 24.007/ R99
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 and SNSM-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: It is a revised CR. Changes were incorporated.
Conclusion: Agreed

Tdoc-N1-000391 SM and RRC Services in TS 24.007/ Ericsson

This is a discussion paper.
Content: This paper proposes new SAPs and service primitives in TS 24.007 for UMTS.
Discussion: For information and comments are welcomed.
Conclusion: For information/ Noted.

Tdoc-N1-000401 MS behavior on T3210 and T3330 expiry/ Nokia

This is a discussion paper.
Content: The purpose of this contribution is to illustrate the abnormal case which may happen when the MS is executing the location or the routing area updating procedure, and for some reason the lower layers are unable to deliver the MM or GMM messages. In this case the current version of the 24.008 [1] does not specify the details of the MS behavior in UMTS, e.g. does the MS release the PS signaling connection at some point.
Additionally, it is shown in this paper that the MS should be able to request the release of the RR connection or the PS signaling connection in some cases. However, it is not clear whether this is possible by the UTRAN protocols. Therefore, it is propose that a LS is sent to RAN groups asking whether these mechanisms are available in the current RAN specifications.
Discussion:
Conclusion: Noted

Tdoc-N1-000405 Exception to the Selective Routing Area Update procedure/ Lucent

This is a CR against 24.008.
Content: In order to preserve battery life, and avoid unnecessary signalling, during a power off detach, the MS should not carry out a RA update procedure regardless of the criteria of the selective routing area update procedure.
Note that it is however not an error condition for the mobile to do so
Discussion: Collide with N1-0000504

Conclusion: Contents to be merged with N1-000504, Rejected.

Tdoc-N1-000435 Application Part (RANAP) on the E-interface/ (3G TS 29.108 version 0.0.0 Release 99)/ Ericsson

This is a new TS.29.108

Content: This new TS is based on the GSM 09.08 V.7.2.0. This TS describes RANAP for the E-interface used at intra UMTS inter-MSC (3G-3G) Relocation.

This document is presented for information to N1. It is also related to the input LS Liaison Statement on "the use of RANAP for intra-UMTS inter-MSC Handover/Relocation" (tdoc N1-000266). TS 23.009 under the responsibility of N1 should refer to both GSM 09.08 (BSSMAP on E-if) and to this new proposed TS (RANAP on E-if). This new TS is recommended to be under the responsibility of TSG CN working group 2B.

Discussion: There are 2 proposals one from Siemens **N1-000496**. So we need to send the 2 proposals.

We need to say why N1 is active in this discussion.

N1-000511 is a LS prepared by Ericsson to send this document to N2.

Conclusion: Noted and will be attached to N1-000435.

Tdoc-N1-000436 Introduction of RANAP for intra-UMTS inter-MSC relocation/ Ericsson

This is a CR against 23.009.

Content: Introduction of stage 2 modifications for intra-UMTS inter-MSC relocation corresponding to what has been agreed in S2 and what has been presented for MAP in N2.

This contribution also requests removal of the queuing mechanism at relocation since that mechanism does not exist for relocation in RANAP.

Discussion:

Conclusion: Agreed and to be sent to N2 for info.

Tdoc-N1-000437 Clarifications of 3G_MSC-A and 3G_MSC-B roles/ Ericsson

Content:

1. The text "handover/relocation" has been replaced by the text "relocation" in some places.
2. The RNS-A is source and the message is then Relocation Cancel and not Relocation Failure
3. Clarification added in what direction an inter-system handover is done.
4. Addition of GSM to UMTS handover in 3G_MSC-A and 3G_MSC-B (this was considered as necessary after the clarification of the direction in 3. was included)

Discussion:

Conclusion: Agreed and to be sent to N2 for info.

Tdoc-N1-000523 DRX parameter for UMTS/ Fujitsu

This is a CR against 24.008 / R99

Content: UTRAN applies UE specific DRX cycle length so that "CN Specific DRX cycle length coefficient" is expected to be supplied from the CN. Following the decision, DRX parameter is updated to contain the information. There would be cases that the requested DRX cycle length can not be supported by the CN due to the NW implementation. To indicate "not supported", the IE is added to ATTACH ACCEPT and ROUTING AREA UPDATE ACCEPT as option IE. If *Fixed DRX indicator* is indicated, the MS shall use the DRX cycle length broadcasted in the SYSTEM INFORMATION RRC message.

Discussion: We need to decide whether we need to negotiate or not.!

We need the possibility to reject the parameter received from the MS, Fujitsu answers that it is manufacturer dependent.

We should always support the DRX cycle was supported by more than one company.

Fujitsu proposes to send this LS to R2 and R3 and ask if we can have a reject capability or not? Siemens rejects asking for such a LS because RAN group has nothing to do with MS manufacturers, and principally the suggestion is not accepted by them at all.

Part of the CR could be accepted by Siemens.

Conclusion: Revised to **N1-000551**, which was agreed..

Tdoc-N1-000423 Procedures for 3G_MSC-B / Ericsson

This is a CR against 23.009

Content: The requested changes include the introduction of RANAP for intra-UMTS inter-MSC relocation. Some minor editorial corrections have also been added.

Editorial changes:

Sheet 7: Entry 4 deleted; Sheet 19: Entry point is 5; Sheet 24: Exit point is 8; Sheet 25: A number of entry and exit points have been renumbered and the entry 10 deleted; Sheet 26: A number of entry and exit points have been renumbered and the text in some boxes have been changed; Sheet 29: Exit point changed to 7; Sheet 32: Exit point changed to 8; Sheet 37: Entry point changed to 6; Sheet 42: Exit point changed to 12 and no italics; Sheet 43: A number of entry and exit points have been renumbered and entry 14 deleted; Sheet 44: Entry point changed to 13, exit point changed to 11 and text changed to "Iu-RELOCATION-FAILURE from RNS-B"; Sheet 47: Exit point changed to 11; Sheet 50: Exit point changed to 12

Functional changes:

Sheet 1: A new branch added with MAP including IU-RLC-REQUEST; Sheet 37-44, 46-53: A- functions within square brackets replaced by Iu- functions; Sheet 45: Box with MAP-PAS with A-HANDOVER-PERFORMED deleted

Tdoc-N1-000434 Procedures for 3G_MSC-A/ Ericsson

Content: The requested changes include the introduction of RANAP for intra-UMTS inter-MSC relocation. Some minor editorial corrections have also been added.

Editorial changes:

Sheet 4: Timer T502 instead of T302; Sheet 12: UE instead of UE/MS; Sheet 16: A text (GSM to UMTS handover) has been added; Sheet 33: Text (GSM to UMTS handover) added; Sheet 57: Text (SRNS Reloction) added; Sheet 61: Text (UTRAN) added; Sheet 62: Text (UTRAN) added

Functional changes:

Sheet 57: A-HO functions within MAP messages replaced by IU-RLC functions; Sheet 59: A-CLEAR-REQUEST replaced by IU-REL-REQUEST; Sheet 60, 62, 63, 65-71, 73-78; IU- functions instead of A-functions

Discussion: Some proposals to make them informative another is to send them to N2B to include them in 22.009. It could not be normative where they are not too detailed.

Conclusion: They will be done informative. Both are agreed.

6.4 MS Classmark

Tdoc-N1-000283 Proposal of MS network capability for UMTS/ Siemens

This is a CR against 24.008 /R99. *This is a CR from a previous meeting and split into 2 Crs for CS and PO.*

Content: To indicate that the ME supports the R99 protocol enhancements UMTS authentication and extended TI for GPRS the MS network capability information element has to be extended.

Discussion: In R97 it is a spare bit so it shall be ignored by the receiver. If we support the Authentication challenge in UMTS then we support all parameters.

Conclusion: To be in line with N1-000528, we will revise this document to **N1-000529**, was presented. Padding bits are wrong here they should be spare bits!! agreed.

Tdoc-N1-000297 Clarifying the presence of the Classmark 2 IE in the LOCATION UPDATE REQUEST message./ Nokia

This is a CR against 24.008 /R99.

Content: To clarify that it is mandatory for the mobile station to include the Classmark 2 IE in the LOCATION UPDATE REQUEST message when on a UMTS network and optional only when on a GSM network.

The presence of the Classmark 2 IE in the LOCATION UPDATE REQUEST message could increase the total message content length so that the message will no longer fit into one L2 frame causing the message to be segmented.

Discussion: If the CM of UMTS is needed in GSM then why?

This message does not fit in the GSM message because of the segmentation so changes is required to the text.

Conclusion: Revised to **N1-000526**, which is agreed.

Tdoc-N1-000344 Modification of MS CM1 and CM2/ Ericsson

This is a CR against 24.008/ R99.

Content: The N1 decisions reflecting the MS Classmark have been reported in TR 23.814, which was approved by the CN Plenary. This CR proposes to update the MS CM 1 and CM 2 according to the TR 23.814 e.g. separating CN and radio related capabilities. The radio capabilities in MS CM 1 and 2 are valid only at GSM access mode and should be indicated in MS CM 1 and MS CM2.

Some mobiles will be able to use both GSM and UTMS access modes, so the handling of these radio capability fields can not be distinguish for GSM access handling and UMTS access handling but based on the MS type. The coding of these radio capability fields at UMTS access mode by MS, which is also GSM access mode capable, should be specified. For MS, which is only UMTS access mode capable, the coding need not be specified since the fields are not valid for these types of MS.

Discussion: Notes are to be changed where it is a requirement. Also we may consider the text position!

Conclusion: Revised to **N1-000527**, which was revised to N1-000563 where coding problems were encountered. **N1-000563** was agreed.

Tdoc-N1-000372 Proposal of Classmark 1 and 2 for UMTS (version 2)/ Siemens

This is a CR against 24.008/ R99.

Content: 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.

Several editorial corrections, and correction of an error introduced between v 3.0.0 and 3.1.0 of TS 24.008.

Discussion: It is a R99 indicator but it does not show the features indicated. Calling it R99 could be difficult to keep in the future, where the author sees it as R99 enhancement for the near future.

Octet 3 need to have some changes.

Conclusion: Revised to **N1-000528**, was presented and agreed.

6.5 Security

N1-000565 Security for UMTS as R99 Work Item

Is the WI status agreed.

Tdoc-N1-000280 Introduction of a new code point within the mobile identity IE, encrypted IMSI/ T-Mobil

This is a CR against 24.008/R99.

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 address the encrypted IMSI and the necessary routing information

Discussion: In SA, the principle of approving the encrypted IMSI is not agreed in SA, but the chairman preferred to proceed unless technical issues are not correct and then see how SA will agree on the proposal.

When the mobile supports encrypted IMSI then it will never be paged with normal IMSI!!

It is optional for the Mobile but the operator could decide if al his mobiles should have it.

Some editorial changes are suggested.

MS shall not response to IMSI paging should be stated in the text.

We need to have it in GSM coverage as well, but the length of the IE does not fit!!

BT believes that stage 2 is not complete so they object the CR principle as well as from Alcatel.

Conclusion:. Rejected

Another go in **N1-000555** : Mobile identity length should be changed. Abbreviations are missing.

IMSI encryption is optional in R99, then how will the encrypted MS work in a roaming environment which can not support this feature. He will not be able to do so. The network has no knowledge whether the MS is encrypted or not!

There is a required to make IMSI encryption in GSM radio applicable as well, although it seems not feasible.
It is a requirement issue. S3 has not decided yet whether it is R99 or R00, therefore we cannot add it in stage 3. Rejected.

Tdoc-N1-000476 Integrity checking of MM and GMM messages/ Vodafone Airtouch

This is a CR against 24.008/R99.
Content: It is a requirement of UMTS that signalling messages be integrity protected. This protection allows the receiving entity to be sure that the messages are from a genuine source, and thus guards against 'replay attacks.'
All protocols shall use integrity protection, and integrity protection is mandatory even in networks where encryption is not turned on.
The receiving entity (MS or RNC) uses a secret key, obtained from and known only by the SIM and the HLR/Auc, to check the integrity 'signature' of a message. Lower layers are responsible for carrying out such checks and, in general, every signalling message received will be discarded by the lower layers if it does not pass the check. However, there are certain messages in MM/GMM that should be allowed up to the layer 3 entity, without having been successfully checked. (This may be because no keys have been agreed yet, or because ciphering and integrity has not been activated yet). On the other hand, there is also a case where, in a network which does not use encryption, certain messages must never be processed at layer 3 unless they have been successfully integrity checked.
Therefore, it is necessary in MM/GMM to run integrity checking almost on a per-message basis.
Discussion: Same subject to N1-000346, please refer for discussion.
Conclusion: Revised to **N1-000534**, agreed.

Tdoc-N1-000346 Integrity protection of signalling messages in UMTS/ Ericsson

This is a CR against 24.008/R99.
Content: A clarification is needed on the supervision of that integrity protection is active and what procedures/messages that are allowed without integrity protection.
Discussion: Vodofan proposal is to send integrity check status in every message and the Ericsson one is once you get integrity then check it for every received message (internal check).
In Ericsson proposal if the integrity information is sent again then the lower layer will reject it.
In N1-000476, it is mentioned that either the messages should be always accepted or others which should be have integrity check passed, but what about the messages which do not fall in any of these 2 categories? The answer is the third type does not exist (all effected messages are covered). One list will be maintained which contains the effected messages.
Timing indication in case of HO proposal might be a problem.
Conclusion: Rejected

Tdoc-N1-000312 Integrity checking of signalling messages for UMTS./ Vodafone AirTouch

This is a CR against 24.008/R99
Content: To allow the layer 3 entities MM and GMM in the MS to be to decide whether or not to process layer 3 messages, the lower layers must indicate the result of the integrity checking procedure. The primitive RR_DATA_IND should include this.
This CR also proposes a change to the primitive RR_SYNCH_IND, to indicate to the MM/GMM layer that integrity protection is in use.
Discussion: Related to N1-000534. UMTS description is missing
Conclusion: Revised to **N1-000548**, which was agreed.

Tdoc-N1-000314 MS behaviour when detecting a 'bad' network from an authentication challenge/ Vodafone AirTouch Plc

This is a CR against 24.008/R99.
Content: There is currently no procedure defined for how the MS should react upon receipt of an invalid Message Authentication Code (MAC) which is derived from the AUTN provided in the UMTS authentication challenge.

For further details, see the presentation document, Tdoc N1-000313, a summary of which is below:

Summary of the proposal

1. Upon sending the AUTHENTICATION FAILURE or the AUTHENTICATION & CIPHERING FAILURE message the MS starts a timer.
2. Upon expiry of the timer the MS deems the network to be false.
3. Upon receipt of a failure message with reject cause 'MAC failure' the network may send an IDENTITY REQUEST message. Upon receipt of the IDENTITY REQUEST message, the MS shall stop the timer and send its (encrypted) IMSI to the network in the IDENTITY RESPONSE message. A second timer shall be started.
4. Having sent the IDENTITY RESPONSE message, the MS may then receive a new authentication challenge. If it does then it shall stop the second timer. If the new challenge contains an invalid MAC then the MS shall deem the network as being false. If no new authentication challenge is received, the second timer will expire and the MS shall deem the network as being false.

Once the MS has deemed the network to be false, an internal mechanism shall treat the cell (as identified by the BSIC, ARFCN and timing) as barred and shall prevent the MS from camping on that cell.

Discussion: We will get the barring information in the system information enquiry. What is the criteria to mark the cell unbarred again after being in a barred cell, they are up to 6 neighbour cells which are barred. This is SMG2 and RAN issue, where they need to explain how this works.

The discussion went on a GSM basis, so we need to know what is the UMTS requirements and considerations, so we need to include it in the RR specifications.

Conclusion: Rejected.

Tdoc-N1-000345 Clarifications on the MM Authentication procedure/ Ericsson

This is a CR against 24.008/R99. GSM Part

Content: Some clarifications and editorial changes are needed for the MM authentication procedure, 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: 4.3.a) change the requirements to support Authentication challenge in GSM and UMTS. New vocabulary need to be added.

Conclusion: Revised to N1-000535. Link to N1-000502. If N1-000535 is agreed then N1-000502 is withdrawn.

N1-000535: principally agreed with some minor changes, revised to N1-000562**.** Consequently N1-000502 is withdrawn.

N1-000562 is agreed

Tdoc-N1-000 379 Clarifications on the GMM Authentication procedure/ Ericsson

This is a CR against 24.008/R99.UMTS part

Content: Some clarifications and editorial changes are needed for the GMM authentication procedure, 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: Comments are to be given to the originator.

Conclusion: Revised to **N1-000536,** which was agreed.

Tdoc-N1-000380 Handling of GPRS keys at intersystem change/ Ericsson

This is a CR against 24.008/ R99

Content: A description of the appropriate security keys for the MS to apply after intersystem change between GSM and UMTS is needed to allow continued ciphering (and integrity for UMTS) without any new authentication

Discussion:

Conclusion: Agreed.

Tdoc-N1-000381 Handling of CS keys at intersystem change/ Ericsson

This is a CR against

Content: A description of the appropriate security keys for the MS to apply after intersystem change between GSM and UMTS is needed to allow continued ciphering (and integrity for UMTS) without any new authentication
Discussion: Older release will work too according to this concept where the handset will make the conversion between the old and new security keys. Normal system interchange as well as HO is covered in this concept.
Conclusion: Agreed.

Tdoc-N1-000475 Alignment of the AUTN and Authentication Failure Parameter length/ NTT Software

This is a Cr against 24.008
Content: Alignment of the AUTN length is needed. Because, MODE was removed and AMF was added to the AUTN in the 33.102.
Alignment of the Response from SIM(renamed to Authentication Failure parameter) length that still has wrong length is needed.
Discussion:
Conclusion: Agreed

6.6 QoS

Tdoc-N1-000383 QoS (N1 status on WI initiated from outside TSGN) WI status/ NTT DoCoMo, NTT Software

This is a WI sheet revised to **N1-000549,** agreed

Tdoc-N1-000378 Deletion/modification of primary PDP context/ Ericsson

This is a CR against 24.008 / R99
Content: According to SA2 the terms primary and secondary context should not have different behaviour or preferably not used. This CR corrects the terminology according to 23.060. Note that references to the 'secondary PDP context activation procedure' are legitimate as they relate to the procedure started by sending a Secondary PDP Context Activation Request.
Discussion: Clashes with another CR in N1-000184 where the same text is touched.
Conclusion: Revised to **N1-000508**, where the changes were presented and agreed.

N1-000433 and N1-000514 describes different alternatives. **N1-000316** is for information and was noted.

Tdoc-N1-000433 The definition of the QoS default value/ NTT Software

This is a CR against 24.008 / R99
Content: Unallocated code points of the R99 QoS attribute was defined to be "reserved". If the new code points are added at future, the old version protocol will not understand the new code points.
In case of code point that a QoS attribute value isn't defined, interpret as the appropriate value by the operator option.
Alignment of the QoS length needed.
Discussion: See N1-000514.
Conclusion: Rejected
Another trial in **N1-000559** changes were presented. The Cr is agreed.

Tdoc-N1-000514 Compact coding of QoS IE/ Ericsson

This is a CR against 24.008/ R99
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 reby 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 IE length to 13 octets (12 octets where the IE is mandatory).QoS IE Length has also been added, were missing, in the tables in section 9.5
Discussion: The default QoS values of the used was objected by NTT-Software, Ericsson are ready to change it to a suggested ones. This Cr specifies the encoding of QoS on the radio interface.
It is a question to provide it in future aspect and to be supplied in a predictable way. Fall back mechanism should be supported. We need to find a way of mapping the values of old Mobiles roaming in new networks as well.
One set of default values should be defined using code points used for ever….
A new code point in the CM to inform the network about its capabilities of supporting code point of QoS level was not supported.
If we have different meanings in the network and the Mobile will lead to problems. In this proposal here is using the GPRS way where the mobile ignores the values which it does not understand.
Conclusion: Rejected and a new proposal is expected.

6.7 Out-of-Band Transcoder Control

N1-000564 agreed as contents need new sheet for the formalities.

Tdoc-N1-000517 Concept proposal for Transport of Codec Information/ Siemens

This is a discussion paper.
Content: At the last CN1 meeting #10 in Abiko, CN1 agreed on a set of working assumptions for the transport of codec information during the codec negotiation between MS and MSC. As was indicated already at that meeting, the working assumptions were not complete, as they did not cover the case when RANAP instead of BSSMAP was used at the MAP E-interface for the purpose of inter 3G MSC SRNS relocation.
Meanwhile SA2 decided to select RANAP as the only protocol to be used for this purpose, and new discussions between Ericsson, NTT DoCoMo and Siemens took place which resulted in the following modified concept. The main principles followed during the development of the codec negotiation procedure are described in the document.
Discussion: It is related to N1-000518.
Fig.10 after the MS receives the Direct message the MS will change coded after successful Ho is completed. R98 MSC will not be able Ho in the described way handling the codecs. Some questions were raised and the answers are in N1-000421.
Conclusion: Principles in the diagrams were agreed and in line with previous assumptions. Noted

Tdoc-N1-000421 CC enhancements to cover UMTS codec negotiation and selection procedures/ Ericsson

This is a CR against 24.008/ R99
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: We need to know how to implement the codec in the MS and the network according to the concept. Implementation guidance for the text were given. We need to clarify which cause to be used in clearing the call.

In the procedure definition the MS handling should be defined, a reference to a text in the document could help too.
5.3.3 It should be applicable to GSM and not UMTS.
Conclusion: Revised to **N1-000522,** which was not provided in the meeting.

Tdoc-N1-000537 Introduction of UMTS AMR/ Ericsson, Siemens, NTT DoCoMo

This is a CR against 24.008 /R99
Content: In R99, UMTS-AMR is the only codec type which is used in UMTS environment, it should be used as a default codec type in R99. ME and the network always assume that UMTS AMR is used/selected even if the ME and the network dose not indicate UMTS-AMR.
(Codec negotiation mechanism will be provided in the later release when another codec type is introduced.)
Discussion: When the BC is sent for UMTS speech call is not included, which is not a criteria for coding the MS. Mandatory issues all over the CR must be fixed.
Page 6 should be speech version 1. Page 8: AMR use should be used, and other comments were given to the originator.
What is the requirement for setting up a speech call for a single mode UMTS mobile? It needs to be added.
Conclusion: Revised to **N1-000554**, which is agreed.

Tdoc-N1-000550 Transcoder handling in the CN at inter-system handover and relocation/ Ericsson

This is a CR against 23.009
Content: Updates to 23.009 in order to introduce transcoder handling
Discussion:
Conclusion: Agreed

6.8 CC related Items

Tdoc-N1-000455 Clarification of reference to Q.931 for LLC IE/ Ericsson

CR against 24.008/ R99
Content: Due to backward compatibility problems related to the change of reference from ETS 300 102-1 to Q.931 for the LLC IE, clarifications need to be introduced.
Discussion:
Conclusion: Revised to **N1-000544** which was not provided in the meeting.

6.9 R99 PLMN Selection and EDGE

Tdoc-N1-000444 Support of 400 and 850 MHz bandE / Ericsson

This is a CR against 24.008/ R99.
Content: Inclusion of 400 and 850 MHz band in MS Radio Access Capability.
Discussion: It was a revised from a received LS in N1-000262.
The intention here is to give the radio capabilities of all bands.
Conclusion: Agreed, will be forwarded TSGN#7.

Tdoc-N1-000285 Modification of PLMN Selection Procedures to support UMTS/ Ericsson

This is a CR against 23.122/ R99.
Content: This CR conflicts with a similar CR for Work Item EDGE Compact. It will not be possible to agree both CRs. If both CRs are supported, then both concepts will need to be merged into a single combined CR.
Discussion: 4.4.3.1.1 contradiction in found which will be corrected. New technology on the SIM called access technology which has high priority.
The text need modification. GSM only text should move to a GSM only paragraph.
It is not clear how the MS could distinguish between CS voice and packet voice.

The MS should search all technologies for each step in 4.4.3.1.1
4.4.3.2.1 use of explicit list is a better approach.
Conclusion: Rejected, need to be merged with N1-000301.

Tdoc-N1-000301 EDGE COMPACT and support for EGPRS in ANSI-136 networks/ UWCC

This is a CR against 23.122/ R99.
Content: Changes introduced in S1 to GSM 22.011 included a terminology change from a "Network Type" to "Access Technology". Clarifications in Investigation scan chapter and corrections pointed out by CN1 #10.
Discussion: The intention of investigation scan that it is triggered after a successful registration.
We need to prioritise voice for high priority this is why we need the whole procedure. In automatic mode we are not making this choice.
Conclusion: Rejected.

Tdoc-N1-000303 Modification of PLMN Selection Procedures to support UMTS+COMPACT Network Selection/ Ericsson

Content: Modifications are required to 23.122 to support the requirements in the latest 22.011.
Discussion: Combination of N1-000301 and N1-000285.
Conclusion: Revised to **N1-000538**, which was rejected.

N1-000538 Modification of PLMN Selection Procedures to support UMTS+COMPACT Network Selection/ Ericsson

Content: Modifications are required to 23.122 to support the requirements in the latest 22.011
Merge between N1-000285 and N1-000301. Update of Tdoc N1-000303, according to comments from N1.
Assuming N1-000298 is agreed
Discussion: Stage 1 does not cover all requirements described in Stage2!!
Conclusion: Rejected, It would be considered as a R99 late CR when presented next time.

6.10 Other R99 Issues

Tdoc-N1-000512 Treatment of "Cause of No ID" National Specific Addition for Japan/ Nokia, Ericsson

This is a discussion paper.
Content: TTC the Japanese SDO is during the process of transposing 3GPP December release of specifications to TTC standards. It has been brought to our attention that, in this process, national specific additions are being introduced to the commonly agreed 3GPP specifications. As these additions impact TS 24.008 which is in the remit of TSG WG N1, attention of this group is required in evaluating the TTC solution.
This contribution also addresses a general concern on how regional SDOs adopting 3GPP specifications should treat national specific options
Since the deadline for the decision of the inclusion of this appendix in TTC procedure is Wednesday 1st of March, Ericsson and Nokia are kindly asking CN WG1 to study and evaluate the proposed solution and have an opinion on how to treat this issue prior to that.
Discussion: This evaluation has not been presented before to any 3 GPP group in all levels.
If any national or regional changes need to be done then please use new point code and do not use the same defined ones.
Roaming access in other countries will confuse the customers. Also how the cause values will be mapped with ISUP in Japan/ TTC and Europe/ITU for instance. This matter is to be discussed in S1 where it effects the requirements in general and also the Supplementary services.
MCC is easy to be known by the MS.
The is no mapping between TTC ISUP and ITU ISUP at the moment. They are totally different parameters.
Open question from BT: what happens to a UK MS roaming in Japan with CLIP feature and want to use it?

S do we want to do it as it is in the regional defined way in Japan or we want them to do it for their region only.
If we standardise the notification over the air part as general need to be agreed with S1 and its interaction with the existing SS. For N1, it would be possible and acceptable by the Japanese to do it.
Any principle which deviate from the global standard should be kept there.
Conclusion: Noted.
Conclusion by the chairman:

- If global 3GPP solution for regional additions such as Japanese indication of the reason for the lack of calling party BCD is standardised then it is S1 task to define the requirements.
- Additionally it was noted that N1 can not decide alone on this issue. As it is about supplementary service SS Ad-hoc should be involved in the discussion too.
- Shift lock codeset 5 to introduce new IE is favoured by the Japanese delegations to provide the service regionally.
- The regionally defined procedures make it more difficult to design global mobiles that would roam easily between the networks.
- N1 agreed the principle that when feasible the regional deviations from the global standard should be avoided.
- Whether the principle above would apply to this particular case could not be agreed by N1.
- TTC will be standardising the feature as part of Japanese regional standard at least for R99.

A global solution would be acceptable for the Japanese delegations if one can

Tdoc-N1-000516 Reintroduction of deleted arrow diagrams/ Ericsson, NTT COMWARE

This is a CR against 24.011/ R99.
Content: Two arrow diagrams and SMC-CP SDLs were removed from GSM 04.11 somewhere between version 5.x.x and 6.0.0. These are now reintroduced as they were never meant to be deleted
Discussion:
Conclusion: Agreed

Tdoc-N1-000296 Marking of ASCI descriptions/ Siemens AG

This is a CR against 24.008 / R99
Content: In UMTS the feature ASCI is not used. In the TS 24.008 you can still find descriptions concerning ASCI. To point out that ASCI is a GSM feature and only used in GSM all clauses regarding ASCI are marked.
Discussion: Wording is confusing.
Conclusion: Revised to **N1-000545**, which was agreed.

Tdoc-N1-000298 UMTS references in 23.122/ Nokia

This is a CR against 23.122 as a clean up.
Content: 23.122 was created as a spin-off of GSM 03.22 and consequently all references are dealing with the GSM world only. This CR introduces the appropriate references to UMTS specifications.
Discussion: Some GSM text is to be removed.
Conclusion: Revised to **N1-000546**, which was agreed.

Tdoc-N1-000513 Recall in Emergency call situation/ Nippon Telecommunications Consulting Co., Ltd/ NTT DoCoMo, Fujitsu, NEC, NTT Comware

This is a discussion paper.
Content: This topic originally has been discussed in TTC, because of the requirement originated in the domestic one. Yet during the TTC meeting, some opinion were arisen that this to be informed and discussed in 3GPP table to ask their opinion. From regulatory requirement, this function will be supported in all of the domestic operators.
In this paper we summarised Japanese domestic requirement. In this meeting, if approach is proposed and agreed we also would like to study it.
Discussion: Related to N1-000512.

The defined MM timer is too short to allow the recall by the Emergency call centre if the connection is released towards the MS, if the call is done without the SIM.
A longer timer for the release could be set to allow the radio bearer to be reused by the MT from the Emergency centre.
Conclusion: We need to standardise it in 3GPP. We need to study this feature and use the functionality of CCBS as guidance. For R00 it would be feasible to have it in 3GPP. Noted.

Tdoc-N1-000393 GPRS Advice of Charge/ Ericsson

This is a CR against 24.008/ R99/
Content: 3GPP CN2 WPA has finalised pre-paid signalling using CAMEL phase 3 in release 99. The gsm-SCF may send down e-parameters to the SGSN node. This contribution forwards the parameters to the MS from the SGSN node.
The gsm-SCF determines the tariff based on SGSN information received in Initial DP from SGSN on attach or PDP context activation. AoC information on the Attach/detach state machine or PDP context as defined by CAMEL phase 3 in 3G TS 23.078 may be sent down to SGSN on volume and/or time for the whole GPRS session and/or per PDP context.
Discussion: Some discussion about AoC charging level and its functionality was discussed. There is no support. Volume related charging is the issue here.
Stage 1 and 2 of AoC for UMTS, need to be updated.
Conclusion: Rejected.

6.11 TEI

Tdoc-N1-000355 Introduction of SAI IE to the Gs Interface/ NTT Communicationware

This is a discussion paper
Content: In LS N1-000023 from S2, S2 and R3 decided the introduction of Service Area Identity in UMTS instead of Cell Global Identity in GSM. N1 was requested to consider the impacts to the Gs interface. This contribution identifies a technical issue on this area and proposes a solution to that problem.
It is proposed that the solution 2-a shall be taken as the working assumption. The related CR against TS 29.018 is distributed as N1-000356.
Discussion: Quite few open questions need to be answered. We need some information from RAN.
Conclusion: Noted.

Tdoc-N1-000356 Introduction of the Service Area Identification/ NTT COMMUNICATIONWARE

This is a CR against 29.018 /R99
Content: In 3G network, Service Area Identity consists of LAI and SAC. It is used by Core Network to identify Service Area. For example Service Area Identity is included in initial UE message instead of CGI in 3G network.
When a VLR receives the BSSAP+-LOCATION UPDATE REQUEST message, the VLR identifies the new LA from the CGI IE in the message. In UMTS, the LAI part of the serving area identity where the MS is in the current radio contact may differ from the location area which the S-RNC informs to the SGSN. Considering those situations, the new IE for the service area shall be introduced in UMTS.
Discussion: See N1-000520
Conclusion: It was revised to **N1-000477**, which was revised to **N1-000520**, which was revised to **N1-000543**, which was agreed.

Tdoc-N1-000520 Introduction of the Service Area Identification/ NTT COMMUNICATIONWARE

This is a CR against 29.018/ R99
Content: In 3G network, Service Area Identity consists of LAI and SAC. It is used by Core Network to identify Service Area. For example Service Area Identity is included in initial UE message instead of CGI in 3G network.

When a VLR receives the BSSAP+-LOCATION UPDATE REQUEST message, the VLR identifies the new LA from the CGI IE in the message. In UMTS, the LAI part of the serving area identity where the MS is in the current radio contact may differ from the location area which the S-RNC informs to the SGSN. Considering those situations, the new IE for the service area shall be introduced in UMTS.

- What is the reply to the Mobile location information for UMTS in the MS_INFORMATION_RESPONSE has been clarified.
- -Editorial modifications are included.

Since the Direct Transfer Message has no Service Area Identity IE in TS 25.413v3.0.0, SGSN is unable to derive the current Service Area Identity in the case the MS is camping different area from the location area that the S-RNC is recognizing. See N1-000355) But the case would rarely happens, the assumption in this CR is that the SGSN sends old inaccurate SAI to the VLR.

Discussion: The ability of GSN to retrieve the current information of LA/ SA from the RNC for CAMAL application is necessary.

Retrieving info from RNC should be described in RANAP specification.

Conclusion: Revised to **N1-000543**, which is agreed.

Tdoc-N1-000357 Cleaning up the References/ NTT COMMUNICATIONWARE

This is a Cr against 24.011/ R99

Content: A Technical Specification clean up of referrences..

Discussion:

Conclusion: Agreed

Tdoc-N1-000373 Extended Transaction Identifier/ Siemens

This is a Cr against 24.008/ R99

Content: To increase the number of simultaneuos 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.

he extended TI has been introduced with the CRs 24.008 CR 089rev1,

24.008 CR 026rev2, and 24.007 CR 001rev5 as part of the "work package" CC related items.

The target of this CR is to get an uniform, structured and clear behaviour both for CC and SM. Following points are fixed:

The TI values TIO = 0 – 6 are supported both for SM and CC.

i) For CC no transaction with TI value > 6 can be established. All messages including a TI value from 7 –127 are ignored or in case of SETUP, EMERGENCY SETUP and START CC rejected by sending RELEASE COMPLETE containing the extension octet from the message that cause the rejection.

ii) For SM Ti values from 7 – 127 are supported. In principle 128 simultaneous MO and 128 simultaneous MT sessions are possible. However the maximum number of simultaneous sessions is limited by the NSAPI.

iii) For Ti values greater 127, i.e. bit 8 of octet 2 (EXT) is set to ´0´, both for CC and SM all received messages are ignored.

Discussion: No objections.

Conclusion: Agreed

Tdoc-N1-000384 Proposed acceleration of Emergency Call implementation/ NEC

This is a discussion paper

Content: On the N1#10 meeting held in Abiko Japan, N1 issued a Liaison Statement (Tdoc N1-000212) to ask S1 task to define whether service for roaming subscribers or flexibility to define operator specific emergency numbers should take higher priority. Upon S1 receiving the LS, S1 started to discuss the requirements for Emergency Call on S1#7 meeting held in Sophia Antipolis from 9 to 11 February 2000. This contribution proposes to accelerate to implement the Emergency Call on R99 specification.

We propose to implement the Emergency Call into R99 specification

Discussion: For R99 we could do it in GSM way, where S1 has not reached a decision yet, it is still under e-mail discussion. For R00 we could do it in a different way.

Conclusion: Noted, **N1-000385**, **N1-000387** are noted as well

Tdoc-N1-000386 Addition of called party BCD number in EMERGENCY SETUP message/ NEC

This is a CR against 24.008/ R98

Content: This CR is addition of Called party BCD Number in Emergency setup message. This solution is simple just increasing currently defined IE not need to define NEW IE. S1 required that it shall be possible to initiate emergency calls to different emergency centre. This functionality shall be included in the Release '99 standard.

Therefore, it should be added to Emergency setup message.

Discussion: See N1-000384.

Conclusion: Rejected.

Tdoc-N1-000400 Correction of static conditions for BC IE contents/ NTT DoCoMo

This is a CR against 24.008 / R99

Content: According to TS27.001 v3.3.0, octet 5b dose not have to be included for multimedia and PIAFS.

Discussion: It is alignment from stage 2 to stage 3 specs.

Conclusion: Agreed

Tdoc-N1-000454 Contribution on incompatibilities due to change of references for LLC from ETS 300 102-1 to Q.931

This is a discussion document.

Content: During the last meetings, it was decided to change all references towards ETS 300 102-1 (12/99) into references towards Q.931 (05/98). So far, TS 24.008 has been updated accordingly.

However, some inconsistencies, mainly backward compatibility problems related to the LLC, have not been taken into consideration so far.

This document reconsiders these issues and proposes to enhance the description in the above mentioned TS to avoid backward compatibility problems.

Discussion: Related to N1-000455

Conclusion: Noted.

Tdoc-N1-000456 Removal of X.25 for packet domain services/ Ericsson

This is a CR against 24.008 / R99

Content: The CR removes the possibility for X.25 related communication within the GPRS and UMTS packet domains. This is in accordance with a 3GPP decision for release 99. No backward compatibility issues are identified. (ie. a R99 MS and network will not request X.25 communication and a R99 network will reject X.25 requests from a pre-R99 MS supporting this feature)

Discussion: Needs LS out to be sent for the next meeting.

Conclusion: Agreed.

7 Release 2000

No input for this agenda item.

7.1 New R200 Work Item proposals

7.2 L3 Segmentation

7.3 TurboCharger

8 Output Liaison Statements

Tdoc-N1-000446 Question about Idle-mode DRX control/ Fujitsu

Sent to R2, Cc: R3

Content: N1 received liaison statement from R2 about DRX parameter [R2-00276]. N1 would like to ask R2 for the clarification about how "k", which is used to calculate the "DRX cycle length" is provided from the CN to the RAN. N1 would like to know if the value of "k" is only derived from broadcasting information as described in liaison, or other mechanism is also expected. In GSM, DRX related information is indicated from SGSN to BSC in paging and other messages of BSSGP. If R2 expects to receive "k" from CN node for each MS as in GSM GPRS, N1 needs to update "DRX parameter" IE in GMM message to adopt to UTRAN.

To complete the work in R99, N1 needs to receive the answer in N1#11 (from 28 Feb to 3 March). N1 expects very quick answer to this question.

[quotation from R2-00276 begin]

For the parameter "k" three different cases apply:

- for NAS paging "k" is CN specific and provided by the CN ("CN domain specific DRX cycle length coefficient" in System information,
- for AS paging "k" is either Cell specific and provided by the DRNC,
- or "k" is individually assigned to a UE and known by the SRNC.

[quotation end]

Discussion: We need to explicitly indicate that we have not agreed the CR.

Conclusion: The document is revised to **N1-000460**, which is agreed and sent during the meeting.

Tdoc-N1-000445 LS on reply to Liaison Statement on access signalling and mobile station behaviour for Multicall/ NTT COMMUNICATIONWARE

LS is sent to CN2, copied to Ss-ad-hoc, TSGN.

Content: TSG CN WG1 thanks TSG CN WG2 for their LS on access signalling and mobile station behaviour for Multicall.

N2 raised three concerns in N2-000016. N2 concerns and N1 answers are in the document:

Discussion: Add TSGN to the Cc.

Conclusion: Agreed

Tdoc-N1-000487 LS on RANAP Transaction Sequence/ Ericsson

LS is sent to R2 and R3.

Content: Since the submission of LS N1-000164 to RAN2 & RAN3 regarding the support of a NAS-PDU message to carry selected codec information, further discussions have been made in N1 to minimise the impacts to RANAP. We made the assumption that the CC message Selected Codec should be sent as a Direct Transfer message. As a result of these discussions a problem with current working assumptions in the RAN was discovered.

It is understood by N1 that there is a working assumption in RAN WG2 & RAN WG3 that Direct Transfer Messages can be handled by different Radio Link Control entities and with unequal priority. Further it is understood by N1 that if a Relocation Command is received, the RNC may suspend transmission of Direct Transfer messages and initiate the change of Radio Bearer. This would lead to a change in the order of the RANAP protocol messages sent from the CN and in intersystem handover or inter MSC handover to a loss of Direct Transfer messages.

Some specific cases where this behaviour causes problems are described in the document.

N1 requests that it is stated in the RANAP protocol that RANAP transactions are completed by the RNC in the sequence that they were received. SCCP is used on Iu to guarantee the protocol sequence integrity from the CN's call control. This should be maintained by the RNC to UE also.

This clarification would mean that prior to performing an RRC release or handover, all Direct Transfer messages received should have been successfully transmitted to the UE.

It should be noted that the CN will suspend Direct Transfer messages during Radio Bearer procedures, so it is not required that the RNC buffer separately further DTAP messages while ensuring those prior to the Radio Bearer procedure are executed.

N1 requests for a rapid response from RAN2 and 3 to be able to complete the work on codec negotiation during this week.
Discussion: Service integrity should be maintained was a comment.
Conclusion: Agreed and sent during the meeting.

Tdoc-N1-000493 Proposed LS on MS initiated signaling connection release/ Nokia

LS sent to R2, R3,.
Content: In some abnormal cases in the mobility management layer there is a need that the MS is able to abort the signaling connection with the CN domain with which the abnormal case occurred. These abnormal cases may happen when the MS is executing the location or the routing area updating procedure, and for some reason the lower layers are unable to deliver the MM or GMM messages.
Additionally, the MS should be able to request the release of the RR connection[1] or the PS signalling connection in some cases. However, it is not clear whether this is possible by the UTRAN protocols.
Discussion:
Conclusion: Agreed

Tdoc-N1-000447 2nd LS on the Transport of Codec Information during the Codec Negotiation between MS and MSC/ Siemens

This LS is sent to R2, R3, CN2B
Content: Since the CN1#10 meeting in January, CN1 continued the work on the downlink transport of codec information during codec negotiation between MS and MSC.
CN1 would like to inform RAN2, RAN3 and CN2B about the progress which has been achieved (see attached Tdoc N1-000517), and kindly asks these groups to take the necessary actions to implement the procedures agreed by CN1 in the respective specifications under their responsibility.
During the further refinement of the working assumptions which were communicated to RAN2, RAN3 and CN2 (Tdoc N1-000164) in January, it was necessary to modify the concept. Our main guideline for this was to achieve a better separation between CC and RR related signalling, and to reduce the amount of codec information which has to be transported by RANAP and RRC messages other than Direct Transfer messages as far as possible. We assume that this is also in the interest of RAN2 and RAN3.
CN1 kindly asks RAN2 and RAN3 for a rapid response to be able to complete the work on codec negotiation during this week.
Discussion:
Conclusion: Agreed and sent during the meeting.

Tdoc-N1-000518 LS on AMR modes & Supported Subflow Combinations/ Ericsson

This LS is sent to S4, R3, CN2B
Content: N1 requests that it is stated in the RAN technical specifications that the RNC shall initialize all subflow combinations requested by the MSC. In conjunction it should be stated that the MSC shall not request any SDU formats that the RNC cannot support.
N1 requests clarification from S4 on the relevance of the ICM in a downlink call control message to the MS. Due to time constraints for N1 to complete this WI by the end of this week, if no decision can be reached in S4, N1 will include the ICM in Selected Codec message sent in Direct Transfer to the MS. However this will be optional as described in TS 26.103.
Discussion: The MSC shall not request any SDU formats that the serving RNC cannot support
Conclusion: Agreed and sent during the meeting.

Tdoc-N1-000451 LS on TrFO Break procedure (N1-000264 & N1-000367)/Ericsson

[1] In 24.008, following terms have been defined:
- **RR connection:** A RR connection is a dedicated physical circuit switched domain connection used by the two RR or RRC peer entities to support the upper layers' exchange of information flows.
- **PS signalling connection** is a peer to peer UMTS connection between MS and CN packet domain node.

This is sent to N2B and copied to R3 and S4.
Content: This LS addresses LS's from N2B (N2-000012 & N2B-000387) regarding TrFO Break procedure. It is believed that the proposed solution has impacts on N1 specifications that should be considered.
The architecture presented shows the Iu interface being extended from RNC to RNC and not simply from RNC to MSC. This has impacts to the call control procedures performed by the MSC, especially with respect to the through connection of the bearer as described in N2B-000387. This would result in some impacts in TS 24.008.
The proposed solution introduces new control procedures from the MSC to RNC at certain service invocations. Although these procedures are proposed as RANAP protocol impacts, the call control entity will have impacts on how and when these procedures are executed and their interaction with CC protocol.
The proposed TrFO break procedure could result in loss of speech frames as bearers may need to be reconfigured & a new initialisation procedure is required. Extensive discussions have been performed within N1 to develop call control procedures for TrFO operation to minimise breaks in the speech connection due to handover and codec change. It is desired that our solutions should not be compromised by proposals made in N2B.
Conclusion: N1 believes these impacts have not been considered or coordinated with work ongoing in N1. Further it is believed that other solutions exist or are being developed (ITU framing protocols) to provide a secure TrFO that will support the call control situations where problems arise with the proposed use of Iu UP protocol within the network.
N1 is kindly asking N2B to give more considerations to the proposed architecture in N2-000012 in cooperation with the other affected working groups.
Discussion: Some comments from DoCoMo.
Conclusion: Rejected.

Tdoc-N1-000450 Response to LS on 5 or 6 digits IMSI HPLMN/ Ericsson
This is sent to SMG9, T3, T2 SWG1 (MExE)
Content: 3GPP N1 thanks the T2 SWG1 (MExE) for their LS (tdoc N1-000289) on 5 or 6 digits IMSI HPLMN.
N1 would like to support T2 SWG1 (MExE) view that maintaining a list of MCCs in the MS along with the number of digits for that MCC is not a very satisfactory solution.
Adding a new field on the USIM to indicate how many digits of the IMSI must be used to extract the PLMN seems like a good solution from a MExE perspective. This solution could also be useful to MS manufacturers as it may be used also for SIM Lock purposes. However N1 would like to add the following comments.
In summary N1 would like to support the proposal as it is likely that it may become useful in the future when the majority of SIMs/USIMs have the new field. However until this becomes true it is unlikely that N1 will be able to use the new field for N1 protocols.
Discussion:
Conclusion: Agreed.

Tdoc-N1-000511 LS to CN WG2B proposing a new Specification "Application Part (RANAP) on the E-interface"; 29.108/ Ericsson

This is a LS sent to N2b and copied to R3.
Content: TSG CN WG1 would like to inform TSG CN WG2B of the need for a new specification to describe RANAP for the E-interface used at intra UMTS inter-MSC (3G-3G) Relocation. The first draft version of this new TS is attached
(N1-000425) and TSG CN WG2B is hereby invited to take on the responsibility of this new TS.
The proposed new TS is based on the GSM 09.08 V.7.2.0. TS 23.009 under the responsibility of TSG CN WG1 should refer to both GSM 09.08 (BSSMAP on E interface), as well as to the new proposed TS (RANAP on E interface).
Discussion:
Conclusion: Agreed includes attachment N1-000435, **N1-000496** will not be included and it is up to the originator (Siemens) to take it to N2

Tdoc-N1-000515 LS on Length of QoS IE/ Ericsson

This LS is sent to N2 and copied to S2.

Content: 3GPP N1 has agreed the attached CR regarding the QoS IE. This done in order to optimise the bits used on the radio interface.

N1 is of the understanding that this may impact the GTP and MAP protocols as the QoS IE carried in these protocols may need updating in order to match the 24.008 IE. In particular N1 believes the QoS length will need updating in GTP and MAP.

N1 asks N2 to make the required changes to GTP and MAP in time for R99.

Discussion: Depending agreement on IE syntax.

Conclusion: Agreed with change of the attachment to 559 instead of 514.

Tdoc-N1-000541 3rd LS on the Transport of Codec Information during the Codec Negotiation between MS and MSC/ Siemens

Sent to RAN2, RAN3, CN2B

Content: CN1 has received the answer from RAN2 (R2-000545) to CN1's liaison statement on RANAP Transaction Sequence (N1-000487) and would like to thank RAN2 for their rapid response.

CN1 understands that with the services provided by a UTRAN in release 99, in-sequence delivery can only be guaranteed for Direct Transfer messages using the same SAPI, but not between Direct Transfer and other RRC signalling messages.

Please refer to the document.

Discussion: The requirement are only for R99 and this does not prevent from having addition requirements for R00 and on. Release the last paragraph.

Conclusion: Revised to **N1-000533,** which was agreed.

Tdoc-N1-000443 Response to LS on GPRS Terminal Support of Network Operation Modes I and II/Ericsson

This LS is sent to GSM Associaition.

Content: 3GPP N1 thanks the GSM Association for their LS (tdoc N1-000261) on GPRS Terminal Support of Network Operation Modes I and II.

In the incoming liaison, the question asked was "Will all Class C GPRS terminals support both Network Operation Modes II and III or will terminal manufacturers make devices which support only one of the modes?"

The N1 opinion was that it is a mandatory requirement for a GPRS mobile operating in GPRS MS operation mode C to support Network Modes of Operation I,II and III. A number of mobile manufacturers were present at the meeting, including Ericsson, Motorola, Nokia and Siemens. At least in the protocol entities for which N1 is responsible (MM, GMM) for GPRS MS operation mode C there are no differences in the behavior specified between Network Operation Modes I, II and III.

It should be noted that the term "class C" terminal has been superceded by "MS operation mode C". It may be possible for the MS operation mode to change; either as result of configuration by the user, or as a result of change of network mode of operation, or possibly for other reasons not defined.

However, once an MS is configured to operate GPRS MS operation mode C, this should not change as a result of change in network mode of operation.

Discussion:

Conclusion: Agreed

Tdoc-N1-000449 USIM triggered authentication and key setting during PS connections/ Vodafone Airtoch

This LS is sent to SA3 and copied to R2 and T3.

Content: CN1 thanks SA3 for their Liaison Statement on the above subject. The group discussed this subject, and concluded the following:

- In CN1's opinion, the need for this feature is not great, especially in comparison with other pressing security matters.
- The work required to support such a feature needs careful consideration and has a relatively large impact on the specifications under the group's control.

- If SA3 remain of the opinion that this feature should be implemented, then CN1 would be happy to consider it as a work item for Release 2000.

In summary, CN1 predict a considerable amount of work to implement the feature and do not feel they can do this work for Release 99. Doing so may have negative affects on more important issues.

Discussion:

Conclusion: Agreed

Tdoc-N1-000539 Reply to LS on "Introduction of rejection of non ciphered calls for GPRS"/ Siemens

Content: N1 thanks S3 for their LS on "Introduction of rejection of non ciphered calls for GPRS" (S3-00 0206). N1 has discussed the topic and came to the conclusion, that S3 is asking for the introduction of a complex new feature that requires work to be done by several TSG working groups, which should be covered by a separate new work item. N1 assumes that S3 would be the best group to initiate and control the work item.

As the R99 and all older releases are already functionally frozen N1 do not see a possibility that, at least for the needed changes to the specifications under its responsibility, caused by this requirement can be completed for R97, 98 or 99.

N1 see that changes to the specifications under its responsibility will be needed if a new R00 work item is approved.

N1 has also discussed the attached CR (S3-000058/ N1-000287) for 04.08/ R98/ GPRS with the result that this CR is rejected by N1.

Discussion:

Conclusion: Agreed

Tdoc-N1-000452 Response on Liaison statement concerning the change of title of 23.060/ Ericsson

This LS is sent to S2 and copied to S1.

Content: N1 wants to thank S2 for the Liaison statement concerning the change of title of 23.060 (Tdoc S2-000314).

N1 has in earlier meetings discussed and agreed on the terminology to be used within N1. The attached CR on TS 24.008 (N1-99D81) shows the terminology agreed. Changing the title of TS 23.060 is not in line with this.

N1 propose S2 not to change the title of TS 23.060 and instead consider adapting TS 23.060 to use the same terminology as agreed by N1.

Discussion:

Conclusion: Agreed

Tdoc-N1-000481 Liaison statement on the status of Multicall/ NTT DoCoMo

This LS is sent to CN, CN2, SSAdoc, and copied to SA1.

Content: CN WG1 discussed the remaining open issues identified by the Multicall Adhoc (17-18, Feb. 2000) at its #11 meeting (28th Feb. – 3rd Mar. 2000). Finally CN WG1 concluded that all remaining open issues related to CN WG1 were solved. The attachment indicates the brief description of the agreed documents.

Discussion:

Conclusion: Agreed

Tdoc-N1-000453 LS on N1 Working Status of the working plan on OoBTC in R99/ NTT-DoCoMo

This LS was sent to SA2, and copied to SA4, CN2, RAN2, RAN3.

Content: CN1 has received LS from S2 titled "Liaison statement on the working plan to complete OoBTC in R99 " (S2000285 = N1000414). S2 has responsibility to coordinate on this WI and asking each WG's the final working status. N1's tasks recognized in this working item is the procedure of down link codec notification. This LS reply N1' s final working status about this for R99.

In N1#11, it is agreed no codec negotiation mechanism is necessary in R99, because UMTS-AMR is the only applicable codec type in R99-UMTS system after intensive discussion and study.
N1 would like to reply to SA2 that we have completed requested task and this is N1's final working status on OBTC in R99. Additionally, N1 recognizes the study for comprehensive codec negotiation procedure when another codec types are introduced in later release.
Discussion:
Conclusion: agreed

Tdoc-N1-000542 Support of Idle-mode DRX control in GMM/ Fujitsu

This LS was sent to RAN2, RAN3.
Content: TSG-CN WG1 thanks for the liaison from TSG-RAN WG2 (R2-000576) and TSG-RAN WG3 (R3-000812) on Idle mode DRX control. The information given to N1 was sufficient to proceed work in N1.
The agreed CR to 24.008 for the support of configurable DRX cycle length for each MS is attached. TSG-CN WG1 kindly asks TSG-RAN WG2 and TSG-RAN WG3 for review.
Discussion:
Conclusion: Agreed.

9 Any other business

About 310 documents were presented in a busy meeting. It was a busy period / year for R99.

Closing of the meeting

The chairman thanked Telia for hosting the meeting it was a very organised meeting. The chairman thanked the delegates for the contribution and effort spent to finalise the R99. Thanked MCC for the support.
Social event was a lot of fun ☺ ☺

Annex A: List of documents


CN1-Tdoclist-11.doc

Annex B: Participants

To be provided

Annex E: Approved CRs in CN1#11

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0334	SGSN reaction upon a RAU request after VLR failure	29.018	Siemens AG/ Roland Gruber	GPRS	CR 003	2	A	R99	3.2.0	Revised from N1-99E00
0459	Timer control for GPRS detach	24.008	Siemens AG/ Roland Gruber	GPRS	CR 091	1	A	R99	3.2.1	Revised from 329,
0559	Compact coding of QoS IE	24.008	Ericsson/ Mark Fenton	QoS	CR 114	3	C	R99	3.2.1	Revised from 514
0534	Integrity checking of MM and GMM messages	24.008	Vodafone / Duncan Mills	Security	CR 118	3	C	R99	3.2.1	Revised from 476
0491	CR to 23.009 on Handover scenario for Multicall	23.009	NTT Comware/ Masahiro Kikuchi	Multicall	CR002	2	B	R99	3.1.0	CR has to be sent to N2, revised from 484, will be sent to N2 this week., need to be sent to the plenary
0395	Functional requirements for the use of RANAP over the E i/f	23.009	N2-B, N2B000320	GSM/ UMTS Interworking	CR003		B	R99	3.1.0	Related to N1-000374
0423	Procedures for 3G_MSC-B_HO	23.009	Ericsson/ Rouzbeh Farhoumand	GSM/UMTS Interw.	CR004		C	R99	3.1.0	
0492	Clarification on timing to release TCH	23.108	NTT COMWARE	Multicall	CR004		C	R99	3.1.0	Revised from 485

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0500	Support of high speed data in UMTS/UTRAN	23.034	Nokia / Timo Kauhanen	GSM / UMTS interworking	CR004	1	C	R99	3.1.1	Revised from 304
0516	Reintroduction of deleted arrow diagrams	24.011	NTT Comware/ Nobuyuki Uda	TEI	CR004	1	F	R99	3.2.0	Revised from 292
0546	UTMS references in 23.122	23.122/ TS	Nokia	TEI	CR004	1	D		3.1.1	TS, revised from 298
0434	Procedures for 3G_MSC-A_HO	23.009	Ericsson/ Rouzbeh Farhoumand	GSM/ UMTS interworking	CR005		C	R99	3.1.0	
0357	Cleaning up the References	24.011	NTT Comware/ Nobuyuki Uda	TEI	CR005 / TS	-	D	R99	3.1.0	TS
0390	Updating Session Management (SM) for R99	24.007	Ericsson/Mark	GSM/UMTS interw	CR006	1	C	R99	3.2.0	Revised from N1-000083
0436	Introduction of RANAP for intra-UMTS inter-MSC relocation	23.009	Ericsson/ Rouzbeh Farhoumand	GSM / UMTS interworking	CR006		C	R99	3.1.0	
0437	Clarifications of 3G_MSC-A and 3G_MSC-B roles	23.009	Ericsson/ Rouzbeh Farhoumand	GSM / UMTS interworking	CR007		A	R99	3.1.0	
0543	Introduction of the Service Area Identification	29.018	NTT Comware/ Nobuyuki Uda	TEI	CR007	3	B	R99	3.2.0	Revised from 520.
0550	Transcoder handling in the CN at inter-system handover and relocation	23.009	Ericsson/ Phil Hodges	Out of band transcoder	CR008	2	B	R99	3.1.0	Revised from 438, R001 never exist

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0365	Encoding of MS classmark in LUP Request	29.018	Siemens AG/ Robert Zaus	GPRS	CR009		F	R99	3.2.0	
0548	Addition of integrity protection feature	24.007	Vodafone AirTouch / Duncan Mills	Security	CR010	1	C	R99	3.2.0	Revised from 312
0489	Addition of the Stream Identifier Information Element	24.008	NTT Comware/Kazuo Mitamura	Multicall	CR032	10	B	R99	3.2.1	Though CR032r8 was approved in the last meeting, it have be revised according to the result of MC adhoc Revised from 385
0444	LS to TSG-CN1 regarding inclusion of 400 and 850 MHz band in MS Radio Access Capability. " Support of 400 and 850 MHz band"	24.008	SMG2	EDGE	CR049	4	B	R99	3.2.1	To: CN1, revised from 262 should be sent to TSGN#7
0525	Changes to support a circuit switched multimedia call	24.008	Nokia / Timo Kauhanen	Multimeda	CR097	3	B	R99	3.2.1	Revised from 418
0375	Clarification to the MS handling when receiving detach type 'IMSI detach'.	24.008	Ericsson/Per	GSM/UMTS interw	CR127		F	R99	3.2.1	Revised from??
0528	Proposal of classmark 1 and 2 for UMTS version2	24.008	Siemens/ Robert Zaus	MS classmark	CR129	2	F	R99	3.2.1	Revised from 372
0529	Proposal for network capability for UMTS	24.008	Siemens/ Robert Zaus	MS classmark	CR130	1	F	R99	3.2.1	Revised from 283
0373	Extended Transaction Identifier	24.008	Siemens/ Robert Zaus	TEI	CR131	1	F	R99	3.2.1	Revised from 284
0545	Marking ASCI descriptions	24.008	Siemens AG/ Robert Zaus	ASCI	CR133	1	D	R99	3.2.1	Revised from 296

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0526	Clarifying the presence of the Classmark 2 IE in the LOCATION UPDATE REQUEST message	24.008	Nokia	MS CM	CR134	1	C		3.2.1	
0501	BCIE changes to support high speed data in UMTS/UTRAN	24.008	Nokia / Timo Kauhanen	GSM / UMTS interworking	CR135	1	C	R99	3.2.1	Revised from 305
0457	Collision of network initiated Detach with the attach and RAU procedure	24.008	Siemens AG/ Roland Gruber	GPRS	CR139	1	A	R99	3.2.1	Revised from 320
0326	Conditions when to start the GMM timer T3321	24.008	Siemens AG/ Roland Gruber	GPRS	CR140		A	R99	3.2.1	
0330	SM IEI value	24.008	Siemens AG/ Roland Gruber	GSM / UMTS interworking	CR141		F	R99	3.2.1	
0503	Initial value for T3302	24.008	Siemens AG/ Roland Gruber	GSM / UMTS interworking	CR142	1	F	R99	3.2.1	Revised from 331.
0336	NAS System Information with T3312 included in the CS domain specific part	24.008	Ericsson/ Monica Wifves	GSM-UMTS interworking	CR144		C	R99	3.2.1	
0504	Intersystem change GSM <-> UMTS	24.008	Ericsson/ Monica Wifves	GSM-UMTS interworking	CR145	1	C	R99	3.2.1	Revised from 337
0505	Paging response in UMTS	24.008	Ericsson/ Monica Wifves	GSM-UMTS interworking	CR146	1	C	R99	3.2.1	Revised from 338

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0339	Corrections to Service Request procedure	24.008	Ericsson/ Monica Wifves	GSM-UMTS interworking	CR147		C	R99	3.2.1	
0563	Modification of MS Classmark 1 and 2	24.008	Ericsson/ Monica Wifves	MS Classmark	CR152	2	C	R99	3.2.1	Revised from 527
0475	Alignment of the AUTN and Authentication Failure Parameter length	24.008	NTT Software/ Takeshi Igarashi	Security	CR155	1	C	R99	3.2.1	Revision of 0347
0490	Multicall Information in Call Control Capability IE	24.008	Fujitsu/Fumihiko YOKOTA	Multicall	CR157	2	C	R99	3.2.1	Revised from 478
0507	Duplicated PDP context activation	24.008	Fujitsu/Fumihiko YOKOTA	UMTS / GSM interworking	CR158	1	C	R99	3.2.1	Revised from 351
0509	Presence of TFT IE in *Activate Secondary PDP Context Request*	24.008	Fujitsu/ Fumihiko YOKOTA	UMTS / GSM interworking	CR159	1	C	R99	3.2.1	Revised from 353
0354	Correction of length of TI	24.008	Fujitsu/ Fumihiko YOKOTA	UMTS / GSM interworking	CR160		D	R99	3.2.1	
0508	Deletion/modification of primary PDP context	24.008	Ericsson/Per	QoS	CR162	1	F	R99	3.2.1	Revised from 378
0536	Clarifications on the GMM Authentication procedure	24.008	Ericsson/ Monica Wifves	Security	CR163	1	F	R99	3.2.1	Revised from 379
0380	Handling of GPRS keys at intersystem change	24.008	Ericsson/ Monica Wifves	Security	CR164		F	R99	3.2.1	
0381	Handling of CS keys at intersystem change	24.008	Ericsson/ Monica Wifves	Security	CR165		F	R99	3.2.1	

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0551	DRX parameter for UMTS	24.008	Fujitsu/Fumihko YOKOTA	UMTS / GSM interworking	CR168	r2	C	R99	3.2.1	Revision of 523
0400	Correction of static conditions of BC IE contents	24.008	NTT DoCoMo	TEI	CR170		F	R99	3.2.1	
0562	Clarifications on the MM Authentication procedure	24.008	Ericsson/ Monica Wifves	Security	CR171	2	F	R99	3.2.1	Revised from 535
0474	Addition of cause value #25 'Pre-emption'	24.008	Nortel Networks/ Sonia Doshi	ASCI	CR177		A	R99	3.2.1	
0560	Introduction of NW CC Capability for Multicall	24.008	NTT Comware/ Nobuyuki Uda	Multicall	CR178	2	B	R99	3.2.1	Revised from 488
0554	Introduction of UMTS AMR	24.008	Ericsson/ NTT DoCoMo	OoBTC	CR180	1	B	R99	3.2.1	Revised from 537,
0456	Removal of X.25 for packet domain services	24.008	Ericsson/ Mark	TEI	CR181		C	R99	3.2.1	For 416
0561	Usage of cause code IE in network initiated detach	24.008	Siemens AG/ Roland Gruber	GPRS	CR182	2	A	R99	3.2.1	Revised from 458
0428	Data Flow for Fast Call setup	03.69	Nortel Networks/ STF139- Sonia Doshi	ASCI	CRA013		F	R97	6.1.0	
0426	VGCS Signalling Flows	03.68	STF139- Sonia Doshi	ASCI	CRA014		F	R97	6.1.0	
0465	Data Flow for Fast Call setup	03.69	Nortel Networks/ Sonia Doshi	ASCI	CRA014		A	R98	7.0.0	

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0427	Data Flow for Fast Call setup	03.68	Nortel Networks/ STF139- Sonia Doshi	ASCI	CRA015		F	R97	6.1.0	
0466	Data Flow for Fast Call setup	03.69	Nortel Networks/ Sonia Doshi	ASCI	CRA015		A	R99	8.0.0	
0461	VGCS Signalling Flows	03.68	Nortel Networks/ Sonia Doshi	ASCI	CRA016		A	R98	7.0.0	
0462	VGCS Signalling Flows	03.68	Nortel Networks/ Sonia Doshi	ASCI	CRA017		A	R99	8.0.0	
0430	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.69	Nortel Networks/ STF139- Sonia Doshi	ASCI	CRA018		F	R96	5.4.0	
0463	Data Flow for Fast Call setup	03.68	Nortel Networks/ Sonia Doshi	ASCI	CRA018		A	R98	7.0.0	
0464	Data Flow for Fast Call setup	03.68	Nortel Networks/ Sonia Doshi	ASCI	CRA019		A	R99	8.0.0	
0470	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.69	Nortel Networks/ Sonia Doshi	ASCI	CRA019		A	R97	6.2.0	
0471	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.69	Nortel Networks/ Sonia Doshi	ASCI	CRA020		A	R98	7.1.0	

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0429	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.68	Nortel Networks / STF139- Sonia Doshi	ASCI	CRA021		F	R96	5.4.1	
0472	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.69	Nortel Networks/ Sonia Doshi	ASCI	CRA021		A	R99	8.0.0	
0467	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.68	Nortel Networks / Sonia Doshi	ASCI	CRA022		A	R97	6.2.0	
0468	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the call'.	04.68	Nortel Networks / Sonia Doshi	ASCI	CRA023		A	R98	7.1.0	
0469	Addition of cause values: #16 for 'Normal clearing', #20 for 'Busy', #23 for 'user not originator of call' and #24 for 'network wants to maintain the	04.68	Nortel Networks / Sonia Doshi	ASCI	CRA024		A	R99	8.0.0	
0362	Correction of Gs Cause	09.18	Siemens AG/ Robert Zaus	GPRS	CRA043		F	R97	6.5.0	
0363	Correction of Gs Cause	09.18	Siemens AG/ Robert Zaus	GPRS	CRA044		F	R98	7.2.0	
0431	Addition of cause value #25 'Pre-emption'	04.08	Nortel Networks/ STF139- Sonia Doshi	ASCI	CRA1001		F	R97	6.7.0	
0494	GPRS detach type corrections	04.08	Siemens AG	GPRS	CRA1003		F	R97	6.7.0	Related to 457

Tdoc 3GPP N1-00	Title	Effected spec	Source/ Name	WI / Topic	Type/ CR	Rev	Cat.	Rel.	Version	Notes
0473	Addition of cause value #25 'Pre-emption'	04.08	Nortel Networks/ Sonia Doshi	ASCI	CRA1005		A	R98	7.4.0	
0495	GPRS detach type corrections	04.08	Siemens AG	GPRS	CRA1007		A	R98	7.4.0	Related to 457
0293	Explanation of octets in MS Classmark 1 IE (R97)	04.08	Ericsson/ MCC	MS Classmark	CRA985		F	R97	6.7.0	
0294	Explanation of octets in MS Classmark 1 IE (R98)	04.08	Ericsson/ MCC	MS Classmark	CRA987		F	R98	7.4.0	R99 is made available last meeting N1-000???
0547	Coding of RAB ID field	24.008	Fujitsu/ Fumihiko YOKOTA	UMTS / GSM interworkng	CR124	R4	B	R99	3.2.1	Revision to already approved CR, revised from 352, put in a separate file in the plenary

Annex F: Liaison Statements from CN1#11

Document number	Title	WI	Content	Sent during the meeting	To:	Cc:
N1-000403	Proposed LS on MS initiated signaling connection release	GSM-UMTS Interworking	LS out	No	3GPP TSG-RAN WG2, 3GPP TSG-RAN WG3	
N1-000443	Response to LS on GPRS Terminal Support of Network Operation Modes I and II	GPRS	LS out	No	GSM Association – IREG GPRSWP V. Chair Scott Bailey	3GPP S2, SMG2 WPA, "Friedhelm for info"
N1-000445	Draft LS on reply to Liaison Statement on access signalling and mobile station behaviour for Multicall	Multicall	LS out	Sent during the meeting	TSG CN WG2	TSG CN SS ad hoc, TSGN
N1-000446	Question about Idle -mode DRX control		LS out	No	TSG-RAN WG2	TSG-RAN WG3
N1-000447	2nd LS on the Transport of Codec Information during the Codec Negotiation between MS and MSC	OoBTC	LS out	Sent during the meeting	RAN2, RAN3, CN2B	
N1-000449	USIM triggered authentication and key setting during PS connections	Security	LS out	No	3GPP TSG SA WG3	3GPP TSG RAN WG2, 3GPP TSG T WG3
N1-000450	Response to LS on 5 or 6 digits IMSI HPLMN	USIM	LS out	No	SMG9, T3, T2 SWG1 (MExE)	
N1-000451	LS on TrFO Break procedure (N1-000264 & N1-000367)	OoBTC	LS out	No	N2B	RAN3, S4
N1-000452	Response on Liaison statement concerning the change of title of 23.060		LS out	Sent to Alain only	3GPP TSG SA WG2	3GPP TSG SA WG1
N1-000453	LS on N1 Working Status of the working plan on OoBTC in R99	OoBTC	LS out	No	TSG SA2	TSG - SA4, CN2, RAN2, RAN3
N1-000460	Question about Idle -mode DRX control	GPRS	LS out	No	TSG-RAN WG2	TSG-RAN WG3

N1-000481	Proposed LS on Open Issues on Multicall and Proposed Solutions Toward the open Issues	Multicall	LS out	No	TSG CN, TSG CN WG2, TSG CN SSAdoc	TSG SAWG1
N1-000487	LS on RANAP Transaction Sequence	OBTC	LS out	Sent during the meeting	RAN2, RAN3	
N1-000493	Proposed LS on MS initiated signaling connection release	GSM-UMTS Interworking	LS out	No	3GPP TSG-RAN WG2, 3GPP TSG-RAN WG3	
N1-000511	LS to CN WG2B proposing a new Specification "Application Part (RANAP) on the E-interface"; 29.108	GSM/UMTS interw	LS Out+ 435	No	CN WG2B	RAN WG3
N1-000515	LS to N2 on QoS IE length	QoS	LS out+ CR in N1-000559	No	3GPP N2	3GPP S2
N1-000518	LS on AMR modes & Supported Subflow Combinations	OoBTC	LS out	Sent during the meeting	RAN3, S4	N2B, RAN2
N1-000539	Reply to LS on "Introduction of rejection of non ciphered calls for GPRS"	GPRS	LS out	No	TSG-S3/SMG10	TSG-T2, SMG9
N1-000542	Support of Idle-mode DRX control in GMM	GSM UMTS Interw.	LS out + CR	No	TSG-RAN WG2, TSG-RAN WG3	
N1-000553	3rd LS on the Transport of Codec Information during the Codec Negotiation between MS and MSC	OoBTC	LS out/	No	RAN2, RAN3, CN2B	

Annex G: Specifications and reports for approval / information at TSGN#7

TR 23.972 Circuit Switched Multimedia Telephony.