3GPP TSG_CN   **Tdoc NP-000257**
Plenary Meeting #8, Dusseldorf, Germany
21st – 23rd June 2000.

3GPP TSG-CN-WG1, Meeting #12   *Draft Report V1.0   14.06.2000*
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Oahu/Hawaii, USA
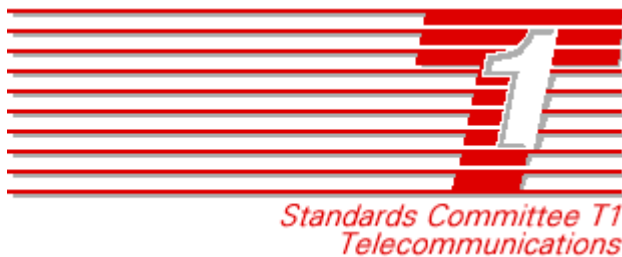
Report of the
3GPP TSG-N WG1 MM/CC/SM (UI) / Meeting #12
22-26 May 2000
Oahu/Hawaii - USA

Chairman: Hannu Hietalahti (Nokia), Hannu.hietalahti@nokia.com

Secretary: Ban Al-Bakri (3GPP-support team/ETSI)mailto:Ban.albakri@etsi.fr

Host: 3GPP Friends (T1P1)

Report of the Chairman   ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_12/Reports/Ihilani0005-ChairmanReport.rtf

Documents could be found on: ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_12/Documents

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0 Administrative Issues and meeting's highlights

- The chairman announced, after reaching the deadline for Vice-chairman candidate-ship, that no candidates other than Andrew Howell had been submitted, therefore Andrew Howell was applauded and congratulated for his position as the vice-chair for CN1 for the term of 2 years.
- PLMN selection ad-hoc to clarify the different views for how to proceed in this issue. RAN2 delegates are welcomed too. Other issues to be handled are codec and TrFO and issues in N1-00669. Also primitives to be matched between 23.011 and 24.007. The minutes of the meeting is extracted from the chairman report. It includes WA on PLMN selection according to the requirements from S1.
- A similar meeting will be held on Thursday to discuss speech coded issues as well as TrFo, and where to specify the primitives between RRC and MM layer 24.007, and 23.110. The results are in N1-000808.
- The originator/ rapporteur of 23.009 encourages the companies to review 23.009 where it had many changes recently.
- Terminology: response to S1 will be done among the rapporteurs, each for his document.
- ASCI R00 CRs are to be sent to SMG#32, and expect them to be forwarded to TSGN#8 with expecting WI description for R00 will be made available in TSGN#8..

1 Opening of the meeting

The chairman Hannu Hietalahti opened the meeting at 07:00am local time and welcomed the delegates in TSGN WG1 #12 meeting in Oaho-Hawaii. The meeting venue is in Ihailani Resorts & Spa, where it is an exotic place. Sonia Doshi welcomed the meeting attendee on behalf of the host "friends of 3GPP - T1 P1". She then passed the speech to the assistance Susan who took care of the logistics during the meetings. She gave us some logistics information.

The chairman mentioned that Voting will take place for the vice-chairman and he set a deadline of 2:00 p.m. for the last call for candidateship, if any other person than Andy Howell / Motorola would like to come to the campaign.

2 Approval of the agenda; document allocation and Reports

1. Opening of the meeting
2. Approval of the agenda, reports and documents allocation and Reports
3. Input Liaison statements
4. Maintenance of R98 and older releases
   4.1. Corrections
5. Work Plan for TSGN WG1 for 2000
   5.1. Election of TSGN1 Vice Chairman
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
   6.12. R99 Corrections

7. Release 2000
    7.1.   L3 Segmentation
    7.2.   TurboCharger
    7.3.   TEI
    7.4.   Other R00 issues
8. Output Liaison Statements
9. Any other business

The Agenda in N1-000567 is noted. It is followed by the updated Ihilani0005.rtf, which will be maintained through the meeting by the chairman and considered as the chairman report. At the same time, it shows document allocation.

Time slots were assigned, starting with the input liaison statements, ASCI on Thursday, PLMN selection early this week (first or second day). Report on TSGN#7 second day, R00 on Thursday. R99 open issues early this week.
Multicall we need to inform N4 about it so need to be treated urgently. The same applies for no CLI issue

The rapporteurs will check vocabulary document 21.905 to align them with our specs.
The contact person of the vocabulary document is Michele Zarri "michele.zarri@one2one.co.uk", delegate of S1.

Reports in Tdocs N1-000569 S2/CN1 meeting report, N1-000570 S2/CN meeting report, N1-000574 Draft meeting report v. 1.0.0. (3GPP Workshop on TrFO and TFO harmonization/ Stockholm, Sweden 8 May 2000), were shortly presented and noted.

Tdoc N1-000568 The chairman reported from the TSGN#8 plenary. He stressed the issues for CN1 WG. EUIC is R00 issue, which was agreed in TSGS#8.
Turbo charger and Layer 3 segmentations have no progress apart from the study, so TSGN#7 set a deadline the next plenary to decide if we withdraw these WIs or there is a progress to implement them.

3   Input Liaison statements

Tdoc N1-000576 LS on RRC Connection Re-establishment mechanism/ RAN2

This LS is sent to N1.

Presentation: 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: We will go to the direction proposed by R2, that SERVICE REQUEST resent timer and max resent counter should be added. No CR available yet.

Conclusion: LS out by Koshimizu san/ NTT DoCoMo in N1-000695.

Tdoc N1-000577 Correction for mobile stations staying in GMM READY virtually for ever/ SMG2

This LS is sent to N1.

Presentation: SMG2 WPA endorses the concerns expressed by Alcatel and Ericsson in Tdoc SMG2 753/00 (attached) about the management of the READY timer.

In summary, the release 97/98 GSM TS request the mobile station to restart its READY timer upon transmission of any UL LLC frame. In a dense cellular network, where mobile stations can be expected to change cell quite frequently, this behaviour means that the mobile station is likely to stay in GMM READY state much longer than indicated by the value of the READY timer. In some cases, the mobile station may stay in the GMM READY state virtually for ever.

At the light of the critical consequences it induces on the network and the mobile station (see Tdoc SMG2 753/00), SMG2 WPA considers that a correction is needed in the scope of release '99 to prevent mobile stations restarting the READY timer in certain conditions (e.g. cell update, routing area update).

SMG2 WPA kindly asks and thanks CN1 to draft a correction.

Discussion: Related to N1-000657 and N1-000648, CRs, which give the reply on this LS. R99 only changes because SMG2 propose the change of READY timer behaviour in order to save network resources and MS battery capacity for R99 only as their assumption. It is late to introduce changes for R97 and R98 where it is an optional feature. Ericsson supports this view.

Conclusion : LS out in N1-000696 by Ericsson/ Monica

Tdoc N1-000578 Introduction of 3G MS capabilities in MS Classmark 3 (Introduction of 3G MS capabilities in MS Classmark 3)/ SMG2WPA, SMG2

This LS is sent to N1.

Presentation: In order to allow handover from GSM to UMTS (or CDMA2000), the GSM BSC needs to know which 3G Radio Access Technologies (if any) are supported by the MS. This is used by the BSC to send the appropriate information on 3G Cells to monitor.

For this purpose, SMG2 WPA have technically agreed the enclosed CR on 24.008 entitled 'Introduction of 3G MS capabilities in MS Classmark 3', to introduce three bits to indicate UMTS Frequency Division Duplex (FDD) support, UMTS Time Division Duplex (TDD) support, and CDMA2000 support. This is Tdoc SMG2-00-792.

TSG CN WG1 are therefore kindly asked if they could approve the enclosed Change Request. TSGCN1 are also thanked for their help in this matter.

"The Network needs to know which 3G RAT are supported by the MS, if any, in order to include the appropriate information on 3G Neighbour Cell Description in the Enhanced Measurement Information Message"

Discussion: Old release of the spec is used to create the CR.

Proposal to add FDD, TDD, CDMA2000 radio technology indication to MS CM.
Some comments were given by the delegates and will be applied to the new CR revision.
Conclusion: Revised CR in N1-000697, and N1-000698 for LS out by Duncan/Vodafone AirToch.

Tdoc N1-000579 Reply to N1 on ACS and ICM (Active Codec Set and Initial Codec Mode for the Adaptive Multi Rate speech codec)/ S4

This LS is sent to N1.
Presentation: S4 thanks N1 for the clear description of the problems regarding ACS and ICM for the AMR.
S4 agrees with the proposed way forward.
In the view of S4 the ICM is not needed. It has already be removed from the TFO Protocol.
Discussion: Linked with N1-000588.
Conclusion: Noted.

Tdoc N1-000580 Response to LS (N1-99F55) on Maximum size of N-PDU/ CN3

This LS is sent to N1.
Presentation: TSG CN3 would like to thank TSG CN1 for their Liaison Statement on Maximum size of N-PDU. TSG CN3 has studied the increase of 1500 to 1502 octets for the PDP type PPP and has concluded that there is no impact on their specifications for the R reference point (27.060) and the Gi interface (29.061).
TSG CN3 have accepted that TSG SA2 may consider increasing the maximum N-PDU size for release 2000 or later releases and TSG CN3 will consider the impact on their specifications 27.060 and 29.061 at that time.
Discussion: No discussion.
Conclusion: Noted with no action to the LS

Tdoc N1-000581 LS on additional impacts on Q.931/ CN3

This LS is copied to N1.
Presentation: As Q.931 has currently assigned the meaning 'National use' to values 000000 through 000101, it is proposed to assign the meaning 'National use' also to values 000110 through 001101.
Discussion: No discussion.
Conclusion: Noted.

Tdoc N1-000582 LS on Service Modification without Pre-notification/ CN3

This LS is sent to N1.
Presentation: TSG_CN WG3 thanks TSG_CN WG1, TSG_T WG2 and TSG_CN WG4 for their collaboration for development of Service Modification without Pre-notification between speech and FAX and between speech and modem. On the SA1#6 meeting, S1 had issued LS (S1-991034) as a response for the LS from N3 (N3-99373) which asked service scenario and requirements of bearer modification without pre-notification. S1-991034 explained detail requirements on the candidates for bearer modification without pre-notification. Then, on the N3#8 meeting, N3 recognised that there is no technical difficulty to satisfy these requirements from N3 point of view. As a result, N3 published the work item description regarding this feature. In the work item description, N3 stated the possible impacts to the TSG_CN WG1, TSG_T WG2 and TSG_CN WG4. Basically, this feature treats the following two situations;
  1) Service situation-1
  Bearer Modification between Speech and FAX and between Speech and modem during no TrFO (Transcoder Free Operation)
  2) Service situation-2
  Bearer Modification between Speech and FAX and between Speech and modem during TrFO (Transcoder Free Operation)
TSG_CN WG3 asks **TSG_CN WG1** to develop UMTS TS 24.008, Mobile Radio Interface Layer 3 specification; Core Network Protocols-Stage 3 and UMTS TS23.108, Mobile radio interface layer 3 specification, Core Network Protocols - Stage 2 for Service situation-1.
Discussion: N3 is asking N1 to draft some Crs according to the proposed changes.

Conclusion :NTT DoCoMo prepared the related document in N1-000691. LS out by NTT DoCoMo/ Igarashi san in N1-000699.

Tdoc N1-000583 Response Liaison on new Specification "Application Part (RANAP) on the E-interface"; 29.108/ CN4

This LS is sent to N1.

Presentation: TSG CN WG4 agrees with TSG CN WG1 that the proposed new specification is indeed necessary. After reviewing the specification, however, it was determined that TSG CN WG4 is not the appropriate group to take responsibility of this document. Although TSG CN WG4 is responsible for the E-interface, our responsibility with regards to RANAP is to provide a mechanism in which RANAP messages can be carried over MAP. It is not the responsibility of TSG CN WG4 to determine which RANAP messages shall be sent using this mechanism. TSG CN WG4 believes that this new TS should be the responsibility of the working group which is responsible for RANAP, which is TSG RAN WG3

Discussion: N1 no action required.

Conclusion: Noted as well as N1-000596 (reply of R3).

Tdoc N1-000584 Response (to TSG-SA WG2, copy TSG-SA WG1, TSG-RAN WG3, TSG-CN WG1 and TSG-CN WG2) to LS (S2-000302) on RAB information and Lossless RNS relocation signalling/ R2

This LS is copied to N1.

Presentation: RAN WG2 would like to thank SA WG2 for their answer to the abovementioned LS (S2-000302, to TSG-RAN WG2, cc TSG-RAN WG3, TSG CN WG 1 & WG 2).

RAN WG2 would like to inform the relevant groups of the fact that RAN WG2 has decided on their meeting #11 to change the range of the PDCP Sequence Number to 0 to 65535. This leads to the need to transfer a 16-bit PDCP sequence number from source to target SRNS during the SRNS relocation procedure in those cases where lossless SRNS relocation has to be performed by PDCP.

RAN WG2 especially considered the suggestion from SA WG2 to keep the range of 0 to 255 but came to the conclusion that for high data rates this range may be insufficient.

Discussion: Reply in N1-000598 from S2.

Conclusion: Noted as well as N1-000598

Tdoc N1-000585 Response on LS (R3-000917) on Paging cause in UTRAN protocols/ R2

This LS is sent to N1.

Presentation: TSG RAN WG2 would like to inform TSG RAN WG3 and CN WG1 regarding the status of "Paging Cause" in RAN WG2.

The liaison from RAN WG3 regarding this issue was discussed and RAN WG2 concluded that the paging cause could not be entirely transparent to UTRAN. RAN WG2 would therefore prefer that the issue and associated CRs are postponed until future meeting where it will be further investigated.

Discussion: R3-000917 was sent to N1 but not received by N1, then it was introduced later in the meeting..

Conclusion: Noted

Tdoc N1-000586 Response to LS (N1-000493) on MS initiated signaling connection release/ R2

This LS is sent to N1.

Presentation: Currently, the RAN WG2 specifications do not allow the UE to request for the release of a signalling connection. Such a procedure can be added to the RRC specification 25.331.

The inclusion of UE initiated signalling connection release should be handled as described in the document.

Discussion: N1-000632 is a CR to cover this issue

Conclusion: Nokia / Hannu will write the answer in N1-000700 according to the output discussion on the CR in N1-000632

Tdoc N1-000587 Response to LS (N1-000542) on Support of Idle mode DRX control in GMM Proposed LS on idle mode DRX control in GMM/ R2

This LS is sent to N1.

Presentation: TSG-RAN WG2 thanks for the liaison statement from TSG-CN WG1 on Idle mode DRX control in GMM. TSG-RAN WG2 are grateful that TSG-CN WG1 has made the necessary changes in GMM.

TSG-RAN WG2 have some comments on the agreed CR to 24.008 for the support of configurable DRX cycle length for each MS, that TSG-RAN WG2 reviewed as asked by TSG-CN WG1.

1. TSG-RAN WG2 thinks it should be clarified that for the values e.g. the meaning of 0010 should not be coefficient number 2, it is the actual value of the coefficient that equals 2.

2. TSG-RAN WG2 also thinks the value 0000 should have the meaning that it is not specified in GMM/not signaled by GMM. This is because it is specified in the RRC protocol and is therefore not unspecified in any case. A proposed name could be "CN DRX control not applicable".

3. TSG-RAN WG2 would like TSG-CN WG1 to clarify what is meant with "UMTS RAN" that was included in the agreed CR. TSG-RAN WG2 have the assumption that this does not include GERAN.

4. TSG-RAN WG2 would also like get clarification if this idle mode DRX control only applies to GMM and not to MM.

Discussion: N1 action is needed. Related CR in N1-000616. Also related to N1-000594.

Conclusion: LS out in N1-000701 by Ericsson/Per.

Tdoc N1-000588 Response to LS (N1-000553) on Transport of Codec Information during the Codec Negotiation between UE and MSC/ R2

This LS is sent to N1.

Presentation: RAN2 thanks CN1 for the LS on Transport of Codec Information during the Codec Negotiation between MS and MSC (R2-000715, N1-000553). Discussing the LS, RAN2 has identified a need for more clarification and therefore asks CN1 to reconsider that issue.

If the UTRAN Release 99 does not support the Codec Negotiation, RAN2 sees a problem with respect to backward compatibility. If UTRAN Release 99 is not able to support Codec Negotiation, this may affect the support of UE's and MSC's of later releases, which supports the Codec Negotiation, especially in case of Handover.

RAN2 sees a need to solve the issue within Release 99. Therefore RAN2 feels that it would be helpful that CN1 could work further on Codec Negotiation.

Discussion: Siemens agree with RAN2 opinion, HO between GSM and UMTS, and R99 and R00 is an issue of codec change, which should be included to R99 RNC protocol - RANAP. It is not only a R00 problem.

Ericsson has a discussion on how to proceed, in N1-000636. We need a solution for compatibility

Conclusion: LS out in N1-000702 by Phil/ Ericsson.

Tdoc N1-000589 Response to LS (S1-000103) on UE/MS idle mode operation/ R2

This LS is sent to N1.

Presentation: Establishing priorities between PLMN selection, mode selection and cell selection

There was a common agreement that the PLMN selection should be performed prior to the mode selection and the cell selection, i.e. the PLMN is chosen first and, once the PLMN is selected, the choice of the mode has to be decided among the ones offered by the chosen PLMN. This second step is under the control of the selected operator.

The meeting agreed that PLMN selection can be decided by the user/application, but once the PLMN selected, the user only provides wishes of the requested services and has no capability to actually choose the serving cell nor the RAN.

This means that the UE should first select PLMN then choose cell according to that operator. The selection within that PLMN is based on radio criteria and not on RAT priorities.

This is also according to the current specification text in TS 25.304 " UE Procedures in Idle mode and Procedures for Cell Reselection in Connected Mode" v3.2.0 in section 5.2.

Discussion:

1-PLMN is chosen first

2- The mode is chosen within the selected PLMN (Radio Access technology and cell selection)

Other issues were discussed like:

-       As Multi radio mobilel needs time to scan the PLMN.

- To select the PLMN, the MS has to know the radio technology to be able to decode the PLMN! Linked with N1-000597 from S1 as output from S2 which is not exactly the same as R2 LS. See also N1-000624.

Conclusion: Noted, LS out in N1-000703 by Oliver/ Ericsson for N1-000589, N1-000624, and N1-000597.

Tdoc N1-000590 LS on coding of RAB ID/ R3- IU SWG

This LS is sent to N1.

Presentation: TSG RAN WG3 Iu SWG would like to inform R2 and N1 about the decision made in R3 Iu SWG on how the RAB ID is specified in RANAP. The RAB ID is now specified with references to Stream Identifier for CS domain and Network service access point identifier (NSAPI) for PS domain (24.008).

With this LS, R3 kindly asks R2 to refer to 25.413 (RANAP) for the coding of RAB ID in 25.331.

With this LS, R3 kindly asks N1 to remove the coding of NAS Binding Information (specified with CR N1-000211) from 24.008.

Since Stream Identifier and Network service access point identifier (NSAPI) in 24.008 are defined with the maximum length of 8 bits, the RAB ID in RANAP is changed to be 8 bits instead of the 16 bits (2 octets) used previously for the NAS Binding Information.

Discussion: We do not need an action from N1

Conclusion: Noted

Tdoc N1-000591 Response to N1 Liaison Statement "Question about Idle-mode DRX control"/ R3- Iu SWG

This LS is sent to N1.

Presentation: Please refer to the document.

Discussion: The issue was handled in Umea

Conclusion: Withdrawn.

Tdoc N1-000592 LS on timing between RAB Assignment Response and user data/ R3

This LS is sent to N1.

Presentation: TSG RAN WG3 would like to have the view from SA2 and CN1 regarding the possibility that user data can be received in SGSN from the RNC prior to receiving the RAB Assignment Response message.

In the normal case of RAB establishment it is assumed that the user plane connection needs to be available only after the completion of the RAB Assignment procedure, i.e. user data will not arrive in the SGSN prior to receiving the RAB Assignment Response message.

In the case of re-establishment of a RAB it is, however, unclear to RAN3 if the SGSN must be prepared to receive uplink user data before the RAB Assignment Response message has been received. RAN3 would thus like to have this clarified.

RAN3 would also like to have it confirmed that no service acceptance message is used in the case of re-establishment of a RAB.

Discussion: No action from N1.

Conclusion: Noted.

Tdoc N1-000593 Response Liaison to SA4 on Harmonization of TFO and TrFO/ R3

This LS is sent to N1.

Presentation: RAN WG3 would like to thank SA4 for their liaison on Harmonisation of TFO and TrFO (S4-000159). RAN WG3 recognises differences of views and assumptions between various 3GPP groups on Core Network and UTRAN aspects regarding codec control and selection. In addition, RAN WG3 had not enough time to make decision on technical solutions to various problems arising with TrFO support in the call scenarios stressed in the N2 liaison and attachments (R3-000700).

RAN WG3 is in favour of a joint meeting with SA4 and N2. But due to the nature of the issues to be addressed, RAN WG3 believes that such a meeting should include not only the interested parties of SA4 and N2, but also of N1 and S2. Indeed, harmonisation between TFO and TrFO being one item of co-ordination between these groups, core networks and backhaul networks architectural and signalling aspects

place requirements on the realisation of TrFO over RAN WG3 interfaces such as Iu User Plane and also over other 3GPP groups interfaces.

RAN WG3 believes that such a joint meeting or rather a workshop should be organised by SA2. The responsibility of the interfaces involved in the various TrFO call scenarios lies beyond 3GPP (e.g. ITU) and therefore SA2 seems to be the only group with the right mandate to interact with external SDOs, if need be.
Discussion: A joint meeting in between solved the issues.
Conclusion: Noted

Tdoc N1-000594 Respond to LS "Support of Idle-mode DRX control in GMM"/ R3

This LS is sent to N1.
Presentation: TSG-RAN WG3 thanks for Liaison Statement from TSG-CN WG1 (N1-000542) on support of idle-mode DRX control. We reviewed the attached CR to 24.008 for the support of configurable DRX cycle length for each MS, it has been clarified that the DRX cycle length coefficient is corresponding to parameter k as defined in 25.331, and it was also clarified that the CR is in line with 25.413 version 3.1.0.
Discussion: We need to check the CR first N1-000616. Related to N1-000587.
Conclusion: LS out in by Ericsson in N1-000701/Per

Tdoc N1-000595 LS to N1 on including the SAI into the Gs-i/f BSSAP+-LOCATION-UPDATE-REQUEST message as requested in N1-000543./ R3

This LS is sent to N1.
Presentation: RAN WG3 would like to ask CN WG1 to reconsider their changes made within N1-000543 (i.e. consider the usage of *LAI* IE given in the DIRECT TRANSFER/INITIAL UE MESSAGE instead, since it gives the actually required information for storage in the VLR) and to inform RAN WG3 of their, possibly changed position on that issue.
Discussion: There is proposed answer from Uda san/ NTT- Commware.
Conclusion: LS out is already prepared in N1-000639

Tdoc N1-000596 Response LS to N4 on new specification 29.108 "Application of the Radio Access Network Application Part (RANAP) on the E-interface"/ R3

This LS is copied to N1.
Presentation: RAN WG3 received the LS from CN WG4 (N4-000084 resp. R3-001014) on the new specification TS 29.108 and would like to inform them, that we decided to take over the responsibility for it.
We already produced an updated version, attached to this LS.
We plan to send this TS to RAN#8 for approval and therefore kindly ask CN WG4 to send comments on it before the next RAN WG3 meeting (22-26 May 2000).
Discussion: See N1-000583.
Conclusion: Noted

Tdoc N1-000597 LS on UE/MS idle mode operation/ S1

This LS is sent to N1.
Presentation: Please refer to the document.
Discussion: There is no relation between the 2 PLMNS which belongs to the same operator which are defined by different codes as stated by France Telecom. This change is too late for R99 and should be studied for R00.
Related to N1-000624 and N1-000589.
Conclusion: Post till the CR in N1-000630 is handled, Ls out in N1-000703 by Oliver / Ericsson.

Tdoc N1-000598 Liaison statement on RAB information and Lossless RNS relocation signalling/ S2

This LS is copied to N1.
Presentation: Please refer to the document.
Discussion: Response to LS in N1-000584.
Conclusion: Noted

Tdoc N1-000599 LS on UE triggered authentication and key agreement during connections/ S3

This LS is sent to N1.

Presentation: It is required to correct a potential weakness in the key lifetime control mechanism so that the authentication and key agreement procedure can be triggered by the UE during a connection if the maximum permitted hyperframe counter value is reached.

Discussion: It is a R00 task and we need to define it as Feature/BB/WT in S3.

Conclusion: WI description will be co-ordinated with S3 IGC - Security Chris Pudney/ Vodafone AirTouch contacted by Duncan from N1. WI is to be presented to TSG#8. LS out in N1-000709 by Duncan / Vodafone AirTouch .

Tdoc N1-000600 Reply to LS on Requirements for Network Selection/ T1

This LS is sent to N1.

Presentation: T1 thanks both S1 and N1 for bringing the Requirements for Network Selection (S1-991056) to their attention.

Due to resource limitations, it is felt by T1 that it will not be possible to include further test cases, to cover these new requirements, in the release 99 documents.

T1 would however welcome relevant contributions from the member companies who feel that test coverage of these issues in release 99 is important.

Discussion: Companies are invited to supply any contribution if found needed.

Conclusion: Noted

Tdoc N1-000601 Liaison statement on usage of terms GSM, UMTS and GERAN/ S1

This LS is sent to N1.

Presentation: Definition Synchronisation between TSGs. Please refer to the document. Refer to Tdoc 21.905.

Discussion: A proposal for CR in N1-000631/ Nokia, and N1-000694/ Ericson.

Conclusion: LS out in N1-000710 by Hannu/ Nokia.

Tdoc N1-000602 Modem type code points/ SPAN5

This LS is sent to N1.

Presentation: Please refer to the document.

Discussion: N1-000610 is a related document. It is meant to be for N3, it is reply for N1-000581.

Conclusion: Noted, forward to N3.

Tdoc N1-000611 Request for feedback on TR22.976 Study on Release 2000 services and capabilities/ S1 Release 2000 adhoc

This LS is sent to all TSG WGs

Presentation : As requested by TSG-SA#7, the TSG-S1 Release 2000 adhoc is forwarding its *TR22.976 Study on Release 2000 services and capabilities* to your Working Group, which will soon be formally presented to TSG-SA#8 for approval.

TR22.976 identifies the Release 2000 services requirements. The report identifies the high level vision of Release 2000, the high level requirements, the Release 2000 services, support of IP multimedia services, applicability of existing toolkits, and roaming and handover requirements.

Your Working Group is invited to review the contents of the TR. It is then intended to generate changes to the TSG-S1 22-series specifications (i.e. Stage 1's) for Release 2000 based on the contents of the TR.

The TSG-S1 Release 2000 adhoc group thanks you for your co-operation.

Discussion: A walk through was suggested but no experts in this document. So we will collect comments if any.

Conclusion: Noted

Tdoc N1-000612 Call control between the UE and CSCF within the R00 architecture/ S2-CN1 joint meeting

This LS is sent to N1.

Presentation: TSG S2/N1 joint group has been discussing the call control issues for use between the UE and CSCF of the R00 architecture. Following the discussion the joint group has made the following decision:

'For MultiMedia type services delivered via the PS Domain within the R00 architecture, a single call control protocol shall be used between the user equipment UE and the CSCF.'

The TSG S2/N1 joint group has made the following working assumption:

'The single protocol applied between the UE and the CSCF (over the Gm reference point) within the R00 architecture will be based on SIP.'

The changes have been proposed for the report 23.821'Architecture principles for Release 2000' to reflect these decisions, are defined in the document.

Discussion: Work has to be done in Stage 2 and we need to contribute to it. 23.821 will be updated by S2. We will see more of this subject in the future.

Conclusion: Noted, for information.

Tdoc N1-000613 S2-CN1 joint meeting/ T2- SWG3 MMS adHoc

This LS is sent to N1.

Presentation: The T2 SWG 3 MMS adHoc group is currently discussing terminal capability negotiation. An important part of this negotiation includes the knowledge of existing codecs (audio, image and/or video) in the terminal. In conjunction to this discussion, a few questions arose that we would be happy if they could be answered.

1. Is there an existing scheme to support reporting / negotiation of terminal capabilities?
2. Is there some signalling that includes what codecs that are supported in the terminal? In that case, where is this signalling and the content of the messages specified?
3. What kind of information is included in the UMTS terminal classmarks?
4. When are the UMTS terminal classmarks sent and to what entity in the network?

T2 SWG 3 eagerly awaits the answer on these questions before our next meeting in Utrecht, 15-19 May.

Discussion: If it is Multimedia then SIP is the CC protocol used in R00. For CS it is R99 feature where the signalling is already defined in N1.

Conclusion: LS out in N1-000712 by Edgar/ Telia answering the questions.

Tdoc N1-000621 LS on the introduction of a user controlled switch of the priority of the user and operator preferred PLMN list/ S1

This LS is sent to N1.

Presentation: For the process on network selection for the 3G system an additional preferred PLMN list was introduced and the order in which these "user controlled PLMN selector" list and "operator controlled PLMN selector" list are handled by the UE is defined in TS22.011.

TSG S1 decided to give the user the possibility to decide on the order these lists are handled by the UE. If no information is available then the "user controlled PLMN selector" list should have priority over the "operator controlled PLMN selector" list. Therefore the attached CR Tdoc SP-000244 was approved.

TSG S1 kindly ask N1, T2 and T3 to analyse the impact of this CR on their specifications.

Furthermore it is pointed out that the "user controlled PLMN selector list" as well as the switch on the user controlled priority for the PLMN selector lists shall only be modified by the user i.e. toolkits planned to be used over air interface shall not have possibility to change this information.

"Possibility for the user to select the priority of "User controlled PLMN selector" and "Operator controlled PLMN selector"

Discussion: If the user list is empty then the MS will not look into the operator list, where it should look into the operator list in this case. This was the reason to originate this CR. The user needs explicitly to set the MS to use the operator list.

Mandatory to the mobile to go automatically to the operator list in case of user list is empty is suggested.

We will make the proposal and if S1 agrees then we align our 23.011 in accordance.

The wording in the proposal is not an improvement to the situation and it is an unnecessary change and put more burdens on the mobile user.

It seems as if it has an effect only if the 2 lists are empty?

Dieter/ T-Mobil will check it with the originator in S1.

It is for R99 therefore USIM is impacted too where it is late to write such CRs now.

Conclusion :LS out in N1-000713 by Oliver/ Ericsson

We need to stop this Cr 22.011 in the Plenary in case we find it not correct.
This CR is approved in SP-000244.

Tdoc N1-000622 Deletion of PDP types X.25 and OSP/ S1

This LS is sent to N1.

Presentation: Please refer to the document.

Discussion: No action in this meeting

Conclusion: Noted.

Tdoc N1-000623 Liaison statement on Global "Cause of no ID"/ S1

This LS is sent to N1.

Presentation: Following four cases of no calling party number available are informed at Japan.

- ➢ Unavailable   In case of the service is unavailable.
- ➢ User rejection   In case of user does not wish to indicate his number.
- ➢ Interaction with other services   In case of service interaction.
- ➢ Coin line   In case of a coin line/payphone call.

It must be possible to indicate the coin line simultaneously with the other indications.

A CR to 22.081 was considered at S1, but it was postponed as the detailed text has dependencies on stage 2/3 solutions. In order to finalise the whole task by next the set of plenaries for release 1999, S1 invites CN1 and CN4 to provide information on their solution as soon as possible to allow S1 to finalise the relevant CR's to Stage 1 and approve them via email procedure.

Discussion: CR drafting process is ongoing by different companies and will be available to N1 and N4 meetings. We need to report back on our decisions to S1 and N4. Related to Crs in N1-000673 and N1-000674

Conclusion: LS out in N1-000714 to reflect the output of the CR principles in N1-000673 and N1-000674. N4 and S1 should be informed.

Tdoc N1-000624 LS on PLMN selection/ S1

This LS is sent to N1.

Presentation: Please refer to the document.

Discussion: Please refer to N1-000589.

Conclusion: Noted.

Tdoc N1-000625 Liaison statement on hexadecimal IMEI format/ S1

This LS is sent to N1.

Presentation: S1 received the attached contribution to change IMEI format. S1 would like other WGs and GSM association to study the proposal and comment.

Change of the coding is proposed for release 2000. S1 asks the WGs to consider if this late proposal for R99 would be possible so that all the UMTS terminals could use this coding from the beginning.

Given the strong reliance on the interoperability with legacy products no change to IMEI length or structure is considered feasible. In contrast, the coding format of the Serial Number is proposed to be modified.

- ▪ Instead using BCD, a hexadecimal code format is proposed. It would offer a capacity of 16.7 Million units manufactured with one Type Approval Code.
- ▪ TAC would set a trigger for interpretation (Network would identify from which TAC number onwards a serial number would be interpreted as binary presentation)

This proposal will require modifications to network management system for both installed and new (GSM and 3G). But no modifications to existing Rel '99 signalling is foreseen.

Change of coding is proposed for release 2000. However, change should be considered already for release 1999 in order to allow new IME coding in all 3G terminals.

Attached to the document is a CR to 22.016 for Release 2000" Change of IMEI coding from decimal format to hexadecimal".

Discussion: Backward compatibility is a problem of the hex coding, therefore we need a mechanism for handling a 3G mobile roaming in a 2G network!

CN revision level is needed to identify the MS - IMEI Hex-Coding.

A date for the deployment of this feature is to be set for all operators to support. It should also have a backward compatibility. It could also be as stand alone feature. It should be mandatory for R00. For R99 should be optional or applied after a certain date. Siemens expressed this opinion.

Dummy IMEI is not good for fraud protection. S3 should decide on that.

Proposal to change at least the SNR part of the IMEI from BCD to hex coding for R00 to increase the maximum length of terminal production series using single TAC and FAC.

Conclusion: LS out in N1-000715 by Hannu/ Nokia

Tdoc N1-000690 GPRS ciphering/ S3

This LS was sent to N1

Presentation: Please refer to the document.

Discussion:

Conclusion: Noted, LS out in N1-000778 by Monica / Ericsson

Tdoc N1-000752 LS on Service Modification without Pre-notification/ T2

This LS was copied to N1.

Presentation: T2 thanks N3 for their LS in T2-000185; N3-000195 on Service Modification without Pre-notification, and the request "TSG_CN WG3 asks TSG _T WG2 to develop UMTS TS 27.007, AT command set for 3GPP User Equipment"

T2 notes the request for additional work in the T2 area, which T2 is happy to complete as soon as we receive a proposal from interested companies.

Discussion:

Conclusion: Noted

Tdoc N1-000753 LS on Race conditions avoidance/ N4

This LS was sent to N1

Presentation: CN4 would like to inform CN1 and SA2 of a correction of the PDP context Delete procedure (see attached CR 29.060 -105 in Tdoc N4-000258), since this may impact SM part 24.008 handled by CN1 and procedure definitions included in 23.060 handled in SA2 .

Discussion: It seems CR will be needed. Please study the LS.

Conclusion: Noted

Tdoc N1-000754 LS response on Service Modification without Pre-notification/ N4

This LS was copied to N1

Presentation: N4 thanks N3 for the LS related to the development of Service Modification without Pre-notification between speech and FAX and between speech and modem. As indicated in N3 LS N3-000195, TSG_CN WG4 recognised the needs to study the impacts to the UMTS TS 23.153 Out of band Transcoder Control Stage2.

TSG_CN WG4 would like to inform to TSG_CN WG3 that the Service Modification without Pre-notification between speech and FAX and between speech and modem feature would be properly treated in our development of Out of band Transcoder Control feature with the time scales specified in WI (N3-000198).

Discussion: For information

Conclusion: Noted

Tdoc N1-000776 LS about hexadecimal coding of IMEI/ S3

This was sent to N1.

Presentation: The current IMEI message structure is proposed to be changed to allow use of hexadecimal coding in addition of current BCD. The change is proposed in 3GPP TSG-CN,TSG-S, TSG-T and TSG-R to allow 16.7 million mobile terminals to be produced with one Type Approval Code - Final Assembly Code combination.

In the transition time there is a backward compatibility problem. Indeed, the mobile may have a new format IMEI which is not accepted (or understood) by the network.

S3 has studied the issue of IMEI change from BCD to hexadecimal. No security problems have been identified provided that the following guidelines are adopted. The important matter is to ensure uniqueness of all IMEIs throughout the transition process to allow continuous operation of all existing and new security-related procedures, e.g. for lawful interception and blacklisting purposes. In particular, no default IMEI shall be used.

- The new format IMEI is included in R99 and later release specifications (for both GSM and 3G systems). On the other hand, a suitable date must be agreed upon, to allow enough time for all networks to be updated to accept the new format IMEI values. It is suggested that the exact date should be agreed between the TSG plenary level and the GSM Association.
- Prior to this date no terminal can have an IMEI with genuine hexadecimal symbols.
- After the date IMEIs with genuine hexadecimal symbols can be used in terminals.

Discussion: Mandatory for R99 for both GSM and UMTS, and no fall back in the specification. Related to N1-000627

Conclusion: Noted and no LS will be sent out to S3.

Tdoc N1-000777 LS on Paging cause in UTRAN protocols/ R3

This LS was sent to CN1

Presentation: R3 has recently discussed the provision of an explicit "paging cause" in the paging messages defined in RANAP protocol. Currently, this cause (which is also seen by RRC in the paging message) may have the following values:

- speech call,
- CS data call,
- PS data call,
- SMS

Based on those values, the impression of R3 is that this paging cause is not needed by UTRAN and should be passed transparently from CN to UE in the paging message, in order to keep AS and NAS independence. Therefore, and if it is confirmed that the "paging cause" is actually needed by the UE, it should not be seen as such by UTRAN, but rather as "NAS transparent information".

If R2 and N1 agree on following these principles, the specifications need to be updated as indicated below, before RAN#7:

- in R2: replacement of "paging cause" by a "transparent NAS paging information" in the RRC protocol (25.331)
- in N1: definition of the content of "transparent NAS paging information", possibly using the causes listed above, or any other N1 would require
- in R3: replacement of "paging cause" by a "transparent NAS paging information" in the RANAP protocol (25.413)

Discussion: A response is already considered on this subject in N1-000585

Conclusion: Noted

Tdoc N1-000800 Proposal of exchange of the terms "in GSM" and "in UMTS"/ SA2, and Tdoc N1-000801 GPRS connection set up by SIM to create a channel between SIM and the end point destination/ T3

Both are sent to N1 and were late arrivals.

Conclusion: Noted. Will be provided in the next meeting and for information in this meeting

Tdoc N1-000802 Answer to LS on Removal of Service Accept/ S2

This LS was sent to N1.

Presentation: S2 has received the LS in N1-000758 as S2-001039.

S2 believe that there is a need to rapidly agree a consistent set of R'99 specifications. 'Reversing' the recent changes to 23.060 is unlikely to be possible prior to the June TSG meetings. This is one reason for S2 to suggest that the stage 3 specification should be aligned with the stage 2 description.

At a more technical level, S2 observe that restoring the Service Accept message may add complexity and might not lead to clean protocol layering.

This is because, currently, 23.060 shows that Service Request messages are always answered by RRC messages triggering inter-layer primitives within the mobile. CN1's alternative proposal would mean that some Service Request messages (ie those with type = 'signalling') <u>require</u> RRC messages (ie Security Mode Command) and inter-layer primitives in the mobile while other Service Request messages (ie those with type = 'data') will be answered with a GMM message.

Hence S2 see problems in re-introducing the Service Accept message.

S2 request CN1 to consider if they can agree a change based on the CR in N1-000646. Hopefully this can be achieved by CN1 prior to the June TSG meetings.

Discussion: Was disussed and considered with N1-000806.

Conclusion: Noted, Ls out in N1-000806.

4   Maintenance of R98 and older releases

4.1   Corrections

Tdoc N1-000618 Network initiated DETACH REQUEST sent unciphered/ Ericsson

This is a CR against 04.08 R97 - GPRS

Presentation: After a restart of the SGSN, all info about the MS is lost, including ciphering parameters (Kc, IOV, LFN, OC, ref. LLC spec 04.64).

When the SGSN receives something (eg SMS, payload traffic or some GMM msgs.) from the MS (which still believes that SGSN is not restarted), the SGSN will respond with LLC XID Reset (which will reset IOV-UI, LFN and OC). After a new IOV-UI is negotiated, the DETACH REQUEST with request of re-attach should be sent from the SGSN. This DETACH REQUEST msg. must be sent unciphered since ciphering key (Kc) is lost. According to 04.08, section 4.7.1.2 this conflicts since DETACH REQUEST is not allowed to be sent unciphered.

The problem with existing solution is that the MSes are not notified of the SGSN restart until the MS sends a periodic ROUTING AREA UPDATE REQUEST (which may take several minutes, upto max value of periodic update). The SGSN should then reply with RAU REJECT (cause: implicit detach). This message is allowed to be sent unciphered.

Consequences if network initiated DETACH REQUEST msg. can not be sent unciphered is that an MS (until roaming, periodic RAU or Attach) will loose data without being notified.

This CR provides faster re-attach of the MS after a SGSN restart, but only when the MS has a transaction. So none or less packets sent over the radio interface are discarded by a restarted SGSN. The cost of this solution is reduced security towards fraud networks.

If the principles are agreed the CR to R98 can be done during N1#12 meeting. For R99 the SGSN restart probably requires a different CR, for N1#13?

Discussion: The chairman asked if it is really necessary to make the changes to R97 and R98? BT supported the change. This will not be compatible with R99 anyway, but it is necessary for R98, R97.

The MS will check the downlink message first to know if it is ciphered or not and according to that it will react.

S3 should be informed.

Motorola reject to accept changes to R97.

Conclusion: Rejected

Tdoc N1-000687, N1-000688, N1-000689 Clarification on local and foreign TLLI management/ Alcatel

These CRs against 04.08 R97, R98 and 24.008 R99 - GPRS

Presentation: GSM 03.60, section 6.5, deals with TLLI management in the MS as follows:

"At the RLC/MAC layer, the MS shall identify itself with a Local or Foreign TLLI if the MS is already GPRS-attached and is performing an IMSI attach. Otherwise, the MS shall identify itself with a Foreign TLLI, or a Random TLLI if a valid P-TMSI is not available. The Foreign or Random TLLI is used as an identifier during the attach procedure until a new P-TMSI is allocated."

Also, GSM 03.60, section 14.3 indicates:

"If the MS has a valid P-TMSI associated with the RA where the MS is currently located, then the MS shall use a Local TLLI derived from its P-TMSI, unless the MS performs a GPRS attach.

If the MS does not have a valid P-TMSI associated with the current RA, or if the MS performs a GPRS attach, then it shall derive a Foreign TLLI from its P-TMSI, or allocate a Random TLLI if no valid P-TMSI is available."

A local TLLI is then only valid in the RA associated with the P-TMSI.

GSM 04.08, section 4.7.1.4 is inconsistent with this description because it only deals with the ATTACH REQUEST (respectively ROUTING AREA UPDATE REQUEST) message and do not refer to the Attach (respectively Routing Area Update) procedure as a whole. Therefore, some MS may send any other message during these procedures (as Authentication and Ciphering Response or Identity Response) with a local TLLI and may wait for messages on local TLLI, which may cause some collision cases. To prevent this, this CR tries to clarify the TLLI handling described in GSM 04.08 during the Attach or during the Routing Area Update procedure when a foreign TLLI shall be used.

Discussion: It seems necessary for R97 and R98 as well as R99.

It is a rare case, but possible to happen. More time is required to read it carefully. There is no objection to the principle but it needs more discussion.

Conclusion: Revised to **N1-000760**, **N1-000761** and **N1-000762** respectively.

They are presented and all are agreed.

Tdoc N1-000723 Operation of the GPRS READY timer at Cell Update/ Ericsson

This is a discussion paper related to N1-000724 till N1-000735

Presentation: please refer to the document.

Discussion: From Chairman's report: Analysis that due to frequent cell updates in dense network the MS may stay in READY state consuming network resources much longer than indicated by the READY timer.

- It was agreed that it is now too late to change R97 or R98 for this. R99 can be considered.
- No objection against the principle in R99.
- In order to work at all the feature must be made mandatory from R99 onwards.

Conclusion: Noted

Tdoc N1-000729/ N1-000728/ N1-000727 Change of the GMM Ready Timer behaviour/ Ericsson - Siemens

This is a CR against 24.008/ R99, 04.08 R98 and R97.

Presentation: The MS/SGSN shall restart the GMM READY timer at transmission/reception of any LLC frame, including an LLC frame without an information field transmitted in order to perform cell update.

If the user is travelling around in an urban area, where the cell size is small, the READY timer will be restarted, even if there is no active user-data transmission. Thus, the MS and SGSN will remain in GMM ready state for considerably longer than is necessary, and the MS will continue to perform cell updates.

Frequent cell updates will lead to:

increase of network load;

waste of radio resources;

Significant increase of MS battery consumption, due to increased signalling and time spent in non-DRX mode.

In order to overcome this problem, it is proposed to introduce an optional cell update procedure where the READY timer will not be started if the LLC frame transmitted (by the MS)/received (by the SGSN) contains a cell update.

This proposed change is optional for both the network and the MS.

The proposed solution introduces a "Cell Update Option" into MS and SGSN . The possibility to use the Cell Update Option will be indicated by the network and may be used by the MS.The cell update will be performed by an additional LLC frame (NULL frame) which is only allowed to send by the MS if the network indicates the Cell Update Option. *Notification of Support for Cell Update Option*

A new, optional information element is introduced into the ATTACH ACCEPT and ROUTING AREA UPDATE ACCEPT message to indicate the ability of the network to support the Cell Update Option.

Thus, both MS and SGSN know if the other entity supports the Cell Update Option.

If both the MS and SGSN support the Cell Update Option, and the ATTACH ACCEPT message (ROUTING AREA UPDATE ACCEPT message) contains a new value of the READY timer, the MS shall

send any LLC frame except the LLC NULL frame in order to start the READY timer. (In the current specification, the MS sends a cell update to start the READY timer, but this of course will not work if the Cell Update Option is supported since cell update will not cause the READY timer to be started.)

Behaviour at Cell Update

A LLC NULL frame is introduced at the GMM layer. If both the MS and SGSN support the Cell Update Option, an MS shall transmit the LLC NULL frame in order to indicate a cell change to the network. The MS shall not start the READY timer as a result of transmitting the LLC NULL frame. Similarly, the SGSN shall not start the READY timer as a result of receiving the LLC NULL frame.

An MS shall not transmit a LLC NULL frame as a response to paging for PS services.

If the MS does not support the Cell Update Option but the SGSN indicates the ability to support them then the behaviour at cell update remains as currently specified.
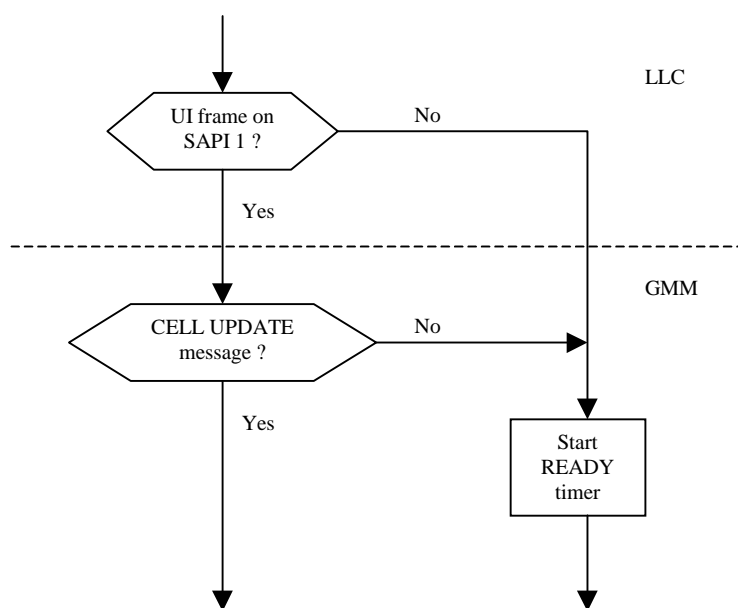
Discussion: The support of cell Update should be mandatory encoded for R99, therefore it is better to say it explicitly instead of having it hidden. Therefore, in the first paragraph requirements on the core network is required.

The cover page says it is optional!

Motorola does not support changes to R97 and R98. BT agrees with it adding it has to be mandatory for R99.

Ericsson's opinion that it needs to make it optional to R97 and R98 and make it up to the manufacturer to implement it or not. This was rejected in the meeting.

If the network and network support cell update are optional, then the procedure and label need to be clarified in the specification.

Conclusion: N1-000729 was revised to N1-000764, N1-000728 and N1-000727 are rejected.

Tdoc N1-000764, leave the text in its normative part without restricting it to R99 Mobile for the cell notification. It should be written in a way without mentioning R99. So it is revised to **N1-000791**, which is agreed

Tdoc N1-000726 Change of the GMM Ready Timer behaviour/ Ericsson - Siemens

This is a CR against 24.007/R99

Presentation: The MS/SGSN shall restart the GMM READY timer at transmission/reception of any LLC frame, including an LLC frame without an information field transmitted in order to perform cell update.

If the user is travelling around in an urban area, where the cell size is small, the READY timer will be restarted, even if there is no active user-data transmission. Thus, the MS and SGSN will remain in GMM ready state for considerably longer than is necessary, and the MS will continue to perform cell updates.

Frequent cell updates will lead to:

increase of network load;

waste of radio resources;

significant increase of MS battery consumption, due to increased signalling and time spent in non-DRX mode.

In order to overcome this problem, it is proposed to introduce an optional cell update procedure where the READY timer will not be started if the LLC frame transmitted (by the MS)/received (by the SGSN) contains a cell update.

This proposed change is optional for both the network and the MS.

Discussion: Normal cell update is untouched

Conclusion: Revised to N1-000763. Other releases are rejected **N1-000725**/R98 and **N1-000724**/R97.

Tdoc N1-000763 was presented and agreed.

Tdoc N1-000735 Change of the Cell update procedure/ Siemens - Ericsson

This is a CR against 04.64/ R99

Presentation: The MS/SGSN shall restart the GMM READY timer at transmission/reception of any LLC frame, including an LLC frame without an information field transmitted in order to perform cell update.

If the user is travelling around in an urban area, where the cell size is small, the READY timer will be restarted, even if there is no active user-data transmission. Thus, the MS and SGSN will remain in GMM ready state for considerably longer than is necessary, and the MS will continue to perform cell updates.

Frequent cell updates will lead to:

- increase of network load;
- waste of radio resources;
- Significant increase of MS battery consumption, due to increased signalling and time spent in non-DRX mode.

In order to overcome this problem, it is proposed to introduce an optional cell update procedure where the READY timer will not be started if the LLC frame transmitted (by the MS)/received (by the SGSN) contains a cell update.

This proposed change is optional for both the network and the MS

Discussion: The addition of primitives in this document is not supported. All should be covered in 24.008.

Conclusion: Revised to N1-000766. Other releases **N1-000734**/R98, **N1-000733**/R97 are rejected.

Tdoc N1-000766 was presented and cell selection should be corrected, revised to **N1-000792**, which was agreed.

Tdoc N1-000732 Change of the Cell update procedure/ Ericsson - Siemens

This is a CR against 23.060/ R99

Presentation: The MS/SGSN shall restart the GMM READY timer at transmission/reception of any LLC frame, including an LLC frame without an information field transmitted in order to perform cell update.

If the user is travelling around in an urban area, where the cell size is small, the READY timer will be restarted, even if there is no active user-data transmission. Thus, the MS and SGSN will remain in GMM ready state for considerably longer than is necessary, and the MS will continue to perform cell updates.

Frequent cell updates will lead to:

- increase of network load;
- waste of radio resources;
- significant increase of MS battery consumption, due to increased signalling and time spent in non-DRX mode.

In order to overcome this problem, it is proposed to introduce an optional cell update procedure where the READY timer will not be started if the LLC frame transmitted (by the MS)/received (by the SGSN) contains a cell update.

This proposed change is optional for both the network and the MS.

Discussion: Addition of "support of this feature is mandatory" is required.

Procedure change should be added to the text.

Conclusion: Revised to N1-000766. Other releases in **N1-000730**/R98, **N1-000731**/R97 are rejected.

N1-000765 was presented and discussed**,** which is revised to N1-000793.

5   Work Plan for TSGN WG1 for 2000

Tdoc N1-000571 List of specs/ Rapporteurs/ MCC
Presentation: It is a list of specification under CN1/SMG3WPA responsibility.
Discussion: New rapporteurs were assigned.
Conclusion: Revised to **N1-000718**, which is noted.

Tdoc N1-000575 Open Issues for Release 99 List/ S2 - MCC
Presentation: List of R99 status reflecting the open issues as well as the completed WIs.
Discussion: Walk though the document was done by the chairman and the CN1 related WIs/ issues were discussed.

Mobile Number Portability	Complete
3G Location Services (LCS) (Geographic)	Open
MultiCall	Complete
High Speed Circuit Data (general Bearer services is complete)	Complete
SMS	Complete
Enhanced User Confidentiality	SA agreed to be postponed to be R00.
Authentication Failure message report	does not apply anymore
Tandem-Free for AMR	No comment!
Charging Issues	the chair wondered if N1 need to do something
Layer 3 Segmentation	will be deleted if no input
Turbocharger	will be deleted if no input
Real Time Fax	agreed to be postponed to R00
Vocabulary	Rapporteurs are invited to align the specification with 21.905.

Please inform the Chairman if anything is to be added to the list.
Conclusion: The list was updated to current status.
Further updates should be provided to the rapporteurs of IGCs. Noted.

Tdoc N1-000572 Proposal for the Release 2000 Features, Building Blocks and Work Tasks/ IGC
Presentation : This document proposes the 3GPP **Work Plan for Release 2000**. It describes the complete set of *R00 work items* and classify them as *feature, building block* and *work task:* a *feature* is subdivided into *building blocks* and a *building block* is subdivided into *work tasks* (definitions are given bellow).
This tree structure is established to ease the monitoring of the 3GPP work progress for R00, and to make explicit the purpose of the work assigned to one WG in the global system.
The aim of this Work Plan is to lead in a consistent way the activities of the full 3GPP community for the Release 2000.
Discussion:

IGC	Convenor	convenor's e-mail address
1. **Bearer and Access Stratum**	*François Courau*, Alcatel	francois.courau@alcatel.fr
2. **QoS**	*Oscar Lopez-Torres*, T-Mobil	Oscar.Lopez@t-mobil.de N1: Takashi Koshimizu / NTT DoCoMo
3. **CC and roaming**	*Ulrich Dropmann,* Siemens	Ulrich.Dropmann@icn.siemens.de N1: Richard Brooke / Lucent
4. **Codecs**	*Ian Doig,*	IANDOIG1@email.mot.com

		Motorola	N1:Andrew Howell / Motorola
5.	**Messaging**	*Martin Guntermann,* Mannesmann Mobilfunk	Martin.guntermann@d2mannesmann.de
6.	**Terminal local features**	*Paul Voskar,* Nokia	Paul.voskar@nokia.com
7.	**Service platforms**	*Christophe Gourraud,* Ericsson	christophe.gourraud@lmc.ericsson.se
8.	**Security**	*Chris Pudney,* Vodafone-Airtouch	chris.pudney@vf.vodafone.co.uk N1: Duncan Mills / Vodafone Airtouch
9.	**Billing, charging and management**	*Yukio Hiramatsu,* NTT	hiramatu@MAGNET.NETLAB.NTT.CO.JP
10.	**Testing**	*N.N.,* Motorola	by interim teuvo.jarvela@nokia.com
11.	**Location related issues**	*Jan Kall,* Nokia	jan.kall@nokia.com N1: Janne Muhonen / Nokia
12.	**Overall Co-ordination and general issues**	*Alain Sultan,* ETSI/MCC	alain.sultan@etsi.fr N1: Ban Al-Bakri

IGC: QoS:

> **Feature**: Real Time QoS for packet services including VoIP
>> **BB**: HOs: maintenance of real-time QoS while moving between cells in the PLMN including inter-SGSN change and SRNS relocation or possibly other mechanisms
>> **BB**: End-to-end/UMTS reservation and (re-)negotiation of QoS parameters (S2 writes WI Desc): N1: on GPRS GMM and SM aspects, N1 changes the date to August.

IGC: Call Control and Roaming:

> **Feature**: Provisioning of IP-based multimedia services
> **S1 WI** proposed S1-000290
> **TR22.976,** WI Rapporteur, Mark Cataldo, Motorola:
>> **BB: Call control and roaming to support IP-based multimedia services in UMTS**

It was proposed to have one WI which covers all N1 related WTs in this BB

>>> **WT:** Architecture and Stage 2 *80% complete in TSGS #8 21.-23.6.2000*
>>> Approved **S2 WI** in SP-000150.
>>> WI Rapporteur Liz Daniel, Lucent
>>> **S2, N1, N3, N4:** Stage 2 description
>>> Issues include e.g.:
>>> - Mobile IP
>>> - RAB selection principles
>>> - Optimized VoIP bearer mechanisms
>>> - SIP multimedia protocol
>>> **TR23.821**
>>> N1- review of 23.821 where they have second responsibility after S2 for the architecture.
>>> **WT: N1, S2:** SIP Call Control protocol over Gm reference point (CSCF – UE) *Dec.*
>>> WI to be defined probably by N1. It will be drafted and proposed by E-mail before the joint meeting in June. Lucent/ Richard would like to contribute.
>>> **WT: N1,S3**: SIP Call Control security *Dec.*
>>> [to be reviewed with security area], is it signalling or which part of security?
>>> **WT: N1**: SIP Call Control SS, Gm IF *Dec*
>>> Which SS are supported ?
>>> **WT: N1, N4:** Multimedia Network capabilities, e.g. CC version, Protocol version, etc. *Dec*

WT: N1, N3,(S1 for requirements): Interworking with other multimedia protocols *Dec.*
- Legacy systems (e.g., H.323, 3GH.324/M, H.320, H.248)
- PSTN
- GSM PLMN

(Should be extensible to other protocols)

OK

BB: Emergency call enhancements

N1 to define WI

WI description should be drafted for the joint meeting, will be done by Rouzbeh/ Ericsson

Timing for S1 N1 and N4 is still missing. For N1 deadline is proposed to be August.

SIM will be involved so propose adding T3.

If we get 80% stage 2 ready in sept, then N1 could have 80% of stage 3 ready in Dec.? where it is still a critical task.

Add a new WT for N1 to make responsible for Stage 3 for PS and CS emergency calls, it should be decided who would take care of it (NN).

Security and Qos , it is up to us to define our responsibility.

BB: Roaming support within and between IP Multi-media network and CS Domain networks

N1 is not involved. There might be impact on PLMN selection? Needs to be clarified.

Feature: Circuit-switched multimedia services

BB: Circuit-switched multimedia swap and fallback

WT: N1: call control and signalling aspects *Dec*

Feature: Facsimile

BB: Real Time FaxPostponed from R99 to R00, **SP-000169**

Feature: Bearer Modification without pre-notification

BB: Bearer Modification without pre-notification between Speech and modem

WI NEC- to be co-ordinated whether N1 or N3 who will be responsible for the WI. It should be provided by June meeting.

Feature: Optimisation of signalling

BB: Turbocharger; Proposal from N1 to delete the WI

BB: Layer 3 Segmentation; Proposal from N1 to delete the WI

IGC: Codec

Feature: Wideband Telephony Service

BB: WB AMR Implementation in CN

Add N1 work task which is responsible for the
- Indication of supported codecs by the MS
- Bearer Capability negotiation
- Codec indication to MS

Feature: Transcoder-Free Operation (TrFO)

BB: OoBTC

"Assumption for R99: As there is only one Codec, AMR, this does not need to be signalled". This assumption is subject to change by TSGN #8.

BB: TrFO specification

No comments.

IGC: Security

Feature: Protection for user plane data

BB: Network wide encryption of user plane

What will N1 do the authentication procedure.

BB: [Study on the evolution of GSM CS algorithms]

Difficult t identify CN1 work where it is only a study

Feature: [GEA 2]

N1: GEA capability indication in MS CM

Feature: Ability of terminal/USIM to reject unencrypted "calls"

BB: CS domain issues N1 is involved.

Feature: Enhanced User Identity Confidentiality

N1:

- Procedures using encrypted IMSI
- Response to paging with non-encrypted IMSI (roaming)

Some editorial changes were done.

Feature: Security features to support IP-based multimedia services in UMTS

BB: Access network security (encyrption, integrity, authentication)

N1- need to do some work:

- Integrity protection
- Authentication

BB: Lawful intercept

N1-deleted, as it has no work to do with this BB

IGC: Location related issue

Feature: Support of Localized Service Area (SoLSA)

What is the status of this R00 work item?

Should not be on the bilding block level but feature level.

Lucent had the information that this feature is not valid anymore, as in S1

Feature: Location Services

No N1 work has been identified.

Approved WI in Plenaries does not stop us from discussing the WIs.

Documents will be updated and we will get feed back.

Conclusion: Revised with the comments to **N1-000782**, which was agreed.

5.1 Election of TSGN1 Vice Chairman

Andrew Howell from Motorola was elected vice chairman of TSGN1.

6 Release 99

6.1 Multicall

Tdoc N1-000638 CR to 23.009 on Handover scenario for Multicall/ NTT COMWARE, Ericsson

This is a CR against 23.009

Presentation : In current 23.009, handover procedures for only one or no bearer are specified.

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

- ➢ Clarification when to release residual RABs and calls, that has been raised in CN#7.
- ➢ Removal of the text in subclause 8.3.1 agreed in CN#7 (N2B000320/N1-000395) because this CR provides more detailed description in a dedicated subclause covering the original texts.
- ➢ Addition of text in subclause 8.1.3.1.2 and 8.1.3.2.2 which describes need for notifying Selected RAB ID to 3G_MSC-A from 3G_MSC-B in the subsequent handover from UMTS to GSM case.

Some editorial improvement was made.

Discussion: No comments.

Conclusion: Agreed, It has to be sent to N4 for shared responsibility.

Tdoc N1-000641 Clarifications for the description of Multicall/ Ericsson

This is a CR against 24.008

Presentation: This CR proposes the following changes to the Multicall supplementary service procedures:

1- To emphasis on that Multicall supplementary service is only for UMTS. However from the mobile station point of view, it should have a common MS CC for GSM and UMTS.

2- The behaviours of the network and the mobile station that do not support Multicall should be specified more clearly.

3- According to multicall related specifications (TS 24.008, TS 23.135 and TS 24.135), the stream identifier (SI) value is always set to '1' when there is no other ongoing call. However the standard should not specify a particular value.

Discussion: Is it applicable to GSM or UMTS or both? From protocol point of view how would we handle it? If we use a label to limit it to UMTS, then many other paragraphs to be updated.

BT added that TSGN#7 decided to have it optional in the core network.

Siemens questioned the change of SI value not to make it"1". It was decided before in N1 and now we are changing what was agreed.

Conclusion: Revised to **N1-000717**, which was withdrawn.

Tdoc N1-000781 R99 N1 Work Item Status: Multicall/ NTT Comware

This is R99 WI status sheet.

Presentation: N1 Work Item Status for Multicall

Discussion: Shows completion of N1 work for the Multicall issues in R99.

Conclusion: Agreed. It will be presented to TSGN#8

6.2   Multimedia call

Tdoc N1-000633 Applicability of multimedia to GSM/ Ericsson

This is a CR against 24.008/ R99

Presentation: As Multimedia shall also be applicable for GSM, the multimedia specific point codes that were previously reserved for UMTS use shall also apply for GSM. This change is in line with the N3 decision on multimedia (agreed Tdoc N3-000152).

Discussion: Special error treatment is removed from the spec.

Conclusion: Agreed.

6.3   GSM / UMTS interworking

Tdoc N1-000607 Clean-up of 3G_MSC-A_HO SDLs/ Telelogic, Ericsson

This is a CR against 23.009

Presentation : General clean-up:

Sheet 4: Branch 4 is joined to branch 3 AFTER "Reset T502".

Sheet 12: Branch 4 is joined to branch 3 AFTER "Reset T702".

Sheet 18: The entry called 6 (1st branch) is removed, there is no 6 anywhere.

Sheet 32: Last boxes of branches 1 and 2 are exchanged.

Sheet 49: Branch 1, box 4: MS should be UE/MS.

Sheet 54: Last boxes of branches 1 and 2 are exchanged.

Sheet 64: Last branch, box 4, MSC-A changed to 3G_MSC-A.

Sheet 76: Last boxes of branches 1 and 2 are exchanged

Discussion: The originator thanked Telelogic for their support to produce the SDTs. To be checked by the delegates. The originator encourages the companies to review 23.009, where it had many changes recently. SDTs are available for the SDLs and are attached to the specification.

Conclusion: Agreed.

Tdoc N1-000608 Clean-up of 3G_MSC-B_HO SDLs/ Telelogic, Ericsson

Presentation: general clean up.

General clean-up:

Sheet 8: Box 3, added "(GSM to UMTS HO)".

Sheet 9: Last branch, box 4, BSS-B changed to RNS-B.

Sheet 26: Branch 1, box 1, the left box should be empty.

Sheet 26: Branch 1, box 4, the text used in other similar places is "Handover Command to UE/MS via Iu-Relocation-Command to RNS-A".

Sheet 26: Branch 3, box 2, the timer changed from T201 to T401.

Sheet 44: Branch 1, box 1, the left box should be empty.

Sheet 50: First box, MS should be UE.

Discussion: To be checked by the delegates. The originator encourages the companies to review 23.009, where it had many changes recently. SDTs are available for the SDLs and are attached to the specification.

Conclusion: Agreed

Tdoc N1-000616 DRX value 0000 clarification and R97 compatibility issue/ Ericsson

This is a CR against 24.008

Presentation: With Tdoc N1-000551 the MS specific DRX cycle length was introduced also for UMTS by using the remaing 4 spare bits for that CN specific DRX cycle length coefficient. Clarification is done to when system information value is used as well as changing reserved values to 'reserved for future use', for possible reuse of these values later on.

A R99 MS attached to R97 SGSN needs the MM context to be coded with this new field instead of spare coding at inter SGSN (R99) RAU. So the note is expanded with this.

Discussion: "Reserved for future use" in table 10.5.139, is better to remove all lines and change the text to say all other values are reserved.

It is a requirement for R97 and R98 and could not only be done for R99. Related to N1-000701.

Conclusion: Revised to **N1-000755**, which is presented and agreed.

Tdoc N1-000617 Compatibility issue due to deletion of SM cause #35/ Ericsson

This is a CR against 24.008

Presentation: In last N1 meeting deletion of SM cause #35 was made with agreed Tdoc N1-000507. Since #35 is used in R97/R98, the value needs to be reintroduced due to compatibility.

A R97/R98 network returns this 'NSAPI already used' in an ACTIVATE PDP CONTEXT REJECT message, leaving the decision to deactivate that PDP context to the MS, or retry another PDP context activation procedure. A R99 network solves that unsynchronous PDP context situation by accepting the new PDP context with equal NSAPI and possibly some changed context parameters (deactivating locally the 'old PDP context'), responding to the MS with an ACTIVATE PDP CONTEXT ACCEPT.

So a R99 MS shall react to SM cause#35 from a R97/R98 network to solve the unsynchronous NSAPI situation.

For R99 some clarifications to the abnormal cases are also done.

In ii) first bullet a question is raised if activating PDP context with same combination of PDP type, PDP address and APN is allowed or not?

Discussion: The separate error handling procedure the second PDP context which was discussed last meeting was mentioned.

Usage of the point code for the error cause id not stated correctly as in the text and the list in the CR - 6.1.3.1.3. Similar alignment should be done in the annex.

Early allocated point code should be kept in the spec because it might be received from old network. We should be able to handle it correctly.

Conclusion: Revised to **N1-000756**, which was agreed.

Tdoc N1-000619 Remove GRR primitive descriptions and make reference to other document/ Ericsson

This is a CR against 24.007/ R99

Presentation: The CR removes detailed description of the GRR primitives and refers to 04.64 instead which contains the more reliable description. (Some inconsistencies currently exist in 24.007) Avoiding duplication of primitive descriptions in separate documents also means less maintenance work in 24.007. In addition, incorrect reference to 24.060 is removed from 24.007

Discussion: None

Conclusion: Agreed

Tdoc N1-000620 Updating SM for R99/ Ericsson

This is a CR against 24.007/R99

Presentation: 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.

Discussion: It is decided to implement the CR without considering the chapter change.

Conclusion: Agreed

Tdoc N1-000642 SAPs and Service primitives for UMTS, PS mode/ Ericsson

This is a CR against 24.007/ R99

Presentation: To add SAPs and service primitives for UMTS to TS 24.007. A new entity RAB Manager (RABM) is introduced for UMTS that replaces the SNDCP entity used in GSM. In the MS the RABM entity keeps track of if a RAB exists for a specific NSAPI (PDP context) or not. The RABM entity in the MS initiates RAB re-establishment by triggering a service request (data) procedure in GMM.

This CR covers only the PS mode of operation for UMTS on the MS side. GSM-UMTS intersystem change is not covered.

Discussion: This proposal is not aligned with 23.110, also to consider that differences between UMTS and GPRS so they have not to be similar.

Conclusion: Revised to **N1-000757,** which was withdrawn..

Tdoc N1-000643 Editorial corrections to MM and GMM in 24.008/ Ericsson

This is a CR against 24.008 / R99

Presentation: This CR proposes the following editorial corrections:

- Correct the naming of the UMTS GPRS integrity key and the GPRS ciphering key sequence number in chapter 4.1.3.2 "GPRS update status"
- Move chapter 4.3.2.9 "Use of established security contexts" to chapter 4.3.2.7, to align the MM description with the GMM description in 24.008.
- Chapter 4.4.5 "Core Network System Information (UMTS only)" for MM and chapter 4.7.14 "Core Network System Information (UMTS only)" for GMM are moved from chapter 4.4 "MM specific procedures" to sub-chapters 4.1.1.3 and 4.1.1.3 in chapter 4.1.1 "MM and GMM procedures"
- Chapter 4.4.6 "Paging response in UMTS" is moved from chapter 4.4 "MM specific procedures" to sub-chapter 4.5.1.3.3 in chapter 4.5.1.3 "MM connection establishment initiated by the network".

Notice that the actual content in the moved chapters have not been changed

Discussion: It is purely changing the chapters in the spec. For one of the delegates, it seems more confusing to put it this way.

Conclusion: Agreed.

Tdoc N1-000644 Removal of P-TMSI signature in Service Request message/ Ericsson

This is a CR against 24.008 / R99

Presentation: 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.

The removal of the P-TMSI signature from the Service Request message was agreed at the previous S2 #11 meeting in CR no. 123 in Tdoc 354 to TS 23.060 ver. 3.2.1.

Discussion: Similar subject in N1-000683.

Conclusion: Post. Afterwards N1-000790 is a similar subject too. The problem is with aligning stage 2 specification. It is rejected.

Chairman's Note: N1 can not decided whether P-TMSI signature should be included in the SERVICE REQUEST even though S2 have agreed a CR on 23.060 on this issue. BT, Lucent are objecting the proposal in this document.

Tdoc N1-000683 Necessity of P-TMSI signature in SERVICE REQUEST/ Fujitsu

This is a discussion paper.

Presentation: This contribution shows the case that SERVICE REQUEST needs authentication and P-TMSI signature should be able to be used for a one of possible methods of authentication.

It is proposed to keep P-TMSI Signature in SERVICE REQUEST in 24.008, and also proposed to send a liaison statement to S2 advising to recover the information element in 23.060.

Discussion: This information is not presented to S2. Arguments against S2 are to be brought up in S2 meeting. Looking at the benefit of this approach in N1 and liaison to S2 is the best approach to handle it.

It was suggested that if you have an Iu connection then the user is authenticated and we do not need P-TMSI signature for subsequent service requests. Ericsson does not like the proposal where coding of MM layer should be independent of the lower layer.

BT stressed that, from operator viewpoint they like to have secured connection, to make it mandatory in all cases to include P-TMSI. To keep the specification as it is know.

If we are in PMM-connected state then we have a secured connection. The release message is visible to PMM so it knows when to send P-TMSI signature.

Conclusion: Noted.

Chairman's comment: If SERVICE REQ is sent in order to perform a re-establishment of a lost radio connection then this request should be authenticated and thus it would be useful have the P-TMSI signature included in SERVICE REQUEST. Three alternatives were seen:

- P-TMSI never included in SERVICE REQUEST (S2 decision, 23.060 CR approved) causes additional signalling when auth. is needed.
- P-TMSI always included in SERVICE REQ. (additional signalling for P-TMSI reallocation)

P-TMSI included in SERVICE REQ when necessary, either specified for re-est. or implementation option

Tdoc N1-000645 P-TMSI and optionally P-TMSI signature sent in Detach Request in UMTS only/ Ericsson

This is a Cr against 24.008/ R99

Presentation: 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 sent ciphered if ciphering mode is on.

This CR proposes to send the P-TMSI and optionally the P-TMSI signature in the Detach Request in UMTS only.

Furthermore, the description of the P-TMSI handling has been divided into GSM and UMTS.

Discussion: Fujitsu has concerns and expressed that every time the P-TMSI signature sent by the network unprotected it should not be used by the mobile, it was commented that the network should not send the P-TMSI unprotected.

If we have parameters saying UMTS only then when we have GPRS -UMTS interworking we will have problems, although it is not intended to change GSM-GPRS. What problems will be faced in this case?

There is no need to send the P-TMSI because the TLLI is available in this case.

Changes for R99 GSM and UMTS are proposed. Not applied to older releases.

Conclusion: Rejected

Tdoc N1-000646 Removal of Service Accept message/ Ericsson

This is a Cr against 24.008/ R99

Presentation: This CR proposes to remove the Service Accept message as it is not needed and to be aligned with TS 23.060.

Annex A: cut out from 23.060

Discussion: It is proposing to mix up layers GMM layer and lower layers, what is the intention? It is not S2 responsibility to deal with the GMM layer, so how could they approve such a case!

We could put requirement on when to send service accept, was not supported by Lucent.

Fujitsu stressed that it seems to late for R99, and it is not against the principle.

It seems an indication from the upper layer.

It saves BW on a dedicated channel, where it is used for sending data.

Conclusion: It seems that N1 and S2 have different views, so we need to send a liaison to S2 to clear the case. LS out in N1-000758 by Lucent/ Sudeep. The CR is rejected.

A LS is received from S2 and they are still having the same view in N1-000802. We need to agree on the principle to be able to carry on. S2 had considered it and they are giving the technical and management reasons for not changing their concept.

Alternatives:

1- we decide to agree this Cr and forward it to plenary and then shoot it there

2- reject it in this meeting and may be some companies will bring it up in the plenary

Problems should be identified:-

Inter layer indication from lower to upper layer is an easy issue

The one about Emergency calls without USIM cards is tricky

How to handle the MS in a connected mode?

Expiry of the timer is an issue to be solved.

Fujitsu supports this CR.

Decision: Not rejected and not approved, but take to the plenary in a separate document as a Strategic document, in addition N1-000758 and S2 LSes N1-000802

Comments by the Chairman: Could not be agreed but must go to TSGN #8 for plenary decision. The N1 LS N1-000758 and S2 LS N1-000802 along with the original S2 23.060 CR to be attached.

- Related with S2 CR but N1 disagreed on the concept of implicit response to SERVICE REQUEST and deletion of SERVICE ACCEPT message as this would cause unnecessary inter-layer interfaces and provide little benefit in lover signalling load.
- S2 LS in N1-000802: they have considered the removal of SERVICE ACCEPT and they still keep their original decision to remove it.
- This causes more complex implementation because of inter-layer primitives to indicate the implicit service acceptance.

Analogically CM SERVICE ACCEPT is most often omitted and implicit MM establishment is used instead by means of security procedure. But this can not be done for emergency calls with no SIM card as security procedures can not be applied. -> The same problem does exist with VoIP emergency calls without SIM. No answer to this problem could be given by N1.

Tdoc N1-000670 Correction of references in protocol error handling for SM/ Siemens AG

This is a Cr against 24.008/ R99

Presentation: CR 24.008–111 removed the Anonymous Access from TS 24.008. The references in subclause 8.5 have to be adapted accordingly.

Discussion: No comments.

Conclusion: Agreed.

Tdoc N1-000681 Immediate cancellation of PDP context activation/ Fujitsu

This is a Cr against 24.008/ R99

Presentation: PDP context activation procedure should be able to be cancelled before it is completed so that a user can abort the procedure to take another action immediately. Without this capability, the user should wait for timer expiry of activation procedure to take next action. This function is essential although it is not clearly described in current 24.008.

Discussion: Ericsson sees it too late to make this change for R99 signalling.

The Subscriber will not be happy, that if he could not be able to stop activation of a PDP context once he wants to, using MMI.

Conclusion: It will be checked if R99 needs the correction as well. This is postponed.

Revised to **N1-00786**, which is presented, still something is to be done for R99 where R99 is not covered in this CR. It is withdrawn. For further study.

Comments by the chairman:

- The meeting analysed R99 specification and agreed that it does not cover the issue of this CR.
- It was agreed that the matter must be studied further in order to find a solution not just for R00 but also for R99.

Tdoc N1-000682 Modification of QoS to support max 0kbps/ Fujitsu

This is a Cr against 24.008/ R99 + R00

Presentation: After radio link failure, the maximum bit rate of corresponding PDP context in Gn interface is set to 0kbps according to 23.060. Current QoS coding does not allow to indicate the 0kbps so that new code point for it needs to be added.

[Quotation from 23.060 v.3.3.0]

9.2.3.5

\-   RAB Release-Initiated Local PDP Context Modification Procedure

The RNC can request a RAB to be released through the RAB Release procedure on the streaming or conversational traffic class bearers without releasing the Iu connection when there is a break in the radio connection. After the RAB(s) release the SGSN shall modify the PDP context as follows.

\-   In the SGSN, for a PDP context using streaming or conversational traffic class, the PDP context is preserved, but the maximum bit rate is downgraded to 0 kbit/s (for both uplink and downlink) when the associated RAB is released. The SGSN sends an Update PDP Context Request (TEID, QoS Negotiated) message to the GGSN to set the maximum bit rate to 0 kbit/s in the GGSN. The value of 0 kbit/s for the guaranteed bit rate indicates to the GGSN to stop sending packets to the SGSN on this PDP context.

Discussion: We should not impact R97, R98 with this requirement, where it is not be implemented there!

Conclusion: Revised to **N1-000759**, which was agreed.

Tdoc N1-000684 PDP context synchronisation procedure/ Fujitsu

This is a discussion paper R99, R00

Presentation: This contribution gives initial study of PDP context synchronisation issue. It is proposed to discuss this issue based on this contribution.

Discussion: See N1-000685.

Conclusion: Noted

Tdoc N1-000685 Recovery from PDP context inconsistency/ Fujitsu

This is a CR against 24.008/ R00, R99.

Presentation: The network may locally deactivate a PDP context, for example, if a deactivation procedure fails. In this case, the MS might consider the PDP context is still established while the network has been released.

The network may initiate PDP context activation to already activated PDP context in the MS. In this case, the MS should locally deactivate the existing PDP context and accept the new request to recover the synchronisation.

Discussion: It is completing an earlier agreed change.

2 activation requests from the same APN is not possible! It needs to be handled as an error case, as Ericsson stressed.

This is the implementation for the MS side, the Network side is already defined in 24.008.

Is should be possible to access the same APN with 2 contexts.

Conclusion: Revised to **N1-000775**, which was presented and for editorial reasons it is revised to **N1-000807**.which was presented and agreed.

Tdoc N1-000694 Use of the terms GSM and UMTS in 23.060, 24.008 etc/ Ericsson

This is a CR against 24.008/R99.

Presentation: In 23.060, 24.008 and other specifications handled by at least N1 and N3, the terms "in GSM" and "in UMTS" are used to describe a behaviour or "mode of operation" in a UE and a 2G/3G SGSN. This behaviour is depending on if the Gb interface or Iu interface is in use due to the different function division in GSM and UMTS.

The introduction of GERAN in R00 may not fit very well with the terms "in GSM" and "in UMTS" since GERAN has both a Gb interface and a Iu interface. Therefore, it would be good to make an editorial change the use of terminology.

It is here proposed to use the terms "in 2G mode of operation" (2GMO) and "in 3G mode of operation" (3GMO).

A corresponding CR on 23.060 has been submitted to the S2 meeting.

Discussion: Provided for information.

Conclusion: Noted.

Tdoc N1-000697 Introduction of 3G MS capabilities in MS Classmark 3./ Vodafone AirTouch

This is a CR against 24.008/ R99

Presentation: The Network needs to know which 3G RAT are supported by the MS, if any, in order to include the appropriate information on 3G Neighbour Cell Description in the Enhanced Measurement Information Message.

Note that the UMTS "UE Capability Information IE" is not included in the RR Classmark Change message, but sent in a subsequent one. The BSC needs to know if the MS supports a non-GSM RAT as soon as possible, in order to send the non-GSM (downlink) message including 3G Neighbour Cell Description and the MS to start reporting on non-GSM cells. This requires that the RR Classmark Change is *not* segmented. This is possible if the UMTS UE Capability is sent in a subsequent (new) RR message.

Discussion: Interworking of the different RAT is necessary to be declared.

Conclusion: The CR is agreed

Tdoc N1-000790 P-TMSI signature in SERVICE REQUEST/ Lucent Technologies

This is a discussion paper

Presentation: This contribution shows the case that SERVICE REQUEST needs authentication and P-TMSI signature should be able to be used for a one of possible methods of authentication.

It is proposed to keep P-TMSI Signature in SERVICE REQUEST in 24.008.

Discussion: The scenario is covered.

LS out is proposed to be sent to S2 to change their specification. This behaviour optimises the most common procedure SERVICE REQUEST. Less resources for the authentication.

It is easier to intercept the downlink messages than the uplink ones and it is easier to intercept the user than the channels in the BS.

Conclusion: Noted.

6.4   MS Classmark

No contributions. Frozen for R99.

6.5   Security

Tdoc N1-000647 Integrity checking of MM/GMM messages and integrity protection during emergency calls/ Ericsson, Vodafone

This is a CR against 24.008/ R99

Presentation: The supervision on that integrity protection is activated is the responsibility of the MM and GMM layer in the MS according to TS 33.102. In order to do this, the lower layers has to send an indication to the MM/GMM layer when integrity protection is started for that domain. For the establishment of a MM connection for an emergency call when no other MM connection is established, the core network is not required to initiate a security mode control procedure for the CS domain in order to activate integrity protection. For the establishment of a MM connection for an emergency call when no other MM connections are established, the MM layer in the MS shall not supervise whether integrity protection is activated or not in the MS.

Furthermore this CR proposes to add the following MM and GMM messages to the list of MM/GMM messages which the MS is allowed to handle if they are received before the integrity protection is activated in the MS (for respectively CN domain):

- LOCATION UPDATING ACCEPT (at periodic location update with no change of location area or temporary identity)
- ABORT - The abort procedure may be invoked by the network to abort any on-going MM connection establishment

ROUTING AREA UPDATE ACCEPT (at periodic routing area update with no change of routing area or temporary identity)

Discussion: If Integrity check is activated in a domain then it is not active in the other domain. So the Cr will be updated.

If we spread the information about failure of integrity check to the upper layer it will require error handling to be designed for that.

There use to be a mechanism in the lower layer in Stage 2 which counts how many times it is discarded and react upon, which was removed from the specs.

How to cover the case where the USIM card is available or not. It is declared in Integrity protection for emergency call (UMTS only). Both domains share the same keys, and one RRC connection but Layer 3 domains do not know about each other's security protection.

The requirement in the list is from stage 2, it is to reduce signalling. Please forward comments to the originator.

Some editorial corrections are required.

Conclusion: Revised to N1-000744.

N1-000744 was **presented**: In this revision of the CR, the DETACH ACCEPT has been added to the list of GMM messages that can be received by the GMM entity in the MS prior to receipt of the indication that integrity protection has started. The reason for this addition is that the DETACH REQUEST (at non power-off) message does not contain the CKSN IE and so the network can not trigger the security mode control procedure. The DETACH REQUEST (at non power-off) message can be an initial layer three message and so if no security mode control procedure can be performed, then the network has to send the DETACH ACCEPT as a non-integrity protected message. There is no security risk, because the MS only accepts the DETACH ACCEPT message if it has sent a request.

Conclusion: Agreed.:

Tdoc N1-000664 Alignment of CC and SM protocols with current MM/GMM integrity protection rules/ Vodafone AirTouch, Ericsson

CR against 24.008/ R99

Presentation: In UMTS, all signalling messages for all protocols shall be integrity protected. This CR adds that requirement to the CC and SM protocol descriptions.

Discussion: Comments were fed back to the originator.

Conclusion: Revised to N1-000745. **N1-000665** is also revised where it reflects the same changes **N1-000745** and **N1-000746** were agreed.

Tdoc N1-000666 Alignment of SMS protocol with current MM/GMM integrity protection rules/ Vodafone AirTouch, Ericsson

Cr against 24.011/ R99

Presentation: In UMTS, all signalling messages for all protocols shall be integrity protected. This CR adds that requirement to the SMS protocol description.

Discussion: It was discussed whether the location of the text is in the right spec:

Keep the existing principle, but modifications should be reflected in 24.007. This was suggested by NTT-Commware.

24.007 is used for general coding as stressed by Siemens, and this is a functional issue.

Conclusion: The result is to keep the principle. Revised to **N1-000747**.Which was agreed.

Tdoc N1-000663 MS behaviour when detecting a 'bad' network from an authentication challenge/ Vodafone AirTouch Plc

Cr against 24.008/ R99.

Presentation: 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.

The MAC provides a guarantee of 'freshness' for the authentication challenge. For instance, in GSM, a RAND could be captured and replayed later without the MS knowing that the RAND had been intercepted. In UMTS, the MS can tell that the RAND is not fresh.

This CR proposes a suitable procedure:

Upon sending the AUTHENTICATION FAILURE or the AUTHENTICATION & CIPHERING FAILURE message the MS starts a timer.

Upon expiry of the timer the MS deems the network to be false.

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.

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, until a refresh of System Information data.

Discussion: If either of the timers time out or 2 consecutive authentication is failed then it is marked as barred till the next system information.

Conclusion: Agreed

Tdoc N1-000671 Correction of the MM Authentication procedure/ Siemens AG

This is a CR against 24.008/ R99

Presentation: CS side.

1. Addition of network reaction in case of a MAC failure: a MAC failure may be caused by a TMSI clash (i.e. two MSs in the same cell using the same TMSI).
2. The length of various authentication parameters was changed by S3.

Discussion: Corrections need to be made. Comments to be sent to the originator

Conclusion: Revised to **N1-000748**, which is revised to **N1-000785**, which was agreed.

Tdoc N1-000672 Correction of the GMM Authentication and ciphering procedure/ Siemens AG

This is a CR against 24.008/ R99

Presentation: packet side

1. Addition of network reaction in case of a MAC failure: a MAC failure may be caused by a P-TMSI clash (i.e. two MSs in the same cell using the same P-TMSI).
2. The length of various authentication parameters was changed recently by S3

Discussion: Need to be co-ordinated with other security CR.

Conclusion: Revised to **N1-000749**, which is agreed.

Tdoc N1-000803 Release 1999 Submission form for security/ Vodafone AirTouch

This is a R99 WI status sheet.

Presentation: It shows that the WI is completed for R99.

Conclusion: Agreed and will be presented to TSGN#8.

6.6   QoS

Tdoc N1-000614 Additional SDU error rate value/ Ericsson

This is a CR against 24.008 / R99

Presentation: Agreed S2-000546 introduced recently a new SDU error ratio of 10 % for the streaming class, which here is proposed updated in 24.008 to be aligned.

Discussion: The order of the point code is t be changes to be in order. Deleted text is to be added for the better overview.

Conclusion: Revised for editorial changes to **N1-000720**, which was agreed.

Tdoc N1-000615 TFT IE length and editorials/ Ericsson

This is a CR against 24.008 / R99

Presentation: When changing TFT IE from Mandatory to Optional the length adjustment was forgotten.

The implementation of the CR to delete X25 failed to delete X.121 reference, and additionally some other editorials are made.

Discussion: Revising the length to be 200 - 257 octets. This mistake is all over the document, to be corrected by the rapporteur.
Conclusion: Agreed

Tdoc N1-000660 Inclusion of PFC Feature Mode in MS Network Capability IE/ Motorola

This is a CR against 24.008 / R99
Presentation: Stage 3 work has been completed in SMG2 WPA for BSS Involvement in QoS.
In order for the MS to receive an SGSN-assigned PFI in the Activate PDP Context Accept message, the MS shall set a "PFC feature" indicator in the MS Network Capabilities IE in the GMM Attach Request. Note that the Network Capabilities IE is also passed to a new SGSN in the MM Context of the SGSN Context Response message during an inter-SGSN RAU (see 3G TS 29.060).
Note that, a PFC_FEATURE_MODE indicator (see GSM 04.60 section 12.24 "GPRS Cell Options") is specified the system information to indicate to R99 MSs that the PFC feature is supported by the network, and therefore the R99 MS may initiate PFC procedures in the uplink direction by including a PFI in TBF establishment procedures.
MS network capability need to be added to the RAU.
Discussion: This CR is not written based on the latest version of the spec.
Conclusion: Revised to **N1-000722**, which was presented and agreed.
N1-000789 is R98 for the same issue.
Discussion: BT does not agree with R98 for compatibility issue.
2 options:
1- R98 is to be checked if necessary, what about compatibility issues.
2- ask S3 how is the whole architecture could work
R98 should be optional for the MS if he supports the new algorithms.
Motorola proposed to accept the CR and talk to S3 and clear the issue.
Conclusion: Revised to **N1-000798**, which was presented change category to Addition of feature (B), and it is agreed. It will be taken to the Plenary TSGN#8 together with N1-000722 for final approval, where BT has reservation towards it.

Tdoc N1-000661 Reserve one bit in PFI/ Motorola

This is a CR against 24.008 / R99
Presentation: It is proposed that the PFI be changed to seven bits to allow one spare bit for possible future enhancements
Discussion: Siemens suggest to reserve more than one octets where it is a change for the future. Fill the last part of it as spare bits and leave the other flexible. Using the length to know how much is coded. The proposal is in line apart from not defining the max length.
Conclusion: Agreed.

6.7   Out-of-Band Transcoder Control

Tdoc N1-000635 CC enhancements to cover UMTS codec negotiation and selection procedures/ Ericsson L.M

This is a CR against 24.008/ R99
Presentation: 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: To be handled in the joint meeting
Conclusion: Withdrawn.

Tdoc N1-000636 How to Proceed With Downlink Selected Code Message/ Ericsson

This is a discussion paper

Presentation: At the last CN1 WG (CN1 #11) a LS was sent to RAN2 requesting that it was confirmed that different signalling buffers were used for Direct Transfer Messages as for Radio Bearer messages, and that the Radio Bearer messages had higher priority. The concern of CN1 was that the order of messages sent by the MSC to the RNC could change when received by the UE, due to buffer congestion or retransmission due to L2 errors. The initial concern was regarding the order of a Selected Codec Message sent on Direct Transfer and a RAB Assignment (Radio Bearer Configuration) message.

For details , please refer to the document.

Discussion: To be handled in the joint meeting

Conclusion: Noted.

Tdoc N1-000693 Active Codec Set (ACS) Negotiation and Notification/ NTT DoCoMo

This is a discussion paper

Presentation: As a companion contribution from DoCoMo has identified, CODEC and ACS negotiation is one of the areas that have to be discussed in this workshop in order for each WG to have individual studies in parallel. This contribution tries to establish consensus among WGs on the requirements and working assumptions on the CODEC and ACS negotiation and notification, and the re-negotiation of the ACS during communication.

For more details please refer to the document.

Discussion: To be handled in the joint meeting.

Presented in the 2nd joint meeting, the originator would be happy to receive comments

Conclusion: Noted.

Tdoc N1-000637 Codec Negotiation at Handover/Relocation/ Ericsson

This is a discussion paper.

Presentation: Handover and Relocation can be simplified by a common solution independent of E-interface bearer technology. Simple rules for handling of transcoders by MSC-A and MSC-B for R99. Codec negotiation is proposed for R00 for TFO with backward compatibility to R99.

A CR should be raised to clarify the TRAU handling in 23.009 for R99, simplifying the handling to the summary above.

The above procedures should be added to 29.010 (possibly separate chapter).

CR required for MAP TS 29.002 to introduce codec negotiation procedures.

LS to N4 is required to include R00 procedures in TS 23.153.

Discussion: Discussed in the joint meeting Transcoder with RAN2, LS out in N1-000795

Conclusion: Email discussion to the originator, for information. Noted.

Tdoc N1-000808 Draft Report of the joint TSG-RAN WG2 / WG3 / TSG-CN WG1 meeting (Oahu, HI, USA, 25 May 2000)/ MCC-RAN2

Presentation: This is the report of the joint meeting where TrFo issues were discussed.

Conclusion: Noted

6.8   CC related Items

No contributions.

6.9   R99 PLMN selection and EDGE

From chairmen report:

This item needs to be brought up early as PLMN selection is still under discussion between T3 and R2.

N1-R2 ad-hoc meeting on PLMN selection 23.5.2000:

- When searching for the RPLMN is the MS limited to indicated RAT or is it an educated guess where to start?
- First the indicated RAT but if RPLMN is not found, then continue search through all supported RATs and Freq. Bands.
- When searching for RPLMN in case of no indication of the RAT related with RPLMN is available is the default RAT the only one to be searched or is it just the first RAT to be searched?
- Again this should be just the starting point to speed up the search in the successful case
- The same principles shall apply when searching for HPLMN with or without an indication of the RAT(s)
- Continuing this same principle to PLMN selector list search would mean scanning all RATs for each PLMN on the lists and that does not seem to be what N1 and R2 would propose. In this case we propose to limit the search to the RATs that are associated with each PLMN, if RATs have been indicated.
- There will be 2 PLMN selector lists, user controlled and operator controlled. By default the user list is used for search first and the operator controlled after that. This priority order must be also user controlled.
- After the search using the PLMN selector lists has failed the MS must search for any network in random order and here the first RAT to be searched should be an implementation option. But all RATs must be searched.

Improvement ideas:
- How about the network broadcasting all of its RATs for the mobile to store at switch-off for the next RPLMN search? This would require updating also the old part of a multimode network to indicate the presence of the new network.
- What is the point of having RAT in PLMN selector list at all? If RPLMN and HPLMN search have already been performed, then all supported RATs have already been searched and the results are readily available?
- PLMN selector list search should be limited to the indicated RATs, if the indication is available.

For the search of PLMNs in descending order of signal strength the "exchange rate" between GERAN and UTRAN signal quality must be defined

Tdoc N1-000630 Modification of PLMN Selection Procedures to support UMTS+COMPACT Network Selection/ Ericsson

Presentation: Modifications are required to 23.122 to support the requirements in the latest 22.011

Revision History:

(1) Tdoc N1-000303 was a merge between N1-000285 and N1-000301, with some editorial improvements

(2) Tdoc N1-000583 was an update of Tdoc N1-000303, incorporating comments received after presentation in N1.

Tdoc N1-000630 is an updated of Tdoc N1-000538, incorporating additional comments from Siemens and some changes due to internal (Ericsson) review.

Discussion: It is expected that the PLMN has one access technology and if it has 2 access technologies it should have 2 different entries for each. Each technology will have a RAT to distinguish it.

4.4.31 first paragraphs, is it the intention to search for GSM only, if yes then make it precise.

It is easier to search for the access technology than the PLMN as stressed by Telia. Not all PLMNs are in the list.

At switch on time, the MS search for the last registered PLMN.

It is described in the CR if the last access technology is not available (could be for any reason like power down!), then the MS is GSM only which should not be the case. Multimode mobile must not be restricted if capable to access both technologies as supported by Motorola and Telia.

It is better to search for the access technology and then for the PLMN.

Add the explanation for the GSM Compact using the right term and add it to the definition.

Updating the SIM for new technology, how will it be done?

Conclusion: Some concepts need to be cleared where different views are presented, to clarify the issues in an ad-hoc session. RAN2 participation is also welcomed. Revised to N1-000719,

N1-000719 was presented and revised to **N1-000796**, which was agreed.

6.10   Other R99 Issues

Tdoc N1-000667 Changes to MS Classmark 3 and MS RA Capabilities for DTM/ Vodafone AirTouch

This is a CR against 24.008/ R99.

Presentation: A DTM (Dual Transfer Mode) mobile must be able to signal to both the MSC and SGSN exactly what its DTM capabilities are. This CR proposes that this information is sent to the MSC in the MS Classmark 3 IE, and to the SGSN in the MS RA capabilities IE.

Discussion: The information in CM3 (radio access capability) is intended to the MSC. There is an agreement that MS CM 3 is to the BSS and CM2 is for the network and MS capability.

Is this applicable for both UMTS-RAN and GSM-RAN? It is only for GSM. This information is needed for the core network.

GPRS capability is interesting for the radio and the reason for change is written to inform the core network MSC and SGSN.

Conclusion: Agreed

Tdoc N1-000668 New PD for LLC for use by DTM (Dual Transfer Mode) mobiles/ Vodafone AirTouch

This is a CR against 24.007/ R99.

Presentation: DTM mobiles can use the main DCCH to pass packetised user data to the network. In order for the network to recognise that these packets should be sent to the PCU, there needs to be a new PD for LLC.

Discussion: Which protocols are covered in this case in 24.007?

DTM is specified in specifications covering LLC description

Conclusion: Agreed.

6.11   TEI

Tdoc N1-000674 Addition of `Cause of no ID` description/ NTC

Presentation: Please refer to the document.

Discussion: Please refer to N1-000673.

Conclusion: Noted.

Tdoc N1-000673 Addition of "Cause of No ID" IE in SETUP message/ NTC

This is a CR against 24.008

Presentation: In SA plenary meeting #7, it was agreed to make global solution about "Cause of No ID" by June 2000. For N1, we propose to add new IE "Cause of No ID" to SETUP message in TS24.008

Discussion: The use of the extension bit is used for more than one cause indication. It needs to be specified. The other question in consequence is, if more than one indication is received how will the MS behave?

Max length should be 4 octets.

Remove the extension bit and limit the cause to one and have the max octets limited to 3 octets.

If this cause is included then there is no BCD number.

The presence of the IE in Set-up message should be clarified.

Conclusion: Revised to **N1-000716**, which is revised to N1-000742**.**

Tdoc N1-000742 Addition of "Cause of No ID" IE in SETUP message/ NTC

Presentation: This is a revision of N1-00673 presented above.

The changes were presented.

Discussion: The maximum length is still mentioned.

The problem could be solved as is if the number is restricted then we need the new cause ID and the calling Id.

Conclusion: The originator could ask in N4 to see their opinion. The document was edited online saved under the number **N1-000750**, which was agreed and sent to N4 together with **N1-000751**. Title was changed to cover CLI. N4 agreed it as well.

Tdoc N1-000603, N1-000604, N1-000605, N1-000606 Alignment on ISDN BC Coding/ T-Mobil

These are against 04.08 R96, R97, R98, and 24.008 /R99

Presentation: Codepoint V.32bis does not exist for Modem Type parameter in ISDN BC. In order to be in alignment with ISDN specifications it is proposed to delete in GSM BC.

Discussion: It was deleted from the change request and not made as reserved point code. It was deleted in the original CR and all values not used as they are reserved.

We need to mark it, that, not to use this point code in the specification. It could be already implemented in some implementations by the manafacturers, so it is not easy to remove it and make it reserved.

These CRs are to be presented separately to the plenary asking the manufacturers to check if they implemented it already or no problem removing it.

Conclusion: All CRs are agreed.

Tdoc N1-000610 Clarification of reference to Q.931 for LLC IE/ Ericsson

This is a CR against 24.008/ R99

Presentation: 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: No objection

Conclusion: Agreed

Tdoc N1-000669 Proposed CR on "Services provided by the Radio Resource Management entity"/ Motorola

This is a CR against 24.007/ R99

Presentation: The routing of upper layer PDUs is the function of the RRC layer. In TS 25.331 (Radio Resource Control) there is a requirement for the upper layers to indicate to RRC the initiation of a new signalling session (connection) in order to make a decision to send either the "Initial Direct Transfer" message or the "Uplink Direct Transfer" message to carry L3 messages. In TS 24.007 v 3.3.1 this information is missing. This CR proposes to provide this indication through new primitives, RR_INIT_REQ, RR_INIT_CONF and RR_FREL_REQ, and information carried in the RR_DATA_REQ primitive. In addition it is required to indicate the protocol discriminator and CN Domain identity to the RRC layer so that they can be included in the RRC information elements of the Initial Direct Transfer message

Discussion: Ericsson has a CR to 24.007 defining primitives between low and high layers.

If both CRs from Ericsson and Motorola are agreed they need to be merged.

Reestablishment request used in idle state, differs from RR initial request when high layer want to establish a new flow.

The concept of the flow identifier reason in the network is not completely clear and why not using protocol discriminator. The author sees also no problem in using the TID, it is an implementation issue actually.

This item is to be added on the agenda for the joint meeting between R2 and N1.

Conclusion: Agreed after consultation with RAN.

Tdoc N1-000627 Change of IMEI coding from BCD to hexadecimal/ Nokia

This is a CR against 24.008/ R00

Presentation: The current IMEI message structure is proposed to be changed to allow use of hexadecimal coding in addition of current BCD. The change is proposed in 3GPP TSG-CN,TSG-S, TSG-T and TSG-R to allow 16.7 million mobile terminals to be produced with one Type Approval Code. The current restriction for one million units per TAC is already a problem in the GSM terminal manufacturing and can only be predicted to worsen in the future.

Change to use hexadecimal coding is most simple since it does not affect to existing message lengths in GSM air interface and network interfaces.

In case of CN WG1, the change is only required to the table describing IMEI coding. IMEI is used for those UE's that have active emergency call without or with a defective USIM module. The change does not affect to message/information element length since BCD (actually TBCD) and hexadecimal digit coding consume equal amount of bits. In the MAP protocol, the only issue is to not use any 'sanity' check for this information element and allow all 4-bit binary values for all 15 digits of IMEI. The old IMEI coding in GSM system is fully backwards compatible with the changed coding for the message interface. (Depending on CN implementation it may be necessary to change the IMEI

database control software. Note that in the MAP protocol the TBCD coding has been used for IMEI – in practise currently the coding is BCD, since IMEI is not using any of the special TBCD values ['*'=1010, '#'=1011, 'a'=1100, 'b'=1101, 'c'=1110]) The TBCD coding in MAP/RANAP for IMEI is technically only ruling out the use of code 'F' for the IMEI digits, this highlights further how small change in the message interface is proposed.

Discussion: It is a strategic issue. Clarification on implementation date should be set

No LS will be sent out to S3. 23.003 CR is presented this week in N4, and is subjected to email approval.

No characters were to be considered in the Hex coding, only digits.

Conclusion: Revised to **N1-000779,** which was agreed with editorial comments.

6.12   R99 Corrections

Tdoc N1-000631 Alignment of 2G / 3G terminology in 23.122/ Nokia

This is a CR against 23.122

Presentation: N1 defined earlier terms like "In GSM" and "In UMTS" to indicate the parts of the specification which apply only to either 2G or 3G implementations. S1 have since discussed the terminology and in their LS they propose that the terminology N1 has been using should be reconsidered.

This late R99 CR only aligns terminology with the one used in the other 3GPP working groups and it does not impact implementations.

22.016 was removed from the references as the spec is not mentioned elsewhere in 23.122.

Discussion: Editorial error. Mode of operation ex. GPRS is not correct, need to be revised.

Conclusion: Revised to **N1-000711,** which was withdrawn where it needs S1 and S2 correct definitions..

Tdoc N1-000632 MS behavior if RAU attempt counter is greater than or equal to 5/ Nokia

This is a CR against 24.008

Presentation: It is specified in 24.008 how MS shall behave if the routing are updating attempt counter is greater than or equal to 5. This CR proposes to add a feature that MS shall also release the PS signaling connection in such situation.

Discussion: 25.331 specified the behaviour for radio side, we need to specify it for the network side.

The text needs more clarification about the signalling connection behaviour of the MS.

What happen to the lower layers in this case?

Conclusion: Revised to **N1-000737**, which is revised to **N1-000794**.which was presented. The abnormal cases for RA update have been aligned with the existing text in section 4.7.3.1.5 Abnormal cases (for GPRS attach) in the MS side. RAN primitives need to be done for both procedures and delegates are asked to do this. It was agreed.

Tdoc N1-000626 References and editorial corrections to 24.008/ Nokia

This is a CR against 24.008/ R99

Presentation: Some of the references from 24.008 to the former 03.22 are now out of date after the 23.122 was split away from 03.22.

This late R99 CR has no impact on the implementations

Discussion: No comments.

Conclusion: Agreed

Tdoc N1-000628 MODIFY PDP CONTEXT REJECT –message definition/ Nokia

This is a CR against 24.008/ R99

Presentation: t is possible for MS to request modification of QoS and TFT at one MODIFY PDP CONTEXT REQUEST –message. If neither requested TFT nor requested QoS are available, the network should send MODIFY PDP CONTEXT REJECT –message to the MS.

Current message definition in 24.008 states that if the requested QoS is not available, the MODIFY PDP CONTEXT REJECT –message should not be sent and this sentence should be removed.

This CR does not cause changes to chapter 6.1.3.3 where PDP Context Modification procedure is described

Discussion: Some more clarifications is required that if no QoS is provided then the network use the old one, if the TFT is not provided then it should be rejected as well as if both are not provided. 23.060 needs to be aligned with this CR.

Conclusion: Revised to **N1-000721,** Which was agreed.

Tdoc N1-000629 Clarifications on GSM-UMTS interoperability/ Nokia

This is a CR against 24.008/ R99

Presentation: Clarifications or corrections on the following five issues are needed.

1) 4.3.2.8 Handling of keys at intersystem change from GSM to UMTS states: "At intersystem change from UMTS to GSM…" when it should state "At intersystem change from GSM to UMTS…".

2) In 10.5.4.5 undefined term "pure UMTS mobile station" is used. This needs to be replaced with "mobile station not supporting GSM".

3) 10.5.5.15 states: " The purpose of the *routing area identification* information element is to provide an unambiguous identification of routing areas within the area covered by the GSM system." This needs to be expanded to concern UMTS, too.

4) The header of annex H states: "GSM specific call control values". Since these values are valid also for UMTS the term "GSM specific" is misleading and should be removed. The term "GSM specific" is used here to distinguish circuit swithced from packet swithced, not to distinguish GSM from UMTS.

The header of annex G states: "GSM specific cause values for mobility management". Since these values are valid also for UMTS the term "GSM specific" is misleading and should be removed. In addition, annex G also inludes the values for GMM. Following the logic of current version of 24.008 (see section 4 of this CR), the term "GSM specific" is used to refer to circuit switced part only, and is therefore incorrect.

Discussion: It is preferred to use UMTS, where GSM is part of UMTS, which is the whole system.

Conclusion: Revised to **N1-000736**, which was agreed.

Tdoc N1-000640 COMPACT Mobile Station Interference Measurements Capability/ UWCC

Nokia presented the document.

This is a CR against 24.008/ R99

Presentation: Interference Measurements are made optional for R99 COMPACT mobiles.

Discussion: COMPACT-EDGE Interference Measurement Capability should be one bit field, as well as the position of the bit.

Conclusion: Revised to **N1-000780**, which was agreed.

Tdoc N1-000658 Network behaviour, abnormal cases detach/ Siemens

This is a CR against 24.008/ R99

Presentation: In the description of the " Abnormal cases on the network side " for the Detach procedure, in the bullet point d) which defines the network behaviour in the case of a procedure collision with a Attach procedure the case of the detach type "re-attach not required" is described twice by error. Instead of the detach type "re-attach not required" the last sentence defines the network behaviour for the detach type "IMSI detach".

Discussion: None

Conclusion: Agreed

Tdoc N1-000659 IEI value of the 'Tear down indicator' IE/ Siemens

This is a CR against 24.008/ R99

Presentation: As the 'Tear down indicator' IE is a type 1 information element, the value of the IEI in the Deactivate PDP context request my only be in the range 0-16 and is proposed to be corrected to the value 9.

Discussion:

Conclusion: Agreed

Tdoc N1-000738 Call Release clarification at the Relay MSC/ Nortel Networks

CR against 03.68/ R99

Presentation: In GSM 03.68, section 10.5 Call Release says that the Relay MSC will send an ISUP Release message to clear the call while the initiating service subscriber is on a dedicated channel and then the process will return to idle state, meaning that no further action is required at the Relay MSC.

Also, In Section 11.5 of GSM 03.69, there is no mention of using the MAP-E release message to release the VBS call originated from a Relay MSC. Note that the originating service subscriber of a VBS call stays on

the dedicated connection all the time. This really implies that MAP-E release message is not used if the originating service subscriber is on a dedicated connection.

Therefore the paragraph about sending a MAP release message to the Anchor MSC is only applicable when the initiating subscriber is on a Group Call Channel.

Discussion: None.
Conclusion: Agreed.

Tdoc N1-000739 Speech transmission architecture clarification/ Nortel Networks

CR against 03.68/ R99
Presentation: Clarification about the distribution function.
Discussion: None.
Conclusion: Agreed

Tdoc N1-000740 Clarification of anchor MSC address format/ Siemens

CR against 03.68/ R99
Presentation: When a service subscriber located in a Relay MSC originates a VGCS, the call must be routed to the VGCS Anchor MSC. Chapter 11.5 " Functional requirement of Relay MSC" describes the use of the anchor MSC address as called party address for this call routing. Later on within the anchor MSC the GCR data retrieval must be invoked to allow further VGCS set up.

In order to avoid interoperability problems between the Relay MSC and the anchor MSC, the format of the anchor MSC address must be described in chapter 9.2 "Use of identities in the network". This is in analogy to the dispatcher originated call set up, where used called party address layout is described in chapter 9.2.d "Identities used by dispatchers for VGCS establishment".

The functional structure of anchor MSC address is the same as for dispatcher originated calls. This allows the reuse of the dispatcher related numbering / routing facilities for VGCS also for service subscriber without imposing new requirements on the networks numbering plan structure.

Discussion: None
Conclusion: Agreed

Tdoc N1-000741 Clarification of anchor MSC address format/Siemens

CR against 03.69/ R99
Presentation: When a service subscriber located in a Relay MSC originates a VBS, the call must be routed to the VBS Anchor MSC. Chapter 11.5 " Functional requirement of Relay MSC" describes the use of the anchor MSC address as called party address for this call routing. Later on within the anchor MSC the GCR data retrieval must be invoked to allow further VBS set up.

In order to avoid interoperability problems between the Relay MSC and the anchor MSC, the format of the anchor MSC address must be described in chapter 9.2 "Use of identities in the network". This is in analogy to the dispatcher originated call set up, where used called party address layout is described in chapter 9.2.d "Identities used by dispatchers for VBS establishment".

The functional structure of anchor MSC address is the same as for dispatcher originated calls. This allows the reuse of the dispatcher related numbering / routing facilities for VBS also for service subscriber without imposing new requirements on the networks numbering plan structure.

Discussion:
Conclusion: Agreed

7 Release 2000

7.1 L3 Segmentation

N1 proposes to delete this WI where no contributions are/ will be done in this area. Proposal will be presented to TSGN#8.

7.2   TurboCharger

N1 proposes to delete this WI where no contributions are/ will be done in this area. Proposal will be presented to TSGN#8.

7.3   TEI

No contribution.

7.4   Other R00 issues

Tdoc N1-000675 Originator-to-Dispatcher Information for VGCS and VBS/ STF 139 /Nortel Sonia Doshi

This is a discussion paper.
Presentation: Please refer to the document.
Discussion: How would the mobile know it is a GSM rail network? So it is a compatibility issue. There is no objection to the CRs but we need to identify the work needed to complete the work.
Conclusion: All related Crs will be presented TSGN#8 in a separate document, which are subject to WI approval.
Noted. Crs will be presented to SMG#32 and probably transferred to TSGN#8, where the WI will be approved as well.

Tdoc N1-000676 Introduction of Originator-to-dispatcher information into VGCS/ STF 139

This is a Cr against 03.68 R00. Presented by Nortel
Presentation: It is a requirement of GSM Railways to present information from the originator of a call (functional number) to the dispatchers at call setup. The information should be included in the VGCS call setup and mapped in the originating MSC into UUS1. For fast call setup, compression and a restriction in length is necessary to meet time requirements.
Discussion: None
Conclusion: Agreed

Tdoc N1-000677 Introduction of Originator-to-dispatcher information into VGCS/ STF 139

This is a Cr against 04.68/ R00. Presented by Nortel
Presentation: It is a requirement of GSM Railways to present information from the originator of a call (functional number) to the dispatchers at call setup. The information should be included in the VGCS call setup and mapped in the originating MSC into UUS1. For fast call setup, compression and a restriction in length is necessary to meet time requirements.
Discussion: None.
Conclusion: Agreed

Tdoc N1-000678 Introduction of Originator-to-dispatcher information into VBS/ STF 139

This is a Cr against 04.68/ R00. Presented by Nortel
Presentation: It is a requirement of GSM Railways to present information from the originator of a call (functional number) to the dispatchers at call setup. The information should be included in the VBS call setup and mapped in the originating MSC into UUS1. For fast call setup, compression and a restriction in length is necessary to meet time requirements.
Discussion: None.
Conclusion: Agreed

Tdoc N1-000679 Introduction of Originator-to-dispatcher information into VBS/ STF 139

This is a Cr against 04.68/ R00. Presented by Nortel

Presentation: It is a requirement of GSM Railways to present information from the originator of a call (functional number) to the dispatchers at call setup. The information should be included in the VBS call setup and mapped in the originating MSC into UUS1. For fast call setup, compression and a restriction in length is necessary to meet time requirements.

Discussion: None.

Conclusion: Agreed

Tdoc N1-000686 Protocol supporting LCS in PS-domain/ Fujitsu

This is a discussion document

Presentation: N1 should wait for the completion of stage 2, which is being discussed in S2, however it is beneficial to start the discussion in N1 to complete this important work in time for the schedule. The protocol framework is one of the items that we can start the discussion now.

It is proposed to make our working assumption regarding this issue so that we can proceed our work efficiently until next N1 meeting.

The proposed approach in this contribution is 3-1) since it is considered as practical and efficient.

Discussion: This paper outlines the proposal for choosing a protocol later.

The conclusion is to start the work as soon as possible to be able to discuss the outcome in our next WG meeting in August.

The MS implementation should keep the implementation for the CS side and built similar implementation for the CS side.

RAT is also a subject to be studied.

Conclusion: Noted.

Tdoc N1-000767 VGCS service accessibility/ Nortel Networks

This is a CR against 03.68/R00

Presentation: Precise that if no NCH is defined on the cell, mobiles shall assume that VBS and VGCS services are not supported on this cell.

Discussion: None.

Conclusion: Agreed.

Tdoc N1-000768 GCS service accessibility/ Nortel Networks

This is a CR against 03.69/R00

Presentation: Precise that if no NCH is defined on the cell, mobiles shall assume that VBS and VGCS services are not supported on this cell.

Discussion: None.

Conclusion: Agreed

Tdoc N1-000769 Talker outside Group Call Area/ Nortel Networks

This is a CR against 03.68/R00

Presentation: Currently, the uplink is released if the talker leaves the GCA. If the talker is leaving the GCA the handover procedure shall be MSC controlled.

Discussion: None.

Conclusion: Agreed

Tdoc N1-000770 Originator outside Group Call Area/ Nortel Networks

This is a CR against 03.69/R00

Presentation: Currently, the call is released if originator leaves the GCA. If the originator is leaving the GCA the handover procedure shall be MSC controlled.

Discussion: None.

Conclusion: Agreed.

Tdoc N1-000771 Notification response & uplink reply procedure definition/ Nortel

This is a CR against 03.68/ R00.
Presentation: Precise Uplink Reply and Notification Response Use and uplink freeing
Discussion: None.
Conclusion: Agreed

Tdoc N1-000772 Notification response & uplink reply procedure definition/ Nortel

This is a CR against 03.69/ R00.
Presentation: Precise Uplink Reply and Notification Response Use and uplink freeing
Discussion: None.
Conclusion: Agreed

Tdoc N1-000773 Release dataFlow correction/ Nortel Networks

This is a CR against 03.68 R00.
Presentation: Wrong message name on MS-BSS and ISUP interface.
Discussion: None.
Conclusion: Agreed

Tdoc N1-000774 Release dataFlow correction/ Nortel Networks

This is a CR against 03.69 R00.
Presentation: Wrong message name on MS-BSS interafce. RELEASE is not an ISUP message then should not be capital letter
Discussion: None.
Conclusion: Agreed.

Tdoc N1-000691 BC IE parameter negotiation during the call/ NEC, NTT DoCoMo

This is a discussion paper
Presentation: It is proposed that addition of two messages for Bearer Modification without pre-notification is approved as working assumption.
In current TS24.008, three message for In Call Modification are defined, namely MODIFY, MODIFY COMPLETE, MODIFY REJECT.
These messages are available for Bearer Modification without Pre-notification. But, these messages are not enough for Bearer Modification without Pre-notification.
MODIFY COMPLETE message corresponds to the 3rd flow for accept. MODIFY REJECT message corresponds to the 3rd flow for reject. MODIFY message corresponds to the 2nd flow for sending the modified BC IE. No messages correspond to the 1st flow to send the new BC IE and the flow to reject the new BC IE.
Therefore two messages which are corresponds to the flows to send the new BC IE and reject the new BC IE have to be added to TS24.008.
Discussion: Related to N1-000692
BC handling is defined in a different way than in GSM, where 3 steps instead of 2 are defined. It is preferred to keep it in the same way as in GSM messages, to prevent adding a new message if the same principle applies here.
Parameter change in is different in this concept than the GSM method, therefore 3 messages are required.
Backward compatibility is covered too by sending a reject message.
The delegates support the proposal.
This proposal covers change of BC during an ongoing call.
Conclusion: Noted, principle is accepted.

Tdoc N1-000704 Proposed acceleration of Emergency Call work based on Category/ NEC

This is a discussion paper.
Presentation: There was a discussion about Emergency call setup procedure before this meeting as the called party BCD number method and the category method. And then S1 concluded the category method to

be the method implemented in R00 feature. This contribution proposes to accelerate to protocol design work in N1 to cope early implementation.

We propose to discuss protocol work in N1 based on the CR submitted previously in N1-000441

Discussion: There was S1 agreed on the principle on the attached CR.

We need confirmation from S1 that it is the right way to go. The controversial issue has been cleared out.

Next S1meeting, Ericsson or interested companies to get the requirement agreed by S1 and inform N1 about it so we can proceed. 22.101 should include the requirements, if yes then we could provide the CR in our next N1 meeting.

Comments on the attached CR were discussed in the meeting.

How shall we encode the octets for ex.119 in Japan (ambulance and Fire) to the service categories?

We need to define either a point code then different alternatives need to be define t for the point codes, or keep it as it is indicating 8 service using bit 8 as bit map. We need to define the maximum for this version.

Bitmap is preferred. When more services need to be added then the default emergency centre should be defined. It is also if the network does not receive the IE, then the default emergency centre is called too.

Operator specific values are preferred to be removed to make a common implementation.

Roaming should be explained too.

Reaction of MSC in case it receive more than one service points. The answer is it depends on the home network configuration.

Conclusion: Rejected

Comments by the chairman:
- Clarification on S1 working assumption on the category method was requested.
- It was clarified that the latest version of 22.101 already contains the requirements.
- Encoding / decoding requirements for service category IE in case of multiple services are requested -> 8 bit long bitmap was preferred.
- What is octet 4 needed for if multiple indications can be given in octet 3?
- Max len of the service category IE is needed
- Default service to be indicated by no bits set in the bitmap

Is 4 octets the right length considering SIM datafield length.

Tdoc N1-000705 Bearer modification without pre-notification /NEC

This is a discussion paper

Presentation: NEC proposed to introduce modified bearer modification procedure. In addition, it takes the change of clause for "Changing the Call Mode" described in subsection 5.3.4.3 in TS24.008. Change request (CR) and description of structured procedure for "In-call modification" described in subsection 7.3.7 in TS23.108.

Discussion: Several comments on the technical proposal.

Conclusion: Noted as for N1-000706 and N1-000707.

Tdoc N1-000706 Bearer modification without pre-notification(24.008)/ NEC

This is a CR against 24.008/R00

Presentation: Current UMTS specification (UMTS 24.008) specifies the procedure that candidate Bearer capabilities modified by "Modify message" should be notified during call setup stage. And the bearers could be specified by bearer capability information element included in the appropriate messages, i.e. Call confirmed, Call proceeding or Setup.

However, the number of bearer, which could be included in the message, is limited by two. (Beaer capability 1 and Beaer capability 2) Therefore, it is impossible to specify the bearer over two kinds. In addition, it may take call re-establishment when the bearer that was not specified during call setup is needed.

A study of technical realisation for Service Modification without pre-notification was completed in N3 and the WI description was produced N3. Therefore actual modification for 24.008 is ready to start.

Discussion: Use 23.108 as basic for future discussion, specially to describe the data flows.

Conclusion: For info, Noted

Tdoc N1-000707 Bearer modification without pre-notification/NEC

This is a CR against 23.108/R00

Presentation: Current UMTS specification (UMTS 24.008) specifies the procedure that candidate Bearer capabilities modified by "Modify message" should be notified during call setup stage. And the bearers could be specified by bearer capability information element included in the appropriate messages, i.e. Call confirmed, Call proceeding or Setup.

However, the number of bearer, which could be included in the message, is limited by two. (Beaer capability 1 and Beaer capability 2) Therefore, it is impossible to specify the bearer over two kinds. In addition, it may take call re-establishment when the bearer that was not specified during call setup is needed.

Discussion:

Conclusion: For info, Noted

Tdoc N1-000788 CC enhancements to cover UMTS codec negotiation and selection procedures/ Ericsson L.M

This is a CR against 24.008

Presentation: Handling of codec types in CC protocol requires a more generic negotiation mechanism to support new codec types from the UE and to indicate & modify the codec type to be used by the UE.

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: The name of the information element is used in different places so search for them and change them.

Listing the AMR as a whole lump where S4 group specifies it. It is difficult to put requirements for the codecs in 24.008.

Conclusion: Comments are welcomed to the R00 spec. Noted for information

8   Output Liaison Statements

Tdoc N1-000701 Proposed LS on clarifications to DRX parameter for GMM/ Ericsson

This LS is sent to RAN2 and RAN3.

Presentation: TSG-CN WG1 is gratefull for Liaison Statements from TSG-RAN WG2 (R2-000910)(N1-000587) and TSG-RAN WG3 (TSGR3#12(00)1110)(N1-000594) on support of idle-mode DRX control, and their review of the CR (Tdoc N1-000551) now included in 24.008 v3.3.1 for the support of configurable DRX cycle length for each MS.

In the CN1#12 meeting the attached CR (Tdoc N1-000755) was agreed in order to clarify issues 1,2 and 3 below, commented by R2. CN1 believes this completes the issues raised.

For more details please refer to the document.

Discussion: Related to N1-000755.

Conclusion: Agreed

Tdoc N1-000702 LS on Transport of Codec Information during the Codec Negotiation between MS and MSC/ Siemens - Ericsson

Goes to RAN2 and RAN3.

Presentation : Following the joint ad-hoc meeting between CN1, RAN2 and RAN3 on Thursday, 25.05.00, CN1 discussed again the requirements for the transport of Codec Information during the Codec Negotiation between MS and MSC, with the following outcome:

To be prepared for the negotiation of more than one codec type in R'00, CN1 kindly ask RAN2 and RAN3 to provide in 3GPP R'99 a mechanism for the transport of codec information in the protocols under their responsibility.

Please refer to the document for more details.

Discussion: A WA was made yesterday to negotiate the codec on a CC layer where the MSC sends back the negotiated codec (total codecs are 16). So if a new codec was required during the call other than the 16 codecs then we need to override the one of the codecs.

Conclusion: The name of the container is to be changed NAS synchronisation indicator, revised to **N1-000795**, which was agreed

Tdoc N1-000714 revised to N1-000751 Liaison statement on Global solution of "Cause of no CLI"

This LS is sent to SA1 and CN4.

Presentation: In N1, we considered global solution in 3GPP specifications regarding to "Cause of No CLI" to fulfil the requirement of TTC. As a result, N1 approved CR in N1-000750 (attached file).

The LS from S1 says, "It must be possible to indicate the coin line simultaneously with the other indications". However, the multiple "Cause of No CLI"s are not notified simultaneously in present TTC standards.

The definition in TTC that the multiple "Cause of No Id"s are notified simultaneously to MT user is defined for the future extension. This extension has not been implemented. The solution N1 is proposing can guarantee future extension.

We hope N4 can review this N1 proposal and to liaise back to N1 urgently whether the proposal is acceptable considering the N4 decisions on SS stage 2 and stage 3 specification under N4 control.

Discussion: Title is revised. It is to be sent together with the CR in N1-000750.

Conclusion: Agreed and sent during the meeting

Tdoc N1-000639 response to LS to N1 on including the SAI into the Gs-i/f BSSAP+-LOCATION-UPDATE-REQUEST message as requested in N1-000543/ (NTT COMWARE)

This LS is sent to R3 and copied to s2.

Presentation: N1 thank R3 for the LS (N1-000595(R3-001217)).

As already stated in last paragraph of your LS, N1 believe that the reason for introduction of SAI is using not in the location management but in the applications like that CAMEL. In detail, the new cell global identity IE in the BSSAP+-LOCATION-UPDATE-REQUEST message is for the location management in UMTS as GSM and the new service area identification IE is for the other applications in UMTS (This relationship between IEs corresponds to the one between LAI IE and the SAI IE in the RANAP Initial UE message.) The requirement was also mentioned in the LS from S2 (N1-000023, R3-000055, S2-99F29).

Therefore N1 would like to inform R3 that N1-000543 is still valid as it is.

Discussion:

Conclusion: Agreed:

Tdoc N1-000696 which was revised to N1-000804 Reply to LS on Correction for mobile stations staying in GMM READY virtually for ever/ Ericsson

This LS is sent to SMG2

Presentation: N1 thanks SMG2 for their LS on " Correction for mobile stations staying in GMM READY virtually for ever " in Tdoc 821/00.

N1 has discussed this issue, and a solution which is mandatory for R99 has been agreed in N1 #12.

The CR's to 24.007, 24.008, 23.060 and 04.64 R99 are attached for information.

Discussion: Related to toN1-000793. S2 was added to N1-000696 and N1-000793 was removed.

Conclusion: Agreed.

Tdoc N1-000710 Response to LS on usage of terms GSM, UMTS and GERAN/ Nokia

This LS is sent to SA1, SA2, SMG2, copied to R3.

Presentation: CN WG1 thanks SA WG1 for the liaison statement S1 (00) 320 (N1-000601) on the usage of terms GSM, UMTS and GERAN. CN WG1 shares the concern of SA WG1 on some of the terminology CN WG1 has been using in R99 specifications under its control.

For more details please refer to the document.
Discussion:
Conclusion: Agreed with some editorial changes on the same document.

Tdoc N1-000712 Terminal capability negotiation including codecs (reply)/ Telia

This LS is sent to T2 MMS adhoc, copied to SA2, SA4.
Presentation: TSG-CN WG1 thanks TSG-T WG2 MMS adhoc for the LS contained in TDoc N1-000613 (T2M000047) and is happy to provide the answers to the questions raised, which are mentioned in the document.
Discussion:
Conclusion: Agreed

Tdoc N1-000713 Response to LS TSGS1#8(00)245 on the introduction of a user controlled switch of the priority of the user and operator preferred PLMN list/ Ericsson

This LS is sent to S1, copied to T2, T3, SMG9.
Presentation: TSG-CN WG1 thanks TSG-S1 for their LS (TSGS1#8(00)245) on the introduction of a user controlled switch of the priority of the user and operator preferred PLMN list. N1 takes note of this new requirement, which has an impact on the N1 TS23.122 specification.
N1 has some comments and questions for clarification below:
-        the S1 CR on 22.011 only applies to the automatic network selection mode. Is it the intention that the switch doesn't apply to manual network selection mode (to sort the list displayed to the user)?
-        PLMN selection is already a complicated procedure and adding this switch makes the procedure even more complex and confusing for the user. The prioritization of the operator list can already be achieved today by emptying the user list.
Discussion: There seems to be an easier way to achieve the same goal, and this should be studied by S1.
Conclusion: Agreed

Tdoc N1-000778 Reply to LS on "GPRS ciphering "/ Ericsson

This LS is sent to S3, CN, copied to SMG, N4.
Presentation: Please refer to the document.
Discussion: Some discussion went on the MS Network Capability IE. In the CRs attached N1-000722 and N1-000789.
Conclusion: Revised to N1-000799, Draft an additional paragraph to the LS. Revised to **N1-000806**, which was presented after rewriting it, it was agreed.

Tdoc N1-000784 Liaison Statement on the introduction of 3G MS capabilities in MS classmark 3/ Vodafone AirTouch

This LS is sent to SMG2, SMG2 WPA.
Presentation: TSG CN WG1 thanks SMG2 WPA for their liaison statement (Tdoc SMG2-00-954) on the introduction of MS capabilities in MS classmark 3.
The CR attached was presented to the CN1 delegates by Vodafone AirTouch during our meeting in Hawaii and was agreed. It will be submitted to TSG CN plenary #8 in June.
The CR adds three 1-bit fields to MS Classmark 3, to indicate support of UMTS (FDD), UMTS (TDD) and CDMA2000. CN1 understands that there are two 'flavours' of CDMA2000 and asks SMG2A to consider whether or not a further bit in classmark 3 is required in order for us to indicate the mobile's support of the two types of CDMA2000. CN1 feels that such an extension would be relatively simple to add.
Discussion: Third paragraph to be deleted.
Conclusion: Revised to **N1-000805**, which was agreed.

Tdoc N1-000787 Handling of codec types in Ue for different access technologies./ Ericsson

This LS is sent to SA4.

Presentation: CN1 intend to introduce a Supported Codecs List IE in DTAP (call control) protocol for R'00 in order to support future codec types other than the default UMTS narrow band AMR, standardised for R'99.

It has been discussed in this working group whether or not the codec list should comprise of separate lists for each radio access. The perceived advantage of this approach is that it provides a freedom of implementation within the UE. Also negotiation of codecs in OoBTC procedures in the CN would only be performed using a list of codecs for the access type to which the UE is attached. However this could result in much signalling at set-up and much duplication if codecs are supported for more than one access type.

Thus CN1 kindly request SA4 to provide their opinion on this matter. If there is no practical reason for providing separate codec lists from the UE for each supported radio access technology then CN1 propose that the UE only provides one list with all codec types. It is then a matter of the MSC and the OoBTC procedures to limit the list to appropriate types for the radio access.

Discussion: None
Conclusion: Agreed

Tdoc N1-000715 Response to LS on hexadecimal IMEI format/ Nokia

This LS is sent to SA WG3 SA WG5, SA WG1, CN WG4, RAN WG2, RAN WG3, GSM Association, copied to SA2.

Presentation: CN WG1 thanks SA WG1 for the liaison stament S1(00)370 / N1-000625 on the hexadecimal IMEI format.

CN WG1 was able to agree the attached CR in tdoc N1-000779 after the receiving LS S3-000352 / N1-000776 from SA WG3.

Discussion:
Conclusion: Agreed

Tdoc N1-000793 LS to S2 on optimisation of Cell Update Procedure/ Ericsson

This Ls is sent to S2 (related to N1-000804)

Presentation: The issue of staying of MM in state READY virtually forever is discussed in N1-000723 and a solution has been proposed which is backward compatible.

There are changes necessary in 24.007 (CR A014r2), 24.008 (CR 208r3), 04.64 (CR 142r2) R99.

This changes need to be regarded by 23.060 R99 to be valid. The proposed changes are attached as CRA147r3, please refer to the document.

Discussion:
Conclusion: Agreed

Tdoc N1-000700 Response to LS (R2-000667 / N1-000586) on MS initiated signaling connection release/ Nokia

Presentation: CN WG1 thanks RAN WG2 for the liaison stament R2-000667 (N1-000586) on UE initiated signaling connection release. The issue has been discussed before between the two working groups and RAN WG2 have added the necessary RRC procedure to their specification.

CN WG1 agreed corresponding CR which is attached to this document and provide it for RAN WG2 for information.

Conclusion: Rejected.

Tdoc N1-000703 Response to LS (R2-000945), LS TSG S1 (00) 103 on UE/MS idle mode operation and LS TSG S1 (00) 368 on PLMN selection/ Ericsson

This LS is sent to R2,S1, Cc: SMG2

Presentation: N1 would also like to stress that N1 needs to consider requirements from EDGE COMPACT in the PLMN selection procedures, in addition to the GSM/UMTS scenarios, although this is not so relevant to R2. To have a single procedure which can be applied to both is much simpler for MS implementations.

Please refer to the document.

Conclusion: Agreed

Tdoc N1-000709 which is revised to Tdoc N1-000797 LS on UE triggered authentication and key agreement during connections/ Ericsson

This LS is sent to SA3, copied toR2, T3.

Presentation: CN1 thanks SA3 for their Liaison statement (Tdoc S3-000213) on the above subject. CN1 recognises the need for such a function for R00 and will begin to study the issue.

The scope of such work must be defined and the WG from which the WI description originates must also be defined. CN1 proposes that such definitions are input to the R00 planning workshop in Nice on the 14.-15. June 2000 with the goal of approving the project plan at the TSG plenary #8 in June.

The Inter Group Coordinator for security is Chris Pudney of Vodafone AirTouch.

Conclusion: Agreed.

Tdoc N1-000758 LS on Removal of Service Accept/ BT

This LS is sent to 3GPP SA2

Presentation: A CR (attached) has been presented to CN1 with the intention of aligning 24.008 with 23.060 on the subject of the removal of the Service Accept message.

CN1 is currently discussing this topic. CN1 agree that keeping the principle of protocol layering is important and should be maintained whenever possible. Some delegates consider this principle more important than the reasons for the change that were identified during CN1 meeting. The removal of an explicit Service Accept introduces complex interaction between different protocol layers e.g. GMM, SM and Lower layers (RAB setup etc) and could lead to problems. However, to continue discussion on the protocol issues further, CN1 would like to understand the reason for S2's decision on removal of Service Accept from the protocol architecture veiwpoint and the benefits for doing so.

CN1 is unable to agree on this issue and asks S2 if they see any problems in re-introducing Service Accept message.

For the CR, please refer to the document.

Conclusion: Agreed.

9 Any other business

Futur meeting's agenda will be adapted to the active WIs and all corrections for older releases will be under corrections.

S3 and CN joint meeting 13 June, 14-15 CN-S2 WI drafting, so it would be good to have the proposal via email before the meeting.

After TSG#8 we will be working more in R2000 WI as SIP
- either Adhoc meetings for N1 or
 - attend S2 meetings to get the stage 2 requirement done so we can start our work.
The chairman will arrange with S2 chairman to arrange a S2-N1 joint meeting.
Contact interested S2 delegates and choose the date. Week 32 can be an alternative. 2 days are proposed.

Closing the meetings.
Thank the delegates for the contributions, thank the host T1P1 for hosting the meeting in Hawaii, We have closed the meeting fairly early this time, although we have the same amount of documents!

Annex A: List of documents

ftp://ftp.3gpp.org/TSG_CN/WG1_mm-cc-sm/TSGN1_12/Documents/CN1-Tdoclist_12.doc

Annex B: Participants

3gppcn1_12_attend
ee.zip

Annex C: List of CRs from CN1#12 to TSGN#8

TSG Meet-ing	TSG Doc number	TSG WG doc number	Spec	CR	Rv	Ph	Cat	Vers Old	Vers New	Subject	Source at TSG	WG-respon sible	TSG WG meet	TSG status	Workitem	Remarks
NP-08	NP-000276	N1-000676	03.68	A023		R00	B	8.1.0	9.0.0	Introduction of Originator-to-dispatcher information into VGCS	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000677	04.68	A025		R00	B	8.1.0	9.0.0	Introduction of Originator-to-dispatcher information into VGCS	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000678	03.69	A016		R00	B	8.1.0	9.0.0	Introduction of Originator-to-dispatcher information into VBS	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000679	04.69	A022		R00	B	8.1.0	9.0.0	Introduction of Originator-to-dispatcher information into VBS	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000767	03.68	A027		R00	F	8.1.0	9.0.0	VGCS service accessibility	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000768	03.69	A018		R00	F	8.1.0	9.0.0	VBS service accessibility	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000769	03.68	A028		R00	C	8.1.0	9.0.0	talker outside Group Call Area	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000770	03.69	A019		R00	C	8.1.0	9.0.0	Originator outside Group Call Area	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000771	03.68	A029		R00	F	8.1.0	9.0.0	Notification response & uplink reply procedure definition	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000772	03.69	A020		R00	F	8.1.0	9.0.0	Notification response & uplink reply procedure definition	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000276	N1-000773	03.68	A030		R00	F	8.1.0	9.0.0	Release dataFlow correction	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-

																00-255
NP-08	NP-000276	N1-000774	03.69	A021		R00	F	8.1.0	9.0.0	Release dataFlow correction	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-255
NP-08	NP-000275	N1-000738	03.68	A024		R99	F	8.1.0	8.2.0	Call Release clarification at the Relay MSC	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-254
NP-08	NP-000275	N1-000739	03.68	A025		R99	F	8.1.0	8.2.0	Speech transmission architecture clarification	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-254
NP-08	NP-000275	N1-000740	03.68	A026		R99	D	8.1.0	8.2.0	Clarification of anchor MSC address format	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-254
NP-08	NP-000275	N1-000741	03.69	A017		R99	D	8.1.0	8.2.0	Clarification of anchor MSC address format	N1	N1	N1-12	Agreed	ASCI	Same as SMG#32 P-00-254
NP-08	NP-000279	N1-000780	24.008	201	1	R99	F	3.3.1	3.4.0	COMPACT Mobile Station Interference Measurements Capability	N1	N1	N1-12	Agreed	EDGE	
NP-08	NP-000269	N1-000760	04.08	A1029	1	R97	F	6.10.0	6.11.0	Clarification on local and foreign TLLI management	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000761	04.08	A1027	1	R98	A	7.7.0	7.8.0	Clarification on local and foreign TLLI management	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000658	24.008	209		R99	F	3.3.1	3.4.0	Network behaviour, abnormal cases detach	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000659	24.008	210		R99	F	3.3.1	3.4.0	IEI value of the 'Tear down indicator' IE	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000667	24.008	214		R99	C	3.3.1	3.4.0	Modification of MS Classmark 3 and modification of MS RA Capabilities, for DTM mobile stations.	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000668	24.007	015		R99	C	3.3.1	3.4.0	Protocol Discriminator to route packet data sent by a DTM mobile from BSC to PCU	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000721	24.008	193	1	R99	F	3.3.1	3.4.0	MODIFY PDP CONTEXT REJECT –message definition	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000762	24.008	222	1	R99	A	3.3.1	3.4.0	Clarification on local and foreign TLLI management	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000763	24.007	014	2	R99	F	3.3.1	3.4.0	Change of the GMM Ready Timer behaviour	N1	N1	N1-12	Agreed	GPRS	

NP-08	NP-000269	N1-000791	24.008	208	3	R99	F	3.3.1	3.4.0	Change of the GMM Ready Timer behaviour	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000269	N1-000792	04.64	A142	2	R99	F	8.3.0	8.4.0	Change of the GMM Ready Timer behaviour	N1	N1	N1-12	Agreed	GPRS	
NP-08	NP-000270	N1-000794	24.008	195	2	R99	F	3.3.1	3.4.0	MS behavior if RAU attempt counter is greater than or equal to 5	N1	N1	N1-12	Agreed	GSM - UMTS interworking	
NP-08	NP-000270	N1-000796	23.122	003	5	R99	F	3.2.0	3.3.0	Modification of PLMN Selection Procedures to support UMTS+COMPACT Network Selection	N1	N1	N1-12	Agreed	GSM / UMTS interworking	
NP-08	NP-000270	N1-000619	24.007	012		R99	F	3.3.1	3.4.0	Remove GRR primitive descriptions and make reference to other document	N1	N1	N1-12	Agreed	GSM/ UMTS interw	
NP-08	NP-000270	N1-000620	24.007	006	2	R99	F	3.3.1	3.4.0	Updating SM for R99	N1	N1	N1-12	Agreed	GSM/ UMTS interw	
NP-08	NP-000270	N1-000736	24.008	194	1	R99	F	3.3.1	3.4.0	Clarifications on GSM – UMTS interoperability	N1	N1	N1-12	Agreed	GSM/ UMTS interw	
NP-08	NP-000270	N1-000755	24.008	189	1	R99	F	3.3.1	3.4.0	DRX value 0000 clarification and R97 compatibility issue	N1	N1	N1-12	Agreed	GSM/ UMTS interw	
NP-08	NP-000270	N1-000756	24.008	190	1	R99	F	3.3.1	3.4.0	Compatibility issue due to deletion of SM cause #35	N1	N1	N1-12	Agreed	GSM/ UMTS interw	
NP-08	NP-000270	N1-000807	24.008	221	2	R99	B	3.3.1	3.4.0	Recovery from PDP context inconsistency	N1	N1	N1-12	Agreed	GSM/ UMTS interworking	
NP-08	NP-000270	N1-000670	24.008	215		R99	F	3.3.1	3.4.0	Correction of references in protocol error handling for SM	N1	N1	N1-12	Agreed	GSM/ UMTS Intw	
NP-08	NP-000270	N1-000607	23.009	009		R99	C	3.2.1	3.3.0	Clean-up of 3G_MSC-A_HO SDLs	N1	N1	N1-12	Agreed	GSM/UMTS Interworking	
NP-08	NP-000270	N1-000608	23.009	010		R99	C	3.2.1	3.3.0	Clean-up of 3G_MSC-B_HO SDLs	N1	N1	N1-12	Agreed	GSM/UMTS Interworking	
NP-08	NP-000270	N1-000643	24.008	203		R99	F	3.3.1	3.4.0	Editorial corrections to MM and GMM in 24.008	N1	N1	N1-12	Agreed	GSM/UMTS Interworking	
NP-08	NP-000266	N1-000644	24.008	205		R99	F	3.3.1	3.4.0	Removal of P-TMSI and optionally P-TMSI signature sent in Detach Request in UMTS only	N1	N1	N1-12	Rejected	GSM/UMTS Interworking	Plenary to decide!
NP-08	NP-000265	N1-000646	24.008	206		R99	F	3.3.1	3.4.0	Removal of Service Accept message	N1	N1	N1-12	Not agreed and not rejected	GSM/UMTS Interworking	Plenary to decide!

NP-08	NP-000270	N1-000759	24.008	220	1	R99	B	3.3.1	3.4.0	Modification of QoS to support max 0kbps	N1	N1	N1-12	Agreed	GSM/UMTS interworking
NP-08	NP-000270	N1-000669	24.007	016		R99	C	3.3.1	3.4.0	Services provided by the Radio Resource Management entity	N1	N1	N1-12	Agreed	GSM-UMTS interworking
NP-08	NP-000270	N1-000697	24.008	184	1	R99	C	3.3.1	3.4.0	Introduction of 3G MS capabilities in MS Classmark 3 (Introduction of 3G MS capabilities in MS Classmark 3)	N1	N1	N1-12	Agreed	GSM-UMTS Interworking
NP-08	NP-000278	N1-000638	23.009	002	4	R99	B	3.2.1	3.3.0	CR to 23.009 on Handover scenario for Multicall	N1	N1	N1-12	Agreed	Multicall
NP-08	NP-000271	N1-000633	24.008	196		R99	C	3.3.1	3.4.0	Applicability of CS Multimedia to GSM	N1	N1	N1-12	Agreed	Multimedia
NP-08	NP-000272	N1-000661	24.008	212		R99	F	3.3.1	3.4.0	Reserve one bit in PFI	N1	N1	N1-12	Agreed	QoS
NP-08	NP-000267	N1-000722	24.008	211	1	R99	F	3.3.1	3.4.0	Inclusion of PFC Feature Mode in MS Network Capability IE	N1	N1	N1-12	Agreed	QoS
NP-08	NP-000272	N1-000615	24.008	188		R99	F	3.3.1	3.4.0	TFT IE length and editorials	N1	N1	N1-12	Agreed	QoS
NP-08	NP-000272	N1-000720	24.008	187	1	R99	F	3.3.1	3.4.0	Additional SDU error rate value	N1	N1	N1-12	Agreed	QoS
NP-08	NP-000267	N1-000798	04.08	A1031	1	R98	F	7.7.0	7.8.0	Support of GEA/2 Encryption Algorithm	N1	N1	N1-12	Agreed	Security
NP-08	NP-000273	N1-000663	24.008	137	1	R99	C	3.3.1	3.4.0	Network Authentication Failure	N1	N1	N1-12	Agreed	Security
NP-08	NP-000273	N1-000744	24.008	207	1	R99	F	3.3.1	3.4.0	Integrity checking of MM/GMM messages and integrity protection during emergency call	N1	N1	N1-12	Agreed	Security
NP-08	NP-000273	N1-000745	24.008	213	1	R99	C	3.3.1	3.4.0	Alignment of CC and SM protocols with current MM/GMM integrity protection rules	N1	N1	N1-12	Agreed	Security
NP-08	NP-000273	N1-000747	24.011	006	1	R99	C	3.2.0	3.3.0	Alignment of SMS protocol with current MM/GMM integrity protection rules	N1	N1	N1-12	Agreed	Security
NP-08	NP-000273	N1-000749	24.008	217		R99	F	3.3.1	3.4.0	Correction of the GMM Authentication and ciphering procedure	N1	N1	N1-12	Agreed	Security
NP-08	NP-000273	N1-000785	24.008	216	2	R99	F	3.3.1	3.4.0	Correction of the MM Authentication procedure	N1	N1	N1-12	Agreed	Security
NP-08	NP-000268	N1-000606	04.08	A1019		R96	A	5.16.0	5.17.0	Alignment on ISDN BC Coding	N1	N1	N1-12	Agreed	TEI
NP-08	NP-000268	N1-000605	04.08	A1017		R97	A	6.10.0	6.11.0	Alignment on ISDN BC Coding	N1	N1	N1-12	Agreed	TEI

NP-08	NP-000268	N1-000604	04.08	A1015		R98	A	7.7.0	7.8.0	Alignment on ISDN BC Coding	N1	N1	N1-12	Agreed	TEI	
								0								
NP-08	NP-000268	N1-000603	24.008	185		R99	F	3.3.1	3.4.0	Alignment on ISDN BC Coding	N1	N1	N1-12	Agreed	TEI	
NP-08	NP-000274	N1-000610	24.008	176	2	R99	C	3.3.1	3.4.0	Clarification of reference to Q.931 for LLC IE	N1	N1	N1-12	Agreed	TEI	
NP-08	NP-000274	N1-000626	24.008	191		R99	F	3.3.1	3.4.0	References and editorial corrections to 24.008	N1	N1	N1-12	Agreed	TEI	
NP-08	NP-000274	N1-000750	24.008	218	3	R99	B	3.3.1	3.4.0	Addition of "Cause of No CLI" IE in SETUP message	N1	N1	N1-12	Agreed	TEI	
NP-08	NP-000274	N1-000779	24.008	192	1	R99	C	3.3.1	3.4.0	IMEI hex coding	N1	N1	N1-12	Agreed	TEI	

Annex D: Liaison Statements from CN1#12

TSGN1 number	Title	Related spec	Related documents	Sent to
N1-000639	Proposed response to LS to N1 on including the SAI into the Gs-i/f BSSAP+-LOCATION-UPDATE-REQUEST message as requested in N1-000543	29.018	LS out (R3, CC:S2)	To:R3, Cc:S2
N1-000701	LS on clarifications to DRX parameter for GMM		LS out + N1-000755	To RAN2 and RAN3
N1-000703	Response to LS (R2-000945), LS TSG S1 (00) 103 on UE/MS idle mode operation and LS TSG S1 (00) 368 on PLMN selection		LS out + N1-000796	To: R2,S1, Cc: SMG2
N1-000710	Response to LS on usage of terms GSM, UMTS and GERAN		LS out	To: SA1, SA2, SMG2, Cc: R3
N1-000712	Terminal capability negotiation including codecs (reply)		LS out	To: T2 MMS adhoc, Cc:SA2, SA4
N1-000713	Response to LS TSGS1#8(00)245 on the introduction of a user controlled switch of the priority of the user and operator preferred PLMN list		LS out	To:S1, cc: T2, T3, SMG9
N1-000715	Response to LS on hexadecimal IMEI format		LS out + N1-000779	To: SA WG3 SA WG5, SA WG1, CN WG4, RAN WG2, RAN WG3, GSM Association, Cc: SA2
N1-000751	Liaison statement on Global solution of "Cause of no CLI"		LS out + N1-000750	To SA1, CN4, sent during the meeting to N4
N1-000758	LS on Removal of Service Accept		LS out + N1-000646	To:SA2
N1-000787	Codec Lists from Ue for different Access technologies	24.008/ OoBTC	LSout	To: SA4
N1-000793	Change of the GMM Ready Timer behaviour	23.060/ GPRS	CR147r3	To S2 (related to N1-000804)

N1-000795	LS on Transport of Codec Information during the Codec Negotiation between MS and MSC	LS out	To: R2, R3
N1-000797	LS on UE triggered authentication and key agreement during connections	LS out	To: SA3, Cc:R2, T3 Note: SA3 to be sent on the S3-reflector.
N1-000804	Reply to LS on Correction for mobile stations staying in GMM	LS out + N1-000763, N1-000791, N1-000792, N1-000793	To: SMG2
N1-000805	Liaison Statement on the introduction of 3G MS capabilities in MS classmark 3	LS out + N1-000697	To: SMG2, SMG2 WPA
N1-000806	Reply to LS on "GPRS ciphering "	LS out + N1-000722, N1-000798	To:S3, CN, Cc:SMG, N4