DRAFT

Third Generation Partnership Project

DRAFT REPORT v2.1.1

3GPP TSG-CN / ETSI SMG3

13th - 15th December 1999
Nice, France

Hosted by ETSI

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1 Opening of the Meeting

The 6th TSG_CN Plenary meeting took place from 13th to the 15th of December in Nice hosted by ETSI. Mr. Adrian Scrase Head of ETSI MCC welcomed the TSG_CN delegates to the south of France on behalf of ETSI and explained the logistical details for the remainder of the week.

The CN Plenary was held at the same time as the Terminal and RAN Plenaries, and was directly followed by the SA Plenary meeting. All of the TSG meetings took place at the Acropolis conference center in the Heart of the old Nice.

The CN Chairman, Mr. Harald Dettner welcome the delegates and opened the meeting at 10:00 on Monday 13th December.

2 Approval of the Agenda

The meeting agenda is available on the 3GPP server at the following location:
ftp://ftp.3gpp.org/TSG_CN/TSG_CN/TSGN_06/Agenda/

NP-99398: **Draft Meeting Agenda.**

RESULT: The Agenda was **REVISED to NP-99400**

⇓ REVISED ⇓

NP-99400: **Meeting Agenda.** Presented by the TSG_CN Chairman.

DISCUSSION: The meeting agenda was revised at the beginning of the meeting to include allocation of new documents to the agenda items.

RESULT: The Agenda was **AGREED.**

3 Approval of the TSG_CN#5 Meeting Report from Kyongju

The meeting report is available on the 3GPP server at the following location:
ftp://ftp.3gpp.org/TSG_CN/TSG_CN/TSGN_05/Report/

NP-99396: **Revised CN#5 Meeting Report from the Kyonju meeting.**

DISCUSSION: The CN#5 meeting report was completed and distributed by the MCC at the end of the meeting. There was the usual 2-week deadline for comments by e-mail, and these comments have been integrated in this revised meeting report presented in this document.

RESULT: The meeting report was **APPROVED.**

4 Letters / Reports from other groups and Urgent Issues

4.1 TSG_CN Working Groups

NP-99399: **Liaison Statement on LCS CRs and GTSs for GSM Release 98 in SMG#30**. Presented by the CN1 Chairman.

CONTENT: In the LS, N1 informs SMG#30bis and CN-plenary of which draft specifications and CRs were reviewed and approved by the recent meeting of N1.

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

NP-99405: **Proposed LS to TSG-SA, TSG-SA1 and TSG-SA2 from N2 on CAMEL Control of VoIP Services FTR**. The CN2A Chairman.

CONTENT: Contains the draft TR for "CAMEL control of IP" (given also in *NP-99510*).

DISCUSSION: Following comments from other delegates, the TR in *NP-99510* was revised to *NP-99561,* and the LS was revised also to reflect these modifications.

RESULT: The LS was **REVISED to NP-99534.**

NP-99534: **Rev. LS to TSG-SA, TSG-SA1 and TSG-SA2 from N2 on CAMEL Control of VoIP Services FTR**.

RESULT: The document was **AGREED** to be distributed by e-mail after the TSG_N meeting.

NP-99407: **Response Liaison Statement on Active Location Retrieval in CAMEL Phase 3**. Presented by the CN1 Chairman.

CONTENT: The document provides the following information regarding ALR in CAMEL P.3.

All necessary procedures and signaling messages already exist in the specifications.

Thus:

- There is no specific impact on the MS due to the Active Location Retrieval functionality.
- There is no impact on specifications handled by TSG N1. TSG N1 has no work to do on the Active Location Retrieval functionality.
- For TSG N1 viewpoint, this functionality can be available for Release 99.

DISCUSSION: The related CR was conditionally approved in the last N2A meeting, and this LS from N1 confirms their assumptions. N1 and N2A will continue to advance with this topic and hopefully provide CRs to the next plenary.

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

NP-99408: **LS from N1 on Liaison Statement on Maximum size of N-PDU**. Presented by Hannu CN1 Chairman.

CONTENT: In N1 the maximum size of N-PDU has been discussed in the last two meetings. N1 have found that a maximum SDU size up to 1502 octets has no impact on their specifications.

N1 also deduce that if S1 has considered it suitable to increase the maximum SDU size then this has got an impact on specifications under S2 control, such as 23.060 and 23.107.

DISCUSSION: Not addressed to CN plenary hence the Plenary simply notes the activity.

RESULT: The document was **NOTED.**

NP-99511: **LS from N2 on the scope of CAMEL Phase 3**. Presented by Steffen N2A Chairman.

CONTENT: Contains the detailed comments of the content of CAMEL Phase 3.

DISCUSSION: It can be noted that Camel Ph.2 took also 2 years to realize. It is unlikely that **all** CAMEL Ph.3 features are realized by the next N#7 meeting.

There were some suggestions to reduce the scope of Camel Ph.3 in order to have these features realized by March 2000. In response to this Ian Park mentioned that it would take a great amount of time to do the analysis of open issues which would delay the overall delivery of Camel Ph.3.

CN Chairman asks CAMEL delegates to provide all CRs for this work item by CN#8. Reply for Steffen; related errors in the specifications are only recognized once implementation is underway.

The CN Chairman drafted a position paper clarifying the following *(NP-99532)*

➢ **At CN#7 review the status of all CAMEL Ph3 items, and any items which N2 cannot assure as stable and which is still contentious shall be excluded of R99.**

RESULT: The plenary **ENDORSES** the sending of this LS **by N2.**

⇓ RELATED DOCUMENT ⇓

NP-99532: **Position Paper on the Requirements for finalizing the content of CAMEL Phase 3**

CONTENT: **En Resume:** It is seen as essential that the CAMEL phase 3 specifications can be used as the basis for implementations early in the year 2000. N2 are therefore urged to work towards solutions for all open issues, ready to be presented for approval to CN plenary meeting #7, 13 – 15 March 2000. This will give implementers and operators the necessary confidence that the list of CAMEL features shown in document NP-99511 as part of CAMEL Phase 3 will really be there. If any of the features listed in NP-99511 remains contentious at CN #7 then there is a serious risk that the feature would have to be postponed to CAMEL Phase4

RESULT: Document to be **forwarded to N2** for consideration.

NP-99512: **LS from SS Ad Hoc on LCS**. Presented by Steffen N2A Chairman.

CONTENT: Relates to a similar document from N1 and T1P1.

TSG CN SS ad hoc group doubts if LCS can be approved as part of Release 98 as LCS brings new functionality, i.e. GSM TS 04.30 is a new specification. TSG CN meeting have taken over the responsibility for maintaining GSM Core Network specifications from SMG3. At the meeting at Kyongju in October 1999 TSG CN have agreed that it will not be acceptable to change GSM Release 98 (or earlier releases) except to deal with serious technical errors.

   ➤ **TSG CN SS ad hoc recommends the approval of LCS as a Release 99 work item.**

DISCUSSION: **Hannu;** LCS was agreed as not impacted by the R97/R98 freezing and it was presented before the freezing came into place, (i.e. at the CN#6 Meeting).

Mikko; The specification 04.30 has been approved at the recent SMG30 bis meeting, who have confirmed that LCS is a R98 feature.

Harald; This decision was originally agreed in the Fort Lauderdale meeting.

   ➤ **CN did not support SS Ad Hocs opinion,**

   ➤ **CN plenary confirms that LCS is a part of Release 98.**

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

⇓ RELATED LS ⇓

NP-99526: **Rev. LS from SS Ah Hoc on LCS**. Presented by Steffen N2A Chairman.

RESULT: **AGREED** to be taken to T1.P1 by Stephen Hayes.

4.2   Other 3GPP TS Groups

NP-99529: **LS from S2 on Transcoder free operation**.

CONTENT: S2 highlights some open issues about location and control of speech codec in an outgoing liaison statement destined to N2 on the issue of transcoder free operation resp. TRAU issues).

S2 would like to highlight the open issues to TSG CN and ask them to take them into consideration when discussing the submission of work not yet completed in R99.

DISCUSSION: N2B chairman explained that unfortunately the LS was received late in N2 and although a reply from N2 was produced, it is unclear whether the issues are resolved now from S2 perspective.

RESULT: The LS is **forwarded to N2 and N1** for important action.

NP-99401: **LS from SA2 on CBC-RNC Protocol Responsibility**. Presented by Hannu, the N1 chairman.

CONTENT: N1 has stated in S2-99A51 (N1-99A88) that they see some kind of responsibility because the CBC should be part of the core network but until now they have no expertise in that field.

N2 sees responsibilities only for the interface between the CBC and the SGSN, which will mainly provide transport functionality. Additionally due to the workload they advised S2 to consider the specification beyond release 99.

DISCUSSION: **Q. from Mikko:** Routing node only applicable to packet or also switching? **R.** There is a high probability that it will be packet only.

RESULT: The document was **NOTED.**

NP-99402: **LS from SMG10 & TSG-SA WG3 on the application of IST to emergency calls**.

CONTENT: SMG10 and TSG-SA WG3 would like to state that the termination of emergency calls must be a VPLMN option and that this should be stated in the appropriate specifications.

DISCUSSION: The specifications mentioned are in the ownership of SMG10 and TSG-SA WG3, hence the inclusion of this information is out of the domain of CN.

The liaison is to be treated by N2 who will reply to SA-WG3 directly.

RESULT: The document was **NOTED.**

NP-99403: **LS from N2 on S2 on establishment of a QoS taskforce.**

CONTENT: Sent to S2 and copied to N plenary for information. The document was not presented.

RESULT: The document was **NOTED.**

NP-99466: **LS from SA2 on CDR creation for non-charging liable subscriptions**.

RESULT: The document was **WITHDRAWN – DUPLICATE of NP-99469.**

NP-99469: **LS from SA2 on CDR creation for non-charging liable subscriptions**.

CONTENT: S2 would like to bring to the awareness of TSG CN an issue related to the completion of charging in R99. The issue is related to the creation of the CDRs in case of non-charging liable subscriptions, e.g. in case of prepaid subscriptions. S2 has conditionally accepted a Change Request on the suppressing of the unnecessary CDRs on subscribers that are not liable for charging. In this context, S2 conditional acceptance signifies that the CR shall be a part of Release 99 if TSG CN should accept this feature as a part of R99.

Because this causes a few CRs to TSG CN WG2, S2 ask the TSG CN if it would be possible to add this feature into R99 specifications in order to complete this work.

DISCUSSION: Nokia have drafted the related CRs to 29.002 and 29.060 (*NP-99485/486*) for inclusion in R99.

> **N-Plenary agrees to the inclusion of CDR as a part of R99.**

RESULT: The document was **NOTED.**

NP-99468: **LS from SA2 on Re. LS on security issues in VHE/OSA**. Presented by Yun-Chao Hu.

CONTENT: SA2 requests that SA3 give guidance as to the re-use of the mechanisms defined in the Security Architecture (TS 33.103) under development and on the perceived need for Mutual Authentication between the UA and Application. The CN OSA ad-hoc are requested to note the requirement for the "UA to Application and User Data, Authentication and Authorization", for which SA2 and SA3 are currently specifying the details. Also to consider the specification work is being developed in SA3

RESULT: The document was **NOTED.**

NP-99530: **LS from SA3 on MAP security**.

CONTENT: S3 have noted a number of other questions on MAP security from the liaison statement. A joint ad hoc meeting of experts from S3 and N2 is proposed to resolve the questions raised by N2, progress the work according to the above principles, and draft the necessary CR to 29.002. It is proposed that the meeting will be held in Darmstadt, Germany on *6th and 7th January 2000*, hosted by Deutsche Telekom.

DISCUSSION: Meeting dates may be modified to avoid clashes with other meetings

Requirement for agreed terms of reference for this meeting to be agreed by e-mail.

RESULT: The document was **NOTED.**

4.3   Others

NP-99404: **LS from T1.P1 on transfer of LCS to 3GPP**. Presented by Steven Hayes

CONTENT: T1P1 has the intention to transfer the responsibility of GSM LCS to 3GPP.

DISCUSSION: **Note:** In the future the source of CRs should not be an SDO, only individual companies representing that SDO.

> ➢ **CN#7 was identified to T1.P1 to be the hard deadline for the transfer of the LCS to 3GPP.**

Concerns were raised on the transfer of SMG2 related LCS specifications not being transferred before TSG#8.

These issues will be compiled into related LS to T1.P1 in *NP-99527.*

RESULT: The document was **NOTED.**

⇓ RELATED LS ⇓

NP-99527: **LS to T1.P1 on the transfer of LCS to 3GPP.**

RESULT: The LS was **APPROVED** to be sent from CN.

⇓ RELATED LS ⇓

NP-99573: **LS to T1P1.5 on LCS decisions in TSG-CN#6.**

RESULT: The LS was **AGREED** to be taken to T1.P1 to by Stephen Hayes.

NP-99409: **LS from SMG2 on UE/MS idle mode operation.** Presented by Hannu, N1 chairman.

CONTENT: The document contains the conclusions from the 'Handover and Cell Selection' workshop held in June. This is provided to allow checking of whether this aligns with the current Stage 1, and working assumptions in the different groups:

DISCUSSION: This proposal is a bit outdated and N1 have both endorsed the principal and has already begun the work, details of which are given in *(NP-99454 and NP-99455)*.

RESULT: The document was **NOTED.**

NP-99503: **Input document from BT. Discussion on an all IP based Core Network**. Presented by Henry Taylor of BT.

CONTENT: It is proposed that 3GPP-CN considers during this meeting, how best to progress work on an All IP Network architecture activity for Release 2000. We shall discuss how best to provide the correct structure within TSG CN so as to focus the correct resources and skills necessary to complete the work. We must consider how this can be done without damage to our current activities, commitments and heavy workloads within TSG CN work groups.

DISCUSSION: This topic was addressed in *agenda item 9.1.* The paper raises many questions and it is hoped to provide a draft agenda for the All IP workshop in Mexico Jan 2000.

BT proposes a number of cross TSG Ad Hocs or e-mail discussion in preparation for the Jan meeting.

RESULT: The document was **NOTED.**

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5 Reports from TSG_CN Working Groups

5.1 TSG_CN WG1 (N1)

5.1.3 Report from N1

NP-99410: **N1 Status Report.** Presented by Hannu, N1 Chairman.

CONTENT: This document summarizes the progress of TSG_N1 on the work items, which have been active in the working group since the previous TSG_N plenary meeting.

DISCUSSION: **Relating to section 4.3.5 L3 segmentation** – the question is raised by N1 on applying level 2 segmentation. There are no CRs for R99, and the

> ➤ **CN Plenary agreesto shift L3 segmentation to R2000.**

Relating to section 4.3.11 PAGING RESPONSE as MM message. There is an administrative problem for non-ETSI 3GPP members as ETSI specifications (not just published standards but the latest reference versions) are not visible to them. This matter should be solved with no delay and TSGN1 is asking for TSGN #6 to raise this issue to the TSG-SA #6.

RESULT: The document was **NOTED.**

NP-99412: **Kobe Meeting Report.**

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED.**

NP-99413: **Bad Aibling Meeting Report.**

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99414: **All LSs from N1 since TSG_N#5.**

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

5.1.2 Questions for Advice and Decisions from N1

No contributions for this agenda item.

5.1.3   Approval of Contributions from N1

NP-99454:   **CR on removal of CN procedures from 03.22 (03.22 split) (Work Item TEI).** Presented by the N1 Chairman.

CONTENT: This document contains 1 CR agreed by 03.22 split drafting group and forwarded to TSG_N Plenary meeting #6 for information only.

Reason for Change: Traditionally 03.22 deals with both AS cell selection (GSM only) and NAS PLMN selection and location registration (GSM & UMTS) procedures.

For R99 this is not acceptable, as there would be a mismatch of concepts either in GSM 03.22 defining UMTS CN procedures or UMTS 23.022 defining GSM only cell selection procedures.

To overcome this problem a split is proposed in this CR together with a linked document.

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

NP-99455:   **Proposed TS 23.122 NAS Functions related to Mobile Station (MS) in idle mode (03.22 & 23.022 split).** Presented by the N1 Chairman.

CONTENT: This proposed TS have not been presented to any TSG plenary before.

The contents of the proposed TS are copied over from 03.22 V 8.2.0, which has been used as the template for the split. The intention has been that no functional changes should result from the split, and the only modifications to the meaning of the text are cases where there has been a clear contradiction or redundant/incorrect text has existed in the specification.

The principle has been that common CN related issues like PLMN selection and location registration procedures have been defined in UMTS 23.xxx (23.122 is being proposed). These procedures are applicable to GSM and UMTS.

GSM related cell selection issues are covered in 03.22 and there is a 03.22 CR linked with this document proposing to remove CN items from 03.22. The remaining cell selection procedures cover only GSM cell selection.

The section numbering has been kept as it is in 03.22 for external references. For the new specification the sections have been renumbered to eliminate deleted sections. References have been corrected in both 03.22 and 23.xxx.

The reason why it is presented here is that this urgent change needs to be implemented at the same time as other R99 CRs on 03.22 and 23.022 are being implemented.

No change to releases before R99 is proposed.

After the split there will be GSM cell selection specification in 03.22 and GSM + UMTS MS NAS idle mode procedures in 23.122. This makes 23.022 redundant and if the split is approved then 23.022 should be deleted.

DISCUSSION: It has since been confirmed that the TS number 23.122 is available, and can be allocated to this specification.

RESULT: **Although other bodies should both reference to specific sections within our specification, this is NOT the case for Type approval and test specification referencing so care must be taken on this issue**

> **CN Plenary agrees in principle to the split of 03.22**

> **CN APPROVES the TS 23.122 v0.0.0 to v3.0.0**

> **CRs will be made to 23.122 v3.0.0 and the resulting version will be 3.1.0.**

NP-99448: **CRs on Work Item Multicall.** Presented by the N1 Chairman.

CONTENT: This document contains "1" CR to 24.008 agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

Reason for Change: In the R99 core network shall allow a ME to handle more than one bearer service simultaneously. For this case, a terminal can be considered 'busy' when it is using all the possible parallel bearers and it can not receive any calls using new bearers. This is equivalent to the case when the ME not supporting Multicall is using one bearer.

DISCUSSION: Questions raised as to the correct handling of Multicall and possible interaction with supplementary services. Possible problems with coordination with other CN SWGs.

Requirement to clarify the interworking between Call waiting and Multicall before such CRs can be approved.

This CR is based on the agreed working assumption that for R99 the number of voice calls is limited to one and is alignment with the stage 1 description.

There are many open issues particularly for N2 including a stage 2 description for Multicall.

Advisable to put this CR on hold until the requirements to the other working groups are clear. Some resistance to this idea and the implementation of Multicall for R99 has not yet been clarified.

> **N1 will work in conjunction with the NSS ad hoc Multicall activity to progress with this CR.**

RESULT: The CR was **NOT APPROVED** and the issue is **REFERRED** back to N1 for further refinement.

NP-99458: **TR 23.972, Version 0.0.3 for Multimedia Telephony.** Presented by the N1 Chairman.

CONTENT: This TR is presented to the plenary for information only.

This document collects the requirements and working assumptions for multimedia for release 99. The description is at a level of detail, which is required in the detailed procedure design in N1 and N3. The document covers the CS as well as the PS multimedia services; however, with focus on CS.

The target release for the Multimedia specifications is (in general) R99, and the specifications apply to UMTS as well as GSM.

DISCUSSION: **Norbert;** N3 has already dealt with these issues, and *fall back at call set-up* can be handled in R99, but the *swap during the call* cannot be achieved and this element should be delayed until R00.

There are some contentious issues on this TR and it cannot be used as a base for future work in its current state. It is in the process of e-mail review by N1.

RESULT: The document was **NOTED** and remains as **v0.0.3.**

NP-99449: **CR to 24.008 on Work Item Multimedia.** Presented by N1 chairman.

CONTENT: This document contains "1" CR to 24.008 agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

Reason for Change: The existing GSM bearer capability is required to be enhanced to provide new services under UMTS. This document proposes new code points for new services.

RESULT: The CR was **APPROVED.**

NP-99456: **CR001r2 to 23.009 / work item GSM-UMTS interworking.** Presented by N1 chairman.

CONTENT: This document contains "1" CR agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval. Due to changes which covers the whole document, a presentation paper for the spec is also attached.

Reason for Change: To cover all handover scenarios in both 2G and 3 systems.

Note: There is some ongoing discussion within S2 but CN is not aware of the outcome. It should be noted that this area is not yet functionally frozen. In the future there may be a requirement to have correctional CRs.

This is still a R99 CR and subsequent changes to the working assumptions for 2G/3G interworking (e.g. due to discussion in S2) and the relevant specs are allowed in R99.

RESULT: The CR was **APPROVED.**

NP-99445: **CRs on Work Item GSM-UMTS interworking.** Presented by N1 chairman.

CONTENT: This document contains "20" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 20 CRs were **APPROVED.**

NP-99440: **TR 23.814 on Work Item MS Classmark.** Presented by N1 chairman.

CONTENT: This document contains the TR agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval. Related CRs in *NP-99447*.

DISCUSSION: Note that being a 23.8xx number, the report will not be published and remains within CN only. N1 agrees with this situation.

RESULT: The TR was **APPROVED** and will be updated to **v3.0.0.**

NP-99447: **CRs on Work MS Classmark.** Presented by N1 chairman.

CONTENT: This document contains "3" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 3 CRs were **APPROVED.**

NP-99457: **TR 23.913 V 1.0.0 on Turbocharger.** Presented by N1 chairman.

CONTENT: This document contains the Turbo-Charger Technical Report presented to CN plenary for information and discussion.

DISCUSSION: N1 has deduced that Turbo-Charger cannot be included in R99. Further analysis is required for the inclusion of this work item for R00.

The document relates to NP-99505.

As there was no consensus within the N1 group, this document is not presented for approval.

RESULT: The TR was **NOTED.**

NP-99505: **Turbo-Charger in Release 00.** Presented by Iain Sharpe of Nortel Networks.

CONTENT: Turbo-Charger may not be feasible for Release 99, but Nortel Networks views Turbo-Charger as an important feature for Release 00. Several of the disadvantages and open issues listed in the TR will no longer exist when Turbo-Charger is applied to the Release 00 architecture currently being defined within S2. Therefore, it is proposed that the feasibility study on Turbo-Charger continue within CN for Release 00.

DISCUSSION: If we move Turbocharger to R00, there may be other solutions to those proposed under the existing turbocharger description.

➢ **It is agreed by CN plenary that Turbocharger is not to be included in R99, and should be moved to R00.**

➢ **It is possible that the scope of the solution may change in R00 depending on the architecture used (all IP).**

➢ **It is expected that CN have a clear idea of Turbocharger solution for R00 by the spring CN#7 plenary. Work to establish whether turbocharger is feasible for R00 should take place in relevant CN and SA sub-groups.**

RESULT: The document was **DISCUSSED.**

⇓ RELATED LS ⇓

NP-99531: **LS to S2 on the Turbocharger.**

DISCUSSION: Due to the lack of time and disagreement between member companies, the wording of the LS could not be agreed in the meeting

RESULT: The LS was **NOT AGREED.**

NP-99442: **CRs on Work Item EDGE.** Presented by the N1 Chairman.

CONTENT: This document contains "1" CR to 24.008 agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The CR was **APPROVED.**

NP-99451: **CRs on Work Item Security.** Presented by the N1 Chairman.

CONTENT: This document contains "1" CR to 24.008 agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The CR was **APPROVED.**

NP-99450: **CRs on Work Item QoS.** Presented by the N1 Chairman.

CONTENT: This document contains "2" CRs to 24.008 agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRs were **APPROVED.**

NP-99459: **CR048r1/ 24.008 on Paging Response in UMTS/ GSM-UMTS interworking.** Presented by the N1 Chairman.

CONTENT: This document contains "1" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: The CR as presented knowing that it should be rejected at the plenary. There is a better solution being proposed by SMG2 that makes this CR redundant.

RESULT: The CR was **NOT APPROVED.**

NP-99441:   **CRs Work Item CC related items.** Presented by the N1 Chairman.

CONTENT: This document contains "2" CRs one to 24.007 and one to 24.008 agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

Intention is to increase the number of simultaneous calls/sessions from the present 7, the TI value needs to be increased.

DICSUSSION: The motivation for this change was stimulated by a liaison to N1 from S2, subsequently produced by the N1 chairman.

RESULT: The 2 CRs were **APPROVED.**

NP-99443:   **CRs on Work Item GPRS.** Presented by the N1 Chairman.

CONTENT: This document contains "22" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

SMG CRs (04.64 R99) are agreed here and approved via e-mail afterwards.

CR 011 to 23.003 on "Introduction of Reserved Service Labels in the APN" duplicates work already done within N2, and this cannot be approved within this document

Note: CR A060 to 04.65 has incorrect category.

RESULT: 21 of the 22 CRs were **APPROVED.**

CR 011 to 23.003 is removed from the pack and **NOT APPROVED.**

NP-99446:   **CRs on Work Item LCS.** Presented by the N1 Chairman.

CONTENT: This document contains "7" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: There were objections to the CR A001r2 to 09.31 at the SMG 30bis meeting.

09.08 only has CRs for R98.

> ➢   **Nothing has yet been done for R99 and the mirror CRs are required to be produced. The interested parties are invited to study the inter-MSC handover issue, and produce the necessary CRs.**

NOTE: 29.008 for R99 does not exist at this time. Also The ownership of 09.08 is not clear, N1 or SMG2?

RESULT: 6 of the 7 CRs were **APPROVED. CR A001r2 to 09.31** is removed from the pack and **REVISED** to NP-99538.

⇓ Rᴇᴠɪsᴇᴅ ⇓

NP-99538:   **Revised CR A001r2 to 09.31 on Work Item LCS.**

CONTENT: Same content as the original CR to 09.31, but removing all references to segmentation.

RESULT: The CR was **APPROVED.**

NP-99506:   **CRs to work item LCS not presented to CN1.** Presented by Stephen Hayes.

CONTENT: This document contains "2" CRs agreed by (Siemens, Nokia, Ericsson, Nortel et.al, and forwarded to TSG_N Plenary meeting #6 for approval.

Minor changes since being seen by N1 to exclude SMG2 parts. The technical parts relating to N1 were seen and agreed by N1.

RESULT: The 2 CRS were **APPROVED.**

NP-99452:   **CRs on Work Item TEI.** Presented by the N1 Chairman.

CONTENT: This document contains "4" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 4 CRs were **APPROVED.**

NP-99453:   **CRs on Work Item PCS 1900 harmonization.** Presented by the N1 Chairman.

CONTENT: This document contains "2" CRs agreed by TSG_N WG1 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRs were **APPROVED.**

NP-99444:   **CR on Work Item EDGE/ source SMG2.** Presented by N1 chairman.

CONTENT: This document contains "1" CRs not presented to TSG_N WG1 and forwarded directly to TSG_N Plenary meeting #6 for approval. It was approved by SMG2 and forwarded to TSGN WG1.

RESULT: **The CR was APPROVED.**

NP-99508:   **CR 002 to 24.034 on Link Adaptation for ECSD.** Presented by Peter Kobriger of Ericsson.

CONTENT: This document contains "1" CRs not presented to TSG_N WG1 and forwarded directly to TSG_N Plenary meeting #6 for approval. It was approved by SMG2 and forwarded to TSGN WG1.

This CR was presented to the N plenary, as there were concerns about the inclusion of this work in R99.

Reason for Change: The procedures for Link Adaptation between 8-PSK coding schemes and 8-PSK coding scheme and GMSK coding scheme is currently unspecified

DISCUSSION: Also related to the Change presented in *NP-99509*

The CR is to be examined by N1 and presented to the next N plenary meeting. If it is a single issue *NP-99508* and *NP-99509* must be merged into a single CR. Nokia and Ericsson will do the merging.

> **This merged CR will be applicable for R99**

RESULT: The CR was **POSTPONED until N#7 meeting**

NP-99509:   **CR to Work item EDGE not presented to CN1.** Presented by the N1 Chairman.

CONTENT: This document contains "1" CR to 23.004 not presented to TSG_N WG1 as such, but a similar with same contents but older spec reference was agreed in SMG3 and not brought up to the plenary afterwards. This is forwarded to TSG_N Plenary meeting #6 for approval.

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

DISCUSSION: The CR is to be examined by N1 and presented to the next N plenary meeting. If it is a single issue *NP-99508* and *NP-99509* must be merged into a single CR. Nokia and Ericsson will do the merging.

> **The merged CR will be applicable for R99**

RESULT: The CR was **POSTPONED until N#7 meeting.**

5.2   TSG_CN WG2 (N2)

5.2.1   Report from N2

NP-99473:   **Status report of TSG-N2.** Presented by Ian Park, N2 Chairman.

CONTENT: This report can be regarded as an executive summary of the work of N2, N2A and N2B since the last N plenary meeting.

DISCUSSION: Questions on the *Multicall* status, that is not aligned between the Phoenix meeting report and the N2 status report. Response from Yun-Chao Hu that the outstanding issues were identified after the Phoenix meeting. Outstanding issues include relating to the supplementary services area.

QoS task group: was initiated and will work on QoS issues with the protocols.

Object Identifiers: some debate on the best way to proceed.

- New object identifies
- New ETSI object identifier
- Agreed to use the 3rd option of an ETSI O.D in the mobile domain.

Camel control of VoIP: Comment on Camel control of VoIP: the intention is to send a proposal to SA for inclusion of VoIP in CAMEL Ph4 only.

RESULT: The document was **NOTED**.

NP-99470:   **N2 meeting report from Galway**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99474:   **N2 meeting report from Phoenix**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99472:   **All Agreed LSs from N2 since TSG_N#5**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99475:   **All Agreed LSs from N2A since TSG_N#5**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

5.2.2   Questions for Advice and Decisions from N2

No input for this agenda item.

5.2.3   Approval of Contributions from N2

NP-99489:   **CRs to GSM 03.16, 3G TS 23.016 (Work Item CAMEL Phase 2).** Presented by Steffen N2A Chairman.

CONTENT: This document contains 2 CRs on Work Item CAMEL Phase 2 agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRS were **APPROVED.**

NP-99471: **CRs to 3G TS 23.078 & 29.078 (Work Item CAMEL phase3).** Presented by Steffen N2A Chairman.

CONTENT: This document contains 2 CRs to 3G TS 23.078 agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

The proposal is to approve the 2 CRS and replace the original versions with the resultant versions of the specifications.

Some concerns raised by NTT DoCoMo that certain open issues are not covered by this CR. This should be covered in the N2 W.I status sheets in *NP-99519*. IT is proposed that *NP-99519* be revised to incorporate any open issues that have been missed in the initial draft.

N2 has to complete the open issues remaining for CAMEL Phase 3 for the CN#7 meeting.

Possible concerns over the correct version of the CR. The word/PDF revision marks are not the same. **The word version is the master documents for the CR.**

RESULT: The 2 CRs were **APPROVED**.

NP-99490: **CRs to 3G TS 23.008, 23.016, 23.018, 23.079, 29.002 (Work Item CAMEL Phase 3).** Presented by Steffen N2A Chairman.

CONTENT: This document contains 5 CRs on Work Item CAMEL Phase 3 agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 5 CRs were **APPROVED**.

NP-99510: **TR 21.978, Version 2.0.0 on CAMEL Control of VoIP Services.** Presented by Steffen, N2A chairman.

CONTENT: Reports on the feasibility of using CAMEL to control Voice over IP Services based on either H.323 or SIP.

Scope: The purpose of this Technical Report is to study the feasibility of a core network CAMEL server controlling voice services carried by VoIP within a GPRS PDP Context using:

1) An architecture based on ITU-T, H.323 family of recommendations.

2) Architecture based on IETF SIP specifications.

DISCUSSION: Concerns that this not be the only solution.

Clarifications:

H.323 and SIP were the only protocols considered

CAMEL Ph.3 can control GPRS session management

Evolution of CAMEL: GPRS interworking can be evolved for 3G packet solutions

RESULT: The TR was **REVISED** to NP-99561

⇓ REVISED ⇓

NP-99561: **Feasibility Technical Report – CAMEL Control of VoIP Services (3G TR 21.978 version 2.0.0)**

RESULT: The document was **AGREED** to be distributed by e-mail after the TSG_N meeting.

NP-99495: **CRs to 3G TS 29.002 (Work Item Long Forwarded to Number).** Presented by Yun-Chao Hu, N2B Chairman.

CONTENT: This document contains 1 CR on Work Item Long Forwarded to Number agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: Postpone approval of this CR until the companions CRs are available.

> **N2 are asked to create a full set of related CRs for presentation to the CN#7 meeting.**

RESULT: The CRs was **REFERRED back to N2** for further refinement.

NP-99491: **CR to 3G TS 29.002 (Work Item Follow Me).** Presented by Yun-Chao Hu, N2B Chairman.

CONTENT: This document contains 1 CR on Work Item Follow Me agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: S1 now confirm that Follow Me is now a 3G feature and not a GSM feature.

RESULT: The CR was **APPROVED.**

NP-99478: **TS 23.119, Version 1.0.0 Gateway Location Register.** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This is the stage 2 specification for the Gateway Location Register (GLR). The stage 3 protocol (MAP and GTP) specifications for GLR are also presented to the TSG CN#6 for approval, (see below in NP-99481, NP-99479).

DISCUSSION: It is noted that there are no contentious issues. The report is functionally frozen.

The SDL charts for location management will be added in order to align with TS 23.012. This addition will be completed before TSG CN#7.

It is the proposal to APPROVE this TS at the CN#7 meeting once the missing SDLS have been provided. The TS will then be updated to a v3.0.0.

LS was sent from NSS to N2 but was not received for the Phoenix meeting.

The CCBS issue has been treated in the GLR stage 2 and GLR stage3 specifications. NSS's concern (*TS 23.093 shall need modifications to be reflected with TS 23.012 modifications by introducing GLR.*) is no longer valid since N2B's decision, that all GLR functionality is specified in the new GLR dedicated specifications in order to isolate to the existing specifications.

Consequently, There is no GLR impact to the TS 23.093

RESULT: The TS was **POSTPONED until CN#7.**

NP-99481: **TS 29.120, Version 1.0.0.** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This is a MAP protocol specification for the GLR, which is a delta document to TS 29.002 and includes only descriptions specific to the GLR. The document was originally presented to plenary for information and approval.

DISCUSSION: CCBS open issue may have impact on this document.

As the TS is presented v1.0.0 for the 1st time to CN plenary it is simply noted for information, and it is expected to be presented to TSG_N#7 meeting.

RESULT: The TS was **POSTPONED until CN#7.**

NP-99479: **GPRS Tunneling Protocol (GTP) specification for GLR (3G TS 29.119 version 1.0.0).** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This is a GTP protocol part for GLR stage3 specifications, which is a delta document to TS 29.060 and includes only description specific to the GLR.

DISCUSSION: As the TS is presented v1.0.0 for the 1st time to CN plenary it is simply noted for information, and it is expected to be presented to TSG_N#7 meeting.

RESULT: The TS was **POSTPONED until CN#7.**

NP-99492: **CRs to GSM 09.02, 09.60, 3G TS 29.002 (Work Item GPRS).** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 8 CRs on Work Item GPRS agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 8 CRs were **APPROVED.**

NP-99493: **CR to 3G TS 29.060 (Work Item GTP Enhancements).** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 1 CR on Work Item GTP Enhancements agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The CR was **APPROVED.**

NP-99494: **CRs to GSM 03.03, 03.07, 03.08, 03.16, 09.02, 3G TS 23.003, 23.007, 23.008, 23.016, 29.002 (Work Item Location Services)** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 10 CRs on Work Item Location Services agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: **Note:** The subject of CR A034 to 03.03 in the cover sheet is incorrect although the contents are correct.

RESULT: The 10 CRs were **APPROVED.**

NP-99496: **CRs to 3G TS 23.008, 23.016, 23.018, 29.002 (Work Item Multicall).** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 4 CRs on Work Item Multicall agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: Following the discussions during the Multicall ad hoc meeting it is considered that the CR be put on hold to ensure the content is stable

RESULT: The CRs were **NOT APPROVED** and are **REFERRED back to N2** for further refinement.

NP-99480: **TS 23.153, Version 1.0.0.** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: The TS describes the technical realization of Out-of-Band Transcoder Control (OoBTC). OoBTC is a feature to enhance the speech quality and to save bandwidth in mobile-to-mobile calls. No transcoder shall be necessary for monitoring and controlling issues. The mobiles shall indicate supported codecs to the terminating MSC. The terminating MSC shall select a codec supported by both mobiles. The information about the selected codec is transported to the mobiles and the bearers are established accordingly to carry the call.

Possible contentious issue with the requirement for new CC message might be needed to indicate the selected codec to the MS (TSG-CN WG1, CR to 3G TS 24.008).

DISCUSSION: SA2 have a number of issues with this work, which are suspected not to have been resolved.

The final approval of this TS is dependent on work on bearer independent call control within the ITU_T SG11. However it is understood that this work is almost stable within ITU-T. The document is technically stable and only editorial modifications are allowed and it is expected that the work will be approved in June 2000.

RESULT: The TS was **NOTED.**

NP-99498: **CRs to 3G TS 23.007, 23.008, 29.002 (Work Item Security)**Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 4 CRs on Work Item Security agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 4 CRs were **APPROVED.**

NP-99477: **TS 23.116, Version 1.0.0 on Super-Charger.** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This Technical Specification specifies the stage 2 description of the Super-Charger that provides a mechanism to reduce the signaling traffic associated with mobility.

There are no outstanding issues and no contentious issues with this work.

DISCUSSION:

Clarification: GLR optimizes inter-network signaling whilst the Super-charger can also perform intra-network signaling. The GLR and super-charger are complimentary and can be used in the same network although the advantages of this configuration are minimal.

Modifications may be required in the GLR to enable it to function with super-charger but this requires further study.

➢ **N2B are requested to study the interaction of the GLR and the super-charger.**

The TS was presented as a v1.0.0 and the expectation is that this TS will be approved at TSG_N#7 and upgraded to v3.0.0.

RESULT: **The TS was NOTED.**

NP-99500: **CRs to 3G TS 23.008, 23.012, 23.016, 23.018, 29.002 (Work Item Super Charger).** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 6 CRs on Work Item Super Charger agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: Concerns on approving the CRs before the stage 2 document is approved.

➢ **It is proposed to approve these CRs but as a result of modifications to the stage 2 document, we may expect additional modification CRs to these specifications following the study of interaction between the GLR and super-charger.**

RESULT: The 6 CRs were **APPROVED.**

NP-99501: **CRs to 3G TS 23.012, 29.002 (Work Item TE&I).** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: This document contains 3 CRs on Work Item Technical Enhancements and Improvements agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 3 CRs were **APPROVED.**

NP-99488:	**CR to 3G TS 29.010 (Work Item: 2G-3G Handover).** Presented by Yun-Chao.Hu N2B Chairman.
CONTENT:	This document contains 1 CR on Work Item 2G-3G Handover agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.
RESULT:	The CR was **APPROVED.**

NP-99497:	**CRs to 3G TS 29.002, 29.060 (Work Item QoS Enhancements).** Presented by Yun-Chao.Hu N2B Chairman.
CONTENT:	This document contains 2 CRs on Work Item QoS Enhancements agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.
RESULT:	The 2 CR were **APPROVED.**

NP-99499:	**CRs to GSM 09.10, 3G TS 29.010 (Work Item SoLSA).** Presented by Yun-Chao.Hu N2B Chairman.
CONTENT:	This document contains 1 CRs on Work Item SoLSA agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.
DISCUSSION:	The R98 CR with the R99 equivalent is available in *NP-99553*.
RESULT:	The document was **WITHDRAWN** due to the duplication in **NP-99553.**

NP-99553:	**CRs to GSM 09.10, 3G TS 29.010 (Work Item SoLSA).** Presented by Yun-Chao.Hu N2B Chairman.
CONTENT:	This document contains 2 CRs on Work Item SoLSA agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.
RESULT:	The 2 CRs were **APPROVED.**

NP-99502:	**CRs to GSM 09.02, 3G TS 29.002 (Work Item USSD)** Presented by Yun-Chao.Hu N2B Chairman.
CONTENT:	This document contains 3 CRs on Work Item USSD agreed by TSG_N WG2 and forwarded to TSG_N Plenary meeting #6 for approval.
RESULT:	The 3 CRs were **APPROVED.**

NP-99476:	**Proposed Work Item: GTP Enhancements.** Presented by Yun-Chao.Hu N2B Chairman.
CONTENT:	This document contains the work item description for GTP enhancements.
	With the introduction of 3G services there is a need for some enhancements to the GPRS Tunneling Protocol (GTP) specified in TS 3G 29.060. For example, GTP shall be able to tunnel real-time multimedia user flows in an efficient way.
	Another requirement is that, in the 3G context, the user plane part of GTP (GTP-U) shall also be used for tunneling of user data over the Iu interface between RNC and SGSN. This requires a clearer separation of the user plane part from the signaling plane part (GTP-C).
	There are some related CRS in *NP-99493*. The approval of the remaining CRs that are required to complete this work area is expected for TSG_N#7.
RESULT:	The Work Item was **APPROVED.**

NP-99487: **CR 013r1 23.003 on Introduction of Reserved Service Labels in the APN.** Presented by Yun-Chao.Hu N2B Chairman.

CONTENT: **Reason to change.** The PDP type IP has been extended to allow the separation of PDP context activation and ISP Environment setup. These extensions support e.g. DHCP end-to-end and Mobile IP.

In order to help automatic APN selection, the concept of Reserved Service Label is introduced, which indicates that a special service is supported by the APN. The service offering is not exclusively coupled to the reserved APN: all APNs can support the new services if configured to do so by the operator.

DISCUSSION: This CR was seen and agreed by N2. However a counter proposal is presented in NP-99524 and NP-99525. It is agreed that NP-99525 replaces NP-99487.

RESULT: The CR was **WITHDRAWN.**

NP-99524: **Definition of Reserved Service Labels.** Presented by Nortel Networks.

CONTENT: The document contains support material for the alternative CR provided in *NP-99525.* The CR proposes the service using a Reserved Service Label and the core network shall determine the most appropriate GGSN to provide the service. However, it will continue to be a requirement to support DNS resolution of APNs for the case where there is no prior operator agreement.

DISCUSSION: This CR has been presented to the author of the original CR in NP-99487, who agrees with the concept.

RESULT: The document was **NOTED.**

NP-99525: **Rev. CR 013r1 23.003 on Introduction of Reserved Service Labels in the APN.** Presented by Iain Sharpe of Nortel Networks.

CONTENT: Contains a CR to 23.003 on Reserved Service Labels in the APN.

DISCUSSION: This CR has been presented to the author of the original CR in NP-99487

RESULT: The CR was **APPROVED.**

NP-99485: **CR 032 to 29.002 on Improving charging efficiency.** Presented by Mikko of Nokia.

DISCUSSION: This CR has sent to the N2 e-mail reflector and a number of comments – mainly editorial have been received.

RESULT: The CR was **NOTED and sent back to N2**

> **It is agreed that this is a R99 issue. It will be studied by N2, and it is expected that the CR be presented for approval to TSG_N#7.**

NP-99486: **CR 078 29.002on Introduction of Reserved Service Labels in the APN.** Presented by Mikko of Nokia.

CONTENT: Contains a CR to 29.002 for Improving GPRS charging efficiency.

Reason for change: Normally, the SGSN and the GGSN collect charging information on MSs which they are serving. The SGSN collects charging information for each attached MS and for each active PDP context. The GGSN collects charging information for each active PDP context.

Alternative charging mechanisms, such as prepaid or flat rate billing, do not require generating charging information (CDRs) in the SGSN and in the GGSN. Sending CDRs for such MSs and/or PDP contexts to Charging Gateway Functionality increases load in the communication channel.

This CR introduces a method of decreasing the load in the communication channel. CDRs may not be sent for MSs and/or PDP contexts which are not liable for charging. If

the feature is not supported in the SGSN and in the GGSN, the SGSN and the GGSN will send CDRs normally. It is operator-specific whether charging information is collected for those MSs and/or PDP contexts which are not liable for charging. For roaming subscribers, CDRs should be generated.

At attach or inter-SGSN routing area update, the packet domain subscription data is transferred to the SGSN. This data includes the subscribed charging characteristics. When creating a PDP context or when updating the PDP context, the SGSN copies the charging characteristics of the PDP context from the subscribed charging characteristics. At inter-SGSN routing area update, the subscribed charging characteristics are transferred from the old SGSN to the new SGSN in the MM context.

DISCUSSION: This CR has sent to the N2 e-mail reflector and a number of comments – mainly editorial have been received

> **It is agreed that this is a R99 issue. It will be studied by N2, and it is expected that the CR be presented for approval to TSG_N#7.**

RESULT: The CR was **NOTED** and **REFERRED back to N2** for further refinement.

NP-99507: **CR 033 to 23.078 on Correction of the direction of Int_Continue after sending Int_O/T-Abandon.** Presented by Sumio Miyagawa.

CONTENT: **Reason to change.** N2-99J49 was agreed at the N2 Phoenix meeting to arm DP O-Abandon or T_Abandon as EDP_R. However the proposed SDLs were not correctly described. The signal Int_Continue should be from the right, the gsmSSF, to which the previous Int_O/T_Abandon has been sent, not from the left, which indicates other entities.

DISCUSSION: The document has been distributed to the CN / CN2 mailing lists and no comments have been received.

RESULT: The CR was **APPROVED.**

5.3   TSG_CN WG3 (N3)

5.3.1   Report from N3

NP-99420: **Status Report from N3.** Presented by Norbert, N3 Chairman.

CONTENT: This report can be regarded as an executive summary of the work of N3 since the last N plenary meeting.

DISCUSSION: The Status report was noted here and questions for clarification taken in section 5.3.2

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

NP-99421: **Report of CN3 #6 Meeting in Sophia.**

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99422: **Report of CN3 #7 Meeting.**

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99423: **All Outgoing LSs from TSG_N3 since TSG_N#5 Plenary.**

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

5.3.2 Questions for Advice and Decisions from N3

NP-99420: **Comments made to Status Report from N3.** Presented by Norbert, N3 Chairman.

DISCUSSION: Comments were made to the following sections of the report.

- ➢ **CN plenary endorses the N3 decision to provide separate solutions for GSM and UMTS. GSM 03.46 will be further maintained in GSM, whereas a UMTS solution will be specified in TS 23.146**

- ➢ **CN plenary endorses the N3 decision to have 3 steps for the specification of circuit switched multimedia:**
  - Basic call set-ups
  - Fall back during call set-up
  - Fall back during the call (see NP99-535)

- ➢ **CN Plenary agrees to the deletion of the work item Modem and ISDN Interworking for GPRS.**

- ➢ **CN Plenary endorses the transfer / deletion of specifications as proposed by N3.**

RESULT: **The document was NOTED.**

.

5.3.3 Approval of Contributions from N3

NP-99428: **CR to 03.46 for Introduction of Real-time non-transparent FAX in UMTS,** Presented by N3 chairman.

CONTENT: The document contains a CR to 03.46 to show the changes required to created 23.146 v1.0.0 as provided in *NP-99425*. The CR was provided to the Plenary only for information.

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

NP-99425: **TS 23.146, Version 1.0.0 for Real time Non transparent FAX specification**. Presented by N3 chairman.

CONTENT: Circuit switched type of Real time Non transparent FAX specification.

This specification is applied to UMTS only and has relation to 3G TS 27.001 and 3G TS 27.003.

DISCUSSION: It is expected that this TS be approved at TSG_N#7 meeting to be updates v3.0.0

It is agreed that this is to remain in R99.

As there is only one N3 meeting before the next N#7 meeting, e-mail discussion on the TS is already underway.

RESULT: The document was **NOTED**.

NP-99435: **CRs to 3G Work Item Real Time Non-transparent fax.** Presented by N3 chairman.

CONTENT: This document contains "2" CRs on Work Item Real Time NT Fax agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRs were **APPROVED**

NP-99426: **3G TR 23.910 V1.0.0 on of CS data bearer services**. Presented by N3 chairman.

CONTENT: This TR records open issues and agreed understanding and solutions to be used for the provision of CS data bearer services.

Outstanding Issues: Handover from GSM to UMTS. Lower rates for NT data.

RESULT: The document was **NOTED**.

NP-99439: **CRs to 3G Work Item CS Data Services in UMTS**. Presented by N3 chairman.

CONTENT: This document contains "3" CRs on Work Item CS Data Services in UMTS agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 3 CRs were **APPROVED**.

NP-99429: **CRs to 3G Work Item Access to ISPs**. Presented by N3 chairman.

CONTENT: This document contains "1" CR on Work Item Access to ISPs agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The CR was **APPROVED**.

NP-99430: **CRs to 3G Work Item FTM**. Presented by N3 chairman.

CONTENT: This document contains "2" CRs on Work Item FTM agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRs were **APPROVED**.

NP-99431: **CRs to 3G Work Item GPRS**. Presented by N3 chairman.

CONTENT: This document contains "12" CRs on Work Item GPRS agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 12 CRs were **APPROVED**.

NP-99432: **CRs to 3G Work Item GPRS Mobile Interworking**. Presented by N3 chairman.

CONTENT: This document contains "1" CR on Work Item GPRS Mobile Interworking agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The CR was **APPROVED**.

NP-99433: **CRs to 3G Work Item High Speed Circuit Switched Data**. Presented by N3 chairman.

CONTENT: This document contains "4" CR on Work Item HSCSD agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 4 CRs were **APPROVED**.

NP-99434: **CRs to 3G Work Item Multimedia**. Presented by N3 chairman.

CONTENT: This document contains "2" CRs on Work Item Multimedia agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRs were **APPROVED**.

NP-99436: **CRs to 3G Work Item Service clean up**. Presented by N3 chairman.

CONTENT: This document contains "5" CRs on Work Item Service clean up agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval.

The CR to 03.10 v8.0.0 is a to GSM only specification, hence agreement is sought from TSG_N and approval from SMG3. Final approval will be obtained from SMG by e-mail.

RESULT: The 4 CRs were **APPROVED**. The CR to 3.10 v8.0.0 was **ENDORSED.**

NP-99437: **CRs to 3G Work Item PIAFS**. Presented by N3 chairman.

CONTENT: This document contains "2" CRs on Work Item PIAFS agreed by TSG_N WG3 and forwarded to TSG_N Plenary meeting #6 for approval..

RESULT: The 2 CRs were **APPROVED**.

NP-99438: **CRs to 3G Work Item Technical Improvements and Enhancements**. Presented by N3 chairman.

CONTENT: This document contains **"5"** CRs **on Work Item TEI** agreed by **TSG_N WG3** and forwarded to **TSG_N Plenary** meeting #6 for approval.

Note: CR 005 to 29.007 has not been agreed within N3 as there are some open issues in this CR.

RESULT: 4 CRs were **APPROVED**. **The CR005 to 29.007 is WITHDRAWN**

NP-99424: **Proposed Work Item description sheet for Circuit Switched Multimedia Features for R00**. Presented by N3 chairman.

CONTENT: Usability, user friendliness and compatibility with fixed network multimedia terminals are increased in the R00 CS multimedia bearer service by adding new features, e.g. start with speech and swap between speech and multimedia.

DISCUSSION: **LUCENT SONERA and NEC** add their names to the list of the supporting companies.

The work item content needs to be limited. The present document has too much room for open issues.

The document was redrafted to provide a clarification of the scope of the Work item.

RESULT: The document was **REVISED to NP-99535**.

⇓ **REVISED** ⇓

NP-99535: **Rev. Work Item description sheet for Circuit Switched Multimedia Features for R00**. Presented by N3 chairman.

RESULT: The document was **APPROVED**.

5.4   TSG_CN WG SS Ad Hoc (NSS)

5.4.1   Report from NSS

NP-99521: **Status Report for NSS Ad Hoc**. Presented by Steffen NSS Ad hoc Interim Chairman.

CONTENT: The TSG CN SS ad hoc meeting took place from 30 November to 02 December 1999 in Henley-on-Thames hosted by Nortel Networks. This contribution gives a summary report of the achievements of the SS ad hoc. Details can be found in the MCC report provided in *NP-99460*.

RESULT: The document was **NOTED**.

NP-99460: **MCC Report from Henley Meeting**. Presented by Steffen NSS Ad hoc Interim Chairman.

CONTENT: Contains a draft meeting of the report which has yet to be seen and commented by the NSS Ad hoc delegates

RESULT: The document was **NOTED**.

NP-99465: **LSs send from NSS Ad Hoc since TSG_N#5**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

5.4.2   Questions for Advice and Decisions from NSS

No input for this agenda itam.

5.4.3 Approval of Contributions from NSS

NP-99462:   **CRs Work Item MSP phase 1**. Presented by Steffen.

CONTENT: This document contains 2 CRs agreed by TSG_N SS ad hoc and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 2 CRs were **APPROVED**.

NP-99463:   **CRs Work Item MSP phase 2**. Presented by Steffen.

CONTENT: This document contains 7 CRs agreed by TSG_N SS ad hoc and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 7 CRs were **APPROVED**.

NP-99463:   **CRs Work Item MSP phase 2**. Presented by Steffen.

CONTENT: This document contains 7 CRs agreed by TSG_N SS ad hoc and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The 7 CRs were **APPROVED**.

NP-99461:   **TS GSM 03.94, Version 2.0.0 for Follow Me**. Presented by Steffen.

CONTENT: This TS describes the technical realization of the Follow-Me feature within the digital cellular telecommunications system. The Follow Me feature enables a mobile subscriber A to manipulate the Follow Me data of a remote party B in such a way that subsequent calls directed to remote party B will be forwarded to subscriber A.

The TS has been agreed to be re-transferred to 3GPP

RESULT: The TS was **APPROVED** and will be upgraded to 23.094 **v3.0.0**.

NP-99464:   **CRs to Work Item USSD enhancement**. Presented by Steffen.

CONTENT: This document contains 1 CR agreed by TSG_N SS ad hoc and forwarded to TSG_N Plenary meeting #6 for approval.

RESULT: The CR was **APPROVED**.

NP-99563:   **CR on Work Item LCS**.

CONTENT: This document contains 1 CRs for Release 98 agreed by TSG_N SS ad hoc and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: It is noted that there are some ASN.1 errors. These will be corrected with future CRs

RESULT: The CR was **APPROVED**.

NP-99564:   **CR on Work Item LCS**.

CONTENT: This document contains 1 mirror CRs for Release 99 agreed by TSG_N SS ad hoc and forwarded to TSG_N Plenary meeting #6 for approval.

DISCUSSION: It is noted that there are some ASN.1 errors. These will be corrected with future CRs

RESULT: The CR was **APPROVED**.

NP-99565:   **Some Thoughts on Multicall**. Presented by Steffen.

CONTENT: The document details the NSS ad hoc chairman's thoughts on Multicall. It provides additional information to that giving in the Status report.

DISCUSSION: **Note:** The requirement for there user interrogation has been removed from the stage 1 document.

> **CN Working Assumption – MULTICALL is a Supplementary Service and a new code point will be allocated**

> **CN NSS Ad hoc are designated as the focal group to lead the work on Multicall**

> **Further study on the interaction with other supplementary services (such as call waiting) is required for both R99 and R00.**

Steffen to provide a position paper on this working assumption to be approved in this meeting.

The CRs on Multicall cannot be approved at this moment in time as they are considered incomplete following this discussion.

Open Issue. The requirement for Multicall to be subscriber controlled or not.

Requirement to call an ad hoc meeting for the MULTICALL activity – with the scope to discuss the 1st phase of R99 Multicall feature. The ad hoc will take place tonight and the objective is to discuss the document 565 and CRs in 448 & 496

RESULT:　　　　**The document was NOTED and DISCUSSED at length.**

5.5　TSG_CN VHE / OSA Ad Hoc Activity

NP-99514:　　　**Status Report from CN OSA Ad hoc**. Presented by Yun-Chao.Hu

CONTENT:　　　This report reflects the activities performed by the 3GPP CN OSA Ad hoc.

It also includes a proposal from the CN OSA ad hoc group to initiate a new VHE/OSA activity either by creating a dedicated Working Group or creating a new WI in an existing Working Group.

DISCUSSION:　The proposed OSA meeting plan was designed to avoid clashed with other CN SWG meetings where possible.

Some open security issues. S3 activity has more impact on the stage 2, but it would be useful to add the SA3 relationship to this status report.

Note: The Stage 2 OSA document will be provided to SA plenary in a v1.1.0 for information.

> **CN Plenary endorses the request to allow parallel development of the stage 2 & stage 3 specification's on OSA.**

> **CN Plenary encourages the co-operation between CN OSA Ad hoc the ETSI SPAN3 and ITU_T SG.11 for the development of API protocols.**

NOTE: ITU-T coordination group was agreed as the communication path towards the ITU-T in the last TSG meetings #5. The OSA ad hoc will continue to use the CN ITU-T coordination group.

Note: there exists no liaison channel between 3GPP and ITU-T. Member companies can however present input to ITU-T.

> **CN Plenary agrees to the initiation of the OSA activity within a dedicated ad hoc Working Group. The stand alone group will run at least until CN#7, and then it's existence and allocation of work will be revisited.**

> **Yun-Chao Hu will continue to be convenor of this group**

> **CN encourages interested parties to provide input to the group, and all contentious issues should be resolved for the CN#7 meeting.**

> **If the unresolved issues cannot be cleared by the March meeting – there may be a decision to postpone OSA from R99 to R00.**

Nokia requested that R99 should be completed for TSG N#7 meeting and not delayed beyond that time. Questions were raised on the term 'complete'.

RESULT:　　　　The document was **DISCUSSED**.

NP-99517: **Meeting report of OSA Meeting#2**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99518: **Meeting report of OSA Meeting#1**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99552: **All LSs sent from the OSA meetings**.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

NP-99551: **Measures for Finalizing VHE/OSA in Release 99**. A document produced by the joined minds of Vodafone, Telia, Telenor, and Ericsson representatives. Presented by Ian Park of Vodafone Airtouch.

CONTENTS: The document produced by provides a brief assessment of the open and contentious issues for VHE/OSA and measures are proposed for advancing those issues.

A related LS will be sent to S1 and S2 in *NP-99540*

RESULT: **The document was NOTED and agreed to be FORWARDED to OSA Ad hoc and S1 and S2 by the originating companies**.

⇓ RELATED LS ⇓

NP-99540: **Draft LS to S1 and S2 on Realization of VHE/OSA for Release 1999**.

CONTENT: This scope of the OSA API will be reassessed for completion at the next TSG CN #07 Plenary (March 2000).

This workplan requires that the open issues within TS 22.121 and 23.127 need urgent resolution. Therefore, TSG CN would urge the responsible WGs to resolve them as soon as possible.

DISCUSSION Addition of text: TSG#7 plenary will decide whether VHE/OSA with reduced scope is stable enough for inclusion R99 or whether it should be deferred to R00.

Addition of N2, T2 and T3 in cc list.

RESULT: **The document was REVISED to NP-99580.**

Editors Note: what ever happened to 580 (seen / agreed)?

5.6 TSG_CN ITU-T Co-ordination Activity

NP-99542: **Refined Terms of Reference for the ITU-T Co-ordination group**

CONTENT: The terms of reference produced at CN#5 and revised SA#5. The document shows the modifications from the original ToR.

DISCUSSION: The permissible communication method to ITU can only be via member companies. This may be revisited in the future depending on requirements.

Note that Individual WGs should not communicate directly with ITU

This ToR requires refinement.

RESULT: The document was **NOTED**.

NP-99566: **Main Results of ITU-T SG11 meeting in November 1999.** Presented by Masami YABUSAKI.

CONTENT: This paper describes the main results of ITU-T SG11 meeting which was held in November/December, 1999, in Geneva.

CONTENT: Not presented to the plenary, and provided for information only.

RESULT: The document was **NOTED**.

5.7   Review of TSG_CN Work Program

5.7.1   Work Items / Work Tasks in TSG_CN and SWGs

NP-99541: List of all Work Items for TSG_CN.

CONTENT: Document produced by MCC that lists all of the Work Items under the CN domain. The document shows which SWGs are responsible for the W.Is and gives an indication of expected completion date.

DISCUSSION: **Due to limitation of time the document was not presented in the TSG_CN meeting. However the Work Item sheet was updated offline to be presented to the TSG_SA plenary meeting #6.**

△	**The W.I list will be maintained and produced by MCC at each Plenary meeting for review.**

RESULT: The document was **NOTED for INFORMATION.**

NP-99482: Completed Work Item Status sheets for R99.

RESULT: The document was **WITHDRAWN**.

NP-99484: List of all Work Items for TSG_CN2.

RESULT: The document was **WITHDRAWN**.

5.7.2   Release 1999 and Release 2000

NP-99427: **List of all Work Items currently treated in N3.**

CONTENT: This document provides Release 1999 Submission forms for all of the Work Items CN3 has to contribute (complete, delayed and/or postponed). Comments were provided to each submission form within the document *NP-99427:*

Circuit Switched Bearers in UMTS- Complete March (except BS 30 NT) - Accepted to be forwarded to SA Plenary.

Real-time Fax – Completion March 2000- Accepted to be forwarded to SA Plenary.

Frame Tunneling Mode (FTM) - Complete - Accepted to be forwarded to SA Plenary.

PIAFS - Complete - Accepted to be forwarded to SA Plenary.

Access to ISPs and Intranets – Wireless / remote access to LANs - Complete - Accepted to be forwarded to SA Plenary.

Real-time Multimedia (CN3 part only) – delete b) swap between speech and multimedia (R00). This summary sheet is to be merged with the N1 submission form in *NP-99416*.

Modem and ISDN Interworking for GPRS - Deleted - Accepted to be forwarded to SA Plenary.

Service clean-up – Completion March 2000 - Accepted to be forwarded to SA Plenary.

RESULT: The document was **DISCUSSED**.

NP-99416: **Multimedia as R99 Work Item.** Presented by N1 Chairman.

CONTENT: This document provides Release 1999 Submission form for Work Item Multimedia within N1.

RESULT: **The document was MERGED with the N3 submission sheet on Multimedia in NP-99427**.

NP-99417: **GSM – UMTS Interworking and MM for UMTS as R99 Work Item.** Presented by N1 Chairman.

CONTENT: This document provides Release 1999 Submission form for Work Item GSM – UMTS Interworking and MM for UMTS within N1.

DISCUSSION: Outstanding on this W.I issues detailed in *NP-99411*

> **UMTS Interworking and MM for UMTS was agreed by CN plenary for late inclusion in R99**

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99411: **TSGN1 task list for GSM/UMTS interworking and MM in UMTS for R99.** Presented by N1 Chairman.

CONTENT: The document contains a detailed list of N1 open tasks required to include GSM / UMTS interworking and MM in UMTS for inclusion in R99.

DISCUSSION: CN acknowledges the list of open issues.

> **CN Plenary endorses the SA decision to deleted Anonymous Access**

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

NP-99418: **MS Classmark as R99 Work Item.** Presented by N1 Chairman.

CONTENT: This document provides Release 1999 Submission form for Work Item MS Classmark within N1.

The Work Item was agreed as complete with only editorials remaining.

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99419: **Out of Band Transcoder Control (Transport of Codec Information).** Presented by N1 Chairman.

CONTENT: This document provides Release 1999 Submission form for Work Item Out of Band Transcoder Control within N1.

The expected completion of this work item is March 2000.

DISCUSSION: There are questions raised as to S4's opinion on this WI, and S2 related issues on the TRAU.

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99557: **Work Item Status Sheet for R99 / Out-of-Band Transcoder Control from N2.**

CONTENT: This document provides Release 1999 Submission form for Work Item Out of Band Transcoder Control within N2.

DISCUSSION: It was agreed to merge the W.I summary sheet from N1 with the content for N2.

RESULT: The document was **MERGED** with N1s WID sheet in NP-99419 for presentation to SA plenary.

NP-99519: **Work Item Status Sheet for R99 / CAMEL Phase 3.** Presented by N2 Chairman.

CONTENT: This document provides Release 1999 Submission form Work Item CAMEL Phase 3 within N2.

The expected completion of this work item is March 2000.

DISCUSSION: Related document in ***NP-99562***. The contents of this document are added to NP-99519 in a revised W.I sheet.

RESULT: The document was **REVISED to NP-99545.**

⇓ REVISED ⇓

NP-99545: **Rev. Work Item Status Sheet for R99 / CAMEL Phase 3.** Presented by N2 Chairman.

CONTENT: This document provides the revised Release 1999 Submission form Work Item CAMEL Phase 3 within N2.

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99562: **Proposed addition to NP-99519 (Work Item Status Sheet for R99 / CAMEL Phase 3).** Presented by NTT DoCoMo.

CONTENT: This document provides a *revised* Release 1999 Submission form Work Item CAMEL Phase 3 within N2.

The expected completion of this work item is still shown as March 2000.

Additional task to be added to the outstanding issues list:

- Dialed service trigger criteria specification in 23.078 (4.2.1.2.2) needs to be revisited

DISCUSSION: The content is some what detailed for presentation to SA.

RESULT: The document was **NOTED** and **REFERRED N2A** for further study.

NP-99520: **Work Item Status Sheet for R99 / Call Forwarding Enhancements.** Presented by N2B Chairman.

CONTENT: This document provides Release 1999 Submission form Work Item Call Forwarding Enhancements within N2.

The expected completion of this work item is March 2000.

DISCUSSION: Addition of task for the investigation of **TIF** for long forwarded-to numbers.

RESULT: The document was **REVISED to NP-99546.**

⇓ REVISED ⇓

NP-99546: **Rev. Work Item Status Sheet for R99 / Call Forwarding Enhancements.** Presented by N2B Chairman.

CONTENT: The content of the document is agreed to be merged with the content of ***NP-99560.***

RESULT: The document was **MERGED in NP-99579** with **NP-99560** content on Call Forwarding Enhancements.

NP-99554: **Work Item Status Sheet for R99 / Gateway Location Register.** Presented by N2B Chairman.

CONTENT: This document provides Release 1999 Submission form Work Gateway Location Register within N2. *The expected completion of this work item is March 2000.*

DISCUSSION: Addition of GLR to Super-charger interaction to open issues.

Addition of 29.119 and 29.129 to the list of affected specifications and removal intra-network signaling.

RESULT: The document was **REVISED to NP-99547.**

⇓ REVISED ⇓

NP-99547: **Rev. Work Item Status Sheet for R99 / Gateway Location Register.** Presented by N2B Chairman.

RESULT: The document was **AGREED.**

NP-99555: **Work Item Status Sheet for R99 / GTP Evolution.** Presented by N2B Chairman.

CONTENT: This document provides Release 1999 Submission form / GTP Evolution within N2.

The expected completion of this work item is March 2000.

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99558: **Work Item Status Sheet for R99 / Security.** Presented by N2 Chairman.

CONTENT: This document provides Release 1999 Submission form Security within N2.

The expected completion of this work item is March 2000

DISCUSSION: There are contentious issues missing from the document.

These are generated by the lack of granularity on the definition of the Work Item 'Security'.

The W.I sheet in this document has an all or nothing approach. It was suggested to provide a more detailed analysis of which elements of the overall Work item can be completed for R99 and which must be delayed to R00.

It is unlikely that all elements of the Security work items will be complete for R99.

> **N1 and N2 are urged to provide a list of completed – non-completed sub areas for the Security work item.**

> **CN Must identify the security areas may lead to incompatibility problems and these are considered essential for R99. Other security sub-areas should be postponed to R00**

> **CN will decide at TSG_N#7 which items are to be postponed to R00**

The more detailed analysis of Security and its sub-work areas is provided in *NP-99548* to be provided after this meeting.

RESULT: The document was **NOT AGREED** for presentation to SA plenary.

NP-99559: **Work Item Status Sheet for R99 / Super-charger.** Presented by N2 Chairman.

CONTENT: This document provides Release 1999 Submission form / super-charger within N2.

The expected completion of this work item is March 2000.

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99522: **Release 99 Submission Forms for TSG CN SS ad hoc related work items.**

RESULT: The document was **REVISED to NP-99560.**

⇓ **Revised** ⇓

NP-99560: **Release 99 Submission Forms for TSG CN SS ad hoc related work items.** Presented by Steffen.

CONTENT: This document provides Release 99 Submission Forms for TSG CN SS ad hoc related work items

- **Multiple Subscriber Profile, Phase 2 -** *expected completion is March 2000.*
- **Follow Me -** *Completed at TSG_N#6.*
- **Call Forwarding Enhancements -** *expected completion is March 2000.*
- **USSD Enhancements -** *Completed at TSG_N#6.*

RESULT: The document was **AGREED** for presentation to SA plenary.

NP-99504: **Release 99 Finalization.** Presented by NTT DoCoMo.

CONTENT: This document contains the following proposal from NTT DoCoMo requesting the approval of the following principles to 'complete' R99 specifications.

(1) For R99 specifications, CN WGs shall focus ONLY on the open issues identified at the CN#6 Plenary and corrective CRs.

(2) Key open issues shall be solved at the WGs held in January 2000.

(3) No further functionality/features shall be incorporated into R99 after CN#6 Plenary.

DISCUSSION: Item (1) should be modified to allow inclusion of problems discovered after CN#6.

➢ **In the period up to CN#7, CN shall concentrate to resolve the open issues and allow only corrective CRs for R99.**

➢ **During this period the priority must be given to R99 issues above R00.**

➢ **Only if there is remaining time shall R00 issues be studied.**

➢ **Problems on critical R99 issues that are raised in WG meetings should be reflected to the Plenary mail list to inform the other parties who may be involved.**

RESULT: **The principles contained within the document were AGREED as resumed above.**

5.8 Letters to Other Groups

No input to this agenda item.

5.9 Voting Issues

as the N3 voting issue on non-transparent Fax was resolved without the need for a vore at the CN plenary, no input to this agenda item.

5.10 Other Issues

No input to this agenda item.

6 Technical Co-ordination with Others

6.1 Other 3GPP TS_Groups

No input to this agenda item.

6.2 Other bodies (e.g. SMG)

No input to this agenda item.

6.3 ITU

No input to this agenda item.

7 Project Management

7.1 Work Item Management

No input to this agenda item.

7.2 Specifications within the TSG_CN Domain

NP-99544: List of all specification for TSG_CN.

CONTENT: Document produced by MCC that lists all of the specifications under the CN domain. The document shows which SWGs are responsible for the.

DISCUSSION: Due to limitation of time the document was not presented in the TSG_CN meeting.

> △ **The specification list will be maintained and produced by MCC at each TSG_N Plenary meeting for review**

RESULT: The document was **PROVIDED for INFORMATION.**

7.3 Working Methods and Work Style

No input to this agenda item.

7.4 Support Arrangements

No input to this agenda item.

7.5 Other Issues

No input to this agenda item.

8 Postponed Issues

No input to this agenda item.

9 Work plan and Future Meetings

9.1 All IP R2000

No input to this agenda item.

10 Any Other Business

No input to this agenda item.

11 Close of Meeting

Chairman's closing remarks:

There will be an effort to have a 3 day + weekend + 3 day Plenary for the December 2000 meeting.

It is unlikely that this can be achieved for March meeting, although it may be possible for June and September meetings.

When the CN Plenary must be held over 2.5 days only, it is proposed to remove the ruling of 1st day 10:00 start time. Instead a start time of 09:00 will be applied.

Harald reminded CN that he is to step down as CN chairman after the March 2000 plenary. Elections will take place after the next Plenary.

Harald thanked the delegates for their hard work throughout the year, and also the meeting hosts and support staff.

The 6th CN Plenary Meeting closed at 13:00 on Wednesday 15th December 1999.

ANNEX A: OUTPUT MATERIAL

A.1 Liaison Statements

The following Liaison Statements will be sent from the TSG_CN Meeting:

DOC	Subject	To	STATUS
NP-99527	Transfer of LCS to 3GPP	T1.P1	Sent 3/1/2000
NP-99580	Realization of VHE/OSA for R99	S1, S2, cc N2 T2, T3	PENDING CLARIFICATION ON STATUS

A.2 Work Items

The following Work Items were agreed by TSG_CN:

DOC	Work Item Subject	Source SWG
NP-99476	GTP Enhancements	N2
NP-99535	Circuit Switched Multimedia Features for R00	N3

A.3 New Specifications / Technical Reports

The following specifications / technical report were presented to TSG_CN and their status after the meeting is indicated in this table:

DOC	Type	Number	Subject	Version @ TSG#6	Planned to ver. 3	SWG	Editor
NP-99455	TS	23.122	NAS Functions related to Mobile Station (MS) in idle mode	3.1.0	Done	N1	
NP-99440	TR	23.814	Work Item MS Classmark	3.0.0	Done	N1	
NP-99457	TR	23.913	Turbocharger	1.0.0		N1	
NP-99458	TR	23.972	Multimedia Telephony	0.0.3		N1	
NP-99561	TR	21.978	Feasibility Technical Report – CAMEL Control of VoIP Services	2.0.0		N2	
NP-99478	TS	23.119	Gateway Location Register Stage 2	1.0.0		N2	
NP-99481	TS	29.120	MAP protocol specification for the GLR	1.0.0		N2	
NP-99479	TS	29.119	GPRS Tunnelling Protocol for GLP	1.0.0		N2	
NP-99480	TS	23.153	Out-of-Band Transcoder Control (OoBTC)	1.0.0		N2	
NP-99477	TS	23.116	Supercharger	1.0.0		N2	
NP-99425	TS	23.146	Real time Non transparent FAX specification	1.0.0		N3	
NP-99426	TR	23.910	CS data bearer services.	1.0.0		N3	
NP-99461	TS	23.094	Follow Me	3.0.0	Done	NSS	

ANNEX B: Participants List for CN3#6

	Name		*E-mail*	*Organisation name*	*Status*	*Partner*
Ms.	Ban	Al -Bakri	ban.albakri@etsi.fr	ETSI	3GPPO	ETSI
Mr.	Niels Peter	Andersen Skov	npa001@email.mot.com	MOTOROLA A/S	3GPPM	ETSI
Mr.	Ermanno	Berruto	ermanno.berruto@cselt.it	TELECOM ITALIA S.p.A.	3GPPM	ETSI
Mr.	Nigel. H	Berry	nhberry@lucent.com	Lucent Technologies N. S. UK	3GPPM	ETSI
Mr.	Simon	Binar	simon.binar@hd-neceur.com	NEC Europe Ltd	3GPPM	ETSI
Mr.	Olavi	Blomberg	olavi.blomberg@sonera.com	SONERA Corporation	3GPPM	ETSI
Mr.	David	Boswarthick	david.boswarthick@etsi.fr	ETSI	3GPPO	ETSI
Mr.	Igor	Brusic	igor.brusic@tuwien.ac.at	ÖFEG	3GPPM	ETSI
Mr.	Quentin	Cassen	quent.cassen@conexant.com	Conexant Systems, Inc.	3GPPM	T1
Mr.	Jonathan P.	Castro	jonathan.castro@orange.ch	ORANGE PCS LTD	3GPPM	ETSI
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Mr.	WonChul	Chung	wcchung@kt.co.kr	KOREA TELECOM CORP.	3GPPM	TTA
Mr.	Stephen	Corkovic	s.corkovic@vipnet.hr	VIP-NET GSM d.o.o	3GPPM	ETSI
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Mr.	Ian	Doig	ian.doig@etsi.fr	ETSI	3GPPO	ETSI
Mr.	Peter	Donat	peter.donat@siemens.at	FEEI	3GPPM	ETSI
Mr.	Ed	Ehrlich	ed.ehrlich@nokia.com	Nokia Telecommunications Inc.	3GPPM	T1
Mr.	John B	Fenn	johnbfenn@aol.com	SAMSUNG Electronics	3GPPM	ETSI
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Mr.	Alexandre	Gervais	alexandre.gervais@theseus.fr	THESEUS	3GPPM	ETSI
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Mr.	François	Grassot	frg@rigeltelecom.com	BOUYGUES Telecom	3GPPM	ETSI
Mr.	Steffen	Habermann	steffen.habermann@t-mobil.de	Deutsche Telekom MobilNet	3GPPM	ETSI
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ANNEX C: List of Documents

Document	Content	Source	Agenda	Replaced by
NP-99398	Draft Agenda for TSG_CN#6	CN Chairman		NP-99400
NP-99399	Liaison Statement on LCS CRs and GTSs for GSM Release 98 in SMG#30	N1	4.1	
NP-99400	Revised Agenda for TSG_CN#6	CN Chairman		
NP-99401	LS on CBC-RNC Protocol Responsibility	S2	4.2	
NP-99402	Liaison statement on the application of IST to emergency calls	SMG10 & TSG-SA WG3	4.2	
NP-99403	LS to S2 on establishment of a QoS taskforce	N2	4.1	
NP-99404	LS on the Transfer of Location Services to 3GPP	T1.P1	4.3	
NP-99405	CAMEL Control of VoIP Services FTR	N2	4.1	NP-99534
NP-99406	Response LS on applicability of GPRS and EDGE requirements and tests	SMG2	SMG3	
NP-99407	Response Liaison Statement on Active Location Retrieval in CAMEL Phase 3	N1	4.1	
NP-99408	LS on on Maximum size of N-PDU	N1	4.1	
NP-99409	UE/MS idle mode operation	SMG2	4.3	
NP-99410	TSG_N1 Status report	N1	5.1.1	
NP-99411	N1 task list for WI GSM-UMTS interworking and MM for UMTS	N1	5.7.1	
NP-99412	CN1#8 Meeting Report (Kobe Oct-1999)	N1	5.1.1	
NP-99413	CN1#9 Meeting Report (Bad Aibling Nov-1999)	N1	5.1.1	
NP-99414	All outgoing LSs from N3 since TSG#5 / for information	N1	5.1.3	
NP-99415	Work Item Status sheets for R99 / Multicall	N1	5.7.2	
NP-99416	Work Item Status sheets for R99 / Multimedia	N1	5.7.2	
NP-99417	Work Item Status sheets for R99 / GSM-UMTS interworking	N1	5.7.2	
NP-99418	Work Item Status sheets for R99 / MS Classmark	N1	5.7.2	
NP-99419	Work Item Status sheets for R99 / Out of Band Transcoder	N1	5.7.2	
NP-99420	Status Report from N3	N3	5.3.1	
NP-99421	CN3#6 Meeting Report (Sophia Oct-1999)	N3	5.3.1	
NP-99422	CN3#7 Meeting Report (Sophia Nov-1999)	N3	5.3.1	
NP-99423	All outgoing LSs from N3 since TSG#5	N3	5.3.1	
NP-99424	New W.I Complementary features to the CS Multimedia bearer service	N3	5.3.3	NP-99535
NP-99425	TS 23.146, Version 1.0.0	N3	5.3.3	
NP-99426	3G TR 23.910 V1.0.0	N3	5.3.3	
NP-99427	Completed Work Item Status sheets for R99	N3	5.7.1	
NP-99428	CR on UMTS particular 23.146 based on GSM 03.46	N3	5.3.3	
NP-99429	All CRs to WI 'Access to ISPs'	N3	5.3.3	
NP-99430	All CRs to WI FTM'	N3	5.3.3	
NP-99431	All CRs to WI GPRS'	N3	5.3.3	
NP-99432	All CRs to WI 'GPRS Mobile IP interworking'	N3	5.3.3	
NP-99433	All CRs to WI 'HSCSD'	N3	5.3.3	
NP-99434	All CRs to WI 'Multimedia'	N3	5.3.3	
NP-99435	All CRs to WI 'Real-time NT FAX in UMTS'	N3	5.3.3	
NP-99436	All CRs to WI 'Service Clean up R99'	N3	5.3.3	
NP-99437	All CRs to WI 'Support of PIAFS in UMTS'	N3	5.3.3	
NP-99438	All CRs to WI 'Tech Enhancements and Improvements'	N3	5.3.3	
NP-99439	All CRs to WI 'CS Data Services in UMTS'	N3	5.3.3	
NP-99440	TR on Work Item MS Classmark	N1	5.1.3	
NP-99441	CRs to work item CC related issues	N1	5.1.3	

NP-99442	CRs to work item EDGE	N1	5.1.3	
NP-99443	CRs to work item GPRS	N1	5.1.3	
NP-99444	CR to Work Item EDGE/ source SMG2	N1	5.1.3	
NP-99445	CRs to work item GSM-UMTS interworking	N1	5.1.3	
NP-99446	CRs to work item LCS	N1	5.1.3	NP-99538
NP-99447	CRs to work item MS Classmark	N1	5.1.3	
NP-99448	CRs to work item Multicall	N1	5.1.3	
NP-99449	CRs to work item Multimedia	N1	5.1.3	
NP-99450	CRs to work item QoS	N1	5.1.3	
NP-99451	CRs to work item Security	N1	5.1.3	
NP-99452	CRs to work item TEI	N1	5.1.3	
NP-99453	CRs to work item PCS 1900 harmonization	N1	5.1.3	
NP-99454	Removal of CN procedures from 03.22 (03.22 split)	03.22 drafting group	5.1.3	
NP-99455	Proposed TS 23.122 (03.22 split)	03.22 drafting group	5.1.3	
NP-99456	CR001r2 to 23.009 / work item GSM-UMTS interworking	N1	5.1.3	
NP-99457	TR on Work Item Turbo Charger	N1	5.1.3	
NP-99458	TR on Work Item Multimedia	N1	5.1.3	
NP-99459	CR048r1/ 24.008 on Paging Response in UMTS/ GSM-UMTS interworking	N1	5.1.3	
NP-99460	SS ad hoc meeting report#6	NSS	5.4.1	
NP-99461	New Version of FM stage 2 Spec 03.94 (incl. forced erasure)	NSS	5.4.3	
NP-99462	CRs- WI MSP phase1	NSS	5.4.3	
NP-99463	CRs- WI MSP phase2	NSS	5.4.3	
NP-99464	CRs- WI USSD enhancement	NSS	5.4.3	
NP-99465	Liaison Statements agreed in CN SS ad hoc since CN#5	NSS	5.4.1	
NP-99466	LS on CDR creation for non-charging liable subscriptions	S2	4.2	
NP-99467	Re LS on Applicability of GPRS and EDGE requirements and tests	S1/SMG1	SMG3	
NP-99468	Re. LS on security issues in VHE/OSA	S2	4.2	
NP-99469	LS on CDR creation for non-charging liable subscriptions	S2	4.2	
NP-99470	N2A meeting report #11, Galway	N2	5.2.1	
NP-99471	CRs to spec 23.078 & 29.078 CAMEL phase 3	N2	5.2.3	
NP-99472	Liaison Statements agreed in CN WG2 SWG-A since CN#5	N2	5.2.1	
NP-99473	Summary Report from N2	N2	5.2.1	
NP-99474	N2 Meeting Report (Phoenix Nov-1999	N2	5.2.1	
NP-99475	All outgoing LSs from N2B since TSG#5	N2	5.2.1	
NP-99476	Proposed WI: GTP enhancements	N2	5.2.1	
NP-99477	TS 23.116 v1.0.0: Super Charger Technical Realization	N2	5.2.3	
NP-99478	TS 23.119 v.1.0.0: Gateway Location Register (GLR) Stage 2	N2	5.2.3	
NP-99479	TS 29.119 v1.0.0: GPRS Tunneling Protocol (GTP) specification for GLR	N2	5.2.3	
NP-99480	TS 23.153 v1.0.0: Out of Band Transcoder Control - Stage 2	N2	5.2.3	
NP-99481	TS 29.120 v.1.0.0: Mobile Application Part (MAP) specification for GLR	N2	5.2.3	
NP-99482	Completed Work Item Status sheets for R99	N2	5.2.3	
NP-99483	List of all specifications for TSG_CN2	N2	5.2.3	
NP-99484	List of all Work Items for TSG_CN2	N2	5.2.3	
NP-99485	CR 29.002-078 on Improving GPRS charging efficiency (not seen by N2)	Nokia	5.2.3	

NP-99486	CR 29.060-032 on Improving GPRS charging efficiency (not seen by N2)	Nokia	5.2.3	
NP-99487	CR 23.003-013r1 on Introduction of Reserved Service Labels in the APN (Tdoc N2-99J76) contentious	N2	5.2.3	
NP-99488	CR on 2G/3G Handover	N2	5.2.3	
NP-99489	CRs on CAMEL Phase 2	N2	5.2.3	
NP-99490	CRs on CAMEL Phase 3	N2	5.2.3	
NP-99491	CR on Follow Me	N2	5.2.3	
NP-99492	CRs on GPRS	N2	5.2.3	
NP-99493	CRs on GTP Enhancements	N2	5.2.3	
NP-99494	CRs on Location Services	N2	5.2.3	
NP-99495	CR on Long Forwarded to Number	N2	5.2.3	
NP-99496	CRs on Multicall	N2	5.2.3	
NP-99497	CRs on QoS Enhancements	N2	5.2.3	
NP-99498	CRs on Security	N2	5.2.3	
NP-99499	CRs on SoLSA	N2	5.2.3	NP-99553
NP-99500	CRs on Super Charger	N2	5.2.3	
NP-99501	CRs on Technical Enhancements and Improvements	N2	5.2.3	
NP-99502	CRs on USSD	N2	5.2.3	
NP-99503	Discussion on an all IP based Core Network	BT	?	
NP-99504	Release 99 Finalisation	NTT DoCoMo	5.7.2	
NP-99505	Turbo charger for R200	Nortel	?	
NP-99506	CRs to work item LCS not presented to CN1	N1	5.1.3	
NP-99507	CR to 23.07 8 Correction of the direction of Int_Continue after sending	Siemens	?	
NP-99508	CR to 23.034 Link Adaptation for ECSD	Ericsson	?	
NP-99509	CR to Work item EDGE not presented to CN1	Nokia	5.1.3	
NP-99510	TR TS CAMEL VoIP	N2A	5.2.3	NP-99561
NP-99511	LS on the scope of CAMEL Phase 3	N2	4.1	
NP-99512	LS on LCS	NSS	4.1	NP-99526
NP-99513	Invitation to S2, T2 CN R00 ad hoc groups in Mexico	Meeting Hosts	?	
NP-99514	Status Report from CN OSA Adhoc	OSA Adhoc convenor	5.5	
NP-99515	Technical project co-ordination and management	SA2	7.1	
NP-99516	Model for the technical management and project co-ordination for 3GPP	SA2	7.1	
NP-99517	3GPP CN OSA Meeting #02 report	OSA Adhoc convenor	5.5	
NP-99518	3GPP CN OSA Meeting #01 report	OSA Adhoc convenor	5.5	
NP-99519	Work Item Status Sheet for R99 / CAMEL Phase 3	CN2 Chairman & Vice Chairmen	5.2.2	NP-99545
NP-99520	Work Item Status Sheet for R99 / Call Forwarding Enhancements	CN2 Chairman & Vice Chairmen	5.2.2	NP-99561
NP-99521	Summary Report from SS Ad Hoc	SS Ad Hoc Chairman		
NP-99522	Work Items Status List	SS Ad Hoc Chairman		NP-99560
NP-99523	Reserved			
NP-99524	Definition of Reserved Service Labels	Nortel Networks		
NP-99525	CR 23.003 V. 013 R2	Nortel Networks		
NP-99526	Revised LS on LCS	NSS		
NP-99527	LS to T1P1 on Transfer of LCS	CN		
NP-99528	CN1 Work Item List	CN1		
NP-99529	LS from S2 on transcoder free operation	S2		
NP-99530	LS to TSG-SA and TSG-CN on MAP security	SA3		
NP-99531	Draft Liaison on Turbocharger	Nortel Networks		
NP-99532	Requirements for finalizing the content of CAMEL Phase 3	3GPP TSG-N & TSC-N2 Chairmen		
NP-99533	Withdrawn			
NP-99534	Draft Liaison on Use of CAMEL in R00 for SIP and	Nortel Networks		

	H323 services			
NP-99535	WID Sheet LS Multimedia			
NP-99536	W. Assupt. On multimedia			
NP-99537	Reserved			
NP-99538	CR to 09.31 on LCS			
NP-99539	LS from S3 on VHE/OSA			
NP-99540	Proposed LS on Realization of VHE/OSA for Release 1999	LM Ericsson AB		NP-99580
NP-99541	CN WI List			
NP-99542	draft ToR for the ITU-T ad-hoc group	Chairman TSG_CN + SMG3		
NP-99543	Proposals how to approach the R'00 all IP bMN aspect within TSG_CN	Chairman TSG_CN + SMG3		
NP-99544	List of CN Specification	MCC		
NP-99545	Revised WI Sheet	CN2 Chairman & Vice Chairmen	5.2.2	
NP-99546	Reserved			
NP-99547	Work Item Status Sheet for R99 / Gateway Location Register	CN2 Chairman & Vice Chairmen		
NP-99548	Reserved			
NP-99549	Multicall as R99 Work Item	N1		
NP-99550	Minutes of multicall ad-hoc meeting 14.12.1999	TSGN	5.7.2	
NP-99551	Measures for Finalising VHE/OSA in Release 99	Vodafone, Telia, Telenor, Ericsson		
NP-99552	All Outgoing LSs from TSG_CN_OSA since TSG_N#5 Plenary	CN OSA Adhoc Convenor		
NP-99553	Revised CRs on SoLSA	N2		
NP-99554	Work Item Status Sheet for R99 / Gateway Location Register	CN2 Chairman & Vice Chairmen	5.2.2	NP-99547
NP-99555	Work Item Status Sheet for R99 / GTP Evolution	CN2 Chairman & Vice Chairmen	5.2.2	
NP-99556	Work Item Status Sheet for R99 / Multi Call	CN2 Chairman & Vice Chairmen	5.2.2	
NP-99557	Work Item Status Sheet for R99 / Out-of-Band Transcoder Control	CN2 Chairman & Vice Chairmen	5.2.2	
NP-99558	Work Item Status Sheet for R99 / Security	CN2 Chairman & Vice Chairmen	5.2.2	
NP-99559	Work Item Status Sheet for R99 / Super Charger	CN2 Chairman & Vice Chairmen	5.2.2	
NP-99560	Work Items Status List	SS Ad Hoc Chairman		
NP-99561	3G TR 21.978 V2.01.0	Nortel Networks		
NP-99562	Proposed addition to NP-99519 (Work Item Status Sheet for R99 / CAMEL Phase 3)	NTT DoCoMo	5.2.2	
NP-99563	CR for WI LCS 04.80	SS Ad Hoc	5.4.3	
NP-99564	CR for WI LCS 24.080	T1P1	5.4.3	
NP-99565	Some Thoughts on Multicall	TSG CN SS ad hoc chairman		
NP-99566	Results of ITU-T SG11 meeting in November, 1999	Masami YABUSAKI	5.6	
NP-99567	"Bake-offs" A Way to Enhance the Quality of Standards	Reinhard.Scholl@ETSI.fr		
NP-99568	MultiCall For Release 99	NTT DoCoMo, NTT Comware		
NP-99569	Proposed Liaison Statement on MultiCall	NTT DoCoMo, NTT Comware		
NP-99570	LS to TSG-SA and TSG-CN on MAP security	SA WG3		
NP-99571	Statement on security issues in VHE/OSA	SA WG3		

NP-99572	A mechanism for reporting authentication failures from VLR/SGSN to HLR	SA WG3		
NP-99573	Proposed LS to T1P1.5 on LCS decisions in TSG-CN#6	TSG-CN [Editor: Nokia]	8	
NP-99574	LCS stage 3 work in TSG-CN	Nokia, Ericsson	5.7.1	
NP-99575	Stage 2 of the Location Services feature in UMTS, 23.171, v1.1.0	Nokia	5.7.1	
NP-99576	Project Plan Outline: Location services in UMTS and cell broadcast services (3G PD 30.806-1.2.1)	Nokia	5.7.1	
NP-99577	3GPP TS 25.305: Stage 2 Functional Specification of LCS in UTRAN	Nokia	5.7.1	
NP-99578	Liaison Statement concerning Transcoder Free operation	S2		
NP-99579	Work Item Status Sheet for R99 / Call Forwarding Enhancements	N2 Chairman		
NP-99580	Revised Proposed LS on Realization of VHE/OSA for Release 1999	LM Ericsson AB		
NP-99581	Reserved			
NP-99582	CN#6 Meeting Report DRAFT v2.0.0	MCC		

ANNEX D: List of CRs Approved by TSG_CN#6

Spec	CR	Rev	Phase	Subject	Cat	Version Current	Version New	tdoc	SWG
03.03	A034		R98	Support of VLR and HLR Data Restoration procedures with LCS	C	7.2.1	7.3.0	NP-99494	N2B
03.07	A009	1	R98	Support of VLR and HLR Data Restoration procedures with LCS	C	7.0.0	7.1.0	NP-99494	N2B
03.08	A029		R98	Organization of Subscriber Data for LCS	C	7.1.0	7.2.0	NP-99494	N2B
03.10	A011		R99	Service Clean up R99	C	8.0.0	8.1.0	NP-99436	N3
03.16	A038		R98	Support of Subscriber Data Management in the HLR and VLR for LCS	C	7.1.0	7.2.0	NP-99494	N2B
03.16	A039		R98	Correction of VLR subscription Data	F	7.1.0	7.2.0	NP-99489	N2B
03.22	A039	1	R98	Correction of Figure A.2 in Annex A	F	7.2.0	7.3.0	NP-99453	N1
03.97	A006		R98	Interaction between MSP Call Forwarding & GSM Call Forwarding	F	7.1.1	7.2.0	NP-99462	NS
04.07	A035		R98	Modifications for LCS enhancements	C	7.2.0	7.3.0	NP-99446	N1
04.08	A676	3	R98	Add enhancements to LCS in GSM 04.08	F	7.3.0	7.4.0	NP-99506	N1
04.08	A939	1	R98	Addition of APN in Request PDP context activation reject message	A	7.3.0	7.4.0	NP-99443	N1
04.08	A941	1	R97	Addition of APN in Request PDP context activation reject message	F	6.5.0	6.7.0	NP-99443	N1
04.22	A024	1	R96	Correction to REMAP procedure in RLP	F	5.5.0	5.6.0	NP-99438	N3
04.22	A025	1	R97	Correction to REMAP procedure in RLP	A	6.1.0	6.2.0	NP-99438	N3
04.22	A026	1	R98	Correction to REMAP procedure in RLP	A	7.0.1	7.1.0	NP-99438	N3
04.64	A113		R97	A-bit interpretation contradiction	F	6.5.0	6.6.0	NP-99443	N1
04.64	A114		R98	A-bit interpretation contradiction	A	7.1.1	7.2.0	NP-99443	N1
04.64	A115		R99	A-bit interpretation contradiction	A	8.1.0	8.2.0	NP-99443	N1
04.64	A116		R97	Values for the maximum I frame buffer size (m)	F	6.5.1	6.6.0	NP-99443	N1
04.64	A117		R98	Values for the maximum I frame buffer size (m)	A	7.1.1	7.2.0	NP-99443	N1
04.64	A118		R99	Values for the maximum I frame buffer size (m)	A	8.1.1	8.2.0	NP-99443	N1
04.64	A122	2	R97	Peak throughput class to be used in GRR-DATA-REQ	F	6.5.1	8.6.0	NP-99443	N1
04.64	A123	2	R98	Peak throughput class to be used in GRR-DATA-REQ	A	7.1.1	7.2.0	NP-99443	N1
04.64	A124	2	R99	Peak throughput class to be used in GRR-DATA-REQ	A	8.1.1	8.2.0	NP-99443	N1
04.65	A058		R97	Using LL-Establish to negotiate protocol control information compression entities	F	6.5.1	6.6.0	NP-99443	N1
04.65	A059		R98	Using LL-Establish to negotiate protocol control information compression entities	A	7.1.1	7.2.0	NP-99443	N1
04.65	A060		R97	Including explicit parameters in SNDCP XID responses	B	6.5.1	6.6.0	NP-99443	N1
04.65	A061		R98	Including explicit parameters in SNDCP XID responses	A	7.1.1	7.2.0	NP-99443	N1
04.71	A001		R98	LCS CR for GSM 04.71	C	7.0.0	7.1.0	NP-99446	N1
04.80	A015		R98	Addition of LCS operations (was A060)	F	7.0.0	7.1.0	NP-99563	NS
07.60	A019		R97	ICPC negotiations for Interworking at the MT for NT IP	D	6.4.0	6.5.0	NP-99431	N3
07.60	A020		R98	ICPC negotiations for Interworking at the MT for NT IP	D	7.1.0	7.2.0	NP-99431	N3
09.02	A236	1	R97	Correction of the USSD procedure in the HLR	F	6.5.0	6.6.0	NP-99502	N2B
09.02	A273	1	R98	MAP Impacts for Location Services (LCS)	C	7.2.0	7.3.0	NP-99494	N2B
09.02	A276	1	R97	Use of SSN for GPRS	F	6.5.0	6.6.0	NP-99492	N2B
09.02	A277		R98	Correction of the USSD procedure in the HLR	A	7.2.0	7.3.0	NP-99502	N2B
09.02	A278		R97	Addition of GGSN number for the SRI for GPRS	F	6.5.0	6.6.0	NP-99492	N2B
09.02	A279		R98	Addition of GGSN number for the SRI for GPRS	A	7.2.0	7.3.0	NP-99492	N2B
09.02	A280		R98	Use of SSN for GPRS	A	7.2.0	7.3.0	NP-99492	N2B
09.07	A054		R96	Intermediate rate	F	5.9.0	5.10.0	NP-99433	N3
09.07	A055		R97	Intermediate rate	A	6.1.0	6.2.0	NP-99433	N3
09.07	A056		R98	Intermediate rate	A	7.1.1	7.2.0	NP-99433	N3
09.08	A137		R98	Changes due to LCS enhancements	C	7.1.0	7.2.0	NP-99446	N1
09.08	A139		R98	LCS CR for GSM 09.08	C	7.1.0	7.2.0	NP-99446	N1
09.10	A010		R98	Addition of LSA Information message	F	7.0.0	7.1.0	NP-99553	N2B
09.31	A001	3	R98	Addition of further LCS functionality in GSM Release 98	C	7.0.0	7.1.0	NP-99538	N1
09.60	A078	1	R97	Clarification of GSN Address field	D	6.4.0	6.5.0	NP-99492	N2B
09.60	A079	1	R98	Clarification of GSN Address field	D	7.2.0	7.3.0	NP-99492	N2B
09.61	A014		R98	ICPC negotiations for Interworking at the MT for NT IP	D	7.1.0	7.2.0	NP-99431	N3
09.61	A015		R97	ICPC negotiations for Interworking at the MT for NT IP	D	6.3.0	6.4.0	NP-99431	N3
23.003	011		R99	Mirror CR to that for GSM 03.03 v.7.1.1 – support of VLR and HLR Data Restoration procedures with LCS	A	3.2.1	3.3.0	NP-99494	N2B
23.003	013	2	R99	Introduction of Reserved Service Labels in the APN	B	3.2.1	3.3.0	NP-99525	N2B
23.007	002	2	R99	Authentication procedure	B	3.1.3	3.2.0	NP-99498	N2B
23.007	003		R99	Support of VLR and HLR Data Restoration procedures with LCS	B	3.1.3	3.2.0	NP-99494	N2B
23.008	003	1	R99	Introduction of the Super-Charger Concept in TS 23.008	C	3.1.0	3.2.0	NP-99500	N2B

Spec	CR	Rev	Phase	Subject	Cat	Version Current	Version New	tdoc	SWG
23.008	004	3	R99	Authentication enhancements	B	3.1.0	3.2.0	NP-99498	N2B
23.008	009		R99	Authentication Enhancements	B	3.1.0	3.2.0	NP-99498	N2B
23.008	010	1	R99	Combined CR to 23.008	C	3.1.0	3.2.0	NP-99490	N2B
23.008	011		R99	Organization of subscriber data for LCS	A	3.1.0	3.2.0	NP-99494	N2B
23.009	001	2	R99	Proposal for updates to 23.009	B	3.0.0	3.1.0	NP-99456	N1
23.012	001	1	R99	MAP Location Management Restructuring	D	3.0.0	3.1.0	NP-99501	N2B
23.012	002		R99	Introduction of Super-Charger into TS 23.012	D	3.0.0	3.1.0	NP-99500	N2B
23.014	001	1	R99	Clarification of DTMF Message	C	3.0.0	3.1.0	NP-99452	N1
23.016	004	3	R99	Introduction of the Super-Charger Concept in TS 23.016	C	3.2.1	3.3.0	NP-99500	N2B
23.016	006		R99	Support of Subscriber Data Management in the HLR and VLR for LCS	A	3.2.1	3.3.0	NP-99494	N2B
23.016	008	1	R99	Introduction of CAMEL phase 3	B	3.2.1	3.3.0	NP-99490	N2B
23.016	009		R99	Correction of VLR subscription Data	A	3.2.1	3.3.0	NP-99489	N2B
23.018	004	2	R99	Introduction of the Super-Charger Concept in TS 23.018	C	3.2.0	3.3.0	NP-99500	N2B
23.018	027	3	R99	Introduction of CAMEL Phase 3	C	3.2.0	3.3.0	NP-99490	N2B
23.022	006	1	R99	Correction of Figure A.2 in Annex A	A	3.1.0	3.2.0	NP-99453	N1
23.072	002	1	R99	Inclusion of the handling of the Service Interaction Indicators Two parameter	B	3.1.0	3.2.0	NP-99463	NS
23.078	032	2	R99	23.078 revised for CAMEL Phase 3 Release 1999	B	3.2.0	3.3.0	NP-99471	N2A
23.078	033		R99	Correction of the direction of Int_Continue after sending Int_O/T-Abandon	F	3.2.0	3.3.0	NP-99507	N2A
23.079	008		R99	Introduction of CAMEL Phase 3	C	3.2.0	3.3.0	NP-99490	N2B
23.083	001	1	R99	Inclusion of the handling of the Service Interaction Indicators Two parameter	B	3.0.0	3.1.0	NP-99463	NS
23.084	001		R99	Inclusion of the handling of the Service Interaction Indicators Two parameter	B	3.0.0	3.1.0	NP-99463	NS
23.090	001	1	R99	USSD enhancement	B	3.0.0	3.1.0	NP-99464	NS
23.091	001		R99	Inclusion of the handling of the Service Interaction Indicators Two parameter	B	3.0.0	3.1.0	NP-99463	NS
23.093	001	3	R99	Inclusion of the handling of the Service Interaction Indicators Two parameter	B	3.0.0	3.1.0	NP-99463	NS
23.093	002	3	R99	Addition of CCBS to the SS Invocation Notification Indicators	B	3.0.0	3.1.0	NP-99463	NS
23.097	002		R99	Inclusion of MSP Phase 2 functionality	B	3.0.1	3.1.0	NP-99463	NS
23.097	003		R99	Interaction between MSP Call Forwarding & GSM Call Forwarding	A	3.0.1	3.1.0	NP-99462	NS
23.108	002		R99	mirror R99 LCS CR	A	3.0.0	3.1.0	NP-99446	N1
23.122	001		R99	PLMN Selection for GPRS mobiles	F	3.0.0	3.1.0	NP-99581	N1
23.122	002		R99	Correction of Figure A.2 in Annex A	A	3.0.0	3.1.0	NP-99581	N1
24.007	001	5	R99	Transaction Identifier Extension	C	3.1.0	3.2.0	NP-99441	N1
24.007	003	5	R99	Using MM sublayer for PS-SMS message transfer	B	3.1.0	3.2.0	NP-99445	N1
24.007	004	1	R99	Uplink L3 sequence numbering	C	3.1.0	3.2.0	NP-99445	N1
24.007	005		R99	Mirror R99 LCS CR to 04.07	A	3.1.0	3.2.0	NP-99446	N1
24.008	003	3	R99	Clarification of DTMF Message Sequencing	C	3.1.0	3.2.0	NP-99452	N1
24.008	026	2	R99	Extended Transaction Identifier Reject	C	3.1.0	3.2.0	NP-99441	N1
24.008	033	5	R99	Updating Session Management (SM) for R99	C	3.1.0	3.2.0	NP-99445	N1
24.008	034	1	R99	Mobile Station Classmark 3 Clarification	F	3.1.0	3.2.0	NP-99447	N1
24.008	036	1	R99	Proposal of Classmark 2 for UMTS	B	3.1.0	3.2.0	NP-99447	N1
24.008	037	1	R99	Proposal of UMTS Bearer Capability	B	3.1.0	3.2.0	NP-99449	N1
24.008	039	4	R99	Service Request	B	3.1.0	3.2.0	NP-99443	N1
24.008	040	3	R99	Introduction of Follow-on mechanism for PS	B	3.1.0	3.2.0	NP-99443	N1
24.008	041	1	R99	Uplink L3 sequence numbering	C	3.1.0	3.2.0	NP-99445	N1
24.008	042	4	R99	Adaptation of MM and GMM messages to incorporate UMTS security parameters	C	3.1.0	3.2.0	NP-99451	N1
24.008	043	2	R99	Addition of APN in Request PDP context activation reject message	A	3.1.0	3.2.0	NP-99443	N1
24.008	047		R99	Clarification of DRX	A	3.1.0	3.2.0	NP-99443	N1
24.008	051	2	R99	Emergency Call Handling in Packet Only Networks	B	3.1.0	3.2.0	NP-99442	N1
24.008	052	1	R99	Addition of MS Classmark 2 in Location Updating Request	B	3.1.0	3.2.0	NP-99447	N1
24.008	053	2	R99	GMM State Model for UMTS	B	3.1.0	3.2.0	NP-99445	N1
24.008	054	3	R99	READY timer not applicable for UMTS	B	3.1.0	3.2.0	NP-99445	N1
24.008	056	1	R99	Periodic RA Update Timer function and Mobile Reachable Timer function for UMTS and clarification that the substate SUSPENDED is applicable for GSMonly	B	3.1.0	3.2.0	NP-99445	N1
24.008	057	1	R99	P-TMSI reallocation procedure	B	3.1.0	3.2.0	NP-99445	N1
24.008	058	1	R99	Detach procedure	B	3.1.0	3.2.0	NP-99445	N1
24.008	059	2	R99	UMTS <--> GPRS Intersystem change (handover)	B	3.1.0	3.2.0	NP-99445	N1
24.008	060	1	R99	Change of network mode of operation	B	3.1.0	3.2.0	NP-99445	N1

Spec	CR	Rev	Phase	Subject	Cat	Version Current	Version New	tdoc	SWG
24.008	061	1	R99	MS modes of operation in UMTS	B	3.1.0	3.2.0	NP-99445	N1
24.008	063	2	R99	Mobile Station Classmark 850 and 1900 band included	B	3.1.0	3.2.0	NP-99444	N1
24.008	064	4	R99	UMTS adaptation to section 4.7.1	B	3.1.0	3.2.0	NP-99443	N1
24.008	069	1	R99	24.008 Vocabulary	F	3.1.0	3.2.0	NP-99445	N1
24.008	071	1	R99	Mirroe R99 LCS CR to GSM 04.08	A	3.1.0	3.2.0	NP-99506	N1
24.008	072	2	R99	Parallel handling of multiple user application flows	B	3.1.0	3.2.0	NP-99450	N1
24.008	074	1	R99	Clean-up for GSM	C	3.1.0	3.2.0	NP-99452	N1
24.008	075	2	R99	Clean-up for UMTS	C	3.1.0	3.2.0	NP-99452	N1
24.008	080		R99	Identity procedure	B	3.1.0	3.2.0	NP-99445	N1
24.008	081	1	R99	Alignment of MM for R99	B	3.1.0	3.2.0	NP-99445	N1
24.008	082	1	R99	Attach procedure for R99	B	3.1.0	3.2.0	NP-99445	N1
24.008	083	1	R99	Routing Area updating procedure for R99	B	3.1.0	3.2.0	NP-99445	N1
24.008	085		R99	Paging for R99	B	3.1.0	3.2.0	NP-99445	N1
24.008	086	1	R99	QoS enhancements	C	3.1.0	3.2.0	NP-99450	N1
24.008	089	1	R99	Transaction Identifier Extension	C	3.1.0	3.2.0	NP-99445	N1
24.011	001	6	R99	Using MM sublayer for PS-SMS message transfer	B	3.0.0	3.1.0	NP-99445	N1
24.022	002	1	R99	REMAP PROCEDURE IN RLP	A	3.1.0	3.2.0	NP-99438	N3
24.022	003		R99	INITIAL UPDATES FOR UMTS	B	3.1.0	3.2.0	NP-99439	N3
24.080	001		R99	Addition of LCS operations	F	3.0.0	3.1.0	NP-99564	NS
27.001	004		R99	Introduction of FTM	B	3.2.0	3.3.0	NP-99430	N3
27.001	005		R99	INITIAL UPDATES FOR UMTS	B	3.2.0	3.3.0	NP-99439	N3
27.001	006		R99	DETAILED INFORMATION OF PIAFS IN UMTS	B	3.2.0	3.3.0	NP-99437	N3
27.001	007		R99	INTRODUCTION OF MULTIMEDIA	B	3.2.0	3.3.0	NP-99434	N3
27.001	008		R99	Service clean-up for Release 99	C	3.2.0	3.3.0	NP-99436	N3
27.001	009		R99	ASYNCHRONOUS INTERFACE FOR REAL-TIME NT FAX	C	3.2.0	3.3.0	NP-99435	N3
27.002	002		R99	Service clean-up for Release 99	C	3.1.0	3.2.0	NP-99436	N3
27.003	002		R99	Introduction of Asynch. interface for Real-time NT FAX	F	3.1.0	3.2.0	NP-99435	N3
27.003	003		R99	Service clean-up for Release 99	C	3.1.0	3.2.0	NP-99436	N3
27.060	006		R99	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	D	3.2.0	3.3.0	NP-99431	N3
27.060	007		R99	CLARIFICATION ON THE TASKS OF THE MT FOR PDP TYPE PPP	D	3.2.0	3.3.0	NP-99431	N3
27.060	008		R99	STREAMLINING	B	3.2.0	3.3.0	NP-99431	N3
27.060	009		R99	Parallel handling of multiple user application flows	B	3.2.0	3.3.0	NP-99431	N3
29.002	032	2	R99	Introduction of White Book SCCP in MAP	C	3.2.0	3.3.0	NP-99501	N2B
29.002	033	3	R99	Introduction of Super-Charger Concept in TS 29.002	C	3.2.0	3.3.0	NP-99500	N2B
29.002	045	4	R99	Authentication enhancements	B	3.2.0	3.3.0	NP-99498	N2B
29.002	050	5	R99	QoS-Subscribed field modification	C	3.2.0	3.3.0	NP-99497	N2B
29.002	060	1	R99	MAP Impacts for Location Services (LCS)	A	3.2.0	3.3.0	NP-99494	N2B
29.002	068		R99	Update of SDLs to support Super-Charger	B	3.2.0	3.3.0	NP-99500	N2B
29.002	069		R99	Correction of the USSD procedure in the HLR	A	3.2.0	3.3.0	NP-99502	N2B
29.002	070		R99	Addition of GGSN number for the SRI for GPRS	A	3.2.0	3.3.0	NP-99492	N2B
29.002	073	1	R99	Introduction of CAMEL Phase 3 in 3G TS 29.002	C	3.2.0	3.3.0	NP-99490	N2B
29.002	074		R99	Restructuring of MAP Location Management Procedures for the Circuit Switched Domain	D	3.2.0	3.3.0	NP-99501	N2B
29.002	075	1	R99	Introduction of Follow Me	B	3.2.0	3.3.0	NP-99491	N2B
29.002	077		R99	Use of SSN for GPRS	A	3.2.0	3.3.0	NP-99492	N2B
29.007	006		R99	Service clean-up for Release 99	C	3.2.0	3.3.0	NP-99436	N3
29.007	007		R99	Intermediate rate	A	3.2.0	3.3.0	NP-99433	N3
29.007	008		R99	Introduction of FTM	B	3.2.0	3.3.0	NP-99430	N3
29.007	009		R99	INITIAL UPDATES FOR UMTS	B	3.2.0	3.3.0	NP-99439	N3
29.007	010		R99	PIAFS and Negotiated parameter extension	B	3.2.0	3.3.0	NP-99437	N3
29.007	011		R99	INTERWORKING WITH H.324/I.	B	3.2.0	3.3.0	NP-99434	N3
29.010	001		R99	UMTS / GSM Interworking	B	3.0.0	3.1.0	NP-99488	N2B
29.010	002		R99	Addition of LSA Information message	A	3.0.0	3.1.0	NP-99553	N2B
29.060	017	4	R99	QoS Profile IE modification	C	3.2.0	3.3.0	NP-99497	N2B
29.060	031		R99	Combined CR on GTP enhancement	C	3.2.1	3.3.0	NP-99493	N2B
29.061	003		R99	CLARIFICATION ON THE PPP LCP NEGOTIATION FOR PDP TYPE PPP	D	3.1.0	3.2.0	NP-99431	N3
29.061	004		R99	ENHANCEMENT TO NUMBERING AND ADDRESSING TO INCLUDE THE APN	C	3.1.0	3.2.0	NP-99431	N3
29.061	005		R99	IPCP NEGOTIATION INTERWORKING AT THE MT FOR NON-TRANSPARENT IP	D	3.1.0	3.2.0	NP-99431	N3
29.061	006		R99	MOBILE IP ISSUES	B	3.1.0	3.2.0	NP-99432	N3
29.061	007		R99	ACCESS TO AN INTRANET/ISP WITH DHCP END TO END	B	3.1.0	3.2.0	NP-99429	N3
29.061	008		R99	STREAMLINING	B	3.1.0	3.2.0	NP-99431	N3
29.078	013		R99	CAMEL Application Part (CAP) specification	B	3.1.0	3.2.0	NP-99471	N2A

*Taken from CR Database **CR-data-000204.mdb***

ANNEX E: List of CRs NOT Approved by TSG_CN#6

Spec	CR	Rev	Phase	Subject	Cat	Version Current	tdoc	SWG	Status
09.31	A001	2	R98	Addition of further LCS functionality in GSM Release 98	C	7.0.0	NP-99446	N1	rejected
23.003	011	1	R99	Introduction of Reserved Service Labels in the APN	B	3.2.0	NP-99443	N1	withdrawn
23.008	005	1	R99	Introduction of maximum number for CS	B	3.1.0	NP-99496	N2B	rejected
23.016	005	1	R99	Introduction of maximum number for CS	B	3.2.1	NP-99496	N2B	rejected
23.018	025	2	R99	Addition of the description for Multicall	B	3.2.0	NP-99496	N2B	rejected
23.034	002		R99	Link Adaptation for ECSD	C	3.1.0	NP-99508	N1	postponed
23.034	003		R99	Modifications to Stage 2 service description due to EDGE	B	3.1.0	NP-99509	N1	postponed
24.008	043	1	R99	Network Requested PDP Context Activation	C	3.1.0	NP-99443	N1	withdrawn
24.008	044	1	R99	Cause 'user busy' in Call Confirmed Message	B	3.1.0	NP-99448	N1	postponed
24.008	048	1	R99	Paging response in UMTS	B	3.1.0	NP-99459	N1	rejected
29.002	048	2	R99	Introduction of maximum number for CS	B	3.2.0	NP-99496	N2B	rejected
29.002	066	1	R99	Addition of FtN-Address String	B	3.2.0	NP-99495	N2B	rejected
29.007	005		R99	Clarification of the VMSC Behavior in case of interworking	D	3.2.0	NP-99438	N3	withdrawn

*Taken from CR Database **CR-data-000204.mdb***

ANNEX F: SMG3 Plenary Meeting # 6 - 15th December 1999

F.1   Outcome of TSG_N#6 Meeting 13-15th December 1999

> ➢ **SMG3 accepts and endorses all of the CRs presented to TSG_CN#6 and has no additional material.**

> ➢ **SMG3 accepts and endorses all of the WIs and Reports presented by CN#6 and has no additional material.**

F.2   Liaisons to SMG3

NP-99406:   **LS from SMG2.**

RESULT: The document was **NOTED**

NP-99467:   **LS from SMG1 SA1.**

RESULT: The document was **NOTED**

NP-99436:   **CR to 03.10 v8.0.0**

RESULT: The document was **SMG3 APPROVES this CR**

History

Document History	
15th December 1999	DRAFT v.1.0.0 provided to a select group of delegates at the end of the CN plenary meeting.
16th December 1999	DRAFT v.1.1.0 input to TSG_SA Plenary as SP-99604
3rd January 2000	DRAFT v.2.0.0 dispatched to the TSG_CN mail exploder for comments. ftp://ftp.3gpp.org/TSG_CN/TSG_CN/TSGN_06/Report/ Comments to be addressed to: **Mr. David Boswarthick, 3GPP TSG-CN3 Secretary** MCC - ETSI Secretariat Tel :+33 (0)4 92 94 42 78 e-mail: david.boswarthick@ETSI.fr A deadline of 2 weeks was given to the CN delegates for e-mail comments on the draft report. **E-mail comments back to author by 14th January 2000**
27th January 2000	Draft report (with revision marks) v2.1.0 placed on the FTP server as file:- **NP-99582**
1st Feb 2000	CR Details added to Report (v2.1.1 **not** posted to FTP Server)
14th March 2000	*Final v2.1.1 presented for approval at TSG#7 Meeting in Madrid.*