

**Third Generation Partnership Project**

**DRAFT REPORT v2.0.0**

**3GPP TSG-CN R00 Ad Hoc Meeting**

1<sup>st</sup> Feb 2000  
Puerto Vallarta, Mexico



Hosted by **AT&T, Ericsson and Nokia**

On ***Behalf of North American Friends of 3GPP***

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## 1 Introduction / opening business

The ad hoc meeting was opened at 09:00 in Feb 1<sup>st</sup> by Mr Stephen Hayes, who in addition to being CN Vice Chairmen, had offered to chair this meeting in the absence of Mr Harald Dettner. Stephen explained that Harald was regretfully unable to attend due to other obligations within his company.

Stephen welcomed the delegates to Puerto Vallarta on behalf of the hosts, and wished them an enjoyable and productive meeting. As well as CN delegates, the meeting included a number of SA2 delegates who were able to bring useful additional input and expertise to the meeting.

As there were relatively few documents, no LAN facility was provided for this meeting, although electronic working was used with the circulation of floppy disks.

- Stephen clarified that this was a one off Ah Hoc meeting where only recommendations will be made, and no decisions would be taken. The final decisions will be in taken in TSGN#7 and SA#7.
- Also it was mentioned that there is not a semi-permanent CN R00 Ad Hoc group, and the decisions as to set-up such a group would be taken by the CN Plenary.

The previous week, S2 had met to discuss amongst other things, the topic of an all IP core network for R00.

The meeting report for this can be found at:-

[ftp://ftp.3gpp.org/TSG\\_SA/WG2\\_Arch/TSGS2\\_11/Tdocs](ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/TSGS2_11/Tdocs)

Also, a joint R00 tutorial had taken place the previous day (31<sup>st</sup> Jan), initiated by S2, and with the participation of CN and T2. The purpose of this tutorial was to present the initial decisions of S2 on the all IP core network, to T2 and CN, and to have some feedback.

The report for this tutorial can be found at:-

[ftp://ftp.3gpp.org/TSG\\_SA/WG2\\_Arch/Joint\\_meetings/000131\\_R00tutorial](ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/Joint_meetings/000131_R00tutorial)

**NP-00001:** **CN R00 Ad Hoc Meeting Agenda.** Presented by Stephen Hayes, CN Vice Chairman.

**CONTENT:** The document contains the Draft Agenda for the R00 Ad Hoc meeting, as produced by the CN Chairman Harald Dettner.

**DISCUSSION:** Stephen presented the agenda, and allocated the documents received at the beginning of the meeting, to the agenda items.

**Comments** Comments to Agenda Item of 3.1 with the addition of "*Examine the basic concepts and work areas that require development*".

It was stated that it would be very useful to gauge the stability of the basis documentation provided from S2 and make some sort of assessment of what additional R00 work should be done and work split between groups.

The comments were noted by the group, but the agenda document itself was not revised.

**RESULT:** The Agenda was **AGREED**

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## 2 Additional material (beside S2) concerning IP-based- (Core-) Networks

### 2.1 Presentations & Discussions

**NP-000008: CN R00 Meeting Objectives.** Presented by Stephen Hayes

**CONTENT:** In, this document, Stephen had attempted to define a clear set of objectives for the CN R00 Ad Hoc meeting, to assist and focus the work.

- ⊗ The objectives included:-
  - Develop preliminary all-IP workplan for CN
  - Propose CN areas of responsibility
  - Propose transition schedule from S2 to CN
  - Propose mechanisms for working efficiently with Sx to resolve issues
- ⊗ Preliminary allocation of work within CN
  - Based on existing S2 all-IP technical report
- ⊗ Define initial work steps for each WG
  - Identify areas needing analysis.
  - Plan for defining work tasks

**DISCUSSION:** Randolph Wohler, commented that CN R00 relates also to CS and PS, and does not limit itself simply to all IP. A document titled R00 Objectives should include CS.

There were also comments that there are some remaining Work Items from R99 that will be carried over to R00, that are not packet based.

Some delegates asked where they could find a list of the postponed or carry over work items from R99, so that they can assess the work that is required for completion.

I would point them off to the SA Plenary document SP-99602, which is the list of Work Item Status sheets from TSG\_N as Presented to TSG\_SA in Nice.

TSG\_N document identified the CN work items and attempted to show when these work items are to be completed.

- [TSG#7 is the deadline for deciding when these work items are required to be completed.](#)
- [These points were noted, and it was agreed to limit the scope of this meeting to ONLY ALL IP aspects](#)

**Masami** noted that this is only an Ad Hoc meeting, and not the first meeting of a new CN R00 Ad hoc group. He stated that it would be useful to organize another R00 meeting soon after the TSG\_N#7 plenary. **Mikko** supported Masami in this. However there was no assumption made that this group will exist in the future.

It was agreed that in the future, there should be a clear distinction between “all-IP” and R’00. It would have been more appropriate to have clearly identified that the Ad-Hoc was dealing with “All IP issues”, as opposed to CN R00, (which should include both PS and CS).

**RESULT:** The document was **DISCUSSED**.

**NP-000005: LS IN on requirements for ALL\_IP CN.** Presented by Gary Jones.

**CONTENT:** This document was also seen during the S2 tutorial on Monday.

It contains a liaison from **GSM North America** describing the high-level service requirements needed to be incorporated for successful deployment of services based on an all-IP network. These should be considered when identifying more specific requirements.

**DISCUSSION:** **Stephen** asked delegates to consider this document during the discussions of the following day(s)

**Nigel:** Agreed with all the requirements, and in particular the reduction of procurement and operation costs, and eased network operation, by re-using the same technologies for both fixed and mobile networks.

**RESULT:** The document was **DISCUSSED**

**NP-000002:** **Study on PS domain services and capabilities TR 22.976 v0.5.0.** Presented by Randolph Wohler, SA1.

**CONTENT:** This document was also seen during the S2 tutorial on Monday.

#### **Hi-lights from the document**

**DISCUSSION:** It is essential that the user requirements are clearly defined before advancing work within CN.

These requirements are being developed by the SA ALL IP Ad Hoc group. CN are invited to participate in these meetings to avoid divergence

**Hannu:** There is a requirement for more information on interfaces before progressing work in **N1**.

**Allitia Russel:** CS R00 will have backward service compatibility. For all IP we should identify a set of features required for R00, as opposed to a full set of service requirements will complete backward compatibility.

**Ullrich:** S2 should come up with clear terminology to avoid confusion with the term 'ALL IP'. Even some variations of terminology can be noted between S1 and S2. This will cause confusion in other groups. **Stephen:** agreed that CN need to be clear with these terms in order to avoid confusion with the R00 terminology.

**Randolph:** invited CN to study the definitions section of TR22.979, and invites comment to this as well as the top level **Vocabulary** document. (**TR21.905**).

In general, there is confusion on terminology. It was also noted that the term IP Domain was not accepted by SA1. Furthermore the term "all-IP" network seems to be ambiguous.

Doing work in R00 is not very clear for some services, such as when an Emergency call is made without the SIM. Guidance is required on such areas.

**RESULT:** The document was **DISCUSSED**

**NP-000012:** **Items for Discussion.** Presented by Timothy Morrel , Motorola,

**CONTENT:** This paper proposes just some of the issues which must be decided upon for an all IP core network. They include:

What is the service model when roaming?

What (if any) existing protocols will be used as the basis of the All IP Core Network including protocols for

- Establishment of end-end service relationship
- Connection Management
- Security
- Quality of Service
- Mobility (esp. data services)

**DISCUSSION:** **Peter Ericsson:** Noted many valid points, however such points as roaming service model and others should also be seen and by S1. The author agreed to this.

**Gary Jones:** There is a general presumption that ALL IP protocols will be used end-to end all the way to the handset. **Q.** where and when was this decision taken. No answer was given.

**Hannu:** In response to this and other documents, Hannu listed his perceptions of **open items** (seen from an N1 viewpoint), that shall be addressed by S1 and S2. This open item list was edited on-line and comments taken from the group. The completed and revised document exists in and proposed LS to SA, S1, and S2 in tdoc **NP-000013**.

- [It was proposed and supported that there is a requirement for Joint meetings or CLOSE LIAISON between CN and S1 to ensure that the requirements and technical works are not delayed](#)

**RESULT:** The document was **DISCUSSED**

**NP-000013:** **List of Open Items for TR 22.976.** Presented by Hannu, of Nokia

**CONTENT:** The 3GPP TSG CN All IP ad-hoc meeting discussed the R00 work with the All IP being the task with the largest amount of work for the TSG CN working groups to do. The TR 22.976 was briefly reviewed during the meeting and several open issues were pointed out. The delegations were invited to participate the S1 and S2 work in filling the gaps that were identified. The following issues need to be decided upon (TR or Stage 1 and draft Stage 2) before the TSG CN work can be planned in detail:

**DISCUSSION:** Agreement to send this document out to CN Plenary for electronic approval, and then to be sent as an TSG\_N LS to S1 and S2 for their consideration.

Randy asks that the reference to 22.976 be removed as 22.976 is currently a draft SA1 document and has not yet approved.

Proposed LS will be reviewed by CN, It will be included in the CR R'00 meeting report and discussed in the SA workshop and SA1 a draft.

**RESULT:** The document was **REVISED** to **NP-000014**

⇓ **REVISED** ⇓

**NP-000014:** **Proposed LS on Open items identified by TSG CN All IP ad-hoc.** Presented by of Johnson Oyame of Ericsson

**CONTENT:** This document contains the proposed LS to SA, SA1 and SA2 on the R00 open issues as identified by the R00 Ad Hoc meeting.

The 3GPP TSG CN All IP ad-hoc meeting discussed the R00 work with the All IP being the task with the largest amount of work for the TSG CN working groups to do.

The delegations were invited to participate the S1 and S2 work in filling the gaps that were identified. TSG CN understand that the open items identified here can not be covered by just one WG alone and that one specification / TR can not be the complete answer.

The following issues need to be decided upon (TR or Stage 1 and draft Stage 2) before the TSG CN All IP work can be planned in detail:

- ⊗ **Scope**
  - Definitions, the vocabulary needs to be stabilized.
  - Phases for scheduling the work for R00, R01,...
  - How to distinguish between signaling and data in all IP stream?
- ⊗ **Interfaces between nodes**
  - Does All IP cover only PS or can CS also be supported?
  - Between which system entities?
  - The protocol requirements for the protocols that are run over the R00 interfaces, e.g. Nb, Nc, Mb, Mh, Mr, Mw and Cx
  - The impact of IP transport on existing protocols
  - Identification of functionality of the functional elements

- ⊗ Scenarios to be supported
  - Roaming service scenarios
  - Inter-release compatibility (R00 MS in R99 network, R99 MS in R00 network, both PS and CS)
  - Handover scenarios (R00 MS in R99 network, R99 MS in R00 network, both PS and CS)
  - Non-supporting R00 implementations (CS only, PS only, speech support,...)
- ⊗ VoIP
  - CAMEL control of VoIP
  - Deciding Basic Call State Model for VoIP
  - The use of the mainstream IP standards for VoIP
- ⊗ Numbering and Addressing
- ⊗ Emergency calls in the PS domain, without SIM
- ⊗ Security, Authentication
- ⊗ Call Control
  - Deciding which CC protocol(s) to use, e.g. 24.008 CC, H.323, SIP,...
  - The location of CC protocols
  - Compatibility requirements between different CC protocols
- ⊗ Quality of Service
  - QoS enhancements compared with R99
  - Mapping of QoS to CC QoS / BC
  - Mapping of overall end to end QoS in each new interface

**DISCUSSION:** The R00 Ad Hoc group agreed that this LS would be sent to the CN Mail exploder for e-mail approval.

Also a representative of the meeting would take the document to the SA and SA1 meetings planned for the 2<sup>nd</sup> week of February

**RESULT:** The document was **AGREED** to be sent to the CN mail exploder for approval, and also presented as a draft to the SA and SA1 meetings.

✓ **The document was presented by David Boswarthick at the SA R00 Ad Hoc Meeting on 8<sup>th</sup> Feb.**

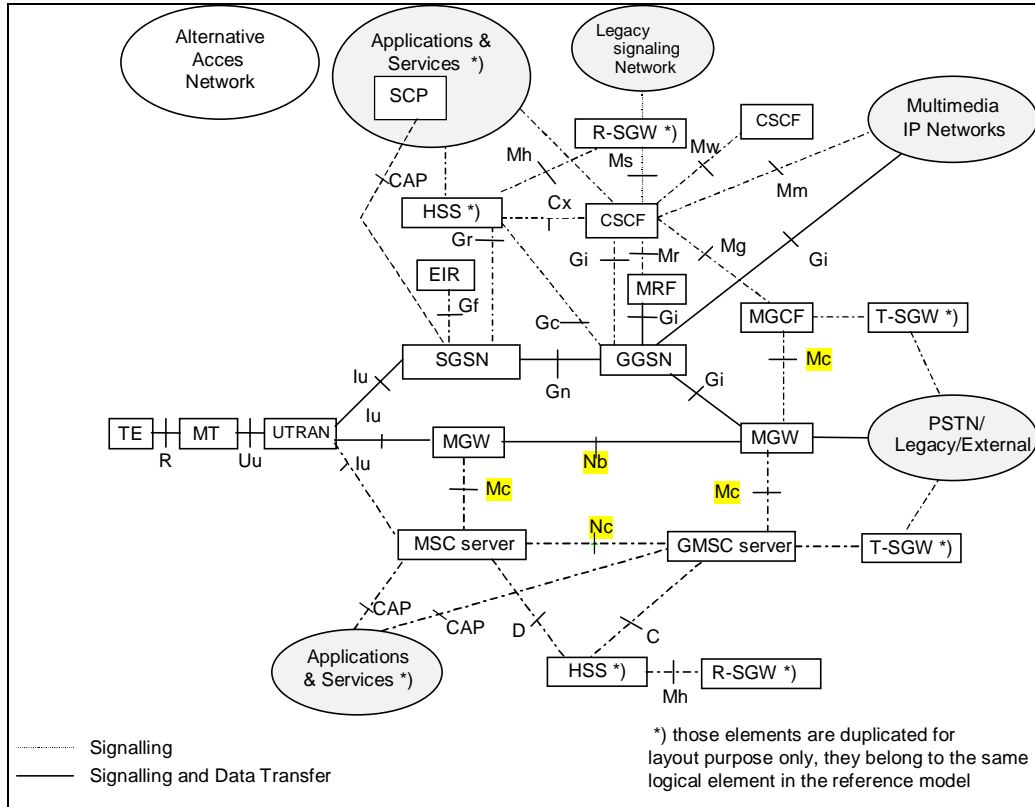
### 3 Technical assessment of presented material

There were no contributions or additional comments to this section.

#### 3.1 Maturity of guiding architectural material

**NP-000006:** LS from S2, on Nc Nb and Mc reference points in Release '00 architecture.  
Presented by Johnson Oyame of Ericsson

**CONTENT:** SA2 has been working on the R'00 reference architecture, and would like to inform the CN R00 Ad Hoc of the progress on three of the interfaces in the architecture. The latest proposed R'00 reference architecture is provided in Figure 1, (reproduced below), with the reference points further discussed in this document (Mc, Nc and Nb) highlighted.



**Figure 1 Proposal for R'00 reference architecture**



**DISCUSSION:** The document is technically stable, and only editorial modifications remain for the Report **TR 23.821**.

**Mikko: Question** of the stability of the BICC protocol. **Response:** The work is technically complete, and CS1 is will be approved in June, and CS2 for completion at the end of the year.

**Ian Park:** We are using CS1 of BICC only for out of band transcoder control in R99. If we are to use CS2 for expanded functionality in R00, we need to examine the stability of CS2 further.

- [CN Ad hoc had no objection to any of the identified interfaces.](#)
- [CN Ad hoc recommend that CN include the further study of these interfaces to be defined in the future work plan.](#)
- [Interfaces marked in yellow are the only ones considered stable enough \(by SA1\) for stage 2 & 3 work to begin.](#)
- [On any of the non-yellow interface, CN are not ready to comment on the stability or level of work required to complete this work.](#)

**Henry Taylor BT:** we should look at impacts of future work to CN as it is presently structured, and perhaps we require a different structure for R00. Some of the identified interfaces do not immediately fall into the present CN structure.

Once of the main difference with R99, R00 shall support real time services in the packet domain.

CN must also examine the CSCF and MGCF.

Enhancements for the existing interfaces (MAP, CAP) may also be required,

**RESULT:** The document was **DISCUSSED**

### 3.2 Delta compared to existing 3GPP specification material (R'99)

*No input documents and comments from the group.*

*We can consider the Requirements specification in SA1. One Key differentiator is the provision of Real time services (voice)in a packet domain*

### 3.3 Compatibility / Optionality aspects

**Clarification of Optionality:** means you can comply with system specs, whilst not implementing all of the options. This leads to interworking/compatibility issues.

**Clarification of Compatibility:** issues between CS and PS domain and back/forwards compatibility between releases.

- [AGREEMENT from the group to stop the use of the All IP terminology when referring to R00.](#)

Requirement to Break down the term ALL IP into individual work items/tasks.

- [The group noted compatibility issues with 24.008 and H.323/SIP call models.](#)

This is an area that CN should investigate further. There are some concerns on backward compatibility call control machine that controls CS and PS. CN are missing adequate information to study at this moment In time. Requirement for a SUPERSET of mobility management that will do both, (24.008 and H232/SIP). There were also concerns that such a superset may not be feasible.

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## 4 Miscellaneous

*No input documents and comments from the group.*

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## 5 Timeframes

**NP-000009: Time schedule Considerations.** Presented by Stephen

**CONTENT:** The document lists some of the time schedule considerations as perceived by the author, intended as a discussion point for this meeting.

- Work on all-IP is second priority until R'99 completed
- Work begins after TSG#7 (March)
- Tentative first meetings
- Companies participate in S2 Co-ordination Groups
- April 10-11 (1.5 days) - proposed joint S2/CN task planning meeting
- April 11-13 (2.5 days) - S2/N1 joint meeting on IM call control

**DISCUSSION:** Due to N3 meeting already planned for this date, Norbert must check if the arrangements can be modified. Stephen mentioned that it may also be possible to move the above dates and he will check this with the S2 chairman.

**RESULT:** The document was **DISCUSSED**.

**NP-000011: 3GPP TSG-SA2 Release 2000 Work in General.** Presented by Stephen

**CONTENT:** The document contains the S2 Tutorial document outlining an initial work plan for the R00 work, and was provided only for information to this meeting.

**RESULT:** The document was simply **NOTED**.

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## 6 Worksplit / Who does what

### 6.1 Between TSG's

**NP-000007: Worksplit between TSG CN groups and TSG S2.** Presented by Inna of Ericsson

**CONTENT:** The document proposes a work split between the protocol groups of TSG CN and TSG SA2 in order to develop and/ or evaluation of the interfaces in release 2000. It should be noted that this is the Ericsson view and not the SA2 approved opinion.

**DISCUSSION:** Companies should prepare work item/task descriptions for presentation to TSG\_CN#7

**Mikko:** Traditionally SA2 are responsible for the stage 2 specifications.

**Ian Park:** The division of Stage 2 for SA2 and Stage 3 in CN is not the way things have been done in the past for R99. This has in the past been determined on a work item by work item basis.

**Hannu:** TSG\_SA should initiate the work items that will be required.

Discussion to move some of the architectural work away from SA2 and back within CN.

**NOTE:** **April 10/11 joint meeting between S2 and some part of N with the objective of defining work tasks for R00.**

**CN have the intention to use the new work feature /building block and task structure as recommended by SA.**

**N3 have a meeting planned in Berlin during that week, and it cannot be moved**

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

## 6.2 Within TSG\_CN

**NP-000004:** **TSG-CN Work areas in year 2000.** Presented by Mikko, Nokia

**CONTENT:** TSG-CN has to cover several new work areas in 2000, in addition to the maintenance of Release 99 and older sets of specifications. The work areas could be classified broadly under the following headings:

- CC/SM protocols
- MM/GMM protocols
- CAMEL
- MAP
- Interworking with external networks
- Interworking with GSM R99 (and older Releases), 3GPP R99, GERAN
- Services, toolkits

The document attempts to allocate these work areas to the CN SWGs, suggesting also which CN WGs should study new R00 interfaces identified by SA2, as well as looking into areas where the introduction of IP in general and IP Telephony have an impact.

**DISCUSSION:** Peter asks which of the items are new? Most seems to be existing in the scope of core network for R99. It was clarified that CN work areas remain basically the same but some areas have to be studied as for the impact of IP. Also new interfaces require work in TSG-CN.

**Masami:** Requirement for an ANALYSIS of listed interfaces to see if they exist already in R99 and require further enhancement, or if they are NEW interfaces.

Open issues: what kind of protocol should be used for each interface

**RESULT:** The document was **DISCUSSED**

**NP-000010:** **CN Interface Allocation.** Presented by Stephen.

**CONTENT:** The document takes the S2 LS and attempts to allocate areas of work required for the R00 interfaces between the CN SWGs.

**DISCUSSION:**

Norbert suggests that the allocation of only external bearer interfaces to N3 is not the best way to define the future work for N3. There is also a requirement for the allocation of functional entities that are not shown in this diagram.

**Norbert** The Role of N3 will evolve to encompass interworking to both internal and external networks

**Norbert** GI interface seem to be the domain of N3.

**Hannu** Iu and Gn interfaces seem to be the domain of N1.

CSCF behavior seems to be natural successor in 23.018 which N1 thinks in its area, it has to interwork to an interface with N1 where it is in the picture.

**Ian P** A large amount of Work on the CSCF and its interfaces (Call control/subscriber data management / and CAMEL interworking).

HSS server CC and Subscriber Data management is handled by N2 now. Interaction with Camel is also N2

**CN2 do and will have a large amount of work, they may require to be broken down into 2 or 3 separate groups, (to be determined by the CN Plenary)**

**RESULT:** The document was **DISCUSSED**

**NP-000003:** **TSG-CN Work organization in year 2000.** Presented by Mikko, Nokia

**CONTENT:** When starting Release 2000 work, it is clear that a new analysis on the work split has to be undertaken, both within TSG-CN and between TSG-CN and other TSGs. In 2000 the TSG-CN work will consist of Release 1999 maintenance and the development of Release 2000. The Release 2000 work could be further divided into the "all IP" work, and the work on the CS domain.

The document analyses the work of TSG-CN groups. The scope and amount of Release 2000 specific work in TSG-CN will depend on architectural decisions made in SA2, and it is impossible to estimate the exact amount of work.

**DISCUSSION:** Comments to the individual sections of the presentation

**CN1 area** The CN1 work on CC, MM, SM and GMM **access** protocols and SMS constitute a significant task. Release 2000 enhancements and the maintenance of earlier releases alone may keep CN1 busy. Adding to this Release 2000 protocols for the "all IP" option may increase CN1 workload to the same level in 2000 as during 1999. However, since the expertise for applying these protocols to the cellular environment, such work should be done under CN1, either directly in regular CN1 meetings, or in CN1 "all IP" ad-hocs. If the amount of work proves too big, the could be carried out either in a permanent CN1 SWG or in an CN1 "all IP" ad-hoc.

**Proposal: the Release 2000 work in the CN1 area is carried out under CN1, either in regular CN1 meetings or in CN1 "all IP" ad-hocs.**

**The proposal was agreed in principle by the group.**

**CN2 area** The CN2 work on CAMEL and non-CAMEL areas has created a heavy workload. Almost since its beginning, CN2 has been split into CN2A and CN2B, two efficient and partly independent groups. Because of this split, the role of CN2 Plenary itself has become less important. Some issues have to be discussed in both groups, making co-located meetings welcome, either regularly or when needed. However, making this split official, and creating two independent WGs would allow the development of these two SWGs to cover "all IP" issues without burdening them with any unnecessary overhead.

**Many of the new interfaces introduced to the "all IP" network, and in Release 2000, fall to CN2's remit, "interfaces between core network nodes".** Each new interface should be allocated to the most appropriate CN2 SWG, and depending on the work amount, the need for new groups should be evaluated.

**Proposal: CN2 is split into two WGs, one inheriting CN2A and the other CN2B work area. As for the new Release 2000 interfaces, they should allocated to relevant CN2 part.**

**The proposal was agreed in principle by the group.**

**Ian P** Considering the level of existing work, and the allocation of R00 work, N2 may require to be 3 new working groups.

Also there will be difficulty obtaining delegates and officers (chairmen / vice chairmen), and also scheduling meetings.

As there is a large amount of crossover of competency there is a requirement for at least 4 joint meetings a year for these new working groups.

**Also the additional / and missed interface of CSCF – Applications Services probably lies with OSA / and thus eventually N2, (should OSA fall under the area of N2 in the future)**

**Ian P** Suggestion that Mm interface should be in the remit of N3 – Norbert agrees.

➤ [Based on the future work of N2 in R00, this group should recommend to CN some mechanism of splitting the groups. However there is no specific proposal at present.](#)

This will be discussed further at CN#7, and it is hoped that proposals will be agreed at this time, and also candidates will be made for officers for these new groups.

**CN3 area** CN3 has worked mainly with CS data services. Also Release 2000 networks and standards offer support for these services, either as such or with some enhancements, but some changes may have to made to these services also to allow them to coexist

with the "all IP" option. As for the PS services, there may a need to study the interworking of PS protocols, and thus increase the importance of PS work in CN3.

Some of the new interfaces introduced to the "all IP" network, and in Release 2000, fall to CN3's remit, "interworking with external networks".

**Proposal: CN3 continues its work under the current terms of reference.**

**The proposal was agreed in principle by the group.**

**Norbert** Agrees to this proposal, also states that the Gi interface for R00 should remain within N3.

**Nigel** **Should also include the functionality of the MGW. |This was agreed by the group.**

**SS Ad Hoc** The SS ad-hoc was established as a temporary solution to cover the maintenance of GSM supplementary services, and the development of a few new services for Release 99. In 1998 it was believed that no new supplementary services would be needed because all services would be offered via toolkits. The toolkit vision has not been realized in Release 99 as fully as was believed but there are views that this vision should be followed to the letter in the "all IP" network. Therefore, it is likely that there will be little pure GSM SS work in 2000. However, SS ad-hoc is responsible for several Release 99 and older specifications that must be maintained now and in the future. In 1998, it was proposed that CN2 cover SS because it was already supposed to cover CAMEL. CN2 is a suitable successor to SS ad-hoc.

**Proposal: the options for developing and offering supplementary services in Release 2000 networks should be studied (in SA1 and SA2), and the SS maintenance and possible new SS development should either be done in SS ad-hoc or in CN2.**

**The proposal was agreed in principle by the group.**

There is a definite need for SS Ad Hoc activities to continue within R00. As the group has lost it's chairperson then the group agrees that the work be done in CN2

**OSA Ad Hoc** The OSA ad-hoc has been working on the completion of a partial solution to OSA since December 1999. The group has made progress, and may complete the first part in time for TSG-CN#7. When the first highly intense period of the work has been completed, it would be advisable to incorporate OSA ad-hoc into regular CN2 work.

**Proposal: OSA ad-hoc is incorporated into CN2 after TSG-CN#7.**

**The meeting did not discuss this proposal. The only comment was that the chairman suggested that this be revisited in TSG-CN#7.**

Recommendation that there is work for OSA to be done for R00 and TSG\_CN will decide if this work will be absorbed within N2.

**IETF** *Proposal: 3GPP and TSG-CN establish efficient working practices with relevant bodies. Requirement to understand how IETF work, and then make a proposal to TSG\_N#7. This was discussed and the group agreed that there is a new requirement to understand and liaise efficiently with the IETF. The question remains on how this shall be done.*

*Mikko Kanerva promised to study this issue, and provide input for the next TSG-CN meeting.*

➤ **Conclusion: There is no need to RADICALLY modify the CN Working groups, although there may be some requirement to split some of them.**

**RESULT:** The document was **DISCUSSED**

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## **7. Wrap up**

## **8 Next steps until TSG#7**

The open item list in NP-000014 will be presented as a DRAFT document to SA and SA1. Most probably presented by David Boswarthick to the SA and SA1 meetings next week.

NP-000014 will be sent out for e-mail approval to CN Plenary directly after this meeting

Delegates or encourage to make proposals to the TSG\_N Plenary in Madrid, on how the R00 work may be organized.

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## **9 Any other business**

No input to this agenda item.

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## **10 Close of meeting**

As the work ran smoothly, it was possible for the meeting to finish at the end of day 1. Delegates were therefore able to make the most of the Mexican hospitality and fantastic local scenery. Many thanks to the North American Friends of 3GPP for providing such an agreeable meeting location.

## ANNEX B: Participants List for CN3#6

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## ANNEX C: List of Documents

<b>Tdoc NUMBER</b>	<b>DOCUMENT TITLE</b>	<b>SOURCE</b>	<b>AGENDA ITEM</b>	<b>REPLACED BY</b>
NP-000001	CN R00 Ad Noc Meeting DRAFT Agenda	Harald Dettner	1	
NP-000002	Study on PS domain services and capabilities TR 22.976 v0.5.0	SA1	2.1	
NP-000003	TSG-CN Work organization in year 2000	NOKIA(Mikko)	6.2	
NP-000004	TSG-CN Work areas in year 2000	NOKIA(Mikko)	6.2	
NP-000005	LS IN on requirements for ALL_IP CN	GSM_NA	2.1	
NP-000006	LS IN on Nc Nb and Mc reference points in Release '00 architecture	SA2	3.1	
NP-000007	Worksplit between TSG CN groups and TSG S2	Ericsson	6.1	
NP-000008	CN R00 Meeting Objectives	Stephen V. Chair	2.1	
NP-000009	Time schedule Considerations	Stephen V. Chair	5	
NP-000010	CN Interface Allocation	Stephen V. Chair	6.2	
NP-000011	SA2 Work description and workplan	SA2	5	
NP-000012	Items for Discussion	Motorola	2.1	
NP-000013	TR 22.976 open item list	Hannu, Nokia	2.1	NP-000014
NP-000014	REV. TR 22.976 open item list	Hannu, Nokia	2.1	



## History

<b>Document History</b>	
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<b>14<sup>th</sup> March 2000</b>	<i>Final Draft v2.0.0 to be presented for approval at TSG#7 Meeting in Madrid</i>