

# Third Generation Partnership Project DRAFT STATUS REPORT v0.0.2

3GPP TSG-CN#9

Oahu, Hawaii 25<sup>th</sup> – 28<sup>th</sup> September 2000



Hosted by ARIB, TTC, North American Friends of 3GPP

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# 1 Opening of the meeting

A welcome introduction was given by Mr. Eiki Yamaguchi, Executive Managing Director of TTC. The meeting was chaired by Mr. Stephen Hayes, (Chair, Ericsson). Additional support was provided by Mr. Ian Park (Vice-Chair, Vodafone) and Mr. David Boswarthick (CN Secretary, MCC). The chair thanked the hosts for the meeting arrangements in sunny Oahu.

# 1 Approval of Agenda

The agenda was approved (NP-00410), however in the future it was requested that the earlier release work preceeds the current release work in the agenda.

#### 2 IPR Declarations

The IPR question was asked and there was no response. There were questions about what types of IPR and how much IPR had to be declared. It was clarified that this IPR question was simply a reminder and in no way changed any of the pre-existing IPR obligations towards the partner SDOs. The guidelines for requesting IPR disclosures in give in NP-000531).

# 3 Items for External Attention

#### 3.1 For PCG Attention

## 3.1.1 Election of Vice-Chair

Hiroshi Nakamura of NTT DoCoMo was elected as vice-chair on TSG-CN by acclamation. This needs formal ratification by the PCG.

# 3.1.2 ITU-T Coordination

Yun-Chao was appointed as convenor of the TSG-CN ITU-T Coordination Ad-Hoc. The Ad-Hoc will remain dormant until direction is received from the upcoming SDO/ITU-T meeting on 3GPP/ITU-T coordination scheduled in November.

# 3.2 For SA Attention

# 3.2.1 Terminology

TSG-CN will adopt the terminology "A/Gb mode" and "lu mode" to replace "in GSM" and "in UMTS" for R'99. For R'00 the terminology is still under discussion as there seem to be more possible options. Appropriate CRs will be generated by CN1.

# 3.2.2 Support of GEA2

Based upon the request of the previous SA plenary, CN has developed and approved CRs for the support of GEA2 for the purposes of early introduction of GEA2 in the UE. It was noted that there will be interworking problems with respect to deploying GEA2 in mixed R97/R98 and R99 networks, but these interworking issues already exist but are not due to these CRs.

# 3.2.3 Feasibility Study on Positive Authentication Reporting

CN4 received a liaison from SA3 requesting information on the impacts on supporting positive authentication reporting. It is CN4's understanding that this is intended for support of 3GPP2 subscribers. However since since it is unclear how 3GPP2 networks fit into the 3GPP architecture, it is difficult to assess these impacts.

A feasibility study is required to clarify the scope of this work. There is insufficient interest in TSG-CN to initiate or sustain such a study so it is suggested that SA3 drive this study. CN4 will provide input as necessary (NP-000553).

# 3.2.4 Integrated Service Node (ISN)

Based upon informal information that SA2 had rejected the concept of a Integrated Service Node (Combined SGSN and MSC/VLR), the WI for "Combined MAP signalling for Mobility Management" was rejected. CN4 was urged to find alternative ways to reduce the signalling load.

# 3.2.5 IMEI Coding

Liaisons on this subject were reviewed from SA1, GSM-NA, and GSMA-TWG. Since the GSMA-TWG has indicated that it will be studying the issue with high priority, no action was taken at this meeting.

#### 3.2.6 TrFO

There are currently two competing alternatives for how to handle TrFO break. The primary specification impact of the two solutions is in RAN3. Although TSG-CN does not make a recommendation it wishes to make the following points:

- Delaying the selection of a TrFO break solution will jeopardize the possibility to complete the work in the March 2001 timeframe.
- Since the primary impacts are on RAN3, it is important that RAN3 be active in the selection of the solution.

# 4 Liaisons from other Groups

# 4.1 Support of GEA2

Liaisons from CN1 on support of GEA2 was reviewed (NP-000411, NP-000412). It was noted that there will be interworking problems with respect to deploying GEA2 in mixed R97/R98 and R99 networks, but these interworking issues already exist but are not due to these CRs.

# 4.2 Terminology

The liaisons from CN1 (NP-000413), RAN2 (NP-000418), and GERAN (NP-000532) were discussed. It was agreed to adopt the terminology "A/Gb mode" and "lu mode" to replace "in GSM" and "in UMTS" for R'99. For R'00 the terminology is still under discussion as there seem to be more possible options. Appropriate CRs will be generated by CN1.

# 4.3 Feasibility Study on Positive Authentication Reporting

CN4 received a liaison from SA3 requesting information on the impacts on supporting positive authentication reporting (NP-000416). It is CN4's understanding that this is intended for support of 3GPP2 subscribers. However since since it is unclear how 3GPP2 networks fit into the 3GPP architecture, it is difficult to assess these impacts. A feasibility study is required to clarify the scope of this work. There is insufficient interest in TSG-CN to initiate or sustain such a study so it is suggested that SA3 drive this study. CN4 will provide input as necessary (NP-000553).

# 4.4 Integrated Service Node (ISN)

A liaison was was copied from CN4 requesting SA2 assessment of the architectural impacts of a combine signalling node (NP-000420). Based upon informal information that SA2 had rejected the concept of a Integrated Service Node (Combined SGSN and MSC/VLR), the WI for "Combined MAP signalling for Mobility Management" was rejected. CN4 was urged to find alternative ways to reduce the signalling load.

# 4.4.1 IMEI Coding

Liaisons on this subject were reviewed from SA1 (NP-000419), GSM-NA (NP-000586), and GSMA-TWG (NP-000590). Since the GSMA-TWG has indicated that it will be studying the issue with high priority, no action was taken at this meeting.

# 4.5 Miscellaneous

Liaisons were noted on IGC rapporteurs from CN4 (NP-000420), All IP End-to-End delay feasibility study (NP-000587), and Location Services Functionality (NP-000588).

# 5 Working Group Status and Issues

### 5.1 CN1

The status report for CN1 is in NP-000530.

TS 24.064 and 24.065 were withdrawn and will be replaced with 44.064 and 44.065.

#### 5.2 CN2

The status report for CN2 is in NP-000451.

Per Johan Jorgensen will begin providing MCC support for CN2 replacing Monica Hellman

#### 5.3 CN3

The status report for CN3 is in NP-000460.

The CN3 vice-chair has resigned. Nominations are urged.

#### 5.4 CN4

The status report for CN4 is in NP-000583.

Kimmo Kymalainen will begin providing MCC support for CN4 replacing Franco Settimo

#### 5.5 CN5

The status report for CN5 is in NP-000477.

Per Johan Jorgensen will begin providing MCC support for CN5 replacing Monica Hellman

# 5.6 TrFO

The status report for the TrFO workshop is in NP-000516. The principles outlined in this report were endorsed by the plenary.

There are currently two competing alternatives for how to handle TrFO break. The primary specification impact of the two solutions is in RAN3. Although TSG-CN does not make a recommendation it wishes to make the following points:

- Delaying the selection of a TrFO break solution will jeopardize the possibility to complete the work in the March 2001 timeframe.
- Since the primary impacts are on RAN3, it is important that RAN3 be active in the selection of the solution.

# 6 Release 2000 Workitems

# 6.1 Provisioning of IP based Multimedia Services

The work item description for SIP CC in IM Subsystem (NP-000568) was approved. The completion date is CN#14. In accordance with the agreed CN IM work division this covers all SIP protocol work (regardless of the interface). It was agreed to emphasize in the WID that extensions to the protocol should be a last resort and that S2 should be kept informed of any architectural implications of the protocol work.

The work item description "Interworking between IM CN subsytem and Circuit Switched networks" (NP-000465) was approved.

This work item description "Interworking between IM CN subsystem and IP networks "(NP-000466) was postponed since it needs to escalated to a building block and the work division between working groups needs to be clarified. This work item is referred back to CN3 for revision.

# 6.2 R'00 Emergency call Enhancements

CRs to R'00 work item CS based emergency call enhancement (NP-000447) were approved.

# 6.3 Enable Bearer Independent Circuit-Switched Network Architecture

The work item description "Bearer Independent Circuit Switched Core Network" (NP-000538) was approved.

It was agreed that CN4 would be responsible for specifying the H.248 packages required for the bearer independent circuit switched network architecture. How the H.248 packages will be communicated back to ITU-T will be determined at a later date. An input to ITU-T SG16 (with copy to ITU-T SG11) was endorsed by CN (NP-000569). This will be carried into ITU-T by Ericsson, but other companies are also welcome to carry this input into ITU-T.

A call for experts on H.248 was put out as CN4 currently lacks expertise in this area.

#### 6.4 Circuit Switched Multimedia Services

The work item "IWF at the CN Border" was not approved due to lack of interest (no rapporteur, no supporting companies). The workitem was referred by to CN3 to try and drum up support.

#### 6.5 Fascimile

CRs to RT Facsimilie in NP-000475 and NP-000476 were approved.

# 6.6 7.7 TrFO

The work item "Out of Band Transcoder Control" (NP-000529) was approved.

CRs in NP-000448 were approved.

# 6.7 Security Enhancements for R'00

CRs on CN security (NP-000485) and Map Security (NP-000494) were approved.

#### 6.8 ASCI

CRs on work item ASCI in NP-000449 were approved.

# 6.9 TEI

CRs to work item TEI in NP-000545 were appproved.

#### 6.10 ISN

A work item description "Optimisation of Signalling: Combined MAP Signalling for mobility management" (NP-000509) was rejected. Based upon informal information that SA2 had rejected the concept of a Integrated Service Node (Combined SGSN and MSC/VLR), the WI for "Combined MAP signalling for Mobility Management" was rejected. CN4 was urged to find alternative ways to reduce the signalling load.

# 7 R'99 Work items

#### 7.1 Camel Phase 2

CRs approved (NP-000482).

# 7.2 Camel Phase 3

CRs approved (NP-000456, NP-000457, NP-000458, NP-000459, NP-000483, NP-000484, NP-000581).

# 7.3 Security

CRs approved (NP-000445, NP-000497, NP-000498).

#### 7.4 GSM Maintenance

CRs approved (NP-000439, NP-000440)

#### 7.5 TEI

CRs approved (NP-000468, NP-000540, NP-000552, NP-000543, NP-000472, NP-000551, NP-000542, NP-000499, NP-000556, NP-000557).

## 7.6 Multimedia

CRs approved (NP-000442)

#### 7.7 OoTBC

CRs approved (NP-000444)

#### **7.8 ASCI**

CRs approved (NP-000450, NP-000481)

#### **7.9 GPRS**

CRs approved (NP-000437, NP-000441, NP-000536)

#### 7.10 GTP Enhancement

CRs approved (NP-000489)

#### 7.11 Handover

CRs approved (NP-000490, NP-000491)

## 7.12 GSM-UMTS Interworking

CRs approved (NP-000438, NP-000443, NP-000488). CRs for removal of service accept (NP-000436) conditionally improved dependent on linked CR to 23.060.

# 7.13 Location Services

CRs approved (NP-000492) for confidence interval, however it is suggested that SA or SA2 may wish to study alternative schemes for more sophisticated confidence intervals. Additional CRs also approved (NP-000444).

#### 7.14 Multicall

CRs approved (NP-000559)

#### 7.15 MS Classmark

CRs approved (NP-000446).

#### 7.16 GLR

CRs approved (NP-000558).

# 7.17 Prepaging

CRs approved (NP-000496).

#### 7.18 OSA

CRs approved (NP-000519, NP-000520, NP-000521).

#### 8 Elections

Hiroshi Nakamura of NTT DoCoMo was elected as vice-chair on TSG-CN by acclamation.

# 9 Work Organization

# 9.1 Worksplit between TSG-CN and SA2

Based upon feedback that SA2 did not feel that it was appropriate to transfer control on 23.060 and the LCS stage 2 specifications at this time, no transfer will occur. CN1 and CN4 remain willing to accept responsibility for those specifications one SA2 feels that they can be transferred.

# 9.2 Principles for work organization within CN

It was agreed in principal that IM work will be allocated within CN on an interface basis (as opposed to an interface basis). The following preliminary allocation was agreed:

- CN1: SIP (Call control) including SIP supplementary services, SDP (Session Definition Protocol)
- CN2: CAMEL extensions for VoIP and multimedia(although I personally have some reservations on whether this makes sense)
- CN3: QoS protocols (such as RSVP), RTP (CRPT should probably be in R3).
- CN4: Name to Address translation functions, AAA protocols, security protocols, subscriber data management in HSS and the HSS to CSCF protocols to support this.
- CN5: extension of OSA (or whatever it's new name is) to VoIP and multimedia

This agreement will be revisited at the next plenary.

# 9.3 Colocated Meetings

To facilitate joint meetings as required. It was agreed that the CN1, CN2, CN3, and CN4 will attempt to colocate their meetings during the first half of 2001. CN1, CN2, and CN4 will colocate and CN3 will attempt to realign it's schedule with the other groups. CN5 will not colocate since they are independent from the other groups and also shares MCC support.

#### 9.4 ToRs

ToRs have been approved for CN (NP-000570), N1 (NP-000571), N2 (NP-000572), N3 (NP-000573), N4(NP-000574). The N3 ToR should be updated by N3 as it does not include any IM work.

# 10 Specifications in TSG-CN Domain

The specifications are referred to the WGs for review.

It was agreed to transfer 24.012 to GERAN. This information will be communicated to the TSG-GERAN chair.

# 11 Workplan/Projectplan

# 11.1 Review of the project plan

There was a strong demand for a revision tracking methodology to be used in the project plan. NP-000562 shows an example of one such revision tracking method. It was felt that a revision marking and version history was required in order to understand:

- What has been changed
- Who introduced the change
- Why some changes were not included

This methodological proposal will be submitted to MCC. It is left for the MCC experts to decide the actual technique used to track revisions. There was concern that the revision method should be based upon a permanent identity instead of line item numbers which will change.

The specific changes are in NP-000563 (CN1), NP-000564 (CN2), NP-000565 (CN3), NP-000566 (CN4) and are endorsed by CN. In addition there was agreement to remove row 101. These should be included in the next revision of the project plan.

#### 11.2 Allocation of R'00 to Releases

The TSG-CN agreements on workplan are captured in NP-000555. It was agreed that there could be milestones associated with intermediate points (such as availability of basic call handling in the IM subsystem), but these would not be work tasks.

# 11.3 Future Meeting Schedule

The proposed TSG schedule for December 2000 and 2001 was presented.

# 12 Working Methods/Work Style

There was a discussion of WG terminology. It was agreed that the abbreviation for TSG-CN WGx would be CNx.

After a long discussion of how to handle editorial changes, a change to the 3GPP working methods (21.900) was proposed to clarify some of the categories and to add a new corrective (class F) subcategory for correction of an ambiguity. The proposed CR is in NP-000548. This will be liased to the other TSGs for overall 3GPP approval.

A companion CR was created to 21.900 that describes the acceptable critera for making a correction to a frozen release. This is captured in NP-000554 and will also be liased to the other TSGs for overall 3GPP approval.

# **ANNEX A:OUTPUT MATERIAL**

# A.1 Liaisons Approved to be sent following TSG\_N#9

NP_Tdoc	Title	LS to	LS Copied	LS attachements
NP-000533	LS to S3 on Positive Authentification Reporting	S3	N4	NP-000416
NP-000548	LS to TSG_R, T and SA including a CR to 21.900 on CR CATEGORIES	TSG-GERAN, TSG-RAN & TSG-T		NP-000548
NP-000554	LS presenting CR to 21.900 to introduce CAT C sub-categories	TSG SA, TSG-GERAN, TSG-RAN, TSG-T		INCLUDES CR to 21.900
NP-000555	CN position paper on R4 and R5 Work Planning Principles	SA		

# A.2 New TSs /TRs Approved at TSG\_N#9

NP_Tdoc	Туре	Title	Release	Resulting Version

# A.3 New / Revised Work Items Approved at TSG\_N#9

NP_Tdoc	Title	Туре	for Release	Status
NP-000465	Revised proposed work item description for interworking between IM CN subsystem and circuit switched networks	WID	R00	APPROVED
NP-000529	WI Description: Out of band Transcoder Control	WID	R00	APPROVED
NP-000538	WI Description: Bearer Independent Circuit-Switched Core Network	WID	R00	APPROVED
NP-000568	WI description for R00 -"SIP-CC over Gm interface", N1-000856	WID	R00	APPROVED

# A.4 CRs Approved at TSG\_N#9

TDoc	Spec	CR	Rev	Phase	Subject	Cat	Source	Work item	to Ver.

Will be generated once Revised CR database is available

# A.5 CRs Not Approved at TSG\_N#9

	Tdoc	Status	Spec	CR	Rev	Phase	Subject	Cat	Source	Workitem
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Will be generated once Revised CR database is available

# ANNEX B. TSG\_N#8 Participants List

Name	e-mail	Telephone	Fax	Represented Organisation	Status

Will be generated once available

# ANNEX C Decisions/Notes on Tdocs by Agenda Item

	Tdoc	Agenda	Туре	Title	Presented Source	Discussion	Status
					Dy		

Will be generated once available

# History

	Document History						
25 <sup>th</sup> September 2000	DRAFT v.0.0.1 dispatched to the TSG_CN mail exploder for comments.						
	Comments to be addressed to:						
	Mr. David Boswarthick, 3GPP TSG-N MCC Support MCC - ETSI Secrétariat 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 by 3 <sup>rd</sup> August 2000						
8 <sup>th</sup> August 2000	Draft report v2.0.0 placed on the FTP server						
20 <sup>th</sup> September 2000	Final v2.0.0 approved at TSG#9 Meeting in Hawaii – Made version 3.0.0 and placed to server as the official meeting report						