3GPP TSG\_CN Tdoc NP-000<u>571</u>435

Plenary Meeting #9, Oahu, Hawaii  $20^{th} - 22^{nd}$  September 2000.

3GPP TSG-N1 #13 Tdoc 3GPP N1-000852

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada Revision of N1-000816

Source: TSG\_N WG 1CN1

Title: R00 / SIP updates to CN1 ToR

Agenda item: 10.2.2

**Document for:** APPROVAL

Date: 15.8.2000

**Source: TSG-N1 Chairman** 

Title: R00 / SIP updates to N1 ToR

#### 1 Introduction

This document describes the agreed guidelines for 3GPP TSG N1-3GPP TSG CN WG1 (CN1) work. It is intended to list the agreed meeting practices in TSG-N1CN1 regular meetings and ad-hoc meetings that may be organised by TSG-N1CN1. The original document was agreed in TSGN #2 in Fort Lauderdale and the original version has been revised in TSGN1 #10 in Abiko. This should be a living document which can be updated as necessary when new procedures need to be introduced or the existing ones need to be revised.

GSM specifications for Release '98 were used as baseline documents for R99 as was defined in Tdoc SMG3A-99179 and other documents on the same topic.

GSM Release 98 was adopted as the first reference specification for TSGN-N1. The initial specifications were listed in Tdoc NP-99028. Additionally to this the RAN specific parts of layer 3 specifications were removed to separate specifications. GSM Release 98 together with the outcome of the L3 stage 3 split defined the basis for TSG-N1CN1 specification work as interim 4/99 release.

## 2 Main objectives of TSG-N1CN1

To produce and maintain specifications for a 3<sup>rd</sup> Generation Core Network (3G CN) which is an evolution from the GSM Core Network;

To produce and maintain specifications for a 2<sup>nd</sup> generation Core Network (2G CN). To use GSM specifications for Release '98 as baseline documents for R99 as has been defined in Tdoc SMG3A 99179 (and other documents, if available); GSM Release 98 is adopted as the first reference specification for TSGN-N1. The specifications are listed in Tdoc NP-99028. Additionally to this the RAN specific parts of 04.08 and 04.07 will be removed to separate specifications. GSM Release 98 together with the outcome of the L3 stage 3 split defines the basis for TSG-N1CN1 specification work as interim 4/99 release.

To implement the work items allocated to TSG-N1CN1 in the specifications under its responsibility

To produce a full, consistent set of specifications under TSGN1 responsibility by the agreed cut-off date for each-annual release, unless the plenary meetings decide that some

| 3GPP TSG\_CN Plenary Meeting #9, Oahu, Hawaii 20<sup>th</sup> – 22<sup>nd</sup> September 2000. Tdoc NP-000<u>571</u>435

**3GPP TSG-N1 #13** 

**Tdoc 3GPP N1-000852** 

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

other apporach will be taken. the first full set of 3G CN specifications by the end of 1999:

To produce a full set of 3G CN specifications for any subsequent release as defined by 3GPP TSGs.

From the first UMTS release (R99) onwards the basis for any new release should by default be the previous UMTS and GSM TS release.

3GPP TSG\_CN

Plenary Meeting #9, Oahu, Hawaii

 $20^{th} - 22^{nd}$  September 2000.

**3GPP TSG-N1 #13** 

**Tdoc 3GPP N1-000852** 

Tdoc NP-000571435

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

# 3 Terms of Reference and Scope of TSG-N1CN1

#### 3.1 Terms of reference

Working Group TSGN-N1 is responsible for the 3GPP specifications that define the User Equipment - Core network L3 radio protocols and Core network side of the Iu reference point. Specifically it has a responsibility for:

- User Equipment Core network layer 3 radio protocols (Call Control, Session Management, Mobility Management, SMS);
- Management of work items placed under its responsibility.

## TSG N WG1CN1 will address the following areas of work:

- Connection Management and Mobility Management related matters, both Circuit Switched and Packet protocols;
- Mobility Management, Call Control, Session Management, Short Message Service, and Location services L3 signalling between the user equipment and the core network;
- SIP Call Control protocol for the IM subsystem. SIP protocol over Gm interface between mobile terminal and CSCF. The intention is to first evaluate and define the enhancements from standard IETF SIP which are needed to produce a mobile SIP, then to have these additions included in SIP (either in IETF or 3GPP TSG WGs)
- SDP protocol for the IM subsystem.
- Signalling for interworking with GSM networks (e.g. handover and roaming) together with <u>CN4TSG-N WG2</u>;
- Core network signalling between the Core network nodes placed under its responsibility together with TSG-N WG2CN4;
- Core network aspects of the Iu interface;

-Core network aspects of the O&M requirements.

The mapping of these Terms of Reference against the ones defined for TSG-N in the first TSG-N meeting in December 1998 is shown in Annex A. The ToR which are appropriate for TSG-N1CN1 are shown in *bold italic* characters.

# 3.2 Scope

The scope of TSG-N1CN1 is the following:

- Maintenance of the following protocols:
  - Mobility Management (both circuit switched and packet)
  - Call Control
  - Session Management
  - SMS Radio protocol
- Development and maintenance Applicability and enhancements of of mobile variant or SIPSIP to mobile environment.
- Applicability and enhancements of SDP to mobile environment.

3GPP TSG\_CN Plenary Meeting #9, Oahu, Hawaii 20<sup>th</sup> – 22<sup>nd</sup> September 2000. **Tdoc NP-000<u>571</u>435** 

#### **3GPP TSG-N1 #13**

**Tdoc 3GPP N1-000852** 

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

- Development and maintenance of MM part of the MS idle mode functionality
- Development and maintenance of the CN side of the Iu reference point.
- Maintenance of the SGSN-VLR (Gs) interface
- Maintenance of Mobile Radio L3 requirements (evolution of GSM 04.07/24.007)
- Maintenance of Mobile Radio L3 stage 3 (evolution of GSM 04.08/24.008)
- Maintenance of Point-to-point Short Message Service (SMS) on the Radio interface (evolution of GSM 04.11/24.011)

In this task TSG-N1CN1 has also the maintenance responsibility of the older versions of the specifications placed under its responsibility.

#### 4 Internal structure

Creation of sub-working groups inside TSG-N WG1CN1 is not proposed at this stage. Establishment of sub-working groups can be considered if matters which can be treated in parallel meetings can be identified. This does not prohibit organising ad-hoc meetings on any identified topic.

An ad-hoc meeting (drafting meeting) which is not mandated to approve any documents is free to define the working methods as appropriate for each meeting. More informal approach than defined in this document is allowed. In case the procedures defined in this Terms of Reference for <u>TSG-N1CN1</u> are not followed in such an ad-hoc meeting, this must be indicated when the invitation to the meeting is issued.

Such ad-hoc meetings have been used successfully in the past when developing major new work items such as GPRS and it can be foreseen that large new work items may justify similar apporachapproach to allow sufficient meeting time matching the magnitude of the work.

3GPP TSG\_CN Tdoc NP-000571435

Plenary Meeting #9, Oahu, Hawaii  $20^{th} - 22^{nd}$  September 2000.

**3GPP TSG-N1 #13** 

**Tdoc 3GPP N1-000852** 

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

# 5 Co-operation with other groups

Possible co-operation is foreseen with the following groups:

TSG-N WG42CN4: Basic Call handling stage 2, SS

CN2: CAMEL

TSG-R WG2R2: Iu IF

**R3: UTRAN Architecture** 

TSG-T WG1T1: ME testing issues

TSG-T WG2T2: Services and Capabilities

TSG-T-WG3T3: UIM IF

TSG-S WG1S1: Service requirements

TSG-S WG2SA2: Architecture

TSG-S WG3S3: Security related issues TSG-S WG5S5: Network Management

ETSI SMG2TSG-GERAN: GSM radio and testing related issues.

**IETF: SIP specifications** 

Plenary Meeting #9, Oahu, Hawaii  $20^{th} - 22^{nd}$  September 2000.

**3GPP TSG-N1 #13** 

**Tdoc 3GPP N1-000852** 

**Tdoc NP-000571435** 

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

## **6** Frequency of meetings

The dates for the meetings should be agreed well before the meetings to allow the host sufficient time for preparations.

The meeting schedule will not be updated to this document but the latest agreed meeting dates are available in the 3GPP meeting calendar.

Providing the latest agreed <u>TSG-N1CN1</u> meeting dates for the maintenance of the global 3GPP meeting calendar is the task of the <u>TSG-N1CN1</u> secretary.

By default all meetings are joint UMTS and GSM meetings. The scope of the meeting and the scheduling of the items will always be indicated on the agenda before the meeting.

The hosts of the future meetings will be drawn from members of all participating organisations with no discrimination based on location.

Additional ad-hoc meetings on issues requiring a meeting of their own may be agreed as necessary.

It is possible to have joint meetings with other working groups as necessary. It is also possible to have a TSG-N1CN1 WG meeting in conjunction with TSG-N plenary meeting. However, TSGN1CN1 meetings are not allowed on the TSGN plenary meeting week in any other location except for the venue of the plenary meeting. TSGN1CN1 meetings the week before and the week after the plenary meeting are not allowed. The minimum suitable number of meetings is one TSG-N1CN1 WG meeting between two consecutive TSG-N plenary meetings. Normally the meetings should not be more frequent than approximately once per month counting both regular TSGN1CN1 WG meetings and TSGN plenary meetings. If ad-hoc meetings are required more frequently then particular attention should be paid to the practical arrangements and travelling to allow sufficient time to prepare new contributions to the meetings.

## 7 Document handling procedures

The contributions shall <u>always</u> indicate the Tdoc <u>number</u> and <u>also</u> CR number if relevant. These are allocated by the secretary of the meeting.

All contributions should be provided for the secretary of the meeting in order to be uploaded to the server under DocBox directory which will be created for each meeting. The deadline for input documents has been agreed to be 3 weekdays before the meeting. Weekdays shall here be understood as the days from Monday to Friday. Exceptions to this rule may be made on a meeting by meeting basis but this must be indicated well before the default deadline for submission of the input documents.

If a meeting starts on Monday, then the input documents should be submitted to the secretary by the previous Tuesday 16:00 hours French time. Preferred media is email, any other media must be first agreed with the secretary. All input document files must be numbered according to the 3GPP tdoc numbering scheme and must contain the appropriate cover sheet details.

The documents which have been provided by the deadline should take higher priority to other documents on the same agenda item.

**Tdoc NP-000571435** 

**3GPP TSG-N1 #13** 

**Tdoc 3GPP N1-000852** 

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

It is not forbidden for the delegations to bring their input documents directly to the meeting but a Tdoc number and CR number if required must be allocated before a document can be discussed. The discussion on such late contributions may be delayed until the next meeting if they can not be scheduled for the meeting due to lack of time. The host can not be expected to provide copies of the documents which are submitted after the deadline. The originator must provide sufficient number of copies. Submission of critical input documents (in electronic form) before the meeting for the other delegations to review is encouraged.

TSG-N1CN1 have agreed uponto go for completely electronic meeting document distribution. Any exception to this rule must be indicated by the originator of the document well before the meeting in order to arrange sufficient copying facilities. If this is not done, then it is up to the originator to provide sufficient number of paper copies to the meeting. In any case the originator must also provide an electronic version of each document. Typically a document requiring distribution on paper copies would be one which contains large diagrams which are difficult to review on PC screen.

TSG-N1CN1 may agree on a prioritisation of work items during meetings based on e.g. the annual release the work items relate to. This prioritisation may also be given to the WG by TSG-N plenary.

When submitting Technical Specifications and Technical Reports to WG meetings the originators are requested to use the TS and TR cover page templates that have been defined for use in plenary meetings and to indicate the main changes since the previous version.

Otherwise the document handling procedures agreed for TSG-N will apply. The submitted documents will be provided at the start of the meeting by the secretary.

#### 8 Appointment of editors

The editor(s) of documents which are affected by a given work item will be appointed as part of the process of identifying the documents.

Plenary Meeting #9, Oahu, Hawaii  $20^{th} - 22^{nd}$  September 2000.

# **3GPP TSG-N1 #13**

**Tdoc 3GPP N1-000852** 

14<sup>th</sup> –18<sup>th</sup> August 2000, Vancouver, Canada

Revision of N1-000816

_ <del>Anne</del>	x A TERMS OF REFERENCE for Core Network Technical
	Specification Group
The T	SG-Core Network (TSG-N) is responsible for the specifications of the Core
	network part of systems based on 3GPP specifications. Specifically it has a
	responsibility for:
	User Equipment - Core network layer 3 radio protocols (Call Control, Session
	Management, Mobility Management);
	Core Network internal interfaces for Call Associated and Non Call
	Associated signalling;
	Interconnection of the Core Network with external networks;
	Management of work items placed under its responsibility.
More specifically, TSG-N will address the following areas of work:	
	Mobility management, call connection control and session management
	signalling between the user equipment and the core network;
	Core network signalling between the core network nodes. The signalling
	supports functionality such as user information, subscription information
	and control of network services;
	Interworking with 2nd generation networks (e.g. handover to / from GSM);
	Definition of interworking functions between the core network and external
	networks:
	Packet related matters such as mapping of QoS [e.g. transparency for IP domain
	applications, general for bearer types, special for optimized applications such as
	Voice over IP].
	Core network aspects of the Iu interface;
Core	network O&M requirements.