

2.-4.March 1999, Fort Lauderdale, U.S.A

Date: March 4th 1999

Source: TSGN WG1 Convenor

Title: Proposed guidelines for 3GPP TSG-CN-WG1 Work

1 Introduction

This document describes the convenor's proposed guidelines for 3GPP TSG-CN WG1 work. It is intended to serve as the basis for discussion in the Work Item ad-hoc meeting and also email discussion outside the meetings. The aim is to elaborate the document until it can be agreed by TSGN WG1 and then propose it to TSGN for approval.

2 Main objectives of CN-WG1

To produce specifications for a 3rd Generation Core Network (3G CN) which is an evolution from the GSM Core Network;

To use as Baseline Documents GSM specifications for Release '98 as has been defined in Tdoc SMG3A-99179 (and other documents, if available);

GSM Release 98 will be adopted as the reference specification for TSGN WG1. 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 TSGN WG1 specification work as interim 4/99 release.

To implement the work items allocated to (TSGN) WG1 in the specifications under its responsibility

To produce the first full set of 3G CN specifications by the end of 1999;

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3 Terms of Reference and Scope of CN-WG1

3.1 Terms of reference

Working Group TSGN WG1 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, SMSCB);
- Management of work items placed under its responsibility.

TSG-N WG1 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, SMS Cell Broadcast and Location services L3 signalling between the user equipment and the core network;
- Signalling for interworking with GSM networks (e.g. handover and roaming) together with TSGN WG2;
- Core network signalling between the Core network nodes placed under its responsibility together with TSGN WG2;
- 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 CN-WG1 are shown in *bold italic* characters.

3.2 Scope

TSGN WG1 will inherit the SMG3 WP'A' work areas. The scope of TSGN WG1 will be the following:

- Maintenance of the following protocols:
 - Mobility Management (both circuit switched and packet)
 - Call Control
 - Session Management
 - SMS and SMSCB Radio protocols
- 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)
- Maintenance of Mobile Radio L3 stage 3 (evolution of GSM 04.08)
- Maintenance of Point-to-point Short Message Service (SMS) on the Radio interface (evolution of GSM 04.11)

In addition, WG1 is expected to inherit the maintenance of the older versions of the documents placed under its responsibility.

4 Internal structure

Creation of sub-working groups inside TSGN WG1 is not proposed at this stage. This does not prohibit organising ad-hoc meetings on any identified topic.

5 Co-operation with other groups

Possible co-operation is foreseen with the following groups:

TSGN WG2: Basic Call handling stage 2, SS

TSGR WG2: Iu IF

TSGT WG2: ME testing issues

TSGT WG3: UIM IF

TSGS WG1: Service requirements

TSGS WG2: Architecture

TSGS WG3: Security related issues

TSGS WG5: Network Management

6 Frequency of meetings

The dates for the meetings were agreed in the first SMG3 WPA / 3GPP TSGN WG1 joint meeting. All previously agreed SMG3 WPA meeting dates were confirmed and new dates meetings were scheduled too.

The meeting calendar for 1999:

| | |
|-------------------|--|
| 25.-27. Jan. 1999 | TSGN WG1 / SMG3 WPA meeting |
| 18.-19. Feb. 1999 | TSGN WG1 Work Item drafting |
| 22.-25. Mar. 1999 | TSGN WG1 / SMG3 WPA meeting, SMG9 invited for SIM issues |
| 21.-23. Apr. 1999 | TSGN WG1 / SMG3 WPA meeting |
| 10.-12. May 1999 | TSGN WG1 / SMG3 WPA meeting |
| 16.-20. Aug. 1999 | TSGN WG1 / SMG3 WPA meeting |
| 21.-23. Sep. 1999 | TSGN WG1 / SMG3 WPA meeting |
| 23.-25. Nov. 1999 | TSGN WG1 / SMG3 WPA meeting |
| 14.-16. Dec. 1999 | TSGN WG1 / SMG3 WPA meeting |

By default all these 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.

At the time of writing the number of meetings allocated for year 1999 exceeds the number of hosts for those meetings. The delegations are encouraged to check whether they would be able to host a 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.

Some CN-WG1 meetings will be held jointly with CN-WG2.

Some CN-WG1 meetings will be held in conjunction with TSG-N meetings.

7 Document handling procedures

The document handling procedures agreed for TSGN will apply.

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.

Annex 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.***