3GPP TSG CN Plenary Meeting #12 **Tdoc NP-010395**
Stockholm, Sweden, 13th - 15th June 2001

Title: **Co-ordination of SDO input to ITU-T Q.REF-1**

Source: 3GPP TSG CN

To: PCG, TSG RAN, TSG SA, TSG T

Cc:

Contact: **Yun-Chao Hu (CN ITU-T Co-ordination Ad-Hoc Convenor)**
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Introduction

ITU-T Special Study Group on "IMT-2000 and Beyond" (SSG) has requested input from SDOs related to 3G core networks (see attached Chairman's letter from ITU-T SSG chair). In particular, the SDOs participating in 3GPP are invited to provide input on "IMT-2000 References to GSM evolved UMTS core NETWORK with UTRAN Access network ."

It is important that the SDOs participating in 3GPP provide as input a consistent set of 3GPP specifications. This document provides a proposal for how the SDOs may wish to respond to this request.

Proposed Baseline for input into ITU-T Q.REF-1

The scope of Q.REF-1 is the identification of the IMT-2000 technical specifications for the Core Network belonging to the IMT-2000 family member GSM evolved UMTS core network with UTRAN access network. The recommendation includes the internal and external interfaces for the Core Network as well as the general architecture specifications. Furthermore, the current scope of Q.REF-1 is aligned with 3GPP release 99.

It is the recommendation of the 3GPP CN ITU-T Co-ordination Ad-Hoc that this input should be based upon the Release 99 following TSG SA#11. The set of specifications should be those listed in TS 21.101 v330, with the following changes:

- Technical Reports (TRs) should not be included
- SOLSA is a GSM capability and should be not included
- The 25 series specifications (RAN specifications) should not be included
- The UE/USIM Test and Conformance Specifications should not be included

The table below provides the list of 3GPP specifications and versions which the CN ITU-T Co-ordination Ad-Hoc recommends be the base for the SDO responses to ITU-T.

3GPP Spec		Title	Version
TS	21.101	3rd Generation mobile system Release 1999 Specifications	3.3.0
TS	21.111	USIM and IC card requirements	3.3.0
TS	21.133	Security Threats and Requirements	3.1.0
TS	22.001	Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)	3.2.0
TS	22.002	Circuit Bearer Services Supported by a PLMN	3.6.0
TS	22.003	Circuit Teleservices supported by a Public Land Mobile Network (PLMN)	3.2.0
TS	22.004	General on Supplementary Services	3.2.1
TS	22.011	Service accessibility	3.4.0
TS	22.016	International Mobile Equipment Identities (IMEI)	3.2.0
TS	22.022	Personalisation of GSM ME Mobile functionality specification ; Stage 1	3.1.0
TS	22.024	Description of Charge Advice Information (CAI)	3.0.1
TS	22.030	Man-Machine Interface (MMI) of the Mobile Station (MS)	3.4.0
TS	22.034	High Speed Circuit Switched Data (HSCSD) ; Stage 1	3.2.1
TS	22.038	SIM application toolkit (SAT); Stage 1	3.2.0
TS	22.041	Operator Determined Call Barring	3.3.0
TS	22.042	Network Identity and Time Zone (NITZ), stage 1	3.0.1
TS	22.057	Mobile Station Application Execution Environment (MExE); Stage 1	3.0.1
TS	22.060	General Packet Radio Service (GPRS); Stage 1	3.5.0
TS	22.066	Support of Mobile Number Portability (MNP); Stage 1	3.2.0
TS	22.067	enhanced Multi-Level Precedence and Pre-emption service (eMLPP) ; Stage 1	3.0.1
TS	22.071	Location Services (LCS); Stage 1	3.3.0
TS	22.072	Call Deflection (CD); Stage 1	3.0.1

3GPP Spec		Title	Version
TS	22.078	CAMEL; Stage 1	3.7.0
TS	22.079	Support of Optimal Routing; Stage 1	3.0.1
TS	22.081	Line Identification Supplementary Services; Stage 1	3.2.0
TS	22.082	Call Forwarding (CF) Supplementary Services; Stage 1	3.0.1
TS	22.083	Call Waiting (CW) and Call Hold (HOLD) Supplementary Services; Stage 1	3.0.1
TS	22.084	MultiParty (MPTY) Supplementary Service; Stage 1	3.0.1
TS	22.085	Closed User Group (CUG) Supplementary Services; Stage 1	3.1.0
TS	22.086	Advice of Charge (AoC) Supplementary Services; Stage 1	3.1.0
TS	22.087	User-to-user signalling (UUS); Stage 1	3.1.0
TS	22.088	Call Barring (CB) Supplementary Services; Stage 1	3.0.2
TS	22.090	Unstructured Supplementary Service Data (USSD); Stage 1	3.1.0
TS	22.091	Explicit Call Transfer (ECT) Supplementary Service; Stage 1	3.1.0
TS	22.093	Call Completion to Busy Subscriber (CCBS); Stage 1	3.0.1
TS	22.096	Calling Name Presentation (CNAP); Stage 1 (T1P1)	3.0.1
TS	22.097	Multiple Subscriber Profile (MSP); Stage 1	3.2.0
TS	22.100	UMTS Phase 1	3.6.0
TS	22.101	UMTS Service principles	3.12.0
TS	22.105	Services & Service capabilities	3.10.0
TS	22.115	Service Aspects Charging and billing	3.3.0
TS	22.121	Provision of Services in UMTS - The Virtual Home Environment ; Stage 1	3.3.0
TS	22.129	Handover Requirements between UMTS and GSM or other Radio Systems	3.5.0
TS	22.135	Multicall Stage 1	3.4.0
TS	22.140	Multimedia Messaging Service; Stage 1	3.1.0
TS	23.002	Network Architecture	3.4.0
TS	23.003	Numbering, Addressing and Identification	3.8.0
TS	23.007	Restoration procedures	3.4.0
TS	23.008	Organisation of subscriber data	3.5.0
TS	23.009	Handover procedures	3.6.0
TS	23.011	Technical Realization of Supplementary Services - General Aspects	3.1.0
TS	23.012	Location management procedures	3.3.0
TS	23.014	Support of Dual Tone Multi Frequency (DTMF) signalling	3.1.0
TS	23.015	Technical realisation of Operator Determined Barring (ODB)	3.1.0
TS	23.016	Subscriber data management ; Stage 2	3.7.0
TS	23.018	Basic Call Handling - Technical realization	3.7.0
TS	23.032	Universal Geographical Area Description (GAD)	3.1.0
TS	23.034	High Speed Circuit Switched Data (HSCSD) ; Stage 2	3.3.0
TS	23.038	Alphabets & Language	3.3.0
TS	23.040	Technical realisation of Short Message Service	3.5.0
TS	23.041	Technical Realization of Cell Broadcast Service	3.3.0
TS	23.042	Compression algorithm for SMS	3.1.0
TS	23.054	Shared Interworking Functions ; Stage 2	3.0.0
TS	23.057	Mobile Station Application Execution Environment (MExE)	3.4.0
TS	23.060	General Packet Radio Service (GPRS) Service description; Stage 2	3.7.0
TS	23.066	Support of GSM Mobile Number Portability (MNP) stage 2	3.3.0
TS	23.067	Enhanced Multi-Level Precedence and Preemption Service (EMLPP) ; Stage 2	3.2.0
TS	23.072	Call Deflection Supplementary Service ; Stage 2	3.3.0
TS	23.078	Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2	3.8.0
TS	23.079	Support of Optimal Routeing - Phase 1 ; Stage 2	3.6.0
TS	23.081	Line Identification Supplementary Services ; Stage 2	3.1.0
TS	23.082	Call Forwarding (CF) Supplementary Services ; Stage 2	3.5.0
TS	23.083	Call Waiting (CW) and Call Hold (HOLD) Supplementary Service ; Stage 2	3.2.0
TS	23.084	MultiParty (MPTY) Supplementary Service ; Stage 2	3.2.0
TS	23.085	Closed User Group (CUG) Supplementary Service ; Stage 2	3.1.0
TS	23.086	Advice of Charge (AoC) Supplementary Service ; Stage 2	3.1.0
TS	23.087	User-to-User Signalling (UUS) ; Stage 2	3.1.0
TS	23.088	Call Barring (CB) Supplementary Service ; Stage 2	3.2.0
TS	23.090	Unstructured Supplementary Service Data (USSD) ; Stage 2	3.2.0
TS	23.091	Explicit Call Transfer (ECT) Supplementary Service ; Stage 2	3.2.0
TS	23.093	Call Completion to Busy Subscriber (CCBS) ; Stage 2	3.2.0
TS	23.094	Follow Me Stage 2	3.2.0
TS	23.096	Name Identification Supplementary Service ; Stage 2	3.0.1
TS	23.097	Multiple Subscriber Profile (MSP); Stage 2	3.1.1
TS	23.101	General UMTS Architecture	3.1.0
TS	23.107	Quality of Service, Concept and Architecture	3.5.0
TS	23.108	Mobile Radio Interface Layer 3 specification Core Network Protocols stage 2 (structured procedures)	3.2.0
TS	23.110	UMTS Access Stratum Services and Functions	3.4.0
TS	23.116	Super Charger ; Stage 2	3.0.0
TS	23.119	Gateway Location Register (GLR) ; Stage2	3.0.0
TS	23.121	Architecture Requirements for release 99	3.5.1
TS	23.122	Non-Access-Stratum functions related to Mobile Station (MS) in idle mode	3.6.0
TS	23.127	Virtual Home Environment; Stage 2	3.3.0
TS	23.135	Multicall ; Stage 2	3.2.0

3GPP Spec		Title	Version
TS	23.140	Multimedia Messaging Service (MMS)	3.0.1
TS	23.171	Functional stage 2 description of location services in UMTS	3.3.0
TS	24.002	GSM-UMTS Public Land Mobile Network (PLMN) Access Reference Configuration	3.1.0
TS	24.007	Mobile Radio Interface Signalling Layer 3 - General Aspects	3.7.0
TS	24.008	Mobile Radio Interface Layer 3 specification; Core Network Protocols ; Stage 3	3.7.0
TS	24.010	Mobile Radio Interface Layer 3 - Supplementary Services Specification - General Aspects	3.1.0
TS	24.011	Point-to-Point (PP) Short Message Service (SMS) Support on Mobile Radio Interface	3.6.0
TS	24.012	Short Message Service Cell Broadcast (SMSCB) Support on the Mobile Radio Interface	3.0.0
TS	24.022	Radio Link Protocol (RLP) for Data and Telematic Services on the (MS-BSS) Interface and the Base Station System - Mobile-services Switching Centre (BSS-MSC) Interface	3.4.0
TS	24.030	Location Services LCS Stage 3 SS (MO-LR)	3.1.0
TS	24.067	Enhanced Multi-Level Precedence and Pre-emption service (eMLPP) ; Stage 3	3.1.0
TS	24.072	Call Deflection Supplementary Service ; Stage 3	3.0.0
TS	24.080	Mobile radio Layer 3 Supplementary Service specification - Formats and coding	3.4.1
TS	24.081	Line Identification Supplementary Service ; Stage 3	3.1.0
TS	24.082	Call Forwarding Supplementary Service ; Stage 3	3.0.0
TS	24.083	Call Waiting (CW) and Call Hold (HOLD) Supplementary Service ; Stage 3	3.0.0
TS	24.084	MultiParty (MPTY) Supplementary Service ; Stage 3	3.0.0
TS	24.085	Closed User Group (CUG) Supplementary Service ; Stage 3	3.0.0
TS	24.086	Advice of Charge (AoC) Supplementary Service ; Stage 3	3.0.0
TS	24.087	User-to-User Signalling (UUS) ; Stage 3	3.0.0
TS	24.088	Call Barring (CB) Supplementary Service ; Stage 3	3.0.0
TS	24.090	Unstructured Supplementary Service Data (USSD) ; Stage 3	3.0.0
TS	24.091	Explicit Call Transfer (ECT) Supplementary Service ; Stage 3	3.0.0
TS	24.093	Call Completion to Busy Subscriber (CCBS) ; Stage 3	3.0.0
TS	24.096	Name Identification Supplementary Service ; Stage 3	3.0.0
TS	24.135	Multicall Stage 3	3.1.0
TS	26.071	AMR speech Codec; General description	3.0.1
TS	26.073	AMR speech Codec; C-source code	3.2.0
TS	26.074	AMR speech Codec; Test sequences	3.1.0
TS	26.090	AMR speech Codec; Transcoding Functions	3.1.0
TS	26.091	AMR speech Codec; Error concealment of lost frames	3.1.0
TS	26.092	AMR speech Codec; comfort noise for AMR Speech Traffic Channels	3.0.1
TS	26.093	AMR speech Codec; Source Controlled Rate operation	3.3.0
TS	26.094	AMR Speech Codec; Voice Activity Detector for AMR Speech Traffic Channels	3.0.0
TS	26.101	AMR speech Codec; Frame Structure	3.1.0
TS	26.102	AMR speech Codec; Interface to Iu and Uu	3.3.0
TS	26.103	Codec lists	3.0.0
TS	26.104	AMR speech Codec; Floating point C-Code	3.1.0
TS	26.110	Codec for Circuit switched Multimedia Telephony Service; General Description	3.1.0
TS	26.111	Codec for Circuit switched Multimedia Telephony Service; Modifications to H.324	3.4.0
TS	26.131	Narrow Band (3,1kHz) Speech & Video Telephony Terminal Acoustic Characteristics	3.2.0
TS	26.132	Narrow Band (3,1kHz) Speech & Video Telephony Terminal Acoustic Test Specification.	3.2.0
TS	27.001	General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)	3.8.0
TS	27.002	Terminal Adaptation Functions (TAF) for services using Asynchronous bearer capabilities	3.5.0
TS	27.003	Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities	3.5.0
TS	27.005	Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	3.1.0
TS	27.007	AT command set for 3G User Equipment (UE)	3.8.0
TS	27.010	Terminal Equipment to User Equipment (TE-UE) multiplexer protocol User Equipment (UE)	3.3.0
TS	27.060	GPRS Mobile Stations supporting GPRS	3.5.0
TS	27.103	Wide Area Network Synchronisation	3.1.0
TS	29.002	Mobile Application Part (MAP)	3.8.0
TS	29.007	General requirements on Interworking between the PLMN and the ISDN or PSTN	3.8.0
TS	29.010	Information Element Mapping between Mobile Station - Base Station System (MS - BSS) and Base Station System - Mobile-services Switching Centre (BSS - MCS) Signalling Procedures and the Mobile Application Part (MAP)	3.5.0
TS	29.011	Signalling Interworking for Supplementary Services	3.0.0
TS	29.013	Signalling interworking between ISDN supplementary services Application Service Element (ASE) and Mobile Application Part (MAP) protocols	3.0.0
TS	29.016	Serving GPRS Support Node SGSN - Visitors Location Register (VLR); Gs Interface Network Service Specification	3.1.0
TS	29.018	Serving GPRS Support Node SGSN - Visitors Location Register (VLR); Gs Interface Layer 3 Specification	3.6.0
TS	29.060	GPRS Tunnelling protocol (GTP) across the Gn and Gp interface	3.8.0
TS	29.061	General Packet Radio Service (GPRS); Interworking between the Public Land Mobile Network (PLMN) supporting GPRS and Packet	3.5.0
TS	29.078	CAMEL; Stage 3	3.7.0
TS	29.108	Application of the Radio Access Network Application Part (RANAP) on the E-interface	3.1.0
TS	29.119	GPRS Tunnelling Protocol (GTP) specification for Gateway Location Register (GLR)	3.0.0
TS	29.120	Mobile Application Part (MAP) specification for Gateway Location Register (GLR); Stage 3	3.1.0
TS	29.198	Open Services Architecture API part 1	3.3.0

3GPP Spec		Title	Version
TS	31.102	Characteristics of the USIM Application	3.5.0
TS	31.110	Numbering system for telecommunication IC card applications	3.2.0
TS	31.111	USIM Application Toolkit (USAT)	3.4.0
TS	32.005	Telecommunications Management; Charging and billing; 3G call and event data for the Circuit Switched (CS) domain	3.4.0
TS	32.015	Telecommunications Management; Charging and billing; 3G call and event data for the Packet Switched (PS) domain	3.5.0
TS	32.101	3G Telecom Management principles and high level requirements	3.4.0
TS	32.102	3G Telecom Management Architecture	3.2.0
TS	32.104	3G Performance Management	3.4.0
TS	32.106-1	Telecommunication Management; Configuration Management; Part 1: 3G configuration management; Concept and requirements	3.1.0
TS	32.106-2	Telecommunication Management; Configuration Management; Part 2: Notification Integration Reference Point; Information Service version 1	3.3.0
TS	32.106-3	Telecommunication Management; Configuration Management; Part 3: Notification Integration Reference Point; CORBA solution set version 1:1	3.3.0
TS	32.106-4	Telecommunication Management; Configuration Management; Part 4: Notification Integration Reference Point: CMIP Solution Set Version 1:1	3.1.0
TS	32.106-5	Telecommunication Management; Configuration Management; Part 5: Basic Configuration Management IRP information model (including NRM) version 1	3.1.0
TS	32.106-6	Telecommunication Management; Configuration Management; Part 6: Basic Configuration Management IRP CORBA solution set version 1:1	3.1.0
TS	32.106-7	Telecommunication Management; Configuration Management; Part 7: Basic Configuration Management IRP CMIP solution set version 1:1	3.1.0
TS	32.106-8	Telecommunication Management; Configuration Management; Part 8: Name convention for Managed Objects	3.1.0
TS	32.111-1	Telecommunication Management; Fault Management; Part 1: 3G fault management requirements	3.2.0
TS	32.111-2	Telecommunication Management; Fault Management; Part 2: Alarm Integration Reference Point: Information Service	3.3.0
TS	32.111-3	Telecommunication Management; Fault Management; Part 3: Alarm Integration Reference Point: CORBA solution set version 1:1	3.4.0
TS	32.111-4	Telecommunication Management; Fault Management; Part 4: Alarm Integration Reference Point: CMIP solution set	3.1.1
TS	33.102	Security Architecture	3.8.0
TS	33.103	Security Integration Guidelines	3.5.0
TS	33.105	Cryptographic Algorithm requirements	3.7.0
TS	33.106	Lawful interception requirements	3.1.0
TS	33.107	Lawful interception architecture and functions	3.2.0
TS	33.120	Security Objectives and Principles	3.0.0
TS	35.201	Specification of the 3GPP confidentiality and integrity algorithms; Document 1: f8 and f9 specifications	3.1.0
TS	35.202	Specification of the 3GPP confidentiality and integrity algorithms; Document 2: Kasumi algorithm specification	3.1.0
TS	35.203	Specification of the 3GPP confidentiality and integrity algorithms; Document 3: Implementors' test data	3.1.0
TS	35.204	Specification of the 3GPP confidentiality and integrity algorithms; Document 4: Design conformance test data	3.1.0

Table 1 – 3GPP core network and system specifications and versions for Release 99

Information to be provided by each SDO

ITU-T has requested that for each specification, the SDOs provide the following information:

Document No. This is the designation assigned by the SDO for the deliverable corresponding to the 3GPP specification number,
Version The version designation assigned by the SDO corresponding to the 3GPP specification version,
Status The status of the SDO deliverable (i.e., ETSI published, ANSI standard),
Issued Date The date when the SDO deliverable was issued,
Location The location where the SDO deliverable may be obtained (i.e., a URL, publications office).

This information may be provided in tabular form as indicated in the circular letter.

It is also recommended that each SDO also provide warning text indicating that:

- The references provided by a SDO represent a consistent set of documents. These documents are continuously evolving and later versions of the documents may be available at the SDO's web site.
- Some references may be provided to both ITU-T and ITU-R. Alignment of the version numbers in the sets provided to both ITU-T and ITU-R is not assured.

INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2001 - 2004

ITU-T Special Study Group on "IMT-2000 and Beyond"

CHAIRMAN'S LETTER TO EXTERNAL ORGANIZATIONS

TITLE: **REQUEST FOR INFORMATION FOR PROPOSED ITU-T RECOMMENDATIONS BEING DEVELOPED BY THE SPECIAL STUDY GROUP ON "IMT-2000 AND BEYOND"**

TO: **3GPP, 3GPP2, ETSI, Committee T1 (T1P1), TIA (TR45.2, TR45.3, TR45.5, TR45.6) and UWCC**

COPY: **ITU-R WP 8F, OHG**

26 February 2001

Dear Colleagues:

During the 11-15 December 2000 Meeting of the ITU-T Special Study Group on "IMT-2000 and Beyond," the text for Question 3/SSG was agreed (see Enclosure 1.) The task objectives for Q.3/SSG include the development of three new ITU-T Recommendations:

- GSM evolved UMTS core network with UTRAN access network;
- ANSI-41 Evolved core network with cdma2000 access network; and
- ANSI-41/GPRS evolved core network with UWC-136 access network.

The initial set of these recommendations will address network aspects of IMT-2000, while later recommendations will address network enhancements to the IMT-2000 Family. The initial set of these ITU-T recommendations, coupled with the ITU-R Recommendation M.1457, "Detailed

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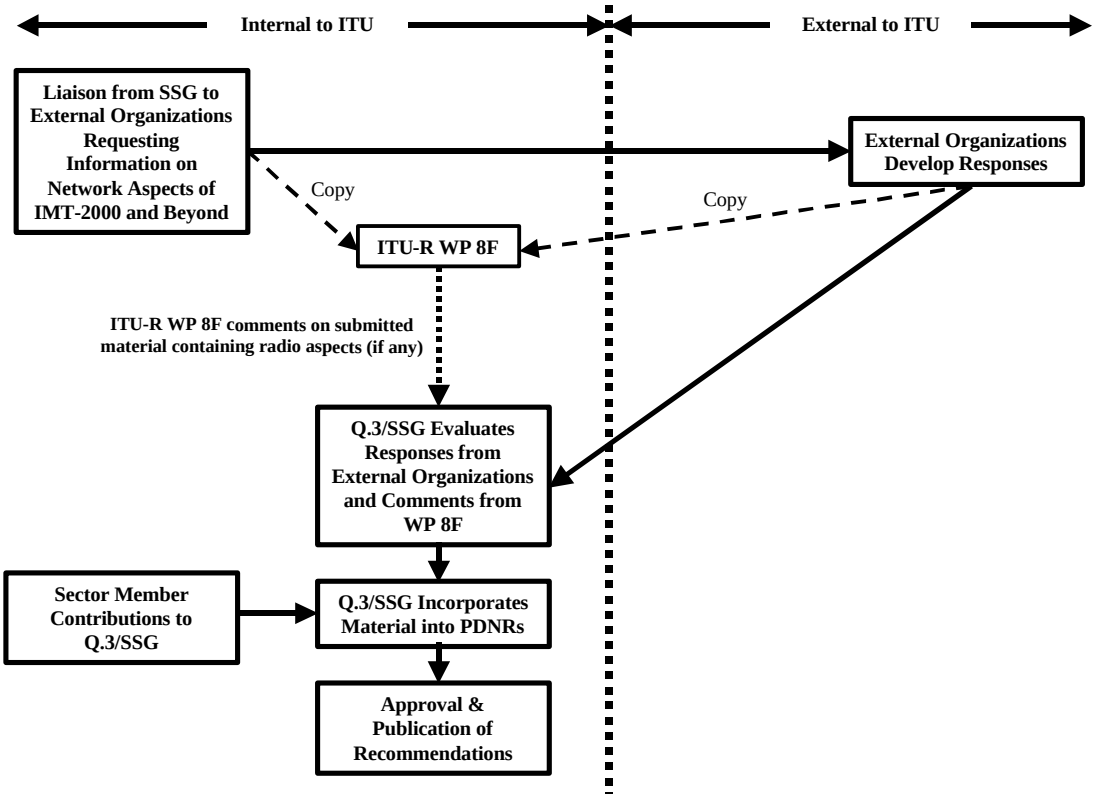
specifications of the radio interfaces of IMT-2000," is intended to form a complete set of IMT-2000 Recommendations.

As noted in the text for Q.3/SSG, the development of these recommendations requires close coordination with external organizations including the SDOs involved in the 3GPPs, and UWCC. Q.3/SSG has now begun its work in developing these recommendations. It is appropriate to begin the coordination process and to request your assistance in the development of these recommendations.

The process for developing these three recommendations was agreed at the Q.3/SSG Rapporteurs Meeting which took place 12-13 February 2001 in Stockholm. The process is depicted in the figure below. The three recommendations indicated above will be based on input contributions received from SSG participants and from input information received from relevant external Standards Development Organisations, or their participants, that are addressees of this correspondence. Please note that the process provides an opportunity for ITU-R Working Party 8F to review and comment on the material and references received to permit an assessment by the radio experts of ITU-R as to whether or not any of the submitted material contains radio aspects of IMT-2000. The intent of the ITU-T SSG is that none of the three proposed ITU-T recommendations will contain material, or will reference material, that contain radio aspects of IMT-2000.

ITU/External Organization Partnership Process for Developing Q.3/SSG Recommendations



An initial draft outline of the first of these recommendations is provided as Enclosure 2. This outline is for the proposed draft new recommendation (PDNR) "GSM evolved UMTS core network with

UTRAN access network." This preliminary draft outline was developed at the 12-13 February 2001 meeting of Q.3/SSG based on input contributions to this meeting.

Because no contributions were received against the other two recommendations, equivalent skeleton outlines are not provided herein. Enclosure 2 is provided as an illustrative example of the type of information to be included in each of these three recommendations, either by direct incorporation of material or by reference to documents produced by the relevant, ITU-T-recognised[1], external organisations. The intent is to provide brief explanatory text in each of the sections followed by references to standards produced by the SDOs. The format planned to be used for these references is shown in the following table.

	Document No.	**Version**	**Status**	**Issue date**	**Location**
ETSI					
T1					
TIA					
TTC					

The ITU-T Special Study Group has aggressive plans for the completion and approval of these three recommendations by the end of 2001. Specifically the work plan for Q.3/SSG is:

Milestone	**Date**	**Event**
Outline and skeleton	02/01	Q.3/SSG Rapporteurs meeting
First draft	04/01	Q.3/SSG Conference Call
Second draft (to SDOs)	05/01	SSG Meeting
Third draft (incorporate input from SDOs)	09/01	SSG Meeting
Fourth Draft	10/01	Q.3/SSG Conference Call
Recommendation	12/01	Begin formal approval

I would appreciate very much if you would assist ITU-T Q.3/SSG by providing necessary information on standards/specifications from your organization in order that the proposed draft new recommendations may reflect the latest IMT-2000 standards and specifications from all relevant standards organizations. Please note that your submission of initial material to help us structure the second and third recommendations indicated above is needed by the end of April for use at our May meeting, and specific content to fill in the structure is needed by the beginning of July 2001 to enable us to develop the recommendations, conduct the necessary reviews, and meet our December 2001 target for completion of the work and initiation of the approval process, per the above plan.

We believe that it is desirable that each of the three recommendations described above be published at the same time. This is dependent on timely receipt of material from the involved SDOs and the UWCC. Each recommendation will be submitted for final approval and publication when it is completed and ready, regardless of the status of the other recommendations. In order to ensure equitable treatment for all the systems, your attention to this request for input is kindly solicited.

Our next SSG meeting is scheduled for 9-13 May 2001 in Geneva. Hence, your initial response by approximately 30 April 2001 would be very helpful to us in progressing our work. The next SSG meeting is being planned for late August / early September 2001. A more complete response by early

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[1] Per list in Section 2.2 of Recommendation A.5, plus ETSI and ICANN per MoUs.

July in time for proposed conference calls and for this SSG meeting is very important towards helping us meet our objectives..

If you need additional information, please do not hesitate to contact me.

With best regards,

John Visser
Chairman, ITU-T Special Study Group on “IMT-2000 and Beyond”

Enclosure 1

Question 3 - Identification of existing and evolving IMT-2000 systems

Reasons for the question

The desire to perform interworking and establish a migration from existing IMT-2000 family members towards systems beyond IMT-2000, will require the identification of the architecture of these systems (IMT 2000 family members).

Since the existing IMT-2000 systems have been specified by a number of SDO's, the reason for this question, is to identify which specifications as approved by the SDO's (recognized by ITU-T according to A series recommendations) are necessary to relies an IMT-2000 system, and where they apply to the overall architecture of the IMT-2000 family member.

As the SDO's continue to develop various releases of their systems, new recommendation will need to be produced to reflect the releases of these systems.
The identification of the architecture and detailed specifications (as produced by the SDO's) of the existing IMT-2000 family members is essential to be able to specify those functions required to facilitate interworking between family members.

Question

What architectures, detailed specifications and releases have been and will be produced by recognized SDO's which make up existing and evolving IMT-2000 systems?

Task objectives

The major focus of this question is to develop recommendations, which identify the existing and evolving IMT-2000 family member systems. The task objectives for the question are to develop recommendations identifying the architecture and detailed specifications of each release (version) of each IMT-2000 family member making reference to relevant specifications produced by the ITU-T recognised SDO's.

Recommendations shall be produced for the following existing and evolving IMT-2000 family members:

- GSM evolved UMTS core network with UTRAN access network,
- ANSI-41 evolved core network with cdma2000 access network,
- ANSI-41/GPRS evolved core network with UWC-136 access network.

  Expected Completion: Initial recommendations consented end 2001, subsequent recommendations 6 – 12 months after systems are approved by SDOs.

Relationships

The development of these recommendations will require close coordination activities with:

- External organizations, particularly UWCC, SDOs.
- ITU-T Study Group 11.
- ITU-R Working Party 8F.

Enclosure 2

Draft outline of Q.REF-1: GSM evolved UMTS core network with UTRAN access network

1 Scope

2 References

[Editor's Note: This section will contain references to existing ITU ITM-2000 recommendations.]

3 Definitions

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations:

5 Introduction

6 Technical specifications structure

[Editor's Note: This section will contain information about the structure of the technical specifications.]

7 Basic architecture for the UMTS IMT-2000 family member

[Editor's Note: This section will contain a figure over the Basic configuration of a PLMN supporting CS and PS services and interfaces.]

8 Nodes

8.1 GMSC

[Editor's Note: A description of the node GMSC will be inserted in this section.]

8.2 MSC/VLR

[Editor's Note: A description of the node MSC/VLR will be inserted in this section.]

8.3 HLR

[Editor's Note: A description of the node HLR will be inserted below.]

8.4 AuC

[Editor's Note: A description of the node AuC will be inserted below.]

8.5 EIR

[Editor's Note: A description of the node EIR will be inserted bellow.]

8.6 GGSN

[Editor's Note: A description of the node GGSN will be inserted bellow.]

8.7 SGSN

[Editor's Note: A description of the node SGSN will be inserted bellow.]

8.8 GMLC

[Editor's Note: A description of the node GMLC will be inserted bellow.]

8.9 GLR

[Editor's Note: A description of the node GLR will be inserted here.]

8.10 IM-GSN

[Editor's Note: A description of the node IM-GSN will be inserted here.]

8.11 IM-MSC

[Editor's Note: A description of the node IM-MSC will be inserted here.]

9 Interfaces

9.1 C-Interface (GMSC-HLR)

9.2 D Interface (VLR-HLR)

9.3 E Interface (MSC-MSC)

9.4 F Interface (VLR-EIR)

9.5 G Interface (VLR-VLR)

9.6 Gc Interface (HLR-GGSN)

9.7 Gf Interface (EIR-SGSN)

9.8 Gi Interface (GGSN-Public Network)

9.9 GLa Interface (GLR-HLR)

9.10 GLb Interface (GLR-MSC/VLR)

9.11 GLc Interface (GLR-SGSN)

9.12 GLd Interface (GLR—IM-MSC)

9.13 GLe Interface (GLR—IM-GSN)

9.14 GLf Interface (GLR—SMS-GMSC)

9.15 GLg Interface (IM-MSC—SMS-GMSC)

9.16 GLh Interface (IM-MSC—MSC/VLR)

9.17 GLi Interface (IM-MSC—GMLC)

9.18 GLj Interface (IM-GSN—GGSN)

9.19 GLk Interface (IM-GSN—SGSN)

9.20 Gn Interface (GGSN-SGSN)

9.21 Gp Interface (SGSN-Public Network)

9.22 Gr Interface (HLR-SGSN)

9.23 Gs Interface (MSC/VLR-SGSN)

9.24 H Interface (HLR-AuC)

9.25 IuBC Interface (CN-RNC)

9.26 IuCS Interface (MSC-RNC)

9.27 IuPS Interface (SGSN-RNC)

9.28 Lc Interface (GMLC-gsmSCF)

9.29 Le Interface (GMLC-External LCS client)

9.30 Lg Interface (MSC/VLR-MLC)

9.31 Lh Interface (HLR-GMLC)

9.32 PSTN Interface (MSC/VLR-PSTN)

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