TSG-RAN Meeting #21 RP-030531
Frankfurt, Germany, 16 - 19 September 2003

Title:	**LS to TSG SA on the documents to be considered for the Revision 4 of Recommendation ITU-R M.1457**
Source:	**TSG RAN**
To:	**TSG SA**
Contact Person:	**Nicola Pio Magnani**
	nicolapio.magnani@telecomitalia.it

TSG RAN#21 intend to approve the update of UTRA FDD and UTRA TDD toward Revision 4 of Rec. ITU-R M.1457, for subsequent submission to ITU-R WP 8F (Edinburgh, 8th –16th October 2003) following usual procedures.

Per each IMT-2000 radio interface, Rec. ITU-R M.1457 contains an 'Overview' (section 5.x.1) and a list of 'Detail Specification' (section 5.x.2) where per each Spec the title and a brief synopsis is provided (in most cases also an empty table is provided: it will be filled in later on by OPs with the hyperlinks to their transposed Deliverables).

With reference to the list of 'Detail Specifications' for UTRA FDD (Section 5.1.2) and UTRA TDD (Section 5.3.2), TSG RAN would like to inform TSG SA that the following Specifications that are under TSG SA responsability are contained in the current version of Rec. ITU-R M.1457:

23.110 UMTS access stratum services and functions
This specification describes the detailed specifications of the protocols which rule the information flows, both control and user data, between the access stratum and the parts of UMTS outside the access stratum, and of the detailed specifications of the UTRAN. These detailed specifications are to be found in other technical specifications.

23.060 General packet radio service (GPRS) service description – Stage 2
This specification describes a general overview over the GPRS architecture as well as a more detailled overview of the MS – CN protocol architecture. Details of the protocols will be specified in companion documents.

23.002 UMTS release 1999 network architecture
This specification describes the possible architectures of the mobile system.

23.101 General UMTS architecture
This specification describes the basic physical and functional separation of UMTS. The content of this specification is limited to those features that are common to all UMTS networks independent of their origin. It identifies and names the reference points and functional groupings appearing at this level.

23.107 QoS concept and architecture
This specification describes the framework for QoS in UMTS. The document shall be used as a living document which will cover all issues related QoS in UMTS.

23.121 Architectural requirements for release 1999
This specification describes architectural requirements for release 1999 related to the evolution of the GSM platform towards UMTS with the overall goal of fulfilling the UMTS service requirements, support of roaming and support of new functionality, signalling systems and interfaces.

23.930 Iu principles
This specification describes the requirements on the Iu and studies relevant principles to guide further standardization of the related interface(s).

22.002 Bearer services supported by a GSM PLMN
This 3G specification describes a set of bearer services to be provided to 3G subscribers by a 3G network itself and in connection with other networks. This document is also be used as a reference for defining the corresponding required mobile network capabilities which are specified by means of the connection type concept.

22.004 General on supplementary services
This specification describes a recommended set of supplementary services to the teleservices and bearer services which will be supported by a 3G network in connection with other networks as a basis for the definition of the network capabilities required.

22.011 Service accessibility
This specification describes the service access procedures as presented to the user. The document contains definitions and procedures are provided for international roaming, national roaming and regionally provided service. These are mandatory in relation to the technical realization of the UE.

22.016 International mobile equipment identities (IMEI)
This specification describes the principal purpose and use of unique equipment identities.

22.022 Personalization of GSM ME mobile functionality specification – Stage 1
This specification describes functional specifications of five features to personalize UE. These features are called:
– network personalization;
– network subset personalization;
– service provider (SP) personalization;
– corporate personalization;
– UMTS subscriber identity module (USIM) personalization.
This specification describes requirements for UE, which provide these personalization features.

22.024 Description of charge advice information (CAI)
This specification describes an overall view of how the charging advice supplementary service shall operate both in the network and within the UE. The charging supplementary service is described in TS 22.086.

22.030 Man-machine interface (MMI) of the mobile station
This specification describes the requirements for and gives guidelines on the MMI for calls on the 3G UE. This includes the requirements of the user procedures for call control and supplementary service control, the requirements on the physical input media and the output, such as indications and displayed information.

22.034 High speed circuit switched data (HSCSD) – Stage 1
This specification describes the Stage 1 description of HSCSD. HSCSD is a feature that allows users subscribing to the general bearer services to access user rates that can be achieved with one or more traffic channel. HSCSD also defines a flexible use of air interface resources, which makes efficient and flexible use of higher user rates feasible.

22.038 SIM application toolkit (SAT) – Stage 1
This specification describes the Stage 1 description of the SAT primarily from the subscriber's and serving environment's points of view, and does not deal with the details of the human interface itself. It includes information applicable to network operators, serving environments and terminal, switch and database manufacturers and contains the core requirements for a SAT which are sufficient to provide a complete service.

22.041 Operator determined call barring
The feature operator determined barring (ODB) allows the network operator or service provider to regulate, by means of an exceptional procedure, access by the subscribers to 3G services, by the barring of certain categories of outgoing or incoming calls or of roaming. ODB shall take effect immediately and shall terminate ongoing calls and bar future calls. The purpose of this network feature is to be able to limit the service provider's financial exposure to new subscribers, or to those who have not promptly paid their bills. It may only be applied to the service provider's own subscribers.

22.042 Network identity and time zone (NITZ) – Stage 1
The feature NITZ provides the means for serving networks to transfer current identity, time, daylight saving time and the local time zone to user equipment storage and use.

22.057 Mobile station application execution environment (MExE) – Stage 1
This specification describes the Stage 1 description of the MExE.

22.060 General packet radio service (GPRS) – Stage 1
This specification describes the Stage 1 description of the GPRS.

22.066 Support of mobile number portability (MNP) – Stage 1
This specification describes the Stage 1 description of the support of MNP between networks in the same country. It is in response to a study mandate agreed between the European Commission and ETSI under order voucher ETSI/97/M-251.

22.067 Priority set-up service – Stage 1 (ASCI spec)
This specification describes the Stage 1 description of the enhanced multi-level precedence and pre-emption (eMLPP) service. This service has two parts: precedence and pre-emption. Precedence involves assigning a priority level to a call in combination with fast call set-up. Pre-emption involves the seizing of resources, which are in use by a call of a lower precedence, by a higher level precedence call in the absence of idle resources. Pre-emption can also involve the disconnection of an on-going call of lower precedence to accept an incoming call of higher precedence.

22.071 Location services (LCS) – Stage 1
LCS is a network provided enabling technology consisting of standardized service capabilities which enables the provision of location applications. This application may be service provider specific. The description of the numerous and varied possible location applications which are enabled by this technology are outside the scope of this specification. However, clarifying examples of how the functionality being specified may be used to provide specific LCS is included in various sections of the specification.

22.072 Call deflection (CD) – Stage 1
CD enables the served mobile subscriber to respond to an incoming call offered by the network by requesting redirection of this call to another number specified in the response. The CD supplementary service can only be invoked before the connection is established by the served mobile subscriber, i.e. in response to the offered call, or during the period that the served subscriber is being informed of the call. The served subscriber's ability to originate calls is unaffected by the CD supplementary service.

22.078 Customized applications for mobile network enhanced logic (CAMEL) – Stage 1
This specification describes the Stage 1 description for CAMEL feature which provides the mechanisms to support services consistently independently of the serving network. The CAMEL features shall facilitate service control of operator specific services external from the serving network. The CAMEL feature is a network feature and not a supplementary service. It is a tool to help the network operator to provide the subscribers with the operator specific services even when roaming outside the home network.

22.079 Support of optimal routing – Stage 1
Support of optimal routing is a network feature to reduce the number of unnecessary inter-network call legs when the subscriber is roaming.

22.081 Line identification supplementary services – Stage 1
This specification describes the supplementary services belonging to the group line identification supplementary services. The group of line identification supplementary services is divided into the following four supplementary services:
CLIP: calling line identification presentation (clause 1);
CLIR: calling line identification restriction (clause 2);
COLP: connected line identification presentation (clause 3);
COLR: connected line identification restriction (clause 4).

22.082 Call forwarding (CF) supplementary services – Stage 1
This specification describes the supplementary services belonging to the group call offering supplementary services. The group of supplementary services call offering supplementary services is divided into four different supplementary services:
– call forwarding unconditional (§ 1);
– call forwarding on mobile subscriber busy (§ 2);
– call forwarding on no reply (§ 3);
– call forwarding on mobile subscriber not reachable (§ 4).

22.083 Call waiting (CW) and call hold (HOLD) supplementary services – Stage 1
This specification describes the supplementary services belonging to the group call completion supplementary services which are divided into the following two supplementary services:
– call waiting (clause 1);
– call hold (clause 2).

22.084 Multiparty (MPTY) supplementary service – Stage 1
This supplementary service provides a mobile subscriber with the ability to have a multi-connection call, i.e. a simultaneous communication with more than one party.

22.085 Closed user group (CUG) supplementary services – Stage 1
The CUG supplementary service enables subscribers, connected to a network and possibly also other networks, to form CUGs to and from which access is restricted. A specific user may be a member of one or more CUGs. Members of a specific CUG can communicate among each other but not, in general, with users outside the group.

22.086 Advice of charge (AoC) supplementary services – Stage 1
These services are designed to supply to a mobile user sufficient information to allow a real-time estimate to be made of the bill which will eventually be levied in the home public land mobile network (PLMN) on the mobile station subscriber.

22.087 User-to-user signalling (UUS) – Stage 1
The UUS supplementary service allows a mobile subscriber to send/receive a limited amount of information to/from another network or ISDN subscriber over the signalling channel in association with a call to the other subscriber.

22.088 Call barring (CB) supplementary services – Stage 1
The call restriction supplementary services allow the possibility for a mobile subscriber to have barring of certain categories of outgoing or incoming calls at the mobile subscribers access.
The group of call restriction services includes two supplementary services:
– barring of outgoing calls;
– barring of incoming calls.
By use of subscription options, the mobile subscriber can at provision time select a set of one or more barring programs to determine the categories of calls to be barred. The following categories are defined:
– all outgoing calls;
– outgoing international calls;
– outgoing international calls except those directed to the home PLMN country;
– all incoming calls;
– incoming calls when roaming outside the home PLMN country.

22.090 Unstructured supplementary service data (USSD) – Stage 1
There are two modes of USSD: MMI-mode and application mode. MMI-mode USSD is for the transparent transport of MMI strings entered by the user to the network and for the transparent transport of text strings from the network that are displayed by the mobile for user information.
Application mode USSD is for the transparent transport of data between the network and the mobile station.
Application mode USSD is intended to be used by applications in the network and their peer applications in the UE.
The communication over the radio interface takes place on the signalling channels using short dialogues with peak data throughput rate capabilities of up to approximately 600 bits/s outside of a call and 1 000 bits/s during a call.

22.091 Explicit call transfer (ECT) supplementary service – Stage 1
The ECT supplementary service enables the served mobile subscriber (subscriber A) who has two calls, each of which can be an incoming or outgoing call, to connect the other parties in the two calls and release the served mobile subscribers own connection.

22.093 Call completion to busy subscriber (CCBS) – Stage 1
In the situation when subscriber A encounters a network determined user busy (NDUB) destination B, the subscriber A can request the CCBS supplementary service (i.e. activate a CCBS request against destination B). The network will then monitor the wanted destination B for becoming idle.
When the wanted destination B becomes idle, then the network will wait a short time in order to allow destination B to make an outgoing call. If destination B does not make any outgoing call within this time, then the network shall automatically recall subscriber A.

22.096 Calling name presentation (CNAP) – Stage 1
The CNAP supplementary service enables the called party to receive the calling name information of the calling party.

22.097 Multiple subscriber profile (MSP) – Stage 1
MSP is an optional service to enable mobile subscribers to have several profiles associated with a single subscriber identity (SIM) and a single international mobile subscriber identity (IMSI), with each profile being a subscription option. Each profile may be used for mobile originated and mobile terminated calls.
Up to four different profiles can be provisioned against a subscriber using the MSP feature. This will allow the subscriber to separate her telecommunication service needs into different identities (e.g. business and home).

22.100 UMTS phase 1 capabilities
This specification describes contains how the definition of the UMTS system will be achieved in a phased approach. This document also specifies the requirements for release 99 of UMTS. Some requirements which are necessary to ensure a smooth transition to later releases are also indicated. This document should, however, be read in conjunction with the other 22.000 series documents which provide a complete description of the requirements for UMTS release 1999 and beyond.

22.101 UMTS service principles
This specification describes the service principles of the UMTS.

22.105 Services and service capabilities
Pre-UMTS systems have largely standardized the complete sets of bearer services, teleservices and supplementary services which they provide. One major difference between UMTS and pre-UMTS systems is that service capabilities rather than services are standardized for UMTS, allowing service differentiation and system continuity. This document describes how and what kind of services the UMTS user has access to.

22.115 Service aspects: charging and billing
This specification describes the service aspects of charging and billing of the UMTS.
This standard is not intended to duplicate existing standards or standards being developed by other groups on these topics, and will reference these where appropriate. This standard will elaborate on the charging requirements described in the charging principles in TS 22.101 UMTS service principles. It will allow the generation of accurate charging information to be used in the commercial and contractual relationships between the parties concerned.

22.121 Virtual home environment (VHE)
This specification describes the content of the Stage 1 requirement for realization of VHE. VHE is defined as a concept for personal service environment (PSE) portability across network boundaries and between terminals. The concept of the VHE is such that users are consistently presented with the same personalized features, user interface customization and services in whatever network and whatever terminal (within the capabilities of the terminal and the network), wherever the user may be located.
A key feature to support VHE is the ability to build services using a standardized application interface.

22.129 Handover requirements between UMTS and GSM or other radio systems
This specification describes service requirements for handover (terms are defined below) within UMTS systems and between UMTS, other IMT-2000 family members and second generation systems. Particular emphasis has been placed on the description of requirements for handover between UMTS and GSM but requirements specific to other systems are incorporated as required.

22.135 Multicall
This specification describes multicall scenarios and requirements for UMTS phase 1 release 1999.
Multicall feature specifies functionality and interactions related to usage of several simultaneous bearers between a terminal and a network. Multicall features allows both circuit-switched call(s) and packet session(s) to exist simultaneously.

22.971 Automatic establishment of roaming relations
This report describes a proposed framework for commercial and technical interworking between UMTS home environments and serving networks who have no direct prior commercial agreements with each other.
This text is applicable to UMTS standardization within ETSI, and is produced with the intent to clarify the concepts involved, and identify those areas which require standardization.

22.975 Advanced addressing
This report describes the requirements for numbering and addressing for UMTS. This technical report is aimed at generating discussion and should be agreed with ETSI WG NA2. The responsibility for developing of numbering and addressing schemes for all networks being in ETSI NA2.

21.133 Security threats and requirements
Detailed security requirements.

33.102 Security architecture
Provides a specification of all security mechanisms and protocols, except algorithms.

33.103 Security integration guidelines

33.105 Cryptographic algorithm requirements
Defines requirements for standard cipher and integrity algorithm.

33.106 Lawful interception requirements
Defines all requirements for network based lawful interception.

33.120 Security objectives and principles
Elaborates on the basic principles underlying the security.

33.901 Criteria for cryptographic algorithm design process
This report describes the process used to design cipher and integrity algorithm.

33.902 Formal analysis of the 3G authentication protocol with modified sequence number management
Formal analysis using BAN and temporal logic of authentication mechanism.

26.071 AMR speech codec: general description
This specification describes an introduction to the set of the adaptive multi-rate (AMR) specifications.

26.090 AMR speech codec: transcoding functions
This specification describes a detailed description of the AMR speech codec transcoding functions.

26.091 AMR speech codec: error concealment of lost frames
This specification describes example procedures for the error concealment, also called frame substitution or muting procedure, of lost speech or silence indicator frames.

26.092 AMR speech codec: comfort noise aspects
This specification describes the detailed requirements for the correct operation of the background acoustic noise evaluation, noise parameter encoding/decoding and comfort noise generation for the AMR speech codec during source controlled rate (SCR) operation.

26.093 AMR speech codec: source controlled rate (SCR) operation
This specification describes the operation of the AMR speech codec during SCR operation.

26.094 AMR speech codec: voice activity detector (VAD)
This specification describes two alternatives for the VAD to be used during SCR operation in conjunction with the AMR codec.

26.110 Codec for circuit-switched multimedia telephony service: general description
This specification describes an introduction to the set of specifications for the support of circuit-switched 3G-324M multimedia telephony service.

26.111 Codec for circuit-switched multimedia telephony service: modifications to ITU-T Recommendation H.324
This specification describes the modifications applicable to the ITU-T Recommendation H.324, Annex C for the support of circuit-switched 3G-324M multimedia telephony service.

26.911 Codec for circuit-switched multimedia telephony service: terminal implementor's guide
This report describes non-mandatory Recommendations for the use of the different codec implementation options for the circuit-switched 3G-324M multimedia telephony service based on ITU-T Recommendation H.324, Annex C. These Recommendations address issues specific to the third generation operating environment, including guaranteeing sufficient error resilience and inter-working between terminals.

21.905 Vocabulary for 3GPP Specifications
Document 21.905 is a collection of terms, definitions and abbreviations related to the baseline documents defining the objectives and systems framework. This document provides a tool for further work on the technical documentation and facilitates their understanding.

TSG RAN kindly ask TSG SA to check whether this material is correct and complete.

Finally, TSG RAN inform TSG SA that, based on the complete list of Specs contained in the updated Sections 5.1.2 & 5.3.2, a CD ROM containing the September version of the Specs will be submitted to the next meeting of ITU-R WP 8F as Global Core Specifications (GCS).

TSG RAN would like to thank TSG SA for their co-operation.