

ETSI TC SMG#29

TSG S#4 (99) 227

Miami, Florida, USA 21st – 23rd June, 1999

Agenda Item: 5.1

Source: S1

Title: CR on FAX requirement affecting 3G 22.100

Document for: Approval

SA_Tdoc	Doc	Spec_	CR#	R	Vers	C	New	Topic	Title
SP-99227	394	22.100	A021	3	3.3.0	F	3.4.0	FAX	Clarification of the fax requirements and inclusion of a definition of the real-time fax requirements.

Facsimile service

The UMTS standards shall insure that both of the services described below may be provided. The operator may then select either none, one or both services depending on the market needs. The fax service shall inter-work with existing fax technology.

6.2.1 Store-and-Forward

A UMTS store-and-forward fax service, where a file or message transfer program is used to transfer text or images from a mobile terminal to a store and forward unit for subsequent delivery to the facsimile machine in the PSTN/ISDN, shall be standardised. The user (or the user's PC) may receive notification of successful delivery of the fax. Fax messages from PSTN/ISDN to mobile terminals are stored in a store-and-forward unit. The user retrieves the fax message with a file or message transfer program from the store-and-forward unit. The mobile terminal may be notified that a fax message is available.

6.2.2 End-to-End

A UMTS fax service using an end-to-end fax session between a PSTN/ISDN fax machine and a mobile terminal shall be standardised. This service shall work end-to-end such that a sender on the PSTN is aware of whether or not the fax has succeeded, and such that a mobile sender is aware of whether or not the fax has succeeded. From the user perspective the end-to-end fax service must look and feel like a T.30 based fax service. The end-to-end service may work with ordinary T.30 based fax machines at the mobile end using a mobile fax adapter [6][7] with a modem that terminates the analogue 2-wire connection from the fax machine.

CHANGE REQUEST No : **A021 r3**

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

Technical Specification 3GPP: **22.100** Version **3.2.0**

Submitted to
TSG SA

list plenary meeting or STC here ↑

for approval

without presentation ("non-strategic")

for information

with presentation ("strategic")

PT SMG CR cover form. Filename: crf26_3.doc

Proposed change affects:

(at least one should be marked with an X)

SIM

ME

Network

Work item:

22.100 UMTS phase 1

Source:

S1 Ericsson

Date:

1 June, 1999

Subject:

Clarification of facsimile requirements

Category:

*(one category
and one release
only shall be
marked with an X)*

F Correction

A Corresponds to a correction in an earlier release

B Addition of feature

C Functional modification of feature

D Editorial modification

Release:

Phase 2

Release 96

Release 97

Release 98

Release 99

UMTS

Reason for change:

Clarification of the fax requirements and including a definition of the real-time fax requirements.

Clauses affected:

Fax section in 6.1

Other specs affected:

Other releases of same spec

→ List of CRs:

Other core specifications

→ List of CRs:

MS test specifications / TBRs

→ List of CRs:

BSS test specifications

→ List of CRs:

O&M specifications

→ List of CRs:

Other comments:

1 Scope

The UMTS system will be defined in a phased approach. This document specifies the content of the first phase of requirements for UMTS. Some requirements affecting phase 1 to ensure a smooth transition to later releases are also indicated.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

2.1 Normative references

This document is the starting point of the set of specifications that define the UMTS Service Requirements for UMTS Phase 1. The UMTS Service requirements for UMTS phase 1 are defined in the following normative specifications.

- [1] UMTS 22.01: "Universal Mobile Telecommunications System (UMTS): Service aspects; Service principles".
- [2] UMTS 22.05: "Universal Mobile Telecommunications System (UMTS); Services and Service Capabilities".
- [3] UMTS 22.15: "Universal Mobile Telecommunications System (UMTS); Service Aspects: Charging and Billing".
- [4] UMTS 22.20: "Universal Mobile Telecommunications System (UMTS); VHE Stage 1".
- [5] [UMTS TS ??, Handover requirements between UMTS and GSM or other Radio System]".
- [6] GSM 03.45: "Technical realization of facsimile group 3 transparent"
- [7] GSM 03.46: "Technical realization of facsimile group 3 non-transparent"

These specifications may refer (directly or indirectly) to further specifications which provide detailed descriptions of service requirements incorporated in UMTS. In particular the service requirements of any GSM component of a UMTS system are specified by reference to GSM service requirements specifications.

3 Definitions, and abbreviations

3.1 Definitions

Definitions applicable to current document :

CAC (Connection Admission Control) : is a set of measures taken by the network to balance between the QoS requirements of new connections request and the current network utilisation without affecting the grade of service of existing/already established connections.

6 Services

UMTS phase 1 will enable the introduction of a range of new services (e.g. Internet services and Multimedia) and applications with the concept of service capabilities. The service capabilities are bearer services defined by parameters (e.g. QoS attributes) and mechanisms needed to realise services.

6.1 Teleservices and supplementary services

UMTS phase 1 shall at least support the following GSM teleservices currently handled by GSM : speech, emergency call and SMS. UMTS phase 1 shall support these teleservices as stated below :

Speech: A default speech codec shall be specified to provide speech service across the UTRAN and GSM access networks. The selected speech codec shall operate with no discernible loss of speech on handover between the GSM access network and the UTRAN.

Short Message Service-Point to Point (SMS-PP): A short message service point to point shall be provided seamlessly (as far as the user or the users terminal equipment is concerned) across the UMTS and GSM access network. Additional features are planned for SMS in **Release 99**.

Short Message Service-Cell Broadcast (SMS-CB): A short message service cell broadcast shall be provided seamlessly (as far as the user or the users terminal equipment is concerned) across the UMTS and GSM network.

Supplementary Services : The standard shall support GSM Release '99 supplementary services. The control of such supplementary services shall be the same as for GSM, from the user's perspective.

~~**FAX:** Transfer of data to/from facsimile machines in the PSTN/ISDN should be supported seamlessly (as far as the user or the user's terminal is concerned) across the UMTS and GSM access network. It is envisaged that the main use of fax in the mobile environment will be via PCs. UMTS will not optionally support direct end-to-end communication using T.30 real-time non-transparent fax service. Instead Alternatively, a~~

~~store and forward service is envisaged where some kind of file transfer program is used to transfer text or images to a store and forward unit for subsequent delivery to the facsimile machine in the PSTN/ISDN. The user (or the users PC) may receive notification of successful delivery of the fax. No standardisation of a fax store and forward service is planned and it is envisaged that roaming subscribers will be supported via the VHE.~~

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6.32. Bearer services

UMTS phase 1 shall support GSM phase 2+ Release '99 data bearer services :

Circuit switched data: Circuit switched data services and "real time" data services shall be provided for interworking with the PSTN/ISDN so that the user is unaware of the access network used (UMTS and GSM access network or handover between access networks). Both transparent (constant delay) and non-transparent (zero error with flow control) services shall be supported. These data services shall operate with minimum loss of data on handover between the GSM access network and the UTRAN.

Packet switched data: Packet switched data services shall be provided for interworking with packet networks such as IP-networks and LANs. The standard shall provide mechanisms which ensure the continuity of packet based services upon handover e.g. between GSM and UMTS.