

Source: SA1

Title: CR 22.100-030r2 on Correction of support of facsimile teleservice for UMTS R99 specifications

Document for: Approval

Agenda Item: 7.1.3

Doc-1st-Level	Spec	CR	Rev	Phase	Cat	Subject	Vers	Vers New	Doc-2nd-Level
SP-010428	22.100	030	2	R99	F	Correction of support of facsimile teleservice for UMTS R99 specifications	3.6.0	3.7.0	S1-010862

CR-Form-v3

CHANGE REQUEST

⌘ **22.100 CR 030** ⌘ rev **2** ⌘ Current version: **3.6.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction of support of facsimile teleservice for UMTS R99 specifications		
Source:	⌘ SA1		
Work item code:	⌘ FAX	Date:	⌘ 13/07/01
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories: F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ The provision of the facsimile teleservice is not required for UMTS R99. Optionally a facsimile service can be provided according to the Technical Report TR 22.945 in a way currently specified in clause 6.2. Therefore, it is necessary to correct the stage 1 description of this teleservice.
Summary of change:	⌘ It is explicitly specified that UMTS R99 does not require the specification of the facsimile service. The provision of the facsimile service as described in section 6.2 is optionally and possible with means outside the necessary UMTS specifications. Therefore this section is formulated as informal description but not as a requirement.
Consequences if not approved:	⌘ Stage 1 description of the service capabilities of UMTS R99 are not consistent with the service capabilities available.

Clauses affected:	⌘ 2, 6.2	
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be

downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

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.

The present document is the starting point of the set of specifications that define the UMTS Service Requirements for UMTS Phase 1 Release '99. The UMTS Service requirements for Release '99 are defined in the following normative specifications. Since these specifications may also address some requirements for later Releases of UMTS phase 1, they explicitly state when a requirement does not apply to Release '99.

- [1] 3G TS 22.101: "Universal Mobile Telecommunications System (UMTS): Service aspects; Service principles".
- [2] 3G TS 22.105: "Universal Mobile Telecommunications System (UMTS); Services and Service Capabilities".
- [3] 3G TS 22.115: "Universal Mobile Telecommunications System (UMTS); Service Aspects: Charging and Billing".
- [4] 3G TS 22.121: "Universal Mobile Telecommunications System (UMTS); VHE Stage 1".
- [5] 3G TS TS 22.129: "Handover requirements between UMTS and GSM or other Radio System]".
- [6] 3G TS 21.133: "Universal Mobile Telecommunications System (UMTS) ; Security threats and requirements".
- [7] TS 23.045: "Technical realization of facsimile group 3 service - transparent".
- [8] TS 23.046: "Technical realization of facsimile group 3 service - non-transparent".
- [9] 3G TS 22.038: "SIM application toolkit, stage 1".
- [10] TS 22.071: "Location Services (LCS); Stage 1".
- [11] 3G TR 22.945: " Study on provisioning of fax in GSM and UMTS".

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.

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.

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.

6.2 Facsimile service (not required for Release '99)

The UMTS standards are not required to support fax services.

However, it should be noted that a fax service can be provided based on external servers without any impact and requirement on UMTS infrastructure as described in 3GPP TR 22.945. According to 3GPP TR 22.945 two possibilities to provide a fax service as shall insure that both of the services described briefly 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 in the PSTN/ISDN.

6.2.1 Store-and-Forward

A UMTS store-and-forward fax service ~~uses, 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~~ uses an end-to-end fax session between a PSTN/ISDN fax machine and a mobile terminal ~~shall be standardised.~~ This service ~~shall~~ works 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~~ has the same look and feel ~~like~~ as a T.30 based fax service although the PLMN internal transmission is not according to T.30. The end-to-end service may work with ordinary T.30 based fax machines at the mobile end using a mobile fax adapter [7][8] with a modem that terminates the analogue 2-wire connection from the fax machine. The conversion between the PLMN internal protocol and the T.30 protocol towards the facsimile machine is performed in a separate server and in a mobile fax adapter towards the T.30 based fax machine at the mobile end.

6.3. Bearer services