

CR-Form-v7
CHANGE REQUEST
⌘ 22.101 CR ⌘ rev - ⌘ Current version: 6.5.0 ⌘

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

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Service change from UDI bearer service to voice (coverage triggered)		
Source:	⌘ Orange		
Work item code:	⌘ To be determined		
	Date: ⌘ 09/12/2003		
Category:	⌘ B		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <i>Use one of the following categories:</i> F (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. </td> <td style="width: 50%; vertical-align: top;"> <i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) </td> </tr> </table>	<i>Use one of the following categories:</i> F (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.	<i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)
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	Release: ⌘ REL-6		

Reason for change:	⌘ When a subscriber is heading out of a cell while having a circuit switch video call, the video quality gradually degrades and the call is eventually dropped. Circuit switched Video telephony (i.e. UDI 64 kbit/s bearer service) suffers from a lower coverage range compare to voice (e.g. 12.2kbps AMR). As such, uncovered areas for video telephony will exist through out operator networks (e.g. within buildings) and despite soft handoff benefits. The operator community believes that such service loss would not provide satisfactory user experience and as such, a mechanism to switch to voice is required.
Summary of change:	⌘ Service change from UDI bearer service to voice coverage triggered
Consequences if not approved:	⌘ End user experience will be very poor when using Video Telephony service upon UDI bearer service

Clauses affected:	⌘ 7.2.1												
Other specs Affected:	<table style="border: none;"> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">Y</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">N</td> <td rowspan="3" style="padding-left: 10px;">Other core specifications</td> <td rowspan="3" style="padding-left: 10px;">⌘</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td>Test specifications</td> <td></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td>O&M Specifications</td> <td></td> </tr> </table>	Y	N	Other core specifications	⌘	X	X	Test specifications		X	X	O&M Specifications	
Y	N	Other core specifications	⌘										
X	X					Test specifications							
X	X			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/specs/CR.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://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 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.

7.2.1 Circuit Switched (CS) multimedia calls

The following basic requirements are to be supported for CS multimedia [24]:

- CS multimedia shall be based on a 3GPP specific subset of H.324M.
- All call scenarios shall be supported, i.e. Mobile Originating and Mobile Terminating call against Mobile, ISDN and PSTN call party.
- Single and multiple numbering schemes shall be supported.
- Fallback to speech (TS 11 [14]) shall be supported from 3.1kHz Ext. PLMN multimedia bearer, i.e. if setup of the multimedia call fails the call will be set up as a speech call.
- Service change and fallback shall be supported for UDI/RDI multimedia bearer and speech, to allow fallback to a less preferred service if the preferred service is unsupported, and to change the service between speech and multimedia during the call.
- CS Multimedia call is a Bearer Service, which utilises Synchronous Transparent Data service.
- Different bitrates as specified at 3GPP TS 22.002 [21] shall be supported.
- Supplementary services apply to multimedia calls as for Synchronous Transparent Data service according to 3GPP TS 22.004[5].
- When accepting a multimedia call with service change, the user shall be able to request a service change to speech before the call is answered, such that the multimedia path is never actually connected through to the user's phone.

The user shall be able to deny a service change to multimedia during the call.

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- Service change shall be supported from UDI bearer to speech if coverage conditions degrade to the point that preferred service is no longer supported. Service change shall occur automatically and prior to preferred service loss. Service change back to UDI 64 kbps bearer should be supported upon appropriate coverage recovery.
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