3GPP TSG CN Plenary Meeting #13
Beijing, China, 19th – 21st September 2001

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Source:	**TSG_CN WG3**
Title:	**Proposed work item description sheet for Service Change and UDI Fallback**
Agenda item:	**9.13**
Document for:	**APPROVAL**

3GPP TSG CN WG3 Meeting #18
Dresden, 9th - 13th July 2001

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This document proposes the work item description sheet for Service Change and UDI Fallback

<u>**Work Item Description**</u>

Title: Service Change and UDI Fallback

1   3GPP Work Area

	Radio Access
X	Core Network
	Services

2   Linked work items

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3   Justification

CS video telephony via 3G.324M terminals may become a quite expensive service compared to ordinary CS speech because if a user temporarily disables the video stream the invoicing will not be reduced. The user will be charged for both the speech as well as the data bearer (and thus the used bandwidth is not changed). Users may therefore decide not start calling via video telephony service.

In order to make CS video telephony more attractive the user may appreciate the ability to change between CS speech and CS multimedia service by a change of the bearer during the active state of a call. The procedure for invoking this change should be as simple as possible, e.g., by the touch of a button. In this way users save money and video telephony gets more and more used. A convenient way to change between ordinary speech and multimedia (video) can be regarded a key service when introducing UMTS multimedia. It is also a kind of end user test possibility for video telephony.

BICC/ISUP support for connection types allowing fallback, e.g., from 7 kHz audio to 3.1 kHz audio, can be applied in 3GPP to support fallback from 3G.324M multimedia service via UDI 64 kbit/s bearer to speech. This allows to trigger in-call modification based on the received TMU parameter (=speech) in ACM, CPG, or CON, and to modify the bearer resource/connection in the core network.

4   Objective

The objective of this work item should be to base service change and fallback from UDI multimedia to speech on the standardized network (also terminal) capability to change the service from CS modem multimedia to speech at fallback after call setup. The same principles should be applied here as well.

-        Fallback indication (a speech BC-IE and a modem multimedia BC-IE in SETUP and CALL CONFIRMED) should also be applicable to UDI multimedia and speech.

-        At the same time it shall be an indication for a service change capability (of the network and terminal).

-        The network should accept a service change (MODIFY is received) after call setup in both directions, speech to multimedia and multimedia to speech. A service change is only allowed between the indicated services at call setup.

-        The existing in-call modification to change the call mode (TS 24.008, 5.4.3.4) should be used to change the radio and network bearer.

-        In case of fallback from UDI multimedia to speech the reception of BICC/ISUP TMU parameter in ACM, CPG, or CON messages triggers fallback execution at the originating side.

5   Service Aspects
No.

6   MMI-Aspects

No.   Implementation dependent.

7   Charging Aspects

No.

8   Security Aspects

No

9   Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X		X	
No			X		X
Don't know	X				

10   Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
29.007		General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)		CN#14 (Dec 01)		Enhancing the fallback from modem multimedia to speech capability by user initiated service change and fallback from UDI multimedia to speech.
24.008		Mobile radio interface layer 3 specification; Core Network Protocols - Stage 3		CN#14 (Dec 01)		Enhancing the fallback from modem multimedia to speech capability by user initiated service change and fallback from UDI multimedia to speech.
27.001		General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)		CN#14 (Dec 01)		Enhancing the fallback from modem multimedia to speech capability by user initiated service change and fallback from UDI multimedia to speech.

11   Work item raporteurs

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12   Work item leadership

CN3

13   **Supporting Companies**

Ericsson , Vodafone, Mannesmann Mobilfunk, France Telecom

14   **Classification of the WI (if known)**

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a   The WI is a Feature:
no building blocks under this feature

14b   The WI is a Building Block:

14c   The WI is a Work Task: