Technical Specification Group Services and System Aspects **TSGS#22(03)0728**
Meeting #22, Hawaii, USA, 15-18 December 2003

Source: **Vodafone**
Title: **Draft WID on Video and Voice Service**
Document for: **Approval**
Agenda Item: **7.2.3**

Draft Work Item Description

Title: Video and Voice Service

1 3GPP Work Area

X	Radio Access
X	Core Network
X	Services

2 Linked work items

none identified

3 Justification

There are several situations where swapping between video and voice calls is needed. These include (but are not limited to):

a) movement from good 3G coverage (ie able to support 64 kbit/s uplink) into "fringe 3G coverage" (ie able to support voice but not video on the uplink)
b) movement from good 3G coverage into 2G coverage (eg at a corner, or entry into a building); and
c) when using voice on a 2G cell (which is in a 3G coverage area) the customer initiates a video session with the person they are speaking to.

Current stage 3 *interface* specifications appear to contain most of the tools needed to provide this functionality. However, in order to build the service, MSCs, RNCs and BSCs need specific functionality that is not described in any current TR or TS. Additionally, there are several ways that the MSCs could implement this feature: this may lead to interoperability problems between networks, and, makes it difficult for mobile manufacturers to design customer friendly MMIs.

As "video" is regarded as a key service by many operators, solving these problems needs to be progressed urgently.

4 Objective

The objectives are:

1) document any relevant stage 1 requirements
2) produce a stage 2 description for this voice and video service
3) produce any necessary stage 3 changes (hopefully none are required)

Within the core network area, there are probably two potential methods to realise this service:

a) use of Service Change and UDI Fallback functionality (part of 3GPP Release 5)

b) setting up a voice call and then (immediately or later) placing it on hold and initiating a video call (this is GSM phase 2 functionality). Loss of good 3G coverage could cause the release of the video call and retrieval of the voice call.

In order to enhance inter-operability between networks and to enable customer friendly MMI design in the terminal, it is likely that one of these mechanisms should be selected in preference to the other. This selection should be one of the outputs of the stage 2 work.

5 Service Aspects

These could include:

a) Should the RNC release the video call as soon as it starts to degrade, or, should it hold on to the video for as long as possible? (The former might ensure that voice quality remains good throughout the call).

b) customer indications/alerts for video (or voice) starting and stopping

6 MMI-Aspects

No specification is expected. However, the output of this WI is needed as a *enabler* for mobile manufacturers to design customer friendly MMIs for this service.

7 Charging Aspects

Inter-operator accounting for SCUDIF based calls needs to be considered, especially for the cases for toggling between video and voice.

8 Security Aspects

None anticipated.

9 Impacts

Affects:	**UICC apps**	**ME**	**AN**	**CN**	**Others**
Yes			X	X	
No	X				
Don't know		X			Transit networks?

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
TS 23.abc	Voice and video service, stage 2	SA 2		#23	#24	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
22. ???		?	#24	
23.009		?	#25	
48.008		?	#25	
25.413		?	#25	
24.008		?	#25	
?		This list should be completed when the stage 2 is presented to SA “for information”	#25	

11 Work item raporteurs

Chris Pudney (Vodafone Group) *(assuming SA 2 leads this task)*

12 Work item leadership

SA 2

13 Supporting Companies

Vodafone Group, …….

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: List of building blocks under this feature

Building Blocks and Work Tasks are anticipated to be identified when the stage 2 is presented "for information".

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

form change history:
2002-07-04: "USIM" box changed to "UICC apps"