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**Source:** Drafting  
**Title:** New WI on Feasibility Study on IMS with real time services deployments  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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### Work Item Description

Title

#### **Feasibility Study on IMS with real time services deployment**

**1**                    **3GPP Work Area**

	Radio Access
X	Core Network
X	Services

**2**                    **Linked work items**

*(list of linked WIs)*

**3**                    **Justification**

Many operators regard IMS as a key feature. However, there remain issues with the efficiency of transferring Voice over IP over the radio interface, and, with the capability of the GSM radio interface to handle VoIP. Additionally, operators are interested in techniques that may provide the ability to smooth the rollout and accelerate the take-up of IMS.

As a result of this, some companies have discussed using the existing CS infrastructure to transport the voice traffic for multimedia services. These discussions have tended to show that there are many different techniques for combining the CS and IMS parts together. However, leaving mobile vendors, infrastructure vendors and operators to develop these different techniques in isolation is likely to lead to interoperability problems and fragmented, small markets.

**4**                    **Objective**

The objective is to study the different options for combining CS and IMS capabilities.

The feasibility studies will cover the requirements, possible solutions; and their tradeoffs. So far two possible solutions have been identified, these are:

- using CS real time bearers with IMS sessions to better satisfy the existing requirements in TS 22.228
- adding an IMS session to a CS call for exchange of media (e.g. picture, video clip, file) and vice versa.

As the two solutions are related on the architectural level, the stage 2 feasibility studies will be documented in single TR. This TR will address migration and interoperability issues.

**5 Service Aspects**

For the option of combining CS calls and IMS sessions, there will be a need to study the interactions of the service capabilities.

**6 MMI-Aspects**

None presently identified

**7 Charging Aspects**

Inter-operator accounting and roaming charging aspects need to be considered for the CS bearer and its relationship with any IMS session.

**8 Security Aspects**

The restriction and disclosure of terminal capabilities should be investigated.

*Note: Adding a medium might require separate authorisation.*

**9 Impacts**

<b>Affects:</b>	<b>UICC apps</b>	<b>ME</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>		X		X	
<b>No</b>					
<b>Don't know</b>	X		X		X

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

See WIDs for the building blocks

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	
		TBD				

**11 Work item raporteurs**

TBD

**12 Work item leadership**

SA1

**13 Supporting Companies**

Ericsson, Vodafone, Telecom Italia, TeliaSonera, Orange NEC, Nortel Networks

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

The WI is a Feasibility Study

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

IMS services using CS bearers  
Combining CS calls and IMS sessions

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)

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