

### Work Item Description

#### **Title**

Speech Recognition and Speech Enabled Services

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

	Radio Access
X	Core Network
X	Services

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

Packet-switched Conversational multimedia Applications (SA4)  
IMS (SA1)  
Distributed Speech Recognition (DSR) (SA1)

#### **3 Justification**

Forecasts show that speech-driven services may play an important role on the 3G market. People want the ability to access information while on the move and the small portable mobile devices that will be used to access this information need improved user interfaces using speech input.

The types of services include those that are voice only, for example, automatic speech access to information. In the future, a new range of multi-modal applications is also envisaged incorporating different modes of input (e.g. speech, keyboard, pen) and speech and visual output.

#### **4 Objective**

To enable all these benefits in a wide market, such as 3G, containing a variety of players including terminal manufacturers, operators, 3<sup>rd</sup> Party Service Providers and speech recognition vendors, an analysis is needed to understand how different architectures work and co-exist, and to weigh if there is a preferred solution(s), allowing 3GPP to limit the number of options.

A study (a Technical Report) on various speech recognition services and technologies and the services that are accessed using them is needed. Some use cases, e.g. related to multimodal browsing, need to be defined. Study on different technologies shall include different architectural aspects including location of recognition (terminal, network and distributed) and also suitability of existing codecs and codecs under development.

**5 Service Aspects**

Shall be covered via services examples.

**6 MMI-Aspects**

Man Machine Interface aspects have to be considered but not standardised.

**7 Charging Aspects**

Shall be covered via services examples.

**8 Security Aspects**

Security aspects have to be considered.

**9 Impacts**

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

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

<b>New specifications</b>						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 22.XXX	Study on Speech Recognition and Speech Enabled Services	SA1	SA2, SA3, SA4	SA#14	SA#15	
<b>Affected existing specifications</b>						
Spec No.	CR	Subject		Approved at plenary#	Comments	

**11 Work item rapporteurs**

TBD

**12 Work item leadership**

TSG SA WG 1

**13                    Supporting Companies**

Ericsson, IBM, Nokia, Siemens, T-Mobil

**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

Distributed Speech Recognition (DSR) (SA1)

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)