

**Source:** Ericsson  
**Title:** Proposed Work Item description for Global text Telephony  
**Document for:** Approval  
**Agenda Item:** 6.6

### Work Item Description

**Title**

## **Global Text Telephony**

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

	Radio Access
	Core Network
x	Services

### **2 Linked work items**

*(none)*

### **3 Justification**

Deaf, hard-of-hearing and speech-impaired persons use specific “Text Telephone” equipment in the fixed network since many years to transmit text and speech through ordinary speech traffic channels. Modern digital cellular systems, however, with their sophisticated error concealment technique, do not provide satisfying character error rates for text transmitted in the voice channel with the modulation from the fixed network. The US government in form of the FCC requires an urgent solution for all emergency (911) calls for one specific text telephone version (“Baudot”). The proposed work item shall address these FCC requirements quickly in a first phase, but shall aim at a global solution for all text telephony systems world wide. In the second phase support for multimedia calls is added.

### **4 Objective**

Provide a solution for “Global Text Telephony” that supports real time text conversation fulfilling the FCC requirements and supporting the ITU standard V.18 for interworking with fixed textphones and T.140 for the text coding and presentation. The solution shall be applicable for existing and future traffic channels in GSM and UMTS. The solution shall take modern multimedia capabilities of 3G systems into account. The impact to existing or future cellular networks shall be minimal. Interworking with messaging systems shall be considered.

### **5 Service Aspects**

Emergency calls shall be possible as for ordinary speech calls, even without registration.

### **6 MMI-Aspects**

The necessary interaction of the user shall be minimal, especially in case of emergency calls.

### **7 Charging Aspects**

Nothing specific: like ordinary speech calls

**8 Security Aspects**

Same as for ordinary speech calls, especially in emergency cases.

**9 Impacts**

Affects:	USIM	ME	AN	CN	Others
Yes				potentially	
No	x				
Don't know		x	x		Gateway between mobile and landline Text Telephony may be required

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

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
	Global Text Telephony, phase one	S4	S1, S2, T2	3GPPSA#9 (Oct 2000)	3GPPSA#10 (Dec 2000)	FCC requirements fulfilled
	Global Text Telephony, phase two	S2	S1, S4, T2	3GPPSA#9 (Oct 2000)	(Dec 2001)	Globally applicable 2G and 3G with multimedia support
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
26.111		Add T.140 data protocol support				C/S Multimedia
26.110		Add T.140 data protocol support				C/S Multimedia
26.911		Add T.140 data protocol support				C/S Multimedia
		Initial work will increase this list with further influence				

**11 Work item rapporteurs**

Gunnar Hellström, Ericsson Radio Systems AB,  
email: [gunnar.hellstrom@omnitor.se](mailto:gunnar.hellstrom@omnitor.se) tel: +46 708 204 288

**12 Work item leadership**

SA-WG2

**13 Supporting Companies**

Ericsson Radio Systems AB, Nokia, Voicestream, BT

**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  
Service Description.

Architecture Specification.  
Interaction with external equipment.  
Interaction with messaging services.  
Transmission across the radio interface.  
Terminal aspects.