

**Technical Specification Group Services and System Aspects TSGS#8(00)0290**  
**Meeting #8, Düsseldorf, Germany, 26-28 June 2000**

**Source:** TSG SA WG2  
**Title:** WI on Global Text Telephony  
**Agenda Item:** 6.2.3

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**Work Item Description**

**Title: Global Text Telephony**

**1 3GPP Work Area**

	Radio Access
X	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, but shall result in a global solution for all text telephony systems world wide, including support for multimedia calls with text.

**4 Objective**

Provide a solution for “Global Text Telephony” that supports real time text conversation fulfilling the FCC requirements. The ITU standard V.18 should be considered when designing 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**

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

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

<b>New specifications</b>						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
22.226	Global Text Telephony,, Stage 1 service description	S1	S2, S4, T2	3GPPSA#9 (Sep 2000)	3GPPSA#10 (Dec 2000)	FCC requirements fulfilled, internationally applicable
23.226	Global Text Telephony, Stage 2: Architecture	S2		3GPPSA#9 (Sep 2000)	3GPPSA#10 (Dec 2000)	
27.226	Global Text Telephony, terminal aspects	T2	S2	3GPPT#9 (Sep 2000)	3GPPT#10 (Dec 2000)	Including commonalities with MMS
26.226	Global Text Telephony, transport of text in the voice channel	S4	S2	3GPPSA#9 (Sep 2000)	3GPPSA#10 (Dec 2000)	As required for FCC requirements but internationally applicable
29.226	Global Text Telephony Interworking	CN3	S2	3GPPCN#9 (Sep 2000)	3GPPCN#10 (Dec 2000)	Interworking PLMN- PSTN, IP , PLMN, ISDN
24.226	Global Text Telephony, Stage 3: Protocols	S2		3GPPSA#9 (Sep 2000)	3GPPSA#10 (Dec 2000)	
<b>Affected existing specifications</b>						
Spec No.	CR	Subject		Approved at plenary#	Comments	
26.111		C/S Multimedia :Add T.140 data protocol support		3GPPSA#10		
26.110		C/S Multimedia :Add T.140 data protocol support		3GPPSA#10		
26.911		C/S Multimedia : Add T.140 data protocol support		3GPPSA#10		
22.976		R00 and IP Multimedia requirements : Add text conversation feature		3GPPSA#9		

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**Work item rapporteurs**

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**Work item leadership**

Primary: SA-WG2, Secondary: T-WG2

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**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

Text Feature Service Description.

Text Feature Architecture Specification.

Text feature activation and transport

Text Feature Interworking

Text Feature Terminal aspects including commonalities with Multimedia Messaging

**15 Document History**

<b>Date</b>	<b>Doc name</b>	<b>Comment</b>
<b>17 March 2000</b>	TSGSA#7(00)0162	<b>Proposed to SA#7</b>
<b>18 March 2000</b>	TSGSA#7(00)0162R2	<b>Adjusted according to SA#7 decision</b>
<b>14 April 2000</b>	TSGS1#8(00)0337r2	<b>List of expected output expanded</b>