

Work Item Description

Title: AMR Wideband Support in GERAN

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Codec for Wideband Telephony Service (3GPP TSG-S4 Work Item)
GERAN MS Conformance Tests for AMR-WB (3GPP TSG-GERAN WG4 Work Item)
GERAN BTS Conformance Tests for AMR-WB (3GPP TSG-GERAN WG3 Work Item)

3 Justification

The support of Wideband Telephony service in GERAN calls for the definition of new Logical Channels and associated Channel Coding and Radio Performances for the transport of Wideband Speech Frames.

This definition is linked to the on-going selection of a Wideband Speech Codec in 3GPP TSG-S4.

The support of the Wideband Speech Service in GERAN should be defined for both CS based and PS based Real Time services.

4 Objectives

- Definition of new Wideband Speech Logical Channels for the support of Wideband Speech over GMSK and 8-PSK using Full or Half Rate channels
- Standardization of the Channel Coding associated to the new Logical Channels for the support of Wideband Telephony service
- Specification of the minimum link performances (FER, RBER) for the Wideband Speech Logical Channels
- Specification of the Link Adaptation associated with the Wideband Speech Logical Channels
- Specification of the Signalling for the support of Wideband Telephony service in GERAN
- Specification of Dedicated TRAU Frame Formats for the support of Wideband Speech
- Definition and Approval of the Test Conditions (Error Patterns) for the selection and Characterization of the Wideband Speech Codec

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

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Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

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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
None expected						
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
45.001		Introduction of new Wideband Speech Logical Channels		TSG-GERAN#3		
45.002		Introduction of new Wideband Speech Logical Channels		TSG-GERAN#3		
45.003		Channel Coding for new Wideband Speech Logical Channels		TSG-GERAN#3		
45.005		Radio Performances for new Wideband Speech Logical Channels		TSG-GERAN#4		
45.009		Link Adaptation aspects of Wideband Speech		TSG-GERAN#4		
44.018		Introduction of the signalling for support of the new speech version		TSG-GERAN#3		
48.008		Introduction of the signalling for support of the new speech version		TSG-GERAN#3		
48.058		Introduction of the signalling for support of the new speech version		TSG-GERAN#3		
48.060		New TRAU Frame Formats for Wideband Speech Service		TSG-GERAN#4		
48.061		New TRAU Frame Formats for Wideband Speech Service		TSG-GERAN#4		

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Work item raporteurs

???

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Work item leadership

TSG GERAN WG1
Other contributing: TSG-GERAN WG2, TSG-SA WG4

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Supporting Companies

Ericsson, Motorola, Nokia, Siemens, Texas Instrument, Toshiba

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Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a

The WI is a Feature: List of building blocks under this feature (list of Work Items identified as building blocks)

14b

The WI is a Building Block: Parent Feature: Wideband Telephony Service

14c

The WI is a Work Task: parent Building Block (one Work Item identified as a building block)