

Source: **Editor**
Title: **AMR wideband development overview (WB-1)**
Version: **0.2**
Agenda Item: **7**

1. Scope

This document presents an overview of the Wideband-AMR (Wideband Adaptive Multi Rate) speech codec development in ETSI SMG11 and 3GPP TSG-S4. The development was initiated at SMG#29 in June 1999. The target for the standardisation is to complete codec specifications for Release 2000.

Section 2 of this document describes a set of permanent WB-AMR project documents.

2. WB-AMR Permanent Project Documents

The standardisation of the WB-AMR codec is described in a series of permanent project documents each assigned with a responsible editor. They contain the most important guidelines, rules and decisions. The names of the documents are given below with a list of editors.

Document name	Doc. number	Editor
1) Overview	WB-1	Imre Varga (Siemens)
2) Project plan	WB-2	Imre Varga (Siemens)
3) Performance requirements	WB-3	Paul Barrett (BT)
4) Design constraints	WB-4	Kari Järvinen (Nokia)
5) Selection rules for qualification phase	WB-5a	Alain Ohana (GSM North America)
Selection rules for selection phase	WB-5b	Alain Ohana (GSM North America)
6) Deliverables for qualification phase	WB-6a	Steve Aftelak (Motorola)
Deliverables for selection phase	WB-6b	Steve Aftelak (Motorola)
7) Processing functions for qualification phase	WB-7a	Paul Barrett (BT)
Processing functions for selection phase	WB-7b	Paul Barrett (BT)
8) Test plans for qualification phase	WB-8a	Janne Vainio (Nokia)
Test plans for selection phase	WB-8b	[tbd by SQ]
9) Test results for qualification phase	WB-9a	[tbd by SQ]
Test results for selection phase	WB-9b	[tbd by SQ]

[tbd]

WB-1 gives an *overview* of the AMR-WB speech codec development programme. (This document is AMR-WB-1.)

WB-2 gives a detailed *time schedule* of the overall development programme.

WB-3 describes *performance requirements* for speech quality.

WB-4 describes *codec design constraints*. These are a set of mandatory requirements for the AMR codec. They cover items such as limits for implementation complexity and transmission delay and give some restrictions for the applicable bit-rates.

WB-5 contains a set of *codec selection rules* for the qualification and selection phases. In the qualification phase, a number of WB-AMR candidate codecs is chosen to enter the selection phase. In the selection phase, the optimal WB-AMR codec is then chosen among these. Qualification and selection are based on the rules given in WB-5.

WB-6 defines the *deliverables* which the codec proponents have to deliver for the qualification and selection phases. The qualification and selection will be carried out only on the codecs for which the full set of deliverables as defined in WB-6 have been correctly and in time provided for consideration to SMG11.

WB-7 describes the *processing functions* for the qualification and selection tests.

WB-8 describes *test plans* for qualification and selection phases.

WB-9 combines the *test results* from the various test phases (qualification, selection, characterisation and verification). This document forms a basis of ETSI Technical Report (ETR) on performance characterisation of the WB-AMR codec.