

Opus Update

draft-ietf-codec-opus-05.txt
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Since IETF 79

- Seamless switching
 - Voice/audio
 - Mono/stereo
 - Frame size
- Implementation bug fixes (PLC, DTX, ...)
- Forward Error Correction (FEC)
- Quality improvements
- Lots of security testing (fuzzing, valgrind, static)
- “Freeze” bit-stream*

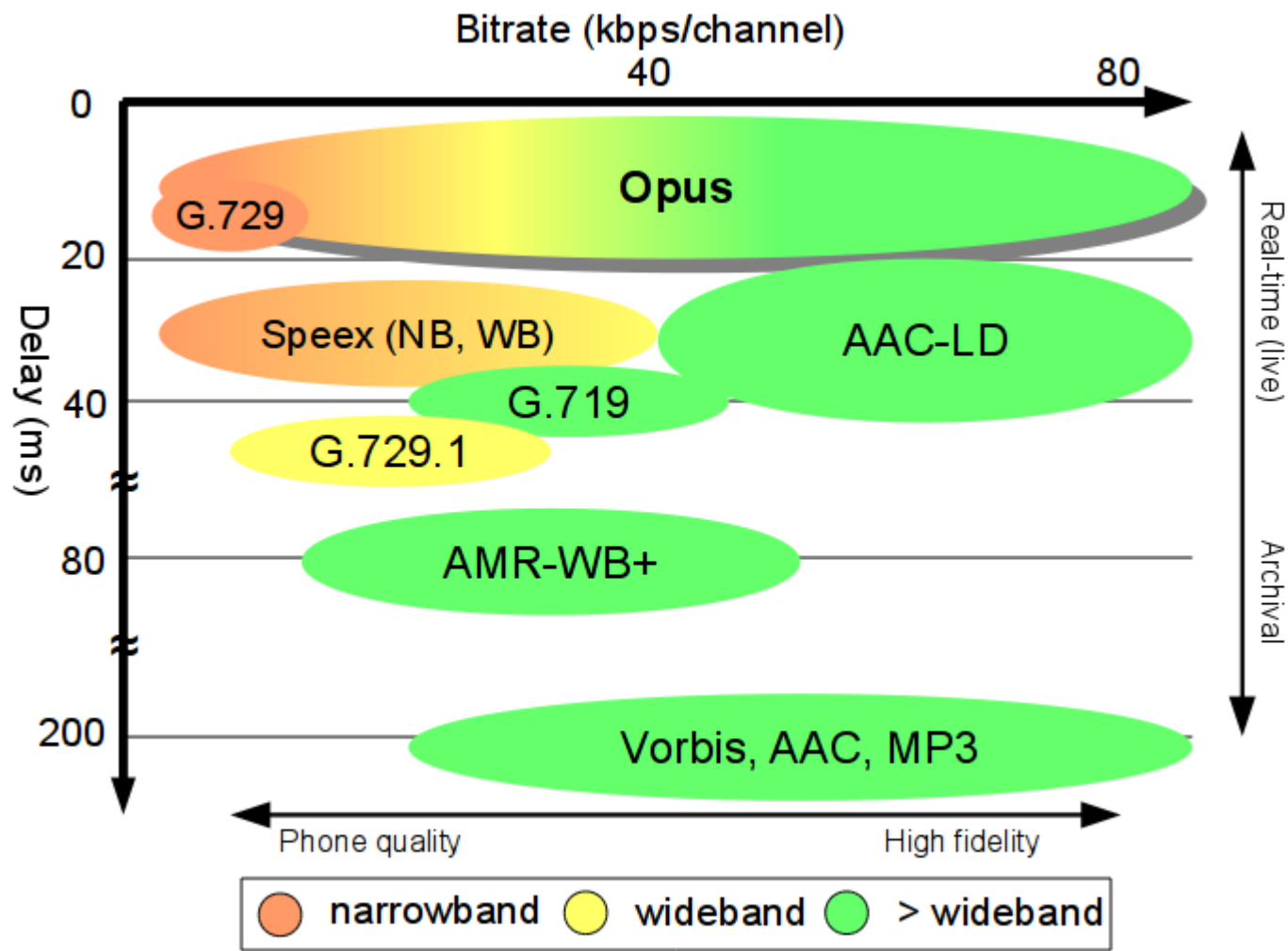
In More Details

- Post-filter filter taps tuning
- Improved bit allocation tuning
- Transient coding improvements
 - Better detection
 - Low bitrate improvement
- Code/Codebook size reduction
- Better LSF quantizer

Opus Current Status

- Suitable for both voice and music
- Very wide operating range
 - Variable frame size from 2.5 ms to 60 ms
 - Variable bitrate from 6 kb/s to 510 kb/s
 - Narrowband (8 kHz) to fullband (48 kHz) support
 - Mono and stereo support
 - CBR and VBR support
- Competitive with state-of-the-art speech/audio codecs throughout operating range

Codec Landscape



TODO List

- More implementation torture testing
- Finish stereo support for voice mode
- Bug fixing
- Draft update (algorithm description)