draft-hoene-codec-quality-01

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Missing Codec Tests
(should be done soon)

– Based on my my previous email (11:22 28.07.2011)
– Sorted according priority

Most important test

1. two voices at the same time and stereo/binaural voice

2. Smooth bit rate changes/no artifacts at mode changes

3. Time stretching and shortening (if this feature is going to be supported)

Not important
– testing using real packet loss traces
– up to 15% loss having acceptable intelligibility
– Narrowband: 40 Mhz (2% of a 2 GHz CPU core)
– Wideband: 80 Mhz (4% of a 2 GHz CPU core)
– SWB/Full: 200 Mhz (10% of a 2 GHz CPU core)
– Bit error robustness
– Input robustness

Codec Characterization
(should be done later)

Why?

- Helps to compare different codec
- Gives understanding how to use Opus optimally
- Many people would love to see good tests and want to contribute

How?

- Formally, well-organized, by third parties (no codec developers)

When?

- Decoupled from codec standardization
- Till most tests have been done

Some Suggestion on Codec Characterization

Action Points

1. Document shall be edited by some old guys
   - Objectivity is needed

2. Editors shall organize formal listening tests
   - suggest test vectors
   - avoid some tests are done again and again

3. Collect and describe formal tests made third party
   - Including results (Tables)

4. Change Charter to include Codec Characterization Document