SILK Speech/Audio Codec

draft-vos-silk-00.txt

Koen Vos, Skype
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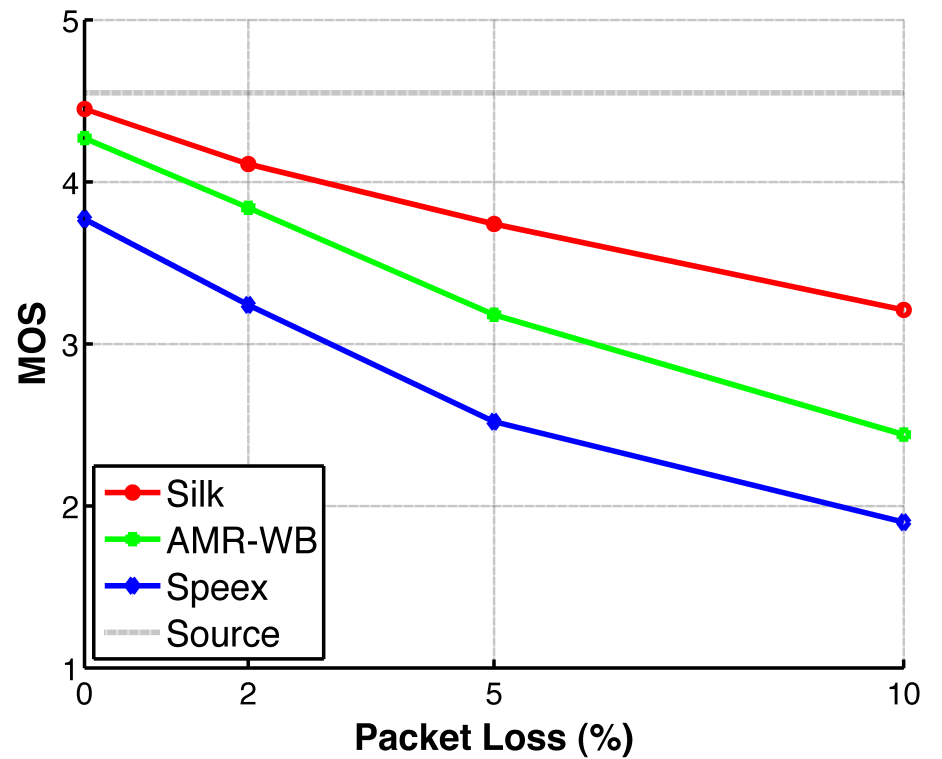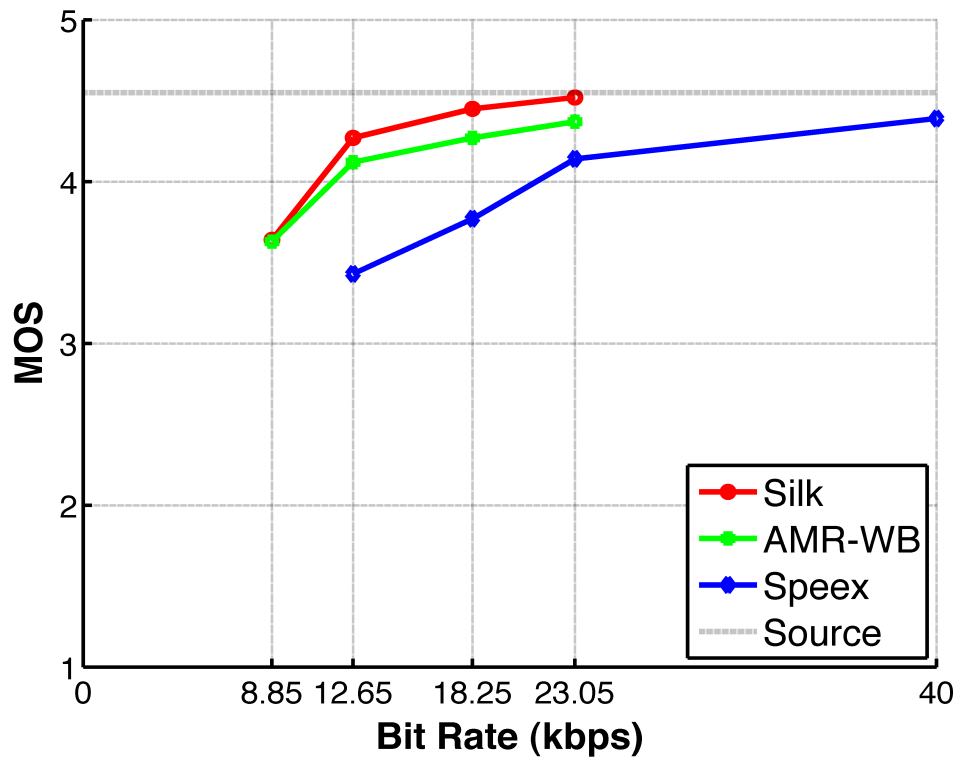Karsten Vandborg Sørensen, Skype

SILK Features

- Sampling rates from 8 to 24 kHz

- Algorithmic delay of 25 ms

- Variable and adaptive bitrate, from 6 to 40 kbit/s

- Scalable packet loss robustness

- Scalable complexity

- Made available royalty free

Technology

- Linear Prediction + Pitch Prediction
- Noise Shaping Quantization
- Pyramid Vector Quantization
- Range Coding

Quality

- Dynastat MOS test (32 subjects)

Conclusion

- SILK is a flexible codec designed for real-time communications

- Complementary to CELT

- Resources: https://developer.skype.com/silk