

draft-andersen-ilbc-00.txt

The Core iLBC method

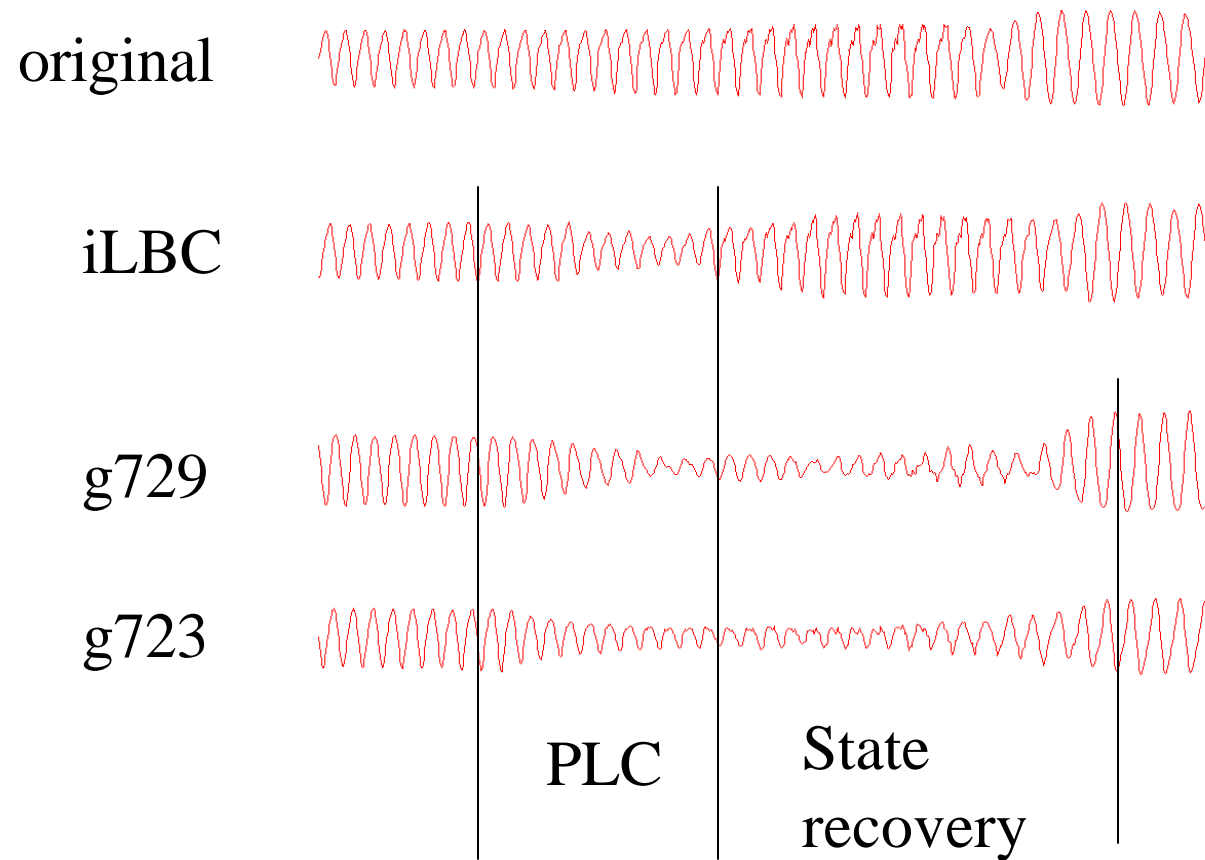
- Start state encoding
- Gain-shape waveform matching forward in time
- Gain-shape waveform matching backward in time
- Pitch enhancement
- Packet loss concealment

Bit allocation

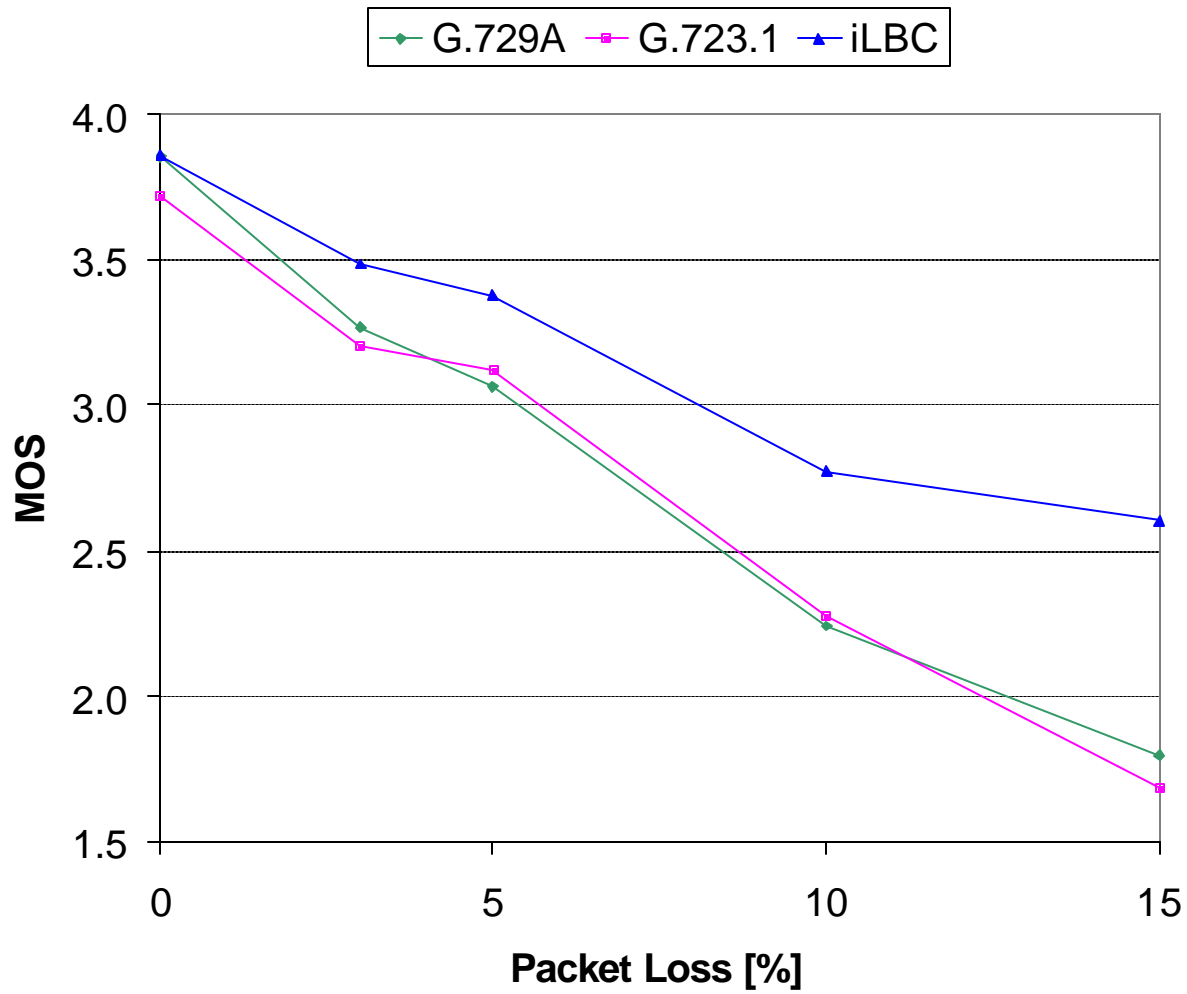
240 samples encoded to 419 bits = 13.967 kbit/s

Parameter	Bits
LPC	52
Start state position	4
Start state scale	6
Start state samples	174
Shapes	129
Gains	50
Gain correction	4
Total	419

Advantage over CELP



MOS results



Coming features

- Reduction to 52 bytes payload per 30ms
- Bit packing prepared for ULP (8,12,32)
- 20ms frame option
- Voice activity detection and comfort noise generation

Available implementation

- iLBC runs in demo SIP client
 - To obtain executable:
 - E-mail/SIP: alan.duric@globalipsound.com
soren.andersen@globalipsound.com
- Full iLBC c-code implementation, test results, and more to appear on:
 - www.iLBCfreeware.org