



3GPP2 CORRESPONDENCE

Dr. Byung K. (BK) Yi
Chair, 3GPP2 TSG-C
LGE USA, Inc.
10225 Willow Creek Road
San Diego, CA 92131
bkyi@lge.com

26 May 2006

ITU-T SG16 WP3 Q10 and Q.23

Contact: Claude Lamblin
Rapporteur Q10/16
claude.lamblin@rd.francetelecom.com

Contact: Dave Lindbergh
Rapporteur Q23/16
lindbergh@92F1.com

Re: Response to “COM 16 – LS 107 – E” LS on embedded extension to G.722.2 and media coding summary database

Dear ITU-T SG16 (Qs 10 & 23/16) Experts,

3GPP2 TSG-C thanks ITU-T SG 16 for the liaison in COM 16 – LS 107 – E. We appreciate the opportunity to provide you with an update on 3GPP2 vocoders for media coding summary database TD 158/WP3. 3GPP2 TSG-C also started reviewing the proposed work item on embedded extensions to G.722.2 and will provide specific comments at a later time. 3GPP2 TSG-C thanks SG16 WP3/16 Q.10 experts for the communication and requests ITU-T SG 16 to keep 3GPP2 TSG-C informed on the progress of G.722.2 and G.MMCC projects.

Information on 3GPP2 Vocoders for Media Coding Summary Database

cdma2000® provides source-controlled variable-rate speech codecs for circuit switched and packet switched voice services operating in *two rate sets*, commonly referred to as RS-1 and RS-2:

- **RS-1** provides frame-rate payload sizes of 171, 80, 40 and 16 bits, along with DTX (Discontinuous Transmission for packet switched voice services only) every 20 msec. RS-1 operates at a peak rate of 8.55 kbps.
- **RS-2** provides frame-rate payload sizes of 266, 124, 54 and 20 bits, along with DTX (for packet switched voice services only) every 20 msec. RS-2 operates at a peak rate of 13.3 kbps.

Among the existing 3GPP2 speech codec standards, EVRC (Enhanced Variable Rate Codec Service Option 3 C.S0014, TIA-127) is a RS-1 codec which has been adopted as a mandatory codec for packet switched multimedia services (MMS, PSS, PSVT, and PoC), and has been widely deployed in cdma2000® systems. EVRC provides higher voice capacity compared with the RS-2 codecs.

Recently, 3GPP2 has introduced an extension to EVRC, called EVRC-B (Enhanced Variable Rate Codec Service Option 68 C.S0014-B). EVRC-B can be controlled dynamically to operate at lower average data rates while gracefully maintaining voice quality, resulting in increased cdma2000-1x voice capacity. Details of this extension are attached herewith.

3GPP2 TSG-C is currently developing an extension to EVRC-B for wideband speech support in RS-1, called EVRC-WB. We have attached the Requirements document for EVRC-WB for your information.

Attached, please also find a copy of codec summary database TD 158/WP3 with our changes.

Regards,



Byung K. (BK) Yi
Chair, 3GPP2 TSG-C

cc: Y.K. Kim	3GPP2 SC Chair	ykkim@lgtel.co.kr
Victoria Bosserman	3GPP2 Senior Manager	vbosserman@tiaonline.org
Paolino Usai	3GPP TSG-SA4 Secretary	Paolo.Usai@etsi.org
Susanna Kooistra	3GPP Liaison Officer	Susanna.Kooistra@etsi.org
Leonardo Chiariglione	ISO/IEC JTC1/SC29/WG11 Convenor	leonardo@chiariglione.org
Yukiko Ogura	ISO/IEC JTC1/SC29 Secretary	ogura@itscj.ipsj.or.jp