

P1857.2

Submitter Email: wgao@pku.edu.cn
Type of Project: New IEEE Standard
PAR Request Date: 27-Aug-2012
PAR Approval Date: 02-Nov-2012
PAR Expiration Date: 31-Dec-2016
Status: PAR for a New IEEE Standard

1.1 Project Number: P1857.2
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Advanced Audio Coding

3.1 Working Group: Audio Video Coding Working Group (C/SAB/AVS_1857_WG)

Contact Information for Working Group Chair

Name: Wen Gao
Email Address: wgao@pku.edu.cn
Phone: +86-10-62758116

Contact Information for Working Group Vice-Chair

Name: Cliff Reader
Email Address: cliff@reader.com
Phone: +1-408-867 4884

3.2 Sponsoring Society and Committee: IEEE Computer Society/Standards Activities Board (C/SAB)

Contact Information for Sponsor Chair

Name: Charlene Walrad
Email Address: cwalrad@daven.com
Phone: 650-580-3003

Contact Information for Standards Representative

Name: p eastman
Email Address: peastman@cox.net
Phone: (602) 993-7085

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2013

4.3 Projected Completion Date for Submittal to RevCom: 07/2014

5.1 Approximate number of people expected to be actively involved in the development of this project: 20

5.2 Scope: This standard specifies audio compression, decompression and packaging tools and mechanism to support transmission and storage of the multimedia data over internet in a highly efficient way under constraints that include limited complexity and bandwidth.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: This part of standard provides regular high quality and efficient coding tool sets for internet and broadcasting audio compression and decompression. It saves bandwidth for internet and broadcasting transmission and memory space for storage.

5.5 Need for the Project: There are some alternative specifications with similar purpose but they do not satisfy the need for balance between efficiency and complexity required for providing high quality aural and visual service in limited band width settings. The committee views standardization as essential for lowering the cost of solutions intended for low-band width consumer devices.

5.6 Stakeholders for the Standard: -Audio and video products (hardware or software) manufacturers or vendors

-Aural and visual content providers

-Video and audio service providers, including broadcasting operators, Internet video service providers

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: Yes

If Yes please explain: The audio coding tools developed by ISO/IEC in MPEG-1/2/4 are mainly used in broadcasting industry, which requires accurate frame rate, and assured bandwidth. G.711, G.722, G.726, G.727, G.723, G.729 developed by ITU-T are mainly used in telecommunication industry. None of them is specified for Internet multimedia coding and search, and none of them matches the needs of the emerging cloud computing environment.

and answer the following

Sponsor Organization: ISO/IEC and ITU-T

Project/Standard Number: G.711, G.722, G.726, G.727, G.723, G.729

Project/Standard Date:

Project/Standard Title: Audio parts of the MPEG-1/2 and MPEG-4

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): 7.1 and 7.2:

- 1) ISO/IEC 11172-3:1993 Information technology -- Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s -- Part 3: Audio
- 2) ISO/IEC 13818-3:1998 Information technology -- Generic coding of moving pictures and associated audio information -- Part 3: Audio
- 3) ISO/IEC 13818-7:1997 Information technology -- Generic coding of moving pictures and associated audio information -- Part 7: Advanced Audio Coding
- 4) ITU-T Recommendation G.711--Pulse Code Modulation (PCM) of Voice Frequencies
- 5) ITU-T Recommendation G.722.2i^aWideband Coding of Speech at around 16kbit/s Using Adaptive Multi-Rate Wideband (AMR-WB)
- 6) ITU-T Recommendation G.723.1i^aDual Rate Speech Coder for Multimedia Communication Transmitting at 5.3 and 6.3kbit/s
- 7) ITU-T Recommendation G.726i^a40, 32, 24,16kbbbit/s Adaptive Differential Pulse Code Modulation (ADPCM)
- 8) ITU-T Recommendation G.727 (1990) i^aExtensions of Recommendation G.727 for use with uniform-quantized input and output
- 9) ITU-T Recommendation G.729i^aCoding of Speech at 8 kbit/s Using Conjugate-Structure Algebraic-Code-Excited Linear-Prediction (CS-ACELP)