ICS 35.040
CCS L 71

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 33475.6-2024

Information technology - High efficiency multimedia coding - Part 6: Smart media transport

信息技术 高效多媒体编码 第6部分：智能媒体传输

Issued on: May 28, 2024 **Implemented on: December 1, 2024**

Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC

Table of Contents

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1.Structure and drafting rules for standardization documents" Drafting. This document is Part 6 of GB/T 33475 "Information Technology Efficient Multimedia Coding". GB/T 33475 has been published as follows part.

4.Compliance test;

5.Reference software;

6.Intelligent Media Transport;

7.Image file formats. This document was proposed and coordinated by the National Technical Committee for Information Technology Standardization (SAC/TC28). This document was drafted by: Shanghai Jiao Tong University, Beijing Samsung Telecommunications Technology Research Co., Ltd., Peking University, Beijing University of Technology, ZTE Communications Co., Ltd., Shanghai University, Shenzhen Longgang Intelligent Audiovisual Research Institute, Guangdong Bohua Ultra High Definition Innovation Center Co., Ltd., Zhongguancun Video Listen to Industry Technology Innovation Alliance, OPPO Guangdong Mobile Communications Co., Ltd. The main drafters of this document are. Xu Yiling, Wu Yue, Zhang Xinggong, Mou Luntian, Huang Cheng, Zhang Wenjun, Chen Hao, Jiang Zhiqian, Xie Shaowei, Hu Ying, Xu Jianwei, Chang Yongjian, Huang Wei, Zhu Wenjie, Chen Gao, Liu Li, Guo Zongming, Zhao Haiwu, Huang Tiejun,

Zhang Weimin, Long Shiqiang, Zhao Haiying, Yang Zhiyao, Gao Wen.

GB/T 33475 "Information Technology - Efficient Multimedia Coding" is intended to consist of the following seven parts.

1.System. The purpose is to establish a system layer coding method for digital audio and video media.

2.Video. The purpose is to establish efficient video compression methods.

3.Audio. The purpose is to establish efficient audio compression methods.

4.Conformance test. The purpose is to determine how to test and verify the coded bit stream and decoder.

5.Reference software. The purpose is to define the software that meets the requirements of GB/T 33475.2-2024 and GB/T 33475.3-2018 Required reference software.

6.Intelligent Media Transport. The purpose is to specify intelligent media for multimedia data transmission in heterogeneous packet switching networks. Transmission technology.

7.Picture file format. The purpose is to specify the syntax description, semantic description, Package definition. The issuing authority of this document calls attention to the fact that when declaring compliance with this document, it may involve 7.3, 7.4, 8.3, 8.4, 9.3, 9.4, 9.7, 9.8, 9.9, 9.12, 9.13, 10.3, 11.3, 11.4, 11.5, 11.6, 12.1, 12.2, 12.4, Appendix A, Appendix B, the following 26 items and digital video codec Use of technology-related patents. The patent application numbers and names are as follows: Serial Number Patent Application Number Patent Name 1.201510401550.9 A method for implementing multimedia content classification technology 2.201510064427.2 A dynamic time window and cache mechanism under heterogeneous network transmission 3.201510698388.1 A method for dynamically providing resource availability time in heterogeneous media network transmission 4.201710561850.2 Adaptive system code FEC encoding and decoding method based on media content 5.201610107748.0 An information interaction system and network transmission method in a multimedia system 6.201510673115.1 A FEC method based on media content 7.201510673091.X An adaptive FEC method based on media content 8.201610060847.8 Description and personalized display method of content component relationship in multimedia services 9.201610056411.1 A storage and transmission method based on media attributes to support spatial partitioning 10.201610674633.X A method and system for personalized presentation of multimedia content components 11.201510955611.6 A description method for personalized presentation of information associated with multimedia content 12.201610915990.0 Media on-demand mode control method based on broadcast system 13.201710027492.7 A media on-demand service control method based on broadcast system 14.201611141843.9 Method, device and system for processing media information 15.201610757375.1 Adaptive synchronization method of multimedia resources based on network conditions in

heterogeneous networks 16.201710973473.3 Adaptive system code FEC method, device and system based on media content 17.201610081443.7 Media data transmission method and device 18.201280029677.7 Method and apparatus for sending/receiving media content in a multimedia system 19.201480042072.0 Method and apparatus for packet transmission supporting downloading and streaming 20.201380025465.6 Method and device for sending and receiving data in multimedia transmission system (Continued) Serial Number Patent Application Number Patent Name 21.201380053506.2 Apparatus and method for transmitting and receiving multimedia data in a hybrid network 22.201280061956.1 Apparatus and method for configuring control messages in a broadcast system 23.201280014043.4 Apparatus and method for configuring control messages in a broadcast system 24.201380035064.9 Method for providing multimedia content 25.201380053098.0 Method and device for media data delivery control 26.201480022346.X Method for sending media data in a multimedia transmission system The issuing organization of this document does not have any position on the authenticity, validity and scope of the above-mentioned patents. The above patent holder has assured the issuing agency of this document that it is willing to cooperate with any applicant under reasonable and non-discriminatory terms and conditions. The above patent holder's statement has been filed with the issuing agency of this document, and the relevant information can be obtained through The following contact information is obtained. Contact. Zhao Haiying (Digital Audio and Video Codec Technical Standard Working Group) Mailing address. Room 515, Mudan Venture Building, No.

1 Scope

GB/T 33475.6-2024 specifies smart media transport in the Chinese high efficiency multimedia coding series. A codec produces a bitstream; something else has to carry it across a network to a device, adapt to what that network and that device can do at the moment, and keep audio, video and any other stream in step. That is the job of a media transport layer, and this part defines the Chinese one. It sets the architecture and the data model, covering the data packets, the media resources and the generic encapsulation units, the data transmission and its transmission model, the signalling in detail, that is the resource request and response messages, the interaction feedback, the session control, the device capability information, the clock relationship information, the synchronisation request and response messages and the media resource transmission characteristic messages, and finally the media presentation. It is the transport companion to the AVS video coding of Part 2. For a streaming platform, a set-top box or player vendor, or a broadcaster working to Chinese requirements, this is the governing text.

This document specifies intelligent media transmission technology for multimedia data transmission in heterogeneous packet switching networks, covering data models, data transmission transmission, signaling, media presentation, HTTP/2 live broadcast, and adaptive forward error correction coding. This document is suitable for applications such as