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OF ITU

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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS
Infrastructure of audiovisual services – Coding of moving
video

**Advanced video coding for generic audiovisual
services**

ITU-T Recommendation H.264



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Advanced video coding for generic audiovisual services

Summary

This Recommendation | International Standard represents an evolution of the existing video coding standards (H.261, H.262, and H.263) and it was developed in response to the growing need for higher compression of moving pictures for various applications such as videoconferencing, digital storage media, television broadcasting, Internet streaming, and communication. It is also designed to enable the use of the coded video representation in a flexible manner for a wide variety of network environments. The use of this Recommendation | International Standard allows motion video to be manipulated as a form of computer data and to be stored on various storage media, transmitted and received over existing and future networks and distributed on existing and future broadcasting channels.

The revision approved 2005-03 contains modifications of the video coding standard to add four new profiles, referred to as the High, High 10, High 4:2:2, and High 4:4:4 profiles, to improve video quality capability and to extend the range of applications addressed by the standard (for example, by including support for a greater range of picture sample precision and higher-resolution chroma formats). Additionally, a definition of new types of supplemental data has been specified to further broaden the applicability of the video coding standard. Finally, a number of corrections to errors in the published text have been included. This revision, in addition to enhancing video coding capability, will serve to maintain technical alignment with the corresponding jointly-developed ISO/IEC 14496-10 standard.

Corrigendum 1 to ITU-T Rec. H.264 corrected and updated various minor aspects to bring the ITU-T version of the text up to date relative to the April 2005 output status approved as a new edition of the corresponding jointly-developed and technically-aligned text ISO/IEC 14496-10. It additionally fixes a number of minor errors and needs for clarification and defines three previously-reserved sample aspect ratio indicators.

This edition includes the text approved 2005-03 and its Corrigendum 1 approved 2005-09.

Source

ITU-T Recommendation H.264 was approved on 1 March 2005 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure. It includes modifications introduced by H.264 (2005) Cor.1 approved on 13 September 2005 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure.

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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