

About This Standard

Mandated

Standard Identifier ITU-T H.264

Title of Standard

Advanced Video Coding for Generic Audio Visual Services, 2005

Standards History

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/Retired
2006-06-27	n/a	2006-06-27	2006-06-27	2006-06-27	n/a

Replaced [ITU-T H.248](#)

Standards Body [ITU](#) [Broken Link?](#)
URL to Access or Acquire <http://www.itu.int>

Working Group

Primary Owner Geospatial Intelligence TWG (GWG)
Secondary Interest Collaboration TWG

Service Areas GEOINT: Motion Imagery
Video Teleconferencing

KIPs No KIP Found

Standard Applicability

2006-06-27

For IP-based, broadcast-quality video at rates of less than 1 Mbps, the ISO/IEC MPEG and the ITU-T Video Coding Expert Group (VCEG) have joined efforts in the development of the emerging H.26L standard which was initiated by the ITU-T committee. The new standard is designated as ITU-T H.264 and MPEG-4 Part 10 and can be used at all bit rates to achieve higher quality at lower data rates.

Standard Abstract

2006-06-27

This Recommendation /International Standard was developed in response to the growing need for higher compression of moving pictures for various applications such as motion imagery, 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 imagery 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.

Profiling Questions

GEOINT: Motion Imagery

- Do your motion imagery terminals operate on IP-based broadcast-quality video at rates of less than 1 Mbps or do

you need the best quality motion imagery at the lowest bandwidth?

Video
Teleconferencing

- Do your VTC terminals operate on IP-based broadcast-quality video at rates of less than 1 Mbps?

Products Incorporating This Standard

None

Relevant Information

Supersedes: ITU-T H.264, Advanced Video Coding, July 2002

Implementation Guidance

None

Standard Selection Criteria

Net-Centric Interoperability

This forward-looking standard can be used on the internet as a component of web services. It can operate over IP based networks as well as other networks. The standard further promotes interoperability because it is platform-independent. One of the tenets of net-centricity is TPPU (Task, Post, Process, Use), because existing video standards produced video at a much higher data rate (or size), many video feeds (like Predator UAV) had to be significantly processed before being sent to the warfighter because of the limited bandwidth of tactical communications. The better compression afforded by H.264 should make practical to stream live UAV video to a much greater variety of tactical users as well as to transmit higher resolution motion imagery to image analyst.

Technical Maturity

The standard is mature and stable for motion imagery applications, and commercial products exist. Major vendors support this standard.

Public Availability

The ITU specification is publicly available for a fee from the ITU. The website is www.itu.int.

Implementability

This standard is widely commercially implemented as a video compression standard for low to high bit rate communication. The major codec vendors have implemented this standard.

Authority

This international standard was developed and is maintained jointly by the ITU and ISO through an open process.

Standard Type Non-Military

Keywords for Search None

