## INTERNATIONAL STANDARD

## ISO/IEC 14496-33

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# Information technology — Coding of audio-visual objects —

Part 33: Internet video coding

Technologies de l'information — Codage des objets audiovisuels — Partie 33: Codage vidéo Internet





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#### Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC | TC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 14496 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

#### Introduction

This document specifies Internet video coding, a video compression technology that is intended to be suitable for video distribution models currently adopted on the Internet.

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## Information technology — Coding of audio-visual objects —

#### **Part 33:**

### Internet video coding

#### 1 Scope

This document specifies MPEG-4 Internet video coding.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Rec. ITU-T H.262 | ISO/IEC 13818-2: 2013, Information technology — Generic coding of moving pictures and associated audio information — Part 2: Video

IEC 60461, Time and control code

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>

#### 3.1

#### **B** frame

#### bidirectional frame

frame (3.28) that is coded using motion compensated prediction from past or future reference frames (3.53) in output order (3.40)

#### 3.2

#### backward prediction

process of predicting the current frame (3.28) by using future frames in an output order (3.40) as reference frames (3.53)

#### 3.3

#### bin

bit of a bin string (3.4)

#### 3.4

#### bin string

intermediate binary representation of values of *syntax elements* (3.65) resulting from the *binarization* (3.5) of the *syntax element*