

## ISO/IEC 14496-15

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

#### Part 15: Carriage of network abstraction layer (NAL) unit structured video in the ISO base media file format

*Technologies de l'information — Codage des objets audiovisuels —*

*Partie 15: Transport de vidéo structurée en unités NAL sur la couche réseau au format ISO de base pour les fichiers médias*

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

This seventh edition cancels and replaces the sixth edition (ISO/IEC 14496-15:2022), which has been technically revised. It also incorporates the Amendment ISO/IEC 14496-15:2022/Amd 1:2023.

The main changes are as follows:

- support for the Low Complexity Enhancement Video Coding (ISO/IEC 23094-2);
- addition of the supplementary track reference and the picture region replacement sample group, for support of picture-in-picture services.

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

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This document defines a storage format based on, and compatible with, the ISO Base Media File Format (ISO/IEC 14496-12), which is used by the MP4 file format (ISO/IEC 14496-14) and the Motion JPEG 2000 file format (ISO/IEC 15444-3) among others. This document enables video streams formatted as Network Adaptation Layer Units (NAL Units) to

- a) be used in conjunction with other media streams, such as audio,
- b) be used in an MPEG-4 systems environment, if desired,
- c) be formatted for delivery by a streaming server, using hint tracks, and
- d) inherit all the use cases and features of the ISO Base Media File Format on which MP4 and MJ2 are based.

This document may be used as a standalone document; it specifies how NAL unit structured video content shall be stored in an ISO Base Media File Format compliant format. However, it is normally used in the context of a specification, such as the MP4 file format, derived from the ISO Base Media File Format, that permits the use of NAL unit structured video such as AVC (ISO/IEC 14496-10) video and High Efficiency Video Coding (HEVC, ISO/IEC 23008-2) video.

The ISO Base Media File Format is becoming increasingly common as a general-purpose media container format for the exchange of digital media, and its use in this context should accelerate both adoption and interoperability.