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TECHNICAL CORRIGENDUM 2

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Information technology — JPEG 2000 image coding system —

Part 12:
ISO base media file format

TECHNICAL CORRIGENDUM 2

Technologies de l'information — Système de codage d'image JPEG 2000 —

Partie 12: Format ISO de base pour les fichiers médias

RECTIFICATIF TECHNIQUE 2

Technical Corrigendum 2 to ISO/IEC 15444-12:2005 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

In Clause 2, add the following references:

ISO 639-2:1998, *Codes for the representation of names of languages — Part 2: Alpha-3 code*

RFC 2045, *Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies, N. Freed & N. Borenstein, November 1996*

RFC 2046, *Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types, N. Freed & N. Borenstein, November 1996*

ITU-R Rec. TF.460-6, *Standard-frequency and time-signal emissions (Annex I for the definition of UTC.)*

ITU-T Rec. X.667 (09/2004) | ISO/IEC 9834-8:2005, *Information technology — Open Systems Interconnection — Procedures for the operation of OSI Registration Authorities: Generation and registration of Universally Unique Identifiers (UUIDs) and their use as ASN.1 Object Identifier components*

ICS 35.040 **Ref. No. ISO/IEC 15444-12:2005/Cor.2:2006(E)**

In subclause 3.10, replace the definition of sample with the following:

In non-hint tracks, a sample is an individual frame of video, a series of video frames in decoding order, or a compressed section of audio in decoding order. In hint tracks, a sample defines the formation of one or more streaming packets. No two samples within a track may share the same time-stamp.

In subclause 4.2, replace the paragraph with the following (UUID is used in the second paragraph without being defined anyway in the entire document.):

Boxes start with a header which gives both size and type. The header permits compact or extended size (32 or 64 bits) and compact or extended types (32 bits or full Universal Unique IDentifiers, i.e. UUIDs). The standard boxes all use compact types (32-bit) and most boxes will use the compact (32-bit) size. Typically only the Media Data Box(es) need the 64-bit size.

In subclause 4.3.1, modify the following paragraph as follows (The term "mime" is used without being defined, and sometimes as "mime" and sometimes "MIME"):

A media-file structured to this part of this specification may be compatible with more than one detailed specification, and it is therefore not always possible to speak of a single 'type' or 'brand' for the file. This means that the utility of the file name extension and Multipurpose Internet Mail Extension (MIME) type are somewhat reduced.

In addition, change the instances of "mime" in the last two paragraphs in subclause 4.3.1 and in the first paragraph in subclause 10.4 to "MIME".

In subclause 4.3.1, replace the following text:

The type 'isom' (ISO Base Media file) is defined in this section of this specification, as identifying files that conform to the first version of ISO Base Media File Format.

More specific identifiers can be used to identify precise versions of specifications providing more detail. This brand should not be used as the major brand; this base file format should be derived into another specification to be used. There is therefore no defined normal file extension, or mime type assigned to this brand, nor definition of the minor version when 'isom' is the major brand.

Files would normally be externally identified (e.g. with a file extension or mime type) that identifies the 'best use' (major brand), or the brand that the author believes will provide the greatest compatibility.

The brand 'iso2' shall be used to indicate compatibility with this amended version of the ISO Base Media File Format; it may be used in addition to or instead of the 'isom' brand and the same usage rules apply. If used without the brand 'isom' identifying the first version of this specification, it indicates that support for some or all of the technology introduced by this amendment is required, such as the functionality in sub-clauses [8.40] through [8.45], or the SRTP support in sub-clause [10], is required.

The brand 'avc1' shall be used to indicate that the file is conformant with the 'AVC Extensions' in sub-clause [8.40]. If used without other brands, this implies that support for those extensions is required. The use of 'avc1' as a major-brand may be permitted by specifications; in that case, that specification defines the file extension and required behavior.

If a Meta-box with an MPEG-7 handler type is used at the file level, then the brand ‘mp71’ should be a member of the compatible-brands list in the file-type box.

with:

Files would normally be externally identified (e.g. with a file extension or mime type) that identifies the ‘best use’ (major brand), or the brand that the author believes will provide the greatest compatibility.

This section of this specification does not define any brands. However, see subclause 6.3 below for brands for files conformant to whole specification and not just this section.

Add 6.3 Brand Identification (and update the index accordingly):

The type ‘isom’ (ISO Base Media file) is defined in this section of this specification, as identifying files that conform to the first version of ISO Base Media File Format.

More specific identifiers can be used to identify precise versions of specifications providing more detail. This brand should not be used as the major brand; this base file format should be derived into another specification to be used. There is therefore no defined normal file extension, or mime type assigned to this brand, nor definition of the minor version when ‘isom’ is the major brand.

The brand ‘iso2’ shall be used to indicate compatibility with this amended version of the ISO Base Media File Format; it may be used in addition to or instead of the ‘isom’ brand and the same usage rules apply. If used without the brand 'isom' identifying the first version of this specification, it indicates that support for some or all of the technology introduced by this amendment is required, such as the functionality in subclauses 8.40 through 8.45, or the SRTP support in clause 10, is required.

The brand ‘avc1’ shall be used to indicate that the file is conformant with the ‘AVC Extensions’ in subclause [8.40]. If used without other brands, this implies that support for those extensions is required. The use of ‘avc1’ as a major-brand may be permitted by specifications; in that case, that specification defines the file extension and required behavior.

If a Meta-box with an MPEG-7 handler type is used at the file level, then the brand ‘mp71’ should be a member of the compatible-brands list in the file-type box.

In subclause 6.2.2, replace the second paragraph with the following:

For convenience during content creation there are creation and modification times stored in the file. These can be 32-bit or 64-bit numbers, counting seconds since midnight, Jan. 1, 1904, which is a convenient date for leap-year calculations. 32 bits are sufficient until approximately year 2040. These times shall be expressed in Universal Time Coordinated (UTC), and therefore may need adjustment to local time if displayed.

In subclause 6.2.3, replace the second paragraph with the following:

The table shows those boxes that may occur at the top-level in the left-most column; indentation is used to show possible containment. Thus, for example, a Track Header Box (tkhd) is found in a Track Box (trak), which is found in a Movie Box (moov). Not all boxes need to be used in all files; the mandatory boxes are marked with an asterisk (*). See the description of the individual boxes for a discussion of what must be assumed if the optional boxes are not present.