



Information technology — Coding of audio-visual objects — Part 12: ISO base media file format

TECHNICAL CORRIGENDUM 3

Technologies de l'information — Codage des objets audiovisuels

Partie 12: Format ISO de base pour les fichiers médias

RECTIFICATIF TECHNIQUE 3

Technical Corrigendum 1 to ISO/IEC 14496-12:2012 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

1.1 SampleToGroupBox and SampleGroupDescriptionBox

In the section 8.9.2 Sample To Group Box, replace

“Within a track, there shall be at most one instance of this box with a particular grouping type”

With:

“There shall be at most one instance of this box with a particular grouping type in a Sample Table Box or Track Fragment Box.”

In the section 8.9.3 Sample Group Description Box, replace

“Within a track, there shall be at most one instance of this box with a particular grouping type.”

With:

“There shall be at most one instance of this box with a particular grouping type in a Sample Table Box or Track Fragment Box.”

1.2 'ctts' box and version

In 8.6.1.3.2 CompositionOffsetBox Syntax, replace:

```
aligned(8) class CompositionOffsetBox
    extends FullBox('ctts', version = 0, 0) {
```

with:

```
aligned(8) class CompositionOffsetBox
    extends FullBox('ctts', version, 0) {
```

1.3 Movie Fragment Sequence Number

In 8.8.5.1 MovieFragmentHeaderBox definition, replace:

The movie fragment header contains a sequence number, as a safety check. The sequence number usually starts at 1 and must increase for each movie fragment in the file, in the order in which they occur. This allows readers to verify integrity of the sequence; it is an error to construct a file where the fragments are out of sequence.

NOTE There is no requirement that the sequence numbers be consecutive, only that the value in a given movie fragment be greater than in any preceding movie fragment.

with:

The movie fragment header contains a sequence number, as a safety check. The sequence number usually starts at 1 and increases for each movie fragment in the file, in the order in which they occur. This allows readers to verify integrity of the sequence in environments where undesired re-ordering might occur.

In 8.8.5.3 MovieFragmentHeaderBox semantics, replace:

sequence_number the ordinal number of this fragment, in increasing order

with:

sequence_number a number associated with this fragment

1.4 reserved fields in subsample

In 8.7.7.2 Sub-sample Information Box syntax, replace:

```
unsigned int(32) reserved = 0;
```

with

```
unsigned int(32) codec_specific_parameters;
```

In 8.7.7.3 Sub-sample Information Box semantics, add:

codec_specific_parameters is defined by the codec in use. If no such definition is available, this field shall be set to 0.

1.5 Extension boxes in MetaDataSampleEntry

In 8.5.2.2 SampleDescriptionBox syntax, replace:

```
class MetaDataSampleEntry(codingname) extends SampleEntry (codingname) { }
```

with :

```
class MetaDataSampleEntry(codingname) extends SampleEntry (codingname) {
    Box[] other_boxes; // optional
}
```

1.6 Track fragment header box

In 8.8.7.1, replace:

0x000001 base-data-offset-present: indicates the presence of the base-data-offset field. This provides an explicit anchor for the data offsets in each track run (see below). If not provided, the base-data-offset for the first track in the movie fragment is the position of the first byte of the enclosing Movie Fragment Box, and for second and subsequent track fragments, the default is the end of the data defined by the preceding fragment. Fragments 'inheriting' their offset in this way must all use the same data-reference (i.e., the data for these tracks must be in the same file).