**INTERNATIONAL STANDARD ISO/IEC 14496-12:2008**
TECHNICAL CORRIGENDUM 1

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# Information technology — Coding of audio-visual objects —

## Part 12:
## ISO base media file format

TECHNICAL CORRIGENDUM 1

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

*Partie 12: Format ISO de base pour les fichiers médias*

*RECTIFICATIF TECHNIQUE 1*

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

*Pages 11 and 12, in Table 1, delete the following rows (NOTE ipmc has two rows to be deleted):*

| | | |
|---|---|---|
| ipmc | 8.12.4 | *IPMP Control Box* |
| ipmc | 8.12.4 | *IPMP Control Box* |
| imif | 8.12.3 | *IPMP Information box* |

*Page 17, in 8.2.2.3, replace:*

`duration` is an integer that declares length of the presentation (in the indicated timescale). This property is derived from the presentation's tracks: the value of this field corresponds to the duration of the longest track in the presentation.

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*with:*

> `duration` is an integer that declares length of the presentation (in the indicated timescale). This property is derived from the presentation's tracks: the value of this field corresponds to the duration of the longest track in the presentation. If the duration cannot be determined then duration is set to all 1s.

*Page 19, in 8.3.2.3, replace:*

> `duration` is an integer that indicates the duration of this track (in the timescale indicated in the Movie Header Box). The value of this field is equal to the sum of the durations of all of the track's edits. If there is no edit list, then the duration is the sum of the sample durations, converted into the timescale in the Movie Header Box. If the duration of this track cannot be determined then duration is set to all 1s (32-bit maxint).

*with:*

> `duration` is an integer that indicates the duration of this track (in the timescale indicated in the Movie Header Box). The value of this field is equal to the sum of the durations of all of the track's edits. If there is no edit list, then the duration is the sum of the sample durations, converted into the timescale in the Movie Header Box. If the duration of this track cannot be determined then duration is set to all 1s.

*Page 21, in 8.4.2.3, replace:*

> `duration` is an integer that declares the duration of this media (in the scale of the timescale).

*with:*

> `duration` is an integer that declares the duration of this media (in the scale of the timescale). If the duration cannot be determined then duration is set to all 1s.

*Page 30, 8.5.4, replace the contents of this subclause with the following text:*

(empty subclause)

*Page 65, in 8.12.1.1, replace:*

> a) MPEG-4 systems with IPMP: no other boxes, when IPMP descriptors in MPEG-4 systems streams are used;
>
> b) Standalone IPMP: an `IPMPInfoBox`, when IPMP descriptors outside MPEG-4 systems are used;
>
> c) Scheme signalling: a `SchemeTypeBox` and `SchemeInformationBox`, when these are used (either both must occur, or neither).

*with:*

> a) MPEG-4 systems with IPMP: no other boxes, when IPMP descriptors in MPEG-4 systems streams are used;
>
> b) Scheme signalling: a `SchemeTypeBox` and `SchemeInformationBox`, when these are used (either both must occur, or neither).

*Page 65, in 8.12.1.2, delete the code line referring to the IPMPInfoBox as follows:*

```
aligned(8) class ProtectionSchemeInfoBox(fmt) extends Box('sinf') {
   OriginalFormatBox(fmt)  original_format;

   SchemeTypeBox            scheme_type_box;         // optional
   SchemeInformationBox     info;               // optional
}
```

*Page 65, 8.12.3, replace the contents of this subclause with the following text:*

(empty subclause).

*Page 66, 8.12.4, replace the contents of this subclause with the following text:*

(empty subclause).

*Page 69, in 8.13.3.3, replace:*

> `block_size` indicates the size of a block (in bytes). A `block_size` that is not a multiple of the `encoding_symbol_length` symbol size indicates that the last source symbol includes padding that is not stored in the item.

*with:*

> `block_size` indicates the size of a block (in bytes). A `block_size` that is not a multiple of the `encoding_symbol_length` symbol size indicates with Compact No-Code FEC that the last source symbols includes padding that is not stored in the item. With MBMS FEC (3GPP TS 26.346) the padding may extend across multiple symbols but the size of padding should never be more than `encoding_symbol_length`.

*Pages 79 and 80, in 9.2.2, replace:*

A schematic picture of a file containing three alternative hint tracks with different FEC overhead for a source file is provided in Figure 4.
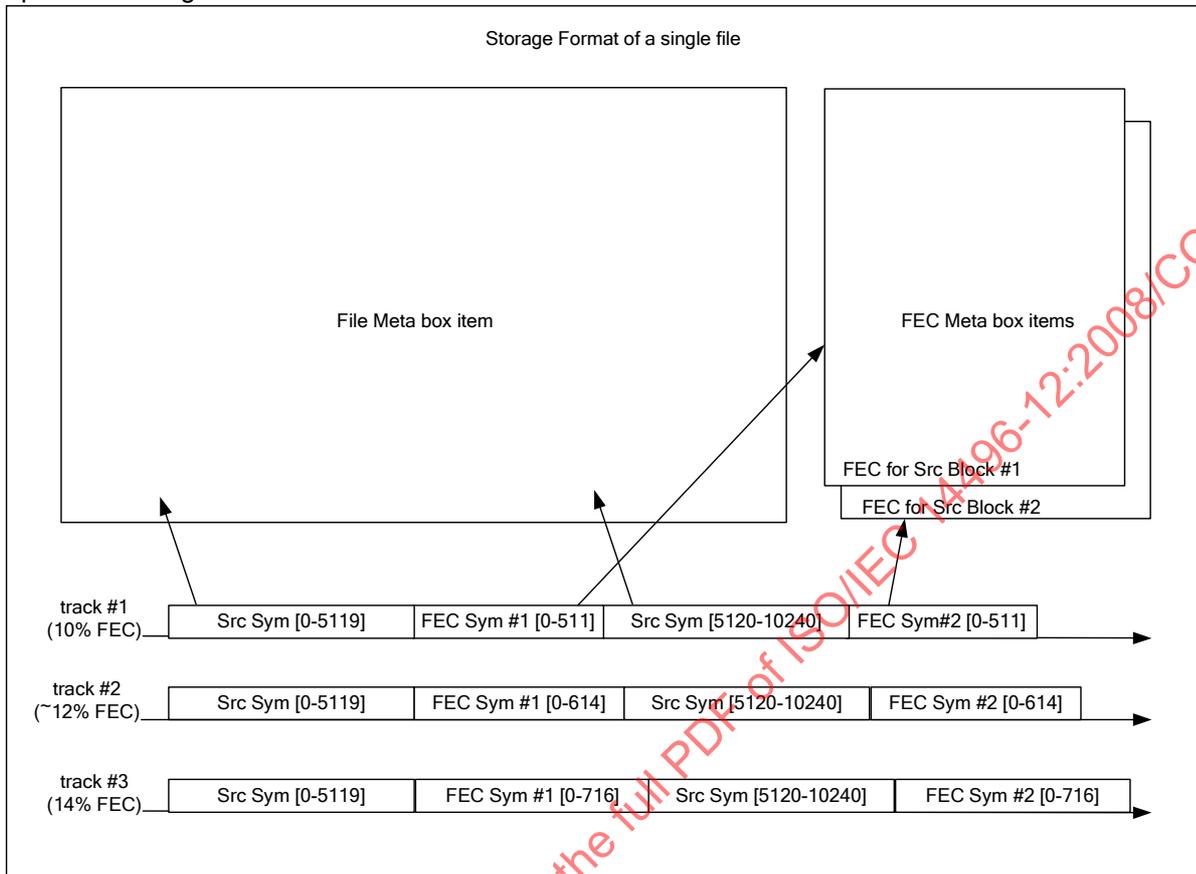


**Figure 4 — Different FEC overheads of a source file provided by alternative hint tracks.**

The source file in the above Figure is partitioned into 2 source blocks containing symbols of a fixed size. FEC redundancy symbols are calculated for both source blocks and stored in separate meta box items. As the hint tracks reference the same items in the file there is no duplication of information. The original source symbols and FEC reservoirs can also be used by repair servers that don't use hint tracks.

*with:*

A schematic picture of a file containing three alternative hint tracks with different FEC overhead for a source file is provided in Figure 4. In this example, each source block consists of only one sub-block.