

### INTERNATIONAL STANDARD ISO/IEC 14496-1:2004 TECHNICAL CORRIGENDUM 1

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

# Part 1: Systems

**TECHNICAL CORRIGENDUM 1** 

Technologies de l'information — Codage des objets audiovisuels — Partie 1: Systèmes

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 14496-1:2004 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

In subclause 7.1.3.5, "Composition Time Stamp (CTS)," replace:

#### 7.1.3.5 Composition Time Stamp (CTS)

Each composition unit has an associated nominal composition time, the time at which it must be available in the composition memory for composition. The CU is not guaranteed to be available in the composition memory for composition before this time. Since the SDM assumes an instantaneous decoding process, the CU is available to the decoder, at that instant in time corresponding to the DTS of the corresponding AU, for further use (e.g. in prediction processes).

This instant in time is implicitly known, if the (constant) temporal distance between successive composition units is indicated in the setup of the elementary stream. Otherwise a composition time stamp (CTS) whose syntax is defined in 10.2.4 conveys this instant in time.

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The current CU is instantaneously accessible by the compositor anytime between its composition time and the composition time of the subsequent CU. If a subsequent CU does not exist, the current CU becomes unavailable at the end of the lifetime of its elementary stream (i.e., when its elementary stream descriptor is removed).

with:

#### 7.1.3.5 Composition Time Stamp (CTS)

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This instant in time is implicitly known, if the (constant) temporal distance between successive composition units is indicated in the setup of the elementary stream. Otherwise a composition time stamp (CTS) whose syntax is defined in 10.2.4 conveys this instant in time.

The current CU is instantaneously accessible by the compositor anytime between its composition time and the composition time of the subsequent CU. If a subsequent CU does not exist, the current CU becomes unavailable at the end of the lifetime of its elementary stream (i.e., when its elementary stream descriptor is removed).

In case of audio decoders, the following additionally applies to the audio samples within a composition unit: the composition time applies to the n-th audio sample within the composition unit. The value of n is 1 unless explicitly specified in ISO/IEC 14496-3 subclause 1.6.6 *Interface between Audio and Systems*.

```
In subclause 7.2.2.2.2, replace: ExtDescrTagStartRange = 0x60
```

with:

ExtDescrTagStartRange = 0x6A

In subclause 7.2.6.16.1, replace:

```
abstract class ExtensionDescriptor extends BaseDescriptor
: bit(8) tag = ExtDescrTagStartRange .. ExtDescrTagEndRange {
    // empty. To be filled by classes extending this class.
}

with:

abstract class ExtensionDescriptor extends BaseDescriptor
: bit(8) tag = ExtensionProfileLevelDescrTag, ExtDescrTagStartRange .. ExtDescrTagEndRange {
    // empty. To be filled by classes extending this class.
}
```

In subclause 8.3.1, replace:

#### Rule C.1: Classes

```
[aligned] [abstract] [expandable[(maxClassSize)]] class object_name [extends parent_class]
  [: bit(length) [id_name=] object_id | id_range] {
    [element; ...] // zero or more elements
}
```

with:

#### Rule C.1: Classes

```
[aligned] [abstract] [expandable[(maxClassSize)]] class object_name [extends parent_class]
   [: bit(length) [id_name=] object_id | id_range | extended_id_range] {
      [element; ...] // zero or more elements
}
```

In subclause 8.3.1, replace:

The optional attribute *id\_name* allows to assign an *object\_id*, and, if present, is the key demultiplexing entity which allows differentiation between base and derived objects. It is also possible to have a range of possible values: the *id\_range* is specified as *start\_id* .. *end\_id*, inclusive of both bounds.

with:

The optional attribute <code>id\_name</code> allows to assign an <code>object\_id</code>, and, if present, is the key demultiplexing entity which allows differentiation between base and derived objects. It is also possible to have a range of possible values: the <code>id\_range</code> is specified as <code>start\_id</code> .. <code>end\_id</code>, inclusive of both bounds. It is also possible to have a combination of <code>id\_range</code> and <code>object\_id</code>: the <code>extended\_id\_range</code> is specified as a comma-separated list of <code>object\_id</code> and <code>range\_id</code>; for example, <code>id name=object id1</code>, <code>object id2</code>, <code>start id .. end id</code>.