



# Information technology — Coding of audio-visual objects —

## Part 22:

### Open Font Format

#### TECHNICAL CORRIGENDUM 1

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

*Partie 22: Format de police de caractères ouvert*

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO/IEC 14496-22:2009 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

*In 5.2.1.3, cmap subtable formats, replace the text with the following:*

**Note on the language field in 'cmap' subtables:** The language field must be set to zero for all cmap subtables whose platform IDs are other than Macintosh (platform ID 1). For cmap subtables whose platform IDs are Macintosh, set this field to the Macintosh language ID of the cmap subtable plus one, or to zero if the cmap subtable is not language-specific. For example, a Mac OS Turkish cmap subtable must set this field to 18, since the Macintosh language ID for Turkish is 17. A Mac OS Roman cmap subtable must set this field to 0, since Mac OS Roman is not a language-specific encoding.

*In 5.2.6.3, Name IDs, in the NameID table, replace item 4 in the example with the following:*

Full font name; a combination of strings 1 and 2, or a similar human-readable variant. If string 2 is "Regular", it is sometimes omitted from name ID 4.

*In 5.2.6.3, Name IDs, in the section entitled "Examples of how these strings might be defined", replace the description of the "Meaning" field for Named ID = 4 with the following:*

4. The complete, unique, human-readable name of the font. This name is used by Windows. *Times New Roman Bold*

*In the table presented in 5.2.7.18, ulUnicodeRange, in the description of bit 61, replace the values defining the block range for the CJK Compatibility Ideographs Supplement with the following value range:*

2F800-2FA1F

*In the "Comments" section that follows the table presented in 5.2.7.20, fsSelection, replace the second sentence of the second paragraph with the following text:*

As noted above, the settings of bits 0 and 5 must be reflected in the macStyle bits in the 'head' table.

*In 5.4.1, CFF – PostScript font program (Composite Font Format) table, append the following paragraphs to the end of the subclause:*

The Name INDEX in the CFF must contain only one entry; that is, there must be only one font in the CFF FontSet. The CFF Top DICT must specify a CharstringType value of 2.

The numGlyphs field in the 'maxp' table must be the same as the number of entries in the CFF's CharStrings INDEX. An OFF glyph index is the same as the CFF glyph index for all glyphs in the font.

*In 5.6.4, kern - Kerning, replace the first paragraph with the following:*

The kerning table contains the values that control the inter-character spacing for the glyphs in a font.

*In 6.3.2.2, GDEF table structure, replace the content of the section "GDEF header" with the following:*

#### **GDEF header**

The GDEF table begins with a header that starts with a version number (Version), currently only versions 0x00010000 and 0x00010002 are defined. A GDEF header also includes an Offset to a table defining the types of glyphs in the font (GlyphClassDef), an Offset to a list defining attachment points on the glyphs (AttachList), an Offset to a ligature caret list (LigCaretList) and an Offset to a list defining types of marks that can be attached (MarkAttachClassDef). The format used for the MarkAttachClassDef is the same as that for GlyphClassDef. Please refer the 'LookupFlag bit enumeration' subclause 6.2 in the Common Table Formats for more on using lookup flags with the information in these fields.

Example 1 in 6.3.2.3 shows a GDEF header table.

The format 0x00010000 of the GDEF header is organized as follows:

Type	Name	Description
ULONG	Version	Version of the GDEF table (= 0x00010000)
Offset	GlyphClassDef	Offset to class definition table for glyph type-from beginning of GDEF header (may be NULL)
Offset	AttachList	Offset to list of glyphs with attachment points-from beginning of GDEF header (may be NULL)
Offset	LigCaretList	Offset to list of positioning points for ligature carets-from beginning of GDEF header (may be NULL)
Offset	MarkAttachClassDef	Offset to class definition table for mark attachment type-from beginning of GDEF header (may be NULL)

The format 0x00010002 of the GDEF header contains an additional Offset to a list defining mark glyph set definitions (MarkGlyphSetDef):

Type	Name	Description
ULONG	Version	Version of the GDEF table (= 0x00010002)
Offset	GlyphClassDef	Offset to class definition table for glyph type-from beginning of GDEF header (may be NULL)
Offset	AttachList	Offset to list of glyphs with attachment points-from beginning of GDEF header (may be NULL)
Offset	LigCaretList	Offset to list of positioning points for ligature carets-from beginning of GDEF header (may be NULL)
Offset	MarkAttachClassDef	Offset to class definition table for mark attachment type-from beginning of GDEF header (may be NULL)
Offset	MarkGlyphSetsDef	Offset to the table of mark set definitions - from beginning of GDEF header (may be NULL)

In 6.3.2.3, *GDEF table examples*, in *Example 1: GDEF header*, replace the value of Hex Data 000A for GlyphClassDefTable with 000C.

In 6.4.3.2, *Feature descriptions and implementations*, in the description of the Lining Figures, Tag: 'Inum', replace the descriptions of the "Function", "Recommended implementation" and "Application interface" with the following text:

**Function:** This feature changes selected non-lining figures to lining figures.

**Recommended implementation:** The Inum table maps each oldstyle figure, and any associated characters to the corresponding lining form (GSUB lookup type 1). If the default figures are non-lining, they too are mapped to the corresponding lining form.

**Application interface:** For GIDs found in the Inum coverage table, the application passes a GID to the Inum table and gets back a new GID. Even if the current figures resulted from an earlier substitution, it may not be correct to simply revert to the original GIDs, because of interaction with the figure width features, so it's best to use this table.

In 6.4.3.2, *Feature descriptions and implementations*, in the description of the Oldstyle Figures, Tag: 'onum', replace the descriptions of the "Function", "Recommended implementation" and "UI suggestion" with the following text:

**Function:** This feature changes selected figures from the default or lining style to oldstyle form.

**Recommended implementation:** The onum table maps each lining figure, and any associated characters to the corresponding oldstyle form (GSUB lookup type 1). If the default figures are non-lining, they too are mapped to the corresponding oldstyle form.

**UI suggestion:** This feature should be inactive by default. Users can switch between the default and oldstyle figure sets by turning this feature on or off.

In the section entitled 'glyf' table of Clause 7, replace the text of the NOTE with the following:

**NOTE** It is recommended that developers perform this optimization prior to finalizing and adding a digital signature to the font. This is necessary for the creator's signature to remain valid in embedded OFF fonts.