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Information technology — Universal Coded Character Set (UCS) —

AMENDMENT 2: Caucasian Albanian,
Psalter Pahlavi, Mahajani, Grantha, Modi,
Pahawh Hmong, Mende Kikakui, and other
characters

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*Technologies de l'information — Jeu universel de caractères codés
(JUC) —*

*AMENDEMENT 2: Aghbanien, pehlevi des psautiers, mahajani,
grantha, modi, pahawh hmong, mendé kikakui et autres caractères*

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Reference number
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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of ISO/IEC 10646 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

This International Standard was prepared by Joint Technical Committee ISO/IEC JTC1, Information technology, Subcommittee SC 2, Coded Character sets.

Amendment 2 to ISO/IEC 10646:2012 was prepared by Joint Technical Committee ISO/IEC JTC1, *Information technology*, Subcommittee SC 2, *Coded character sets*.

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Page 22, Sub-clause 16.3 Format characters

Insert the following entry in the list of format characters:

061C	ARABIC LETTER MARK
2066	LEFT-TO-RIGHT ISOLATE
2067	RIGHT-TO-LEFT ISOLATE
2068	FIRST STRONG ISOLATE
2069	POP DIRECTIONAL ISOLATE
1107F	BRAHMI NUMBER JOINER

Page 23, Sub-clause 16.5 Variation selectors and variation sequences

Replace the first paragraph with the following new paragraph:

Variation selectors are a specific class of combining characters immediately following a base character for which there is no canonical mapping and no equivalent composite sequence. The purpose is to indicate a specific variant form of graphic symbol for that base character. The character sequence consisting of such base character followed by a variation selector is called a variation sequence.

Replace the first note with the following new note:

NOTE 1 – The variation selector only selects a specific *appearance* among those acceptable for an already encoded character. It is not intended as a general code extension mechanism.

Remove the first sentence of the third paragraph (starting with ‘No variation sequences using characters’).

Replace the text of the sub-clause after Note 2 (starting with ‘The following list provides a description’) with the following text:

The content linked to is a plain text file, using ISO/IEC 646-IRV characters with LINE FEED as end of line mark that specifies Standardized Variations Sequences. Each line in the text file contains the following information organized in two or three fields:

- 1st field: Variation sequence expressed as a UCS Sequence Identifier (using a modified syntax for the USI, omitting commas and angle brackets),
- 2nd field: Description of the variation sequence ,
- 3rd field (optional): Shaping environments where the variation sequence applies. The possible values are: isolate, initial, medial, final.

The fields are delimited by a SEMICOLON (;) followed optionally by zero or more SPACE characters. The last field may be followed by a comment starting with a NUMBER SIGN (#) describing the name of the base character. Comment lines, starting with a NUMBER SIGN (#) are informational only. Comment lines and blank lines

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in the text file should be ignored by any automatic process which parses the data file to extract the normative list of Standardized Variants.

Provide a new reference file with format as specified above containing the standardized variations sequences defined in this International Standard using the lists part of the previous sub-clause 16.5, augmented with the following list:

Emoji variation sequences for use as part of keycap symbols

```
0023 FE0E; text style; # NUMBER SIGN
0023 FE0F; emoji style; # NUMBER SIGN
0030 FE0E; text style; # DIGIT ZERO
0030 FE0F; emoji style; # DIGIT ZERO
0031 FE0E; text style; # DIGIT ONE
0031 FE0F; emoji style; # DIGIT ONE
0032 FE0E; text style; # DIGIT TWO
0032 FE0F; emoji style; # DIGIT TWO
0033 FE0E; text style; # DIGIT THREE
0033 FE0F; emoji style; # DIGIT THREE
0034 FE0E; text style; # DIGIT FOUR
0034 FE0F; emoji style; # DIGIT FOUR
0035 FE0E; text style; # DIGIT FIVE
0035 FE0F; emoji style; # DIGIT FIVE
0036 FE0E; text style; # DIGIT SIX
0036 FE0F; emoji style; # DIGIT SIX
0037 FE0E; text style; # DIGIT SEVEN
0037 FE0F; emoji style; # DIGIT SEVEN
0038 FE0E; text style; # DIGIT EIGHT
0038 FE0F; emoji style; # DIGIT EIGHT
0039 FE0E; text style; # DIGIT NINE
0039 FE0F; emoji style; # DIGIT NINE
```

Emoji variation sequences

```
203C FE0E; text style; # DOUBLE EXCLAMATION MARK
203C FE0F; emoji style; # DOUBLE EXCLAMATION MARK
2049 FE0E; text style; # EXCLAMATION QUESTION MARK
2049 FE0F; emoji style; # EXCLAMATION QUESTION MARK
2139 FE0E; text style; # INFORMATION SOURCE
2139 FE0F; emoji style; # INFORMATION SOURCE
2194 FE0E; text style; # LEFT RIGHT ARROW
2194 FE0F; emoji style; # LEFT RIGHT ARROW
2195 FE0E; text style; # UP DOWN ARROW
2195 FE0F; emoji style; # UP DOWN ARROW
2196 FE0E; text style; # NORTH WEST ARROW
2196 FE0F; emoji style; # NORTH WEST ARROW
2197 FE0E; text style; # NORTH EAST ARROW
2197 FE0F; emoji style; # NORTH EAST ARROW
2198 FE0E; text style; # SOUTH EAST ARROW
2198 FE0F; emoji style; # SOUTH EAST ARROW
2199 FE0E; text style; # SOUTH WEST ARROW
2199 FE0F; emoji style; # SOUTH WEST ARROW
21A9 FE0E; text style; # LEFTWARDS ARROW WITH HOOK
21A9 FE0F; emoji style; # LEFTWARDS ARROW WITH HOOK
21AA FE0E; text style; # RIGHTWARDS ARROW WITH HOOK
21AA FE0F; emoji style; # RIGHTWARDS ARROW WITH HOOK
```

231A FE0E; text style; # WATCH
 231A FE0F; emoji style; # WATCH
 231B FE0E; text style; # HOURGLASS
 231B FE0F; emoji style; # HOURGLASS
 24C2 FE0E; text style; # CIRCLED LATIN CAPITAL LETTER M
 24C2 FE0F; emoji style; # CIRCLED LATIN CAPITAL LETTER M
 25AA FE0E; text style; # BLACK SMALL SQUARE
 25AA FE0F; emoji style; # BLACK SMALL SQUARE
 25AB FE0E; text style; # WHITE SMALL SQUARE
 25AB FE0F; emoji style; # WHITE SMALL SQUARE
 25B6 FE0E; text style; # BLACK RIGHT-POINTING TRIANGLE
 25B6 FE0F; emoji style; # BLACK RIGHT-POINTING TRIANGLE
 25C0 FE0E; text style; # BLACK LEFT-POINTING TRIANGLE
 25C0 FE0F; emoji style; # BLACK LEFT-POINTING TRIANGLE
 25FB FE0E; text style; # WHITE MEDIUM SQUARE
 25FB FE0F; emoji style; # WHITE MEDIUM SQUARE
 25FC FE0E; text style; # BLACK MEDIUM SQUARE
 25FC FE0F; emoji style; # BLACK MEDIUM SQUARE
 25FD FE0E; text style; # WHITE MEDIUM SMALL SQUARE
 25FD FE0F; emoji style; # WHITE MEDIUM SMALL SQUARE
 25FE FE0E; text style; # BLACK MEDIUM SMALL SQUARE
 25FE FE0F; emoji style; # BLACK MEDIUM SMALL SQUARE
 2600 FE0E; text style; # BLACK SUN WITH RAYS
 2600 FE0F; emoji style; # BLACK SUN WITH RAYS
 2601 FE0E; text style; # CLOUD
 2601 FE0F; emoji style; # CLOUD
 260E FE0E; text style; # BLACK TELEPHONE
 260E FE0F; emoji style; # BLACK TELEPHONE
 2611 FE0E; text style; # BALLOT BOX WITH CHECK
 2611 FE0F; emoji style; # BALLOT BOX WITH CHECK
 2614 FE0E; text style; # UMBRELLA WITH RAIN DROPS
 2614 FE0F; emoji style; # UMBRELLA WITH RAIN DROPS
 2615 FE0E; text style; # HOT BEVERAGE
 2615 FE0F; emoji style; # HOT BEVERAGE
 261D FE0E; text style; # WHITE UP POINTING INDEX
 261D FE0F; emoji style; # WHITE UP POINTING INDEX
 263A FE0E; text style; # WHITE SMILING FACE
 263A FE0F; emoji style; # WHITE SMILING FACE
 2648 FE0E; text style; # ARIES
 2648 FE0F; emoji style; # ARIES
 2649 FE0E; text style; # TAURUS
 2649 FE0F; emoji style; # TAURUS
 264A FE0E; text style; # GEMINI
 264A FE0F; emoji style; # GEMINI
 264B FE0E; text style; # CANCER
 264B FE0F; emoji style; # CANCER
 264C FE0E; text style; # LEO
 264C FE0F; emoji style; # LEO
 264D FE0E; text style; # VIRGO
 264D FE0F; emoji style; # VIRGO
 264E FE0E; text style; # LIBRA
 264E FE0F; emoji style; # LIBRA
 264F FE0E; text style; # SCORPIUS
 264F FE0F; emoji style; # SCORPIUS
 2650 FE0E; text style; # SAGITTARIUS

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2650 FE0F; emoji style; # SAGITTARIUS
2651 FE0E; text style; # CAPRICORN
2651 FE0F; emoji style; # CAPRICORN
2652 FE0E; text style; # AQUARIUS
2652 FE0F; emoji style; # AQUARIUS
2653 FE0E; text style; # PISCES
2653 FE0F; emoji style; # PISCES
2660 FE0E; text style; # BLACK SPADE SUIT
2660 FE0F; emoji style; # BLACK SPADE SUIT
2663 FE0E; text style; # BLACK CLUB SUIT
2663 FE0F; emoji style; # BLACK CLUB SUIT
2665 FE0E; text style; # BLACK HEART SUIT
2665 FE0F; emoji style; # BLACK HEART SUIT
2666 FE0E; text style; # BLACK DIAMOND SUIT
2666 FE0F; emoji style; # BLACK DIAMOND SUIT
2668 FE0E; text style; # HOT SPRINGS
2668 FE0F; emoji style; # HOT SPRINGS
267B FE0E; text style; # BLACK UNIVERSAL RECYCLING SYMBOL
267B FE0F; emoji style; # BLACK UNIVERSAL RECYCLING SYMBOL
267F FE0E; text style; # WHEELCHAIR SYMBOL
267F FE0F; emoji style; # WHEELCHAIR SYMBOL
2693 FE0E; text style; # ANCHOR
2693 FE0F; emoji style; # ANCHOR
26A0 FE0E; text style; # WARNING SIGN
26A0 FE0F; emoji style; # WARNING SIGN
26A1 FE0E; text style; # HIGH VOLTAGE SIGN
26A1 FE0F; emoji style; # HIGH VOLTAGE SIGN
26AA FE0E; text style; # MEDIUM WHITE CIRCLE
26AA FE0F; emoji style; # MEDIUM WHITE CIRCLE
26AB FE0E; text style; # MEDIUM BLACK CIRCLE
26AB FE0F; emoji style; # MEDIUM BLACK CIRCLE
26BD FE0E; text style; # SOCCER BALL
26BD FE0F; emoji style; # SOCCER BALL
26BE FE0E; text style; # BASEBALL
26BE FE0F; emoji style; # BASEBALL
26C4 FE0E; text style; # SNOWMAN WITHOUT SNOW
26C4 FE0F; emoji style; # SNOWMAN WITHOUT SNOW
26C5 FE0E; text style; # SUN BEHIND CLOUD
26C5 FE0F; emoji style; # SUN BEHIND CLOUD
26D4 FE0E; text style; # NO ENTRY
26D4 FE0F; emoji style; # NO ENTRY
26EA FE0E; text style; # CHURCH
26EA FE0F; emoji style; # CHURCH
26F2 FE0E; text style; # FOUNTAIN
26F2 FE0F; emoji style; # FOUNTAIN
26F3 FE0E; text style; # FLAG IN HOLE
26F3 FE0F; emoji style; # FLAG IN HOLE
26F5 FE0E; text style; # SAILBOAT
26F5 FE0F; emoji style; # SAILBOAT
26FA FE0E; text style; # TENT
26FA FE0F; emoji style; # TENT
26FD FE0E; text style; # FUEL PUMP
26FD FE0F; emoji style; # FUEL PUMP
2702 FE0E; text style; # BLACK SCISSORS
2702 FE0F; emoji style; # BLACK SCISSORS

2708 FE0E; text style; # AIRPLANE
 2708 FE0F; emoji style; # AIRPLANE
 2709 FE0E; text style; # ENVELOPE
 2709 FE0F; emoji style; # ENVELOPE
 270C FE0E; text style; # VICTORY HAND
 270C FE0F; emoji style; # VICTORY HAND
 270F FE0E; text style; # PENCIL
 270F FE0F; emoji style; # PENCIL
 2712 FE0E; text style; # BLACK NIB
 2712 FE0F; emoji style; # BLACK NIB
 2714 FE0E; text style; # HEAVY CHECK MARK
 2714 FE0F; emoji style; # HEAVY CHECK MARK
 2716 FE0E; text style; # HEAVY MULTIPLICATION X
 2716 FE0F; emoji style; # HEAVY MULTIPLICATION X
 2733 FE0E; text style; # EIGHT SPOKED ASTERISK
 2733 FE0F; emoji style; # EIGHT SPOKED ASTERISK
 2734 FE0E; text style; # EIGHT POINTED BLACK STAR
 2734 FE0F; emoji style; # EIGHT POINTED BLACK STAR
 2744 FE0E; text style; # SNOWFLAKE
 2744 FE0F; emoji style; # SNOWFLAKE
 2747 FE0E; text style; # SPARKLE
 2747 FE0F; emoji style; # SPARKLE
 2757 FE0E; text style; # HEAVY EXCLAMATION MARK SYMBOL
 2757 FE0F; emoji style; # HEAVY EXCLAMATION MARK SYMBOL
 2764 FE0E; text style; # HEAVY BLACK HEART
 2764 FE0F; emoji style; # HEAVY BLACK HEART
 27A1 FE0E; text style; # BLACK RIGHTWARDS ARROW
 27A1 FE0F; emoji style; # BLACK RIGHTWARDS ARROW
 2934 FE0E; text style; # ARROW POINTING RIGHTWARDS THEN CURVING UPWARDS
 2934 FE0F; emoji style; # ARROW POINTING RIGHTWARDS THEN CURVING UPWARDS
 2935 FE0E; text style; # ARROW POINTING RIGHTWARDS THEN CURVING DOWNWARDS
 2935 FE0F; emoji style; # ARROW POINTING RIGHTWARDS THEN CURVING DOWNWARDS
 2B05 FE0E; text style; # LEFTWARDS BLACK ARROW
 2B05 FE0F; emoji style; # LEFTWARDS BLACK ARROW
 2B06 FE0E; text style; # UPWARDS BLACK ARROW
 2B06 FE0F; emoji style; # UPWARDS BLACK ARROW
 2B07 FE0E; text style; # DOWNWARDS BLACK ARROW
 2B07 FE0F; emoji style; # DOWNWARDS BLACK ARROW
 2B1B FE0E; text style; # BLACK LARGE SQUARE
 2B1B FE0F; emoji style; # BLACK LARGE SQUARE
 2B1C FE0E; text style; # WHITE LARGE SQUARE
 2B1C FE0F; emoji style; # WHITE LARGE SQUARE
 2B50 FE0E; text style; # WHITE MEDIUM STAR
 2B50 FE0F; emoji style; # WHITE MEDIUM STAR
 2B55 FE0E; text style; # HEAVY LARGE CIRCLE
 2B55 FE0F; emoji style; # HEAVY LARGE CIRCLE
 303D FE0E; text style; # PART ALTERNATION MARK
 303D FE0F; emoji style; # PART ALTERNATION MARK
 3297 FE0E; text style; # CIRCLED IDEOGRAPH CONGRATULATION
 3297 FE0F; emoji style; # CIRCLED IDEOGRAPH CONGRATULATION
 3299 FE0E; text style; # CIRCLED IDEOGRAPH SECRET
 3299 FE0F; emoji style; # CIRCLED IDEOGRAPH SECRET
 1F004 FE0E; text style; # MAHJONG TILE RED DRAGON
 1F004 FE0F; emoji style; # MAHJONG TILE RED DRAGON
 1F17F FE0E; text style; # NEGATIVE SQUARED LATIN CAPITAL LETTER P

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1F17F FE0F; emoji style; # NEGATIVE SQUARED LATIN CAPITAL LETTER P
1F21A FE0E; text style; # SQUARED CJK UNIFIED IDEOGRAPH-7121
1F21A FE0F; emoji style; # SQUARED CJK UNIFIED IDEOGRAPH-7121
1F22F FE0E; text style; # SQUARED CJK UNIFIED IDEOGRAPH-6307
1F22F FE0F; emoji style; # SQUARED CJK UNIFIED IDEOGRAPH-6307.
```

In addition, 1002 new entries corresponding to standardized variation sequences for CJK compatibility ideographs are added using the following format:

`xxxx yyyy; CJK COMPATIBILITY IDEOGRAPH-zzzz;`

(xxxx is the code point of the base character and represents the CJK Unified Ideograph associated through decomposition mapping with the CJK Compatibility Ideograph defined itself by the code point zzzz, yyyy is the variation selector code point and can be FE00, FE01, or FE02 in this context. The 1002 entries corresponding to the CJK Compatibility Ideographs specified between F900-FA6D, FA70-FAD9, and 2F800-2FA1D, excluding the 12 CJK Unified Ideographs: FA0E-FA0F, FA11, FA13-FA14, FA1F, FA21, FA23-FA24, FA27-FA29). For example, the CJK UNIFIED IDEOGRAPH-7DF4 is used as base for 3 entries associated with CJK COMPATIBILITY IDEOGRAPH F966, FA57, and FAB0:

```
7DF4 FE00; CJK COMPATIBILITY IDEOGRAPH-F966;
7DF4 FE01; CJK COMPATIBILITY IDEOGRAPH-FA57;
7DF4 FE02; CJK COMPATIBILITY IDEOGRAPH-FAB0;
```

Add the following text and notes:

[Click on this highlighted text to access the reference file.](#)

NOTE 3 – The content is also available as a separate viewable file in the same directory as this document. The file is named: “UCSVariants.txt”. These sequences are also described as *StandardizedVariants.html* in the Unicode character database (<http://www.unicode.org/Public/UNIDATA/StandardizedVariants.html>).

The Standardized Variations Sequences contain sequences associated with allowed base characters from the following categories:

- Mathematical symbols

NOTE 4 – The VARIATION SELECTOR-1 (FE00) is the only variation selector used with mathematical symbols.

- Mongolian characters. Only some presentation forms of the base Mongolian characters used with the Mongolian free variation selectors produce variant appearances.

NOTE 5 – The Mongolian characters have various presentation forms depending on their position in a code unit sequence. These presentations forms are called isolate, initial, medial and final.

- Phags-pa characters. These variation sequences do not select fixed visual representation; rather, they select a representation that is reversed from the normal form predicted by the preceding character.
- Pictographic symbols. The range of presentations may include a traditional black and white text style, using FE0E VARIATION SELECTOR-15, or an ‘emoji’ style, using FE0F VARIATION SELECTOR-16, whose presentation often involves color/grayscale and/or animation.

NOTE 6 – Standardized variations sequences involving the characters 0023 NUMBER SIGN and the range 0030-0039 (DIGIT ZERO to DIGIT NINE) are intended for use with 20E3 COMBINING ENCLOSING KEYCAP, such as in: <0023, FE0E, 20E3> NUMBER SIGN inside a COMBINING ENCLOSING KEYCAP in text style.

- CJK Unified Ideographs. Each of these variation sequences corresponds to a CJK compatibility ideograph. Its specified appearance is that of the corresponding CJK compatibility ideograph.

NOTE 7 – All normalization forms replace CJK compatibility ideographs with the corresponding CJK unified ideographs, but leave the variation sequences unchanged (see Clause 21). In contexts where normalization forms are used and the distinction between the CJK compatibility ideographs and CJK unified ideographs is desired, the usage of variation sequences is a mechanism to maintain that distinction. No equivalence between these variation sequences and the corresponding compatibility ideographs is defined. Conversion considerations are out of scope of this International Standard.

Page 26, Clause 18, Compatibility characters

Add the following note:

NOTE 3 – Because compatibility ideographs are not preserved through any normalization forms, use of standardized variation sequences for CJK Unified Ideographs (see 16.5) may be preferred in contexts where normalization forms are used and the distinction between CJK compatibility ideographs and the corresponding CJK Unified ideographs needs to be maintained. In context where compatibility ideographs should be preserved, normalization forms cannot be used.

Page 29, Clause 21, Normalization forms

Add the following note:

NOTE 4 – In all four normalization forms, CJK Compatibility Ideographs are replaced with the corresponding CJK Unified Ideographs. Normalization, however, doesn't alter variation selectors, and variation sequences are preserved. Because of this, the use of standardized variation sequences for CJK Unified Ideographs over the CJK Compatibility Ideographs is preferred in the context of normalization (see 16.5).

Page 41, Clause 25, Named UCS Sequence identifiers

Insert the following NUSIs into the linked content:

ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH ALEF;0626 0627
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH WAW;0626 0648
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH ALEF MAKSURA;0626 0649
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH OE;0626 06C6
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH U;0626 06C7
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH YU;0626 06C8
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH E;0626 06D0
 ARABIC SEQUENCE YEH WITH HAMZA ABOVE WITH AE;0626 06D5
 ARABIC SEQUENCE NOON WITH KEHEH;0646 06A9

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 (The following text is identical to ISO/IEC 10646:2012 but is linked to the updated file)

[Click on this highlighted text to access the reference file](#)

Page 48-2180 Clause 31, Code charts and list of character names**1. Modifications to existing blocks**

Insert the additional character glyphs and names at the indicated positions in the blocks given below.

Plane 00

Cyrillic Supplement

Arabic

Arabic Extended-A

Bengali

Telugu

Runic

Vedic Extensions

Combining Diacritical Marks Supplement

General Punctuation

Currency Symbols

Latin Extended-D

Myanmar Extended-B

Myanmar Extended-A

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Plane 01

Ancient Greek Numbers

Ancient Symbols

Brahmi

Sharada

Cuneiform

Cuneiform Numbers and Punctuation

Playing Cards

Miscellaneous Symbols and Pictographs

Transport and Map Symbols

These blocks contain new characters and names at the following code positions:

0528-052F 061C 08B2 0980 0C34 16F1-16F8 1CF8-1CF9 1DF5 2066-2069 20BB-20BC A796-A797 A7AB-A7AD A7B0-A7B1 A7F7 A9E7-A9FE AA7C-AA7F AB64-AB65 1018B-1018C 101A0 1107F 111CD 111DA 1236F-12398 12463-1246E 12474 1F0BF 1F0E0-1F0F5 1F37D 1F396 1F398-1F39B 1F39E-1F39F 1F3C5 1F3CB-1F3CE 1F3D4-1F3DF 1F3F7 1F43F 1F4F8 1F4FD-1F4FE 1F56B-1F56C 1F570 1F572 1F574-1F576 1F579 1F57C 1F580-1F581 1F588 1F594-1F596 1F5BC-1F5BE 1F5C2-1F5C3 1F5D2-1F5D3 1F5DC-1F5F3 1F6CB-1F6CF 1F6E1-1F6EC 1F6F0-1F6F3

updated graphic symbols at the following code positions:

11034 122D4-122D5 1F3E0 1F3ED 1F44D-1F44E 1F4FA 1F5BB 1F687

and new character name aliases for 122D4 and 122D5: CUNEIFORM SIGN NU11 TENU and CUNEIFORM SIGN NU11 OVER NU11 BUR OVER BUR respectively.

2. New blocks

<https://standards.iteh.ai/catalog/standards/sist/44556758-cca6-4497-a0f8-64e4fc8aa61a/iso-iec-10646-2012-fdamd-2>

Insert the following additional blocks.

Plane 01

Old Permic

Caucasian Albanian

Psalter Pahlavi

Mahajani

Grantha

Siddham

Modi

Warang Citi

Pahawh Hmong

Mende Kikakui

These blocks add new characters and names at the following code positions:

10350-1037A 10530-10563 1056F 10B80-10B91 10B99-10B9C 10BA9-10BAF 11150-11176 11301-11303 11305-1130C 1130F-11310 11313-11328 1132A-11330 11332-11333 11335-11339 1133C-11344 11347-11348 1134B-1134D 11357 1135D-11363 11366-1136C 11370-11374 11580-115B5 115B8-115C9 11600-11644 11650-11659 118A0-118F2 118FF 16B00-16B45 16B50-16B59 16B5B-16B61 16B63-16B77 16B7D-16B8F 1E800-1E8C4 1E8C7-1E8D6

Page 48, Sub-clause 31.2 Characters name list

In the list of informative information, add the following item:

- Variation sequences preceded by U+2053 ~ SWUNG DASH, when this character is used as a base character in such a variation sequence,

In the Example, insert the following content after 01C9:

2268 ≯ LESS-THAN BUT NOT EQUAL TO
 ~ 2268 FE00 ≯ with vertical stroke
 ...

Page 2181, Annex A.1

Add a “” (for fixed collection) for the following collection:*

155 MYANMAR EXTENDED-A

In the list of collection numbers and names, after

1075 SUPPLEMENTAL ARROWS-C

insert new entries as follows:

1076 OLD PERMIC	10350-1037F
1077 CAUCASIAN ALBANIAN	10530-1056F
1078 PSALTER PAHLAVI	10B80-10BAF
1079 MAHAJANI	11150-1117F
1080 GRANTHA	11300-1137F
1081 SIDDHAM	11580-115FF
1082 MODI	11600-1165F
1083 WARANG CITI	118A0-118FF
1084 PAHAWH HMONG	16B00-16B8F
1085 MENDE KIKAKUI	1E800-1E8DF

Page 2185, annex A.1

In the alphabetical list of keywords in Note 3, insert the following entries:

Caucasian Albanian	1077
Grantha	1080
Mahajani	1079
Mende Kikakui	1085
Modi	1082
Old Permic	1076
Pahawh Hmong	1084
Psalter Pahlavi	1078
Siddham	1081
Warang Citi	1083

Page 2188, Annex A.2.2

In the list of blocks in the SMP, insert the following new entries:

OLD PERMIC	10350-1037F
CAUCASIAN ALBANIAN	10530-1056F

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PSALTER PAHLAVI	10B80-10BAF
MAHAJANI	11150-1117F
GRANTHA	11300-1137F
SIDDHAM	11580-115FF
MODI	11600-1165F
WARANG CITI	118A0-118FF
PAHAWH HMONG	16B00-16B8F
MENDE KIKAKUI	1E800-1E8DF

Page 2211, Annex F.1.1 Zero-width boundary indicators

Append the following text:

BRAHMI NUMBER JOINER (1107F): This character is used to form ligature between Brahmi numbers signifying multiplication.

Page 2212, Annex F.1.3 Bidirectional text formatting

Replace the paragraph starting with ‘RIGHT-TO-LEFT MARK’ with the following text:

ARABIC LETTER MARK (061C): In bidirectional formatting, this character acts like a right-to-left Arabic character (such as ARABIC LETTER NOON).

RIGHT-TO-LEFT MARK (200F): In bidirectional formatting, this character acts like a generic right-to-left character (such as NKO LETTER A).

At the end of the sub-clause add the following text:

The following format characters, commonly called isolate characters, can be applied to a text segment to reduce its effect on the bidirectional ordering of its surroundings to that of a neutral character. This is in contrast to the existing embedding formatting characters (LEFT-TO-RIGHT EMBEDDING, RIGHT-TO-LEFT EMBEDDING, POP DIRECTIONAL FORMATTING) which have the effect of a strong character on their surroundings. Otherwise, isolate characters are similar to embedding characters: they declare a direction for the text inside it, and can be nested inside another isolate or embedding (and vice-versa).

LEFT-TO-RIGHT ISOLATE (2066): This character is used to indicate the start of a left-to-right isolate.

RIGHT-TO-LEFT ISOLATE (2067): This character is used to indicate the start of a right-to-left isolate.

FIRST STRONG ISOLATE (2068): This character is used to indicate the start of a first-strong isolate, i.e. one whose direction is determined by applying specific Unicode Bidi Algorithm (see 3) paragraph level rules to the isolate’s content as if it were a separate paragraph.

POP DIRECTIONAL ISOLATE (2069): This character is used to indicate the end of an isolate.

Page 2218, Annex G

Insert each of the new character name entries at the appropriate position, ordered alphabetically by the character name, in the list of character names in Annex G. These new names are provided in a machine-readable format that is accessible as a link to this document.

Click on this highlighted text to access the file containing the new names.

NOTE – The content is also available as a separate viewable file in the same file directory as this document. The file is named: “Am2names.txt”.

Correct the typo in the name for 1F806 so that ‘ARROW is spelled correctly as in:

1F806 RIGHTWARDS ARROW WITH MEDIUM TRIANGLE ARROWHEAD

Page 2220, Annex I

Insert the following items in the first list of allowed IDS components (after 'a coded radical'):

- The character FF1F FULLWIDTH QUESTION MARK to represent an otherwise un-described DC
- a private use character (as long as the interchanging parties have agreed that the particular private use character represents a particular ideograph or component of an ideograph)

Remove the second note (starting with 'An IDS is restricted').

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[ISO/IEC 10646:2012/FDAmd 2](https://standards.iteh.ai/catalog/standards/sist/44556758-cca6-4497-a0f8-64e4fc8aa61a/iso-iec-10646-2012-fdamd-2)

<https://standards.iteh.ai/catalog/standards/sist/44556758-cca6-4497-a0f8-64e4fc8aa61a/iso-iec-10646-2012-fdamd-2>