## ISO/IEC JTC 1/SC 2 <br> Coded Character Sets <br> Secretariat: Japan (JISC)

| DOC. TYPE | Summary of Voting/Table of Replies |
| :--- | :--- |
| TITLE | Result of voting on SC 2 N 4201, ISO/IEC 10646:2011/PDAM 1.2, <br> Information technology -- Universal Coded Character Set (UCS) -- <br> Amendment 1: Palmyrene, Old North Arabian, Sindhi, Mro, Bassa <br> Vah, and other characters |
| SOURCE | SC 2 Secretariat |
| PROJECT | JTC 1.02.10646.00.01.00.03 |
| STATUS | This document is forwarded to WG 2 for resolution of comments. <br> WG 2 is requested to prepare a disposition of comments report, <br> revised text and a recommendation for further processing. |
| ACTION ID | FYI |
| DUE DATE |  |
| DISTRIBUTION | P, O and L Members of ISO/IEC JTC 1/SC 2 ; ISO/IEC JTC 1 <br> Secretariat; ISO/IEC ITTF |
| ACCESS LEVEL | Def |
| ISSUE NO. | 385 |
|  | NAME <br> SIZE <br> (KB) <br> PAGES |
| FILE | 02n4207.pdf |

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Telephone: +81-3-3431-2808; Facsimile: +81-3-3431-6493; E-mail: kimura@itscj.ipsj.or.jp

## Result of voting

| Ballot Information |  |
| :--- | :--- |
| Ballot reference | ISO/IEC 10646:2011/PDAM 1.2-SC2N4201 |
| Ballot type | CIB |
| Ballot title | Information technology -- Universal Coded |
|  | Character Set (UCS) -- Amendment 1: |
|  | Palmyrene, Old North Arabian, Sindhi, Mro, |
|  | Bassa Vah, and other characters |
|  | $2011-07-29$ |
| Opening date | $2011-10-29$ |
| Closing date |  |
| Note |  |


| Member responses: |  |
| :---: | :---: |
| Votes cast (26) | Canada (SCC) <br> China (SAC) <br> Egypt (EOS) <br> Finland (SFS) <br> France (AFNOR) <br> Germany (DIN) <br> Greece (ELOT) <br> Hungary (MSZT) <br> Iceland (IST) <br> India (BIS) <br> Indonesia (BSN) <br> Ireland (NSAI) <br> Japan (JISC) <br> Korea, Dem. P. Rep. of (CSK) <br> Korea, Republic of (KATS) <br> Lithuania (LST) <br> Norway (SN) <br> Poland (PKN) <br> Romania (ASRO) <br> Russian Federation (GOST R) <br> Serbia (ISS) <br> Sri Lanka (SLSI) <br> Sweden (SIS) <br> Ukraine (DSSU) <br> United Kingdom (BSI) <br> USA (ANSI) |
| Comments submitted (1) | Italy (UNI) |
| Votes not cast (4) | Austria (ASI) <br> Mongolia (MASM) <br> Thailand (TISI) <br> Tunisia (INNORPI) |

Questions:

| Q. $\mathbf{1}$ | "Do you agree with approval of the PDAM Text?" |
| :--- | :--- |
| Q.2 | "If you Disappove the Draft, would you please indicate if you accept to change your <br> vote to Approval if the reasons and appropriate changes will be accepted?" |


| Votes by members | Q. 1 | Q. 2 |
| :---: | :---: | :---: |
| Canada (SCC) | Approval with comments | Yes |
| China (SAC) | Approval with comments | Ignore |
| Egypt (EOS) | Approval as presented | Ignore |
| Finland (SFS) | Approval as presented | Ignore |
| France (AFNOR) | Approval with comments | Ignore |
| Germany (DIN) | Disapproval of the draft | Yes |
| Greece (ELOT) | Abstention | Ignore |
| Hungary (MSZT) | Disapproval of the draft | No |
| Iceland (IST) | Abstention | Ignore |
| India (BIS) | Abstention | Ignore |
| Indonesia (BSN) | Approval as presented | Ignore |
| Ireland (NSAI) | Disapproval of the draft | Yes |
| Japan (JISC) | Approval as presented | Ignore |
| Korea, Dem. P. Rep. of (CSK) | Abstention | No |
| Korea, Republic of (KATS) | Approval as presented | Ignore |
| Lithuania (LST) | Approval as presented | Yes |
| Norway (SN) | Approval as presented | Ignore |
| Poland (PKN) | Abstention | Ignore |
| Romania (ASRO) | Disapproval of the draft | Yes |
| Russian Federation (GOST R) | Abstention | Ignore |
| Serbia (ISS) | Abstention | Ignore |
| Sri Lanka (SLSI) | Approval as presented | Ignore |
| Sweden (SIS) | Abstention | Ignore |
| Ukraine (DSSU) | Approval as presented | Ignore |


| United Kingdom (BSI) | Approval with <br> comments | Ignore |
| :--- | :--- | :--- |
| USA (ANSI) | Disapproval of <br> the draft | Ignore |


| Answers to Q.1: "Do you agree with approval of the PDAM Text?" |  |  |
| :---: | :---: | :---: |
| 9 x | Approval as presented | Egypt (EOS) <br> Finland (SFS) <br> Indonesia (BSN) <br> Japan (JISC) <br> Korea, Republic of (KATS) <br> Lithuania (LST) <br> Norway (SN) <br> Sri Lanka (SLSI) <br> Ukraine (DSSU) |
| 4 x | Approval with comments | Canada (SCC) <br> China (SAC) <br> France (AFNOR) <br> United Kingdom (BSI) |
| 5 x | Disapproval of the draft | Germany (DIN) <br> Hungary (MSZT) <br> Ireland (NSAI) <br> Romania (ASRO) <br> USA (ANSI) |
| 8 x | Abstention | Greece (ELOT) <br> Iceland (IST) <br> India (BIS) <br> Korea, Dem. P. Rep. of (CSK) <br> Poland (PKN) <br> Russian Federation (GOST R) <br> Serbia (ISS) <br> Sweden (SIS) |


| Answers to Q.2: "If you Disappove the Draft, would you please indicate if you accept to change your vote to Approval if the reasons and appropriate changes will be accepted?" |  |  |
| :---: | :---: | :---: |
| 5 x | Yes | Canada (SCC) <br> Germany (DIN) <br> Ireland (NSAI) <br> Lithuania (LST) <br> Romania (ASRO) |
| 2 x | No | Hungary (MSZT) <br> Korea, Dem. P. Rep. of (CSK) |
| 19 x | Ignore | China (SAC) <br> Egypt (EOS) <br> Finland (SFS) <br> France (AFNOR) <br> Greece (ELOT) <br> Iceland (IST) <br> India (BIS) <br> Indonesia (BSN) <br> Japan (JISC) <br> Korea, Republic of (KATS) <br> Norway (SN) <br> Poland (PKN) |


|  <br> Russian Federation (GOST R) <br> Serbia (ISS) <br> Si Lank (SLSI) <br> Sweden (SIS) <br> Ukraine (DSSU) <br> United Kingdom (BSI) <br> USA (ANSI) |  |  |
| :---: | :---: | :---: |
| Comments from Voters |  |  |
| Member: | Comment: | Date: |
| Canada (SCC) | Comment File | $\begin{gathered} \text { 2011-10-28 } \\ 20: 58: 56 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_SCC.doc |  |  |
| China (SAC) | Comment File | $\begin{gathered} 2011-10-25 \\ 08: 39: 36 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_SAC.doc |  |  |
| France (AFNOR) | Comment File | $\begin{gathered} 2011-10-27 \\ 16: 21: 44 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_AFNOR.doc |  |  |
| Germany (DIN) | Comment File | $\begin{gathered} 2011-10-19 \\ 11: 42: 19 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_DIN.zip |  |  |
| Hungary (MSZT) | Comment File | $\begin{gathered} \text { 2011-10-17 } \\ 09: 37: 35 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_MSZT.doc |  |  |
| Iceland (IST) | Comment | $\begin{gathered} \text { 2011-10-28 } \\ \text { 17:32:32 } \end{gathered}$ |
| Abstension due to lack of expertise |  |  |
| Ireland (NSAI) | Comment File | $\begin{gathered} \text { 2011-10-25 } \\ 17: 43: 32 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_NSAI.doc |  |  |
| Romania (ASRO) | Comment File | $\begin{gathered} \text { 2011-09-23 } \\ 09: 23: 44 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_ASRO.doc |  |  |
| United Kingdom (BSI) | Comment File | $\begin{gathered} 2011-10-17 \\ 14: 49: 30 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_BSI.doc |  |  |
| USA (ANSI) | Comment File | $\begin{gathered} \text { 2011-10-26 } \\ 20: 10: 38 \end{gathered}$ |
| CommentFiles/ISO_IEC_10646_2011_PDAM_1.2_-_SC2N4201_ANSI.doc |  |  |
| Comments from Commenters |  |  |
| Member: | Comment: | Date: |


| Italy (UNI) Comment | 2011-10-19 <br> $10: 42: 51$ |
| :--- | :---: | :---: |
| Abstention |  |

Canada will have no objection to changing the name (and the corresponding names of the characters in the repertoire) of currently named script 'Old Hungarian' to 'Rovas', to address one of the main objections expressed by the Hungarian national body expert in the feedback document http://www.dkuug.dk/jtc1/sc2/wg2/docs/n4120.pdf on the JTC1/SC2/WG2 ad hoc report in http://www.dkuug.dk/jtc1/sc2/wg2/docs/n4110.pdf on the topic in 2011 Helsinki WG2 meeting.

China Votes Yes to ISO/IEC JTC1/SC2 N4201, ISO/IEC 10646/PDAM 1.2 with comments.

China request JTC1/SC2 NBs to reach consensuses on all issues of every amendment acceptable solution on Old Hungarian before it becomes a part of IS.

| 1 | 2 | (3) | 4 | 5 | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MB ${ }^{1}$ | Clause No./ Subclause No./ Annex (e.g. 3.1) | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of comment $^{2}$ | Comment (justification for change) by the MB | Proposed change by the MB | Secretariat observations on each comment submitted |
| FR | 10C80 |  | TE | "Old Hungarian" is a denomination that may cause confusion and lack consistency <br> 1/ Possible sources of confusion <br> - "Old Hungarian" also describes a stage in the history of Hungarian that is essentially attested by texts written in the Latin script <br> - "Old Hungarian script" was natively used to write Hungarian well into the post-renaissance period in some communities, thus relating to stages of the language by far post-dating Old Hungarian <br> - "Old Hungarian" is used in print even today in instances that symbolically aim at highlighting some elements of continuity in Hungarian history. Nevertheless the language used in such instances is Modern Hungarian and there should be no confusion on that point. <br> 2/ Lack of consistency <br> The document provides code points for uppercase and lowercase letters, then rightfully underlines that "The use of uppercase letters is a modern innovation". This document thereby seeks to offer solutions helping modern usage of this script. There is some contradiction to recognizing evolutions of a script in its modern usage and still call it "Old" | Change the denomination of this script to "Hungarian rovas" or simply "Rovas", in the same way that other scripts in 10646 are named with no reference to the language it is/was used for ("ogham, deseret, devanagari...)" |  |

$1 \mathbf{M B}=$ Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

| 1 | 2 | (3) | 4 | 5 | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MB ${ }^{1}$ | Clause No./ Subclause No./ Annex (e.g. 3.1) | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of comment $^{2}$ | Comment (justification for change) by the MB | Proposed change by the MB | Secretariat observations on each comment submitted |
| DE |  |  |  | Germany votes "No with comments". <br> The vote is turned into YES if the requests in comments T1 and T4 are accepted. |  |  |
| DE |  |  | te | T1. Naming of the "Intonation marks for Lithuanian dialectology": <br> The names of the following characters do not describe the characters as shown in the code charts and the original proposal (WG2 N4070 " Second revised proposal to add characters used in Lithuanian dialectology"): <br> 2B4E SHORT NORTH EAST ARROW <br> 2B4F SHORT SOUTH EAST ARROW <br> 2B5A NORTH EAST ARROW WITH HOOKED HEAD 2B5B SOUTH EAST ARROW WITH HOOKED TAIL 2B5C NORTH EAST ARROW WITH HORIZONTAL TAIL 2B5D SOUTH EAST ARROW WITH HORIZONTAL TAIL <br> The inclination of the arrows is in no case even near to $45^{\circ}$, as the terms "NORTH EAST" and "SOUTH EAST" unambiguously denote, neither in the code chart nor in the original proposal. Thus, the names are plain wrong. | Germany repeats its request already expressed in WG2 N4085 to name the character correctly as follows: <br> U+2B4E SHORT SLANTED NORTH ARROW <br> U+2B4F SHORT BACKSLANTED SOUTH ARROW <br> U+2B5A SLANTED NORTH ARROW WITH HOOKED HEAD <br> U+2B5B BACKSLANTED SOUTH ARROW WITH HOOKED TAIL <br> U+2B5C SLANTED NORTH ARROW WITH HORIZONTAL TAIL <br> U+2B5D BACKSLANTED SOUTH ARROW WITH HORIZONTAL TAIL <br> Germany considers its request accepted also if the term "NORTH EAST" is replaced by "NORTH NORTH EAST" <br> or "ONE OCLOCK", and the term "SOUTH EAST" is replaced by "SOUTH SOUTH EAST" or "FIVE OCLOCK", <br> instead of "SLANTED" resp. "BACKSLANTED". |  |
| DE |  |  | te | T2. Integration of the accepted proposal WG2 N4078 " Revised Proposal to enable the use of Combining Triple Diacritics in Plain Text" <br> WG2 N4078 provides a way to handle diacritics spanning over three or more characters by using joining parts | Following the wording of the annotation for U+FE2B, add the following annotation to U+FE26: <br> "• Used with combining left and right half ligature above to extend above more than two characters." |  |

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

| 1 | 2 | (3) | 4 | 5 | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MB ${ }^{1}$ | Clause No./ Subclause No./ Annex (e.g. 3.1) | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of comment $^{2}$ | Comment (justification for change) by the MB | Proposed change by the MB | Secretariat observations on each comment submitted |
|  |  |  |  | combined with each of the single base letters. For diacritics below, new characters were accepted; for diacritics above, existing characters are devised. While the appropriate annotations are given for the new characters (summarized for U+FE2B), they are missing for the existing ones. |  |  |
| DE |  |  | te | T3. Placement of Wingdings characters <br> Germany has not objected to encode the Wingdings symbols when discussing this issue in Helsinki in principle, but has requested that only such symbols will get into the BMP for which actual use is shown. | As a practical solution, Germany requests now that all arrows which show special head shaping or decorative elements will be moved to the SMP into the block "Supplemental Arrows-C, which has enough space. Thus: <br> Move 2B60...2BAE to 1F880...1F8CE, <br> in exchange move 1F880...18F89 to 2B60...2BF9 as this series contains keyboard symbols which are in use. <br> Move 2BD0...2BE7 to 1F8D0...1F8E7. <br> Also, move 2BBE...2BBF into the "Ornament Symbols" block 1F650...1F67F, to have the "heavy punctuation marks" together. <br> Any rearrangement within the affected blocks following these movements is accepted. |  |
| DE |  |  | te | T. 4 Removing of Wingdings characters which do not comply with the Unicode character/glyph model <br> As part of the Wingdings addition, the following character series are included: <br> U+1F670 LIGATURE ET <br> U+1F671 BOLD LIGATURE ET <br> U+1F672 SANS-SERIF AMPERSAND <br> U+1F673 BOLD SANS-SERIF AMPERSAND | Germany requests the removal of the listed characters except U+1F670. <br> To offer a compromise, Germany considers this comment accepted also if the following is done, based on the fact that the specific appearance of the "sans-serif ampersand" may constitute a character identity rather than a glyph variation, and based on the fact that there already are "heavy" variants of punctuation marks in the Dingbats block: |  |

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge=general te=technical ed=editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

| 1 | 2 | (3) | 4 | 5 | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MB ${ }^{1}$ | Clause No./ Subclause No./ Annex (e.g. 3.1) | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of comment $^{2}$ | Comment (justification for change) by the MB | Proposed change by the MB | Secretariat observations on each comment submitted |
|  |  |  |  | U+1F674 BOLD AMPERSAND <br> U+1F678 BOLD INTERROBANG <br> U+1F679 SANS SERIF INTERROBANG <br> U+1F67A BOLD SANS-SERIF INTERROBANG <br> Regarding the interrobangs, the original Wingdings proposal WG2 N4115 also shows a "serifed-font-style" <br> interrobang (ID 2093) which is considered to be unified with U+203D INTERROBANG. <br> This is glyph encoding. Even if it is agreed that Wingding characters are to be included into Unicode without proof of actual use (but only based on availability on a large part of present-day computing equipment), there is no argument that roundtrip encoding between Unicode (ISO/IEC 10646) and the "existing standard" Wingdings is necessary (which would be the only reason to accept glyph encoding). Also, unifying just one glyph (the "serifedfont- style" one) with the existing character is arbitrary. <br> In fact, all these characters already are perfectly represented in Unicode (by U+0026 AMPERSAND and $\mathrm{U}+203 \mathrm{D}$ INTERROBANG), and $\mathrm{U}+1 \mathrm{~F} 671$ is perfectly represented in Unicode when $\mathrm{U}+1$ F670 is accepted. The exact glyph is to be selected by the rendering system (font etc.), according to the Unicode character/glyph model (as it has to be done even with the PDAM 1.2 character set, as a "serifed-font-style" interrobang glyph can only be gained by selecting an appropriate font). | Only U+1F678 and U+1F679 are removed. The other characters are renamed as follows: <br> U+1F670 SCRIPT LIGATURE ET <br> U+1F671 HEAVY SCRIPT LIGATURE ET SYMBOL <br> U+1F672 LIGATURE OPEN ET (or similar) <br> U+1F673 HEAVY LIGATURE OPEN ET (or similar) SYMBOL <br> U+1F674 HEAVY AMPERSAND SYMBOL <br> U+1F67A HEAVY INTERROBANG SYMBOL <br> following by any rearrangement of the code points (including, but not requested here, moving of <br> 1F670/1F672/1F675 to the Supplemental Punctuation block in the BMP). |  |
| DE |  |  | te | T. 5 Completing the set of "Sans-Serif heavy double quotation mark ornaments" <br> As part of the Wingdings addition, the following character series is included: | Germany requests the addition of the character completing this series: <br> U+1F67x SANS-SERIF LOW HEAVY DOUBLE COMMA QUOTATION MARK ORNAMENT |  |

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

| 1 | 2 | (3) | 4 | 5 | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MB ${ }^{1}$ | Clause No./ Subclause No./ Annex (e.g. 3.1) | Paragraph/ <br> Figure/Table/ Note <br> (e.g. Table 1) | Type Type of comment $^{2}$ | Comment (justification for change) by the MB | Proposed change by the MB | Secretariat observations on each comment submitted |
|  |  |  |  | U+1F676 SANS-SERIF HEAVY DOUBLE TURNED COMMA QUOTATION MARK ORNAMENT <br> U+1F677 SANS-SERIF HEAVY DOUBLE COMMA QUOTATION MARK ORNAMENT <br> This series is only usable for American typography and lacks the opening quotation mark which is needed for German typography done in the same style. | (a formal proposal will be submitted in time). <br> For formal reasons only, Germany notes that this comment is accepted also if $\mathrm{U}+1 \mathrm{~F} 676 / 1 \mathrm{~F} 677$ are withdrawn from PDAM 1.2 for any reason. |  |

$1 \mathbf{M B}=$ Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation
Международная организация по стандартизации

## Doc Type: Working Group Document

Title: Request to add the characters proposed in WG2 N4068 to PDAM 1.3
Source: German NB
Action: For consideration by JTC1/SC2/WG2 at the discussion of PDAM 1.2
Date: 2011-10-18
WG2 N4068 was submitted to SC2/WG2 as a liaison proposal by SC35, requesting the encoding of missing Latin small capital and modifier letters.
This proposal was on the agenda of the JTC1/SC2/WG2 June 6-10, 2011, in Helsinki. In fact, at that meeting, it was not discussed due to lack of time.
Germany already had requested the addition in WG2 N4085, section 3.
As this German request persists, the text of that section is repeated here, with added text shown in italics.

The German NB welcomes this proposal, especially (besides the reasons listed in the proposal) as it will save the time to discuss and decide any single character whenever new evidence is found.

In discussions on the Unicode mailing list and forum, concerns were issued that having the sets of modifier letters derived from the basic Latin letters (A...Z) complete will invite users to "misuse" them, by using them to obtain a different style instead denoting of a different semantic (like using the small capital letters to get smallcaps). However, this already can be done with the current almost complete sets, and has to be taken into account by search engines etc. anyway (and imposes no real problem as all these characters have compatibility equivalences to the respective base letters). It also should be noted that quasistandards like the Adobe Glyph List 2.0 already have encoded such complete sets (using the PUA), thus indicating style by character selection rather by markup is already an existing practice. (Such practice may be considered "bad", but standards are there for serving their users rather than for educating them.)

In addition, concerns were issued that encoding the modifier forms of the basic Latin letters (A...Z) will encourage proposals for more letters. The addition of the complete set of basic Latin squared letters A...Z in Unicode 6.0 (like the encircled letters long ago) has proven that such is not an automatic consequence.
Moreover, the German NB is concerned about the fact that SC35/WG2, which identifies characters in keyboard standards by Unicode values only recently, has partially to deviate from this in a recent standard draft (ISO/IEC 9995-9 CD), by the plain fact that specifying a method to enter raised, lowered, and small capital forms of the basic Latin letters A...Z/a...z (as part of language orthographies, not as style) results in a mapping to a character set which cannot completely enumerated by Unicode. Even if the PUA positions used in that draft "are only for internal reference", there is the danger that they will in fact be used by referencing to an international standard, thus weakening the position of Unicode for a larger audience. This can be avoided when SC2/WG2 is prepared to cooperate with SC25/WG2 by accepting the characters proposed in N4068 in time.

Thus, the German NB requests the addition of the characters proposed in N4068 now to PDAM 1.3 of ISO/IEC 10646.

Technical note: The code range of the block "Phonetic Extensions Supplement B" referred to in N4068 is now part of the block "Latin Extended-E". However, the proposed code points for the characters there are still appropriate.

Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation Международная организация по стандартизации

Doc Type: Working Group Document
Title: Proposal to encode an additional sans-serif heavy double quote symbol in the UCS
Source: German NB
Status: National Body Contribution
Action: For consideration by JTC1/SC2/WG2 and UTC
Date: 2011-10-17

## Block: Ornament Symbols

## Quotation Marks

$\boldsymbol{y} \quad$ U+1F67x $\quad \begin{aligned} & \text { SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT } \\ & \rightarrow 2760 \text { heavy low double comma quotation mark ornament }\end{aligned}$

## Properties:

1F67x;SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT;So;0;ON;;;;;N;;;;;

This proposal accompanies the German Comments on ISO/IEC 10646 FPDAM 1.2 (SC2 N4107).
There is stated:

## T. 5 Completing the set of "Sans-Serif heavy double quotation mark ornaments"

As part of the Wingdings addition, the following character series is included:
U+1F676 SANS-SERIF HEAVY DOUBLE TURNED COMMA QUOTATION MARK ORNAMENT U+1F677 SANS-SERIF HEAVY DOUBLE COMMA QUOTATION MARK ORNAMENT
This series is only usable for American typography and lacks the opening quotation mark which is needed for German typography done in the same style.

Germany requests the addition of the character completing this series:
U+1F67x SANS-SERIF LOW HEAVY DOUBLE COMMA QUOTATION MARK ORNAMENT

## ISO/IEC JTC 1/SC 2/WG 2

## PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC $10646{ }^{1}$

## Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P \& P) from http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.
Please ensure you are using the latest Form from http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html. See also http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps.

## A. Administrative

1. Title: Proposal to encode an additional sans-serif heavy double quote symbol in the UCS
2. Requester's name

German NB
3. Requester type (Member body/Liaison/IIdividual contribution):
4. Submission date:
5. Requester's reference (if applicable):
6. Choose one of the following:

This is a complete proposal:
(or) More information will be provided later:

## B. Technical - General

1. Choose one of the following:
a. This proposal is for a new script (set of characters):

2011-10-17
$\qquad$

## :

$\qquad$

Proposed name of script:
b. The proposal is for addition of character(s) to an existing block:

Name of the existing block: -............. Ornament Symbols (introduced in PDAM 1.2)
2. Number of characters in proposal: $\qquad$
3. Proposed category (select one from below - see section 2.2 of P\&P document):

| A-Contemporary | X.- B.1-Specialized (small collection) | B.2-Specialized (large collection) |
| :---: | :---: | :---: |
| C-Major extinct | D-Attested extinct | E-Minor extinct |
| F-Archaic Hierogly | ic or Ideographic | G-Öbscure or questionable usage symbols |

F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage symbols
$\qquad$
4. Is a repertoire including character names provided?
a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P\&P document?
b. Are the character shapes attached in a legible form suitable for review?

5. Fonts related:
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
n/a
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

## 6. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? $\qquad$
b. Are published examples of use (such as samples from newspapers, magazines, or other sources)
of proposed characters attached?
No (as usual for Wingdings symbols)
7. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? $\qquad$ No

## 8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also

[^0]see Unicode Character Database ( http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

## C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? $\qquad$ If YES explain
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?


If YES, with whom?
Experts within the NB

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? ........ Yes Reference:
4. The context of use for the proposed characters (type of use; common or rare) Common Reference: see text
5. Are the proposed characters in current use by the user community? If YES, where? Reference: ......................................................
6. After giving due considerations to the principles in the $\mathrm{P} \& \mathrm{P}$ document must the proposed characters be entirely

> in the BMP?

If YES, is a rationale provided?
If YES, reference:
$\qquad$
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? $\qquad$
If YES, is a rationale for its inclusion provided?
If YES, reference:
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

```
......No
``` If YES, is a rationale for its inclusion provided?

If YES, reference:
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

If YES, is a rationale for its inclusion provided?
If YES, reference:
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided?

If YES, reference:
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
If YES, reference:
12. Does the proposal contain characters with any special properties such as control function or similar semantics? No If YES, describe in detail (include attachment if necessary)
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:

Template for comments and secretariat observations
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1 & 2 & (3) & 4 & 5 & (6) & (7) \\
\hline MB \({ }^{1}\) & Clause No./ Subclause No./ Annex (e.g. 3.1) & Paragraph/ Figure/Table/ Note (e.g. Table 1) & Type of comment \(^{2}\) & Comment (justification for change) by the MB & Proposed change by the MB & Secretariat observations on each comment submitted \\
\hline HU & Clause 31 & Page 482180, Page 2185, Page 2188 & te & The term Old Hungarian is incorrect. The correct term is "Szekely-Hungarian Rovas". The term "Old Hungarian" is used for a completely different script, namely the medieval version of the Hungarian Latin-based orthography. See ISO/IEC JTC1/Sc2/WG2 N4120, Section 2.1 for the detailed reasoning (http://std.dkuug.dk/JTC1/sc2/wg2/docs/n4120.pdf) & Change the term "Old Hungarian" to "SzekelyHungarian Rovas" & \\
\hline HU & Annex G & Page 1379 & te & \begin{tabular}{l}
The proposed character set for the Szekely-Hungarian Rovas (with the incorrect name "Old Hungarian") is incorrect. Reasons: \\
1. The character repertoire is based on the outdated results of the palaeography in the early \(20^{\text {th }}\) century and some unscientific and popular web sites, on which information is unreliable and incorrect in many cases. Oppositely, the correct character repertoire must contain the contemporary and the historical Szekely-Hungarian Rovas characters, which are listed in the proposal of the Hungarian Standard Body; see ISO/IEC JTC1/SC2/WG2 N4007, Section 3.1, \\
http://std.dkuug.dk/JTC1/sc2/wg2/docs/n4007.pdf \\
2. The term "Old Hungarian" is already used by Hungarian linguists for denoting the medieval version of the Hungarian Latin-based script, which is wildly different to the Szekely-Hungarian Rovas script (for instance, see Ch. 3 of N4120 (2011-07-05)). \\
Therefore, using the term "Old Hungarian" for the Szekely-Hungarian Rovas is misleading. More details about the Old Hungarian script: \\
http://wiki.rovas.info/index.php/Old Hungarian script \\
3. The Szekely-Hungarian Rovas script has been developed ca. the end \(8^{h}\) c., in the Ancient Hungarian linguistic period ( \(1^{\text {st }}\) millennium \(B C-896\) AD), before the Old Hungarian linguistic period (896-1526).
\end{tabular} & The "Old Hungarian" block is unacceptable and unimprovable; therefore it must be completely changed to the character repertoire in the proposal of the Hungarian Standard Body, see ISO/IEC JTC1/SC2/WG2 N4007, Section 3.1, http://std.dkuug.dk/JTC1/sc2/wg2/docs/n4007.pdf & \\
\hline
\end{tabular}
\(1 \mathbf{M B}=\) Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editoria
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

Template for comments and secretariat observations
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1 & 2 & (3) & 4 & 5 & (6) & (7) \\
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\hline & & & & \begin{tabular}{l}
Consequently, using the name "Old Hungarian script" for an earlier script would be misleading. \\
4. Using the expression "Old Hungarian" for denoting the Szekely-Hungarian Rovas has no tradition either in Hungarian culture or in the script history. \\
Moreover, there are several arguments for the term "Szekely-Hungarian Rovas": \\
5. The variety of traditional names for this script usually contains adjectives; the most frequent ones being "Szekely" and "Hungarian". Therefore, the widely accepted name "Szekely-Hungarian Rovas" correctly reflects the traditional naming. The Hungarian ethnic group Szekelys played a key role in preserving the tradition of Szekely-Hungarian Rovas and regard this script as key part of their identity. \\
6. Throughout history, the term Rovas has been widely used, moreover having found common use in the Hungarian language today. Although the term "Rovas" is of Hungarian-origin, it has been widely used in numerous languages; see in the Ch. 4 of N4120 (2011-07-05). \\
7. The Rovas using community organized the "Living Rovas" Conference in 2008, in Hungary, which was the largest ever Rovas user/researcher meeting. At this conference, after a detailed discussion, the attendance made the resolution that the English name of the script is "Szekely-Hungarian Rovas" being the correct translation of the appropriate Hungarian term "székely-magyar rovás". \\
8. The term "Rovas" is a category name; three related scripts belong to this script family, namely: SzekelyHungarian Rovas, Carpathian Basin Rovas (see
\end{tabular} & & \\
\hline
\end{tabular}

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

Template for comments and secretariat observations
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\hline 1 & 2 & (3) & 4 & 5 & (6) & (7) \\
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\hline & & & & \begin{tabular}{l}
N4144, 2011-10-12), and Khazarian Rovas (see N4145, 2011-10-12). The close relation of Carpathian Basin Rovas to Szekely-Hungarian Rovas has been shown by linguist and Turkologist Gyula Németh in 1932. Moreover, according to the archaeologisthistorian István Erdélyi, the Khazarian Rovas is related to Carpathian Basin Rovas and SzekelyHungarian Rovas. More details about the Rovas script family: \\
http://wiki.rovas.info/index.php/Rovas Script Family \\
9. The research into the field of the Rovas scripts are mainly published in Hungarian and only little information is available in English. Consequently, the English databases are outdated in most cases. Especially, the results of the last 2-3 decades are missing from western literature as only a small portion of the Hungarian publications on this topic have been translated. The contributions of the Hungarian NB use and refer to the results of international and the Hungarian scholars. \\
10. The proposed character names are incorrect. These are based on few medieval relics. However, the characters of this script have well accepted names both in scientific and popular literature. The main reason for encoding the Szekely-Hungarian Rovas script is for present-day use, therefore, the contemporary character names of the letters has to be used in the standard. The archaic character names used in the N4110 resolution shows an outdated state of the Rovas-related paleography of the early \(20^{\text {th }}\) century. During that time, a SzekelyHungarian Rovas relic, the so-called Nikolsburg Alphabet was the only significant Rovas relic. Based on this, only a static view of the Szekely-Hungarian Rovas scripts existed in the early \(20^{\text {th }}\) century.
\end{tabular} & & \\
\hline
\end{tabular}

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2 Type of comment: ge = general te = technical ed = editorial
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\hline & & & & \begin{tabular}{l}
However, after exploring several archaeological finds in the \(20^{\text {th }}-21^{\text {st }}\) centuries, several earlier Rovas relics where found, making possible further advances of Rovas script history. \\
11. Another essential condition to be considered is the vital present-day use of the Szekely-Hungarian Rovas orthography. The user base of the SzekelyHungarian Rovas is represented in every country in Europe where Hungarian populations exist and in the global Hungarian community as well. Currently, in every part of the Hungarian society including the state administration, the number of SzekelyHungarian Rovas users is dynamically increasing. This strong and conscious user support is clearly manifested, as in the Hungarian NB professional and civil Rovas stakeholders officially support the three Rovas proposals - the Szekely-Hungarian Rovas (N4007), the Carpathian Basin Rovas (N4144), and the Khazarian Rovas (N4145).
\end{tabular} & & \\
\hline HU & Clause 31 & \[
\begin{aligned}
& \text { Page 48- } \\
& 2180, \text { Page } \\
& 2185, \text { Page } \\
& 2188
\end{aligned}
\] & ge & The term Old Hungarian is false. The right term is "Szekely-Hungarian Rovas". The term "Old Hungarian" is used for a fully different script, the Medieval version of the Hungarian Latin-based orthography. See ISO/IEC JTC1/Sc2/WG2 N4120, Section 2.1 for detailed reasoning (http://std.dkuug.dk/JTC1/sc2/wg2/docs/n4120.pdf) & Changing "Old Hungarian" to "Szekely-Hungarian Rovas" & \\
\hline HU & Annex G & Page 1379 & ge & \begin{tabular}{l}
The proposed character set for the Szekely-Hungarian Rovas (with false name: "Old Hungarian") is wrong. Reasons: \\
12. The character repertoire is based on the outdated results of the palaeography in the mid- \(20^{\text {th }}\) century and some unscientific, popular web sites, of which information is unreliable and incorrect in many cases. Oppositely, the right character repertoire must contain the contemporary and the historically
\end{tabular} & The "Old Hungarian" block is unacceptable and unimprovable; therefore it must be totally change to the character repertoire in the proposal of the Hungarian Standard Body, See ISO/IEC JTC1/Sc2/WG2 N4007, Section 3.1, http://std.dkuug.dk/JTC1/sc2/wg2/docs/n4007.pdf & \\
\hline
\end{tabular}

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Template for comments and secretariat observations
\begin{tabular}{|c|c|c|c|c|c|c|}
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\hline & & & & \begin{tabular}{l}
Szekely-Hungarian Rovas characters, which are listed in the proposal of the Hungarian Standard Body, See ISO/IEC JTC1/Sc2/WG2 N4007, Section 3.1, \\
http://std.dkuug.dk/JTC1/sc2/wg2/docs/n4007.pdf \\
13. The proposed character names are wrong. These are based on a few medieval relics; however, the characters of this script have generally used names.
\end{tabular} & & \\
\hline
\end{tabular}

1 MB = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10

\section*{Irish comments on ISO/IEC PDAM 1.2 10646:2011}

Reference: SC2 N4201
Closes: 2011-10-29
Date: 2011-10-25
Ireland disapproves the draft with the technical and editorial comments given below. Acceptance of these comments and appropriate changes to the text will change our vote to approval. In the attached charts, characters proposed to be added to the PDAM are coloured in yellow, and characters whose names are proposed to be changed are coloured in blue. Characters which have been proposed to be moved have "• was xxxx" in the names list indicating their code position in PDAM 1.2.

T1. Page 52, Row 2B0: Miscellaneous Symbols and Arrows. Ireland recommends the removal of the following characters from this table (to be moved elsewhere):

2BA3, 2BA4, 2BA5, 2BA6, 2BA7, 2BA8, 2BA9, 2BAA
2BBE, 2BBF
2BC3, 2BC4, 2BCB, 2BCD
2BD0, 2BD1, 2BD2, 2BD3, 2BD4, 2BD5, 2BD6, 2BD7, 2BD8, 2BD9, 2BDA, 2BDB
2BE0, 2BE1, 2BE2, 2BE3, 2BE4, 2BE5, 2BE6, 2BE7, 2BE9, 2BEA, 2BEB, 2BEC, 2BED, 2BEE, 2BEF,
2BF0, 2BF1, 2BF2, 2BF3
b) Ireland recommends moving the following characters to this table:

1F800, 1F801, 1F802, 1F803, 1F804, 1F805, 1F806, 1F807, 1F808, 1F809, 1F80A, 1F80B, 1F80C, 1F80D, 1F80E, 1F80F
1F810, 1F811, 1F812, 1F813, 1F814, 1F815, 1F818, 1F819, 1F81A, 1F81B, 1F81C, 1F81D, 1F81E, 1F81F
1F820, 1F821, 1F822, 1F823, 1F824, 1F825, 1F826, 1F827
1F834, 1F835
1F878, 1F879, 1F87A, 1F87B, 1F87C, 1F87D
1F880, 1F881, 1F882, 1F883, 1F884, 1F885, 1F886, 1F887, 1F888, 1F889
c) Ireland recommends adding the following new characters to this table:
```

2B74 LEFT RIGHT TRIANGLE-HEADED ARROW TO BAR
2B75 UP DOWN TRIANGLE-HEADED ARROW TO BAR
2B77 NORTH EAST TRIANGLE-HEADED ARROW TO BAR
2B79 SOUTH WEST TRIANGLE-HEADED ARROW TO BAR
2B7A LEFTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE HORIZONTAL
STROKE
2B7C RIGHTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE HORIZONTAL
STROKE
2B81 UPWARDS TRIANGLE-HEADED ARROW LEFTWARDS DOWNWARDS
TRIANGLE-HEADED ARROW
2B82 RIGHTWARDS TRIANGLE-HEADED ARROW OVER LEFTWARDS TRIANGLE-
HEADED ARROW
2BDO UPWARDS TRIANGLE-HEADED ARROW WITH HEAVY SHAFT
2BD1 DOWNWARDS TRIANGLE-HEADED ARROW WITH HEAVY SHAFT

```
d) Ireland recommends ordering the characters in the table as shown below.

T2. Page 65, Row A72: Latin Extended-A. With reference to ISO/IEC JTC1/SC2/WG2 N4030R "Proposal for the addition of six Latin characters to the UCS", Ireland requests that the following characters be added to PDAM 1.2:

A796 LATIN CAPITAL LETTER B WITH FLOURISH
A797 LATIN SMALL LETTER B WITH FLOURISH
A7AB LATIN CAPITAL LETTER REVERSED OPEN E
A7AC LATIN CAPITAL LETTER SCRIPT G
A7F6 LATIN CAPITAL LETTER SIDEWAYS I
A7F7 LATIN SMALL LETTER SIDEWAYS I
T3. Page 65, Row A72: Latin Extended-A. Ireland reiterates its strong support for the encoding of A79F LATIN LETTER MIDDLE DOT in this table.

T4. Page 71, Row FE2: Combining Half Marks. With reference to ISO/IEC JTC1/SC2/WG2 N4130R "Proposal for encoding the Caucasian Albanian script in the SMP of the UCS", Ireland requests that the character at FE2B COMBINING CONJOINING MACRON BELOW be moved to FE2D.
b) Ireland also requests that the following characters be added to PDAM 1.2:

FE2B COMBINING MACRON LEFT HALF BELOW
FE2C COMBINING MACRON RIGHT HALF BELOW

T5. Page 98, Row 11AC: Pau Cin Hau. Ireland requests that the inherent vowel -A be added to the names of the characters from 11AC0 through 11AD4. The assertions given by the author of N4017 for this were not sufficient to omit a vowel from the character names, as is the normal practice for UCS names for scripts of this region. In fact, the use of an -a does not imply that there is an inherent vowel in the alphabet (any more than -e implies that there is an inherent vowel in Old Italic. Ireland strongly prefers to use the transliteration names as attested in Figures 2 and 8 of N4017. We do not request a change to the names of the final consonants, as the proposed names are congruent with other names of similar characters in the UCS.

T6. Page 113, Row 1F30: Miscellaneous Symbols and Pictographs. Ireland recommends adding the following new characters to this table:
```

1F395 BOUQUET OF FLOWERS
1F397 BEAMED DESCENDING MUSICAL NOTES
1F569 RIGHT SPEAKER WITH ONE SOUND WAVE
1F56A RIGHT SPEAKER WITH THREE SOUND WAVES
1F596 REVERSED VICTORY HAND
1F597 REVERSED HAND WITH MIDDLE FINGER EXTENDED
1F598 RAISED HAND WITH PART BETWEEN MIDDLE AND RING FINGERS
1F5DF DECREASE FONT SIZE SYMBOL

```
b) Ireland recommends changing the 1F581 BLACK ENVELOPE WITH WHITE LIGHTNING to ENVELOPE WITH LIGHTNING. There is no inherent necessity for there to be "blackness"
in the envelope or "whiteness" in the lightning. The essential concept of this symbol is "electronic mail". The essential glyphs here are those of an envelope (which is white) and of 26A1 HIGH VOLTAGE SIGN (which is black).
c) Ireland recommends using a reversed 270D WRITING HAND glyph for 1F58A LEFT WRITING HAND.
d) Ireland recommends basing the glyph for 1F5DB BLACK FOLDER on the glyph for 1F5DA FOLDER.
e) Ireland recommends ordering the characters in the table as shown below.

T7. Page 128, Row 1F65: Ornament Symbols. Ireland requests the change of the block name to "Ornamental Dingbats"; these characters are dingbats, not symbols for things.
b) Ireland requests that 2BBE and 2BBF be moved into this table.
c) Ireland requests that the word POINTING be added to the names of 1F650, 1F651, 1F652, 1F653, 1F654, 1F655, 1F656, 1F657.
d) Ireland requests that the word ORNAMENT be added to the names of 1F670, 1F671, 1F672, 1F673, 1F674, 1F675. The word "ornaments" should also be added to the section headings.
e) Ireland recommends adding the following new character to this table:

\section*{1F678 SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT}
f) Ireland recommends ordering the characters in the table as shown below.

T8. Page 130, Row 1F68: Transport and Map Symbols. Ireland requests that 2BCB and 1F6E6 be moved into this table.
b) Ireland recommends ordering the characters in the table as shown below.

T9. Page 132, Row 1F78: Geometric Shapes Extended. Ireland recommends ordering the characters in the table as shown below.

T10. Page 136, Row 1F80: Supplemental Arrows-C. Ireland recommends the removal of the following characters from this table (to be moved elsewhere):

1F800, 1F801, 1F802, 1F803, 1F804, 1F805, 1F806, 1F807, 1F808, 1F809, 1F80A, 1F80B, 1F80C, 1F80D, 1F80E, 1F80F
1F810, 1F811, 1F812, 1F813, 1F814, 1F815, 1F818, 1F819, 1F81A, 1F81B, 1F81C, 1F81D, 1F81E, 1F81F
1F820, 1F821, 1F822, 1F823, 1F824, 1F825, 1F826, 1F827
1F834, 1F835
1F878, 1F879, 1F87A, 1F87B, 1F87C, 1F87D
1F880, 1F881, 1F882, 1F883, 1F884, 1F885, 1F886, 1F887, 1F888, 1F889
b) Ireland recommends moving the following characters to this table:

2BA3, 2BA4, 2BA5, 2BA6, 2BA7, 2BA8, 2BA9, 2BAA
2BD0, 2BD1, 2BD2, 2BD3, 2BD4, 2BD5, 2BD6, 2BD7, 2BD8, 2BD9, 2BDA, 2BDB 2BE0, 2BE1, 2BE2, 2BE3, 2BE4, 2BE5, 2BE6, 2BE7
c) Ireland recommends adding the following new characters to this table:

1 F801 UPWARDS TRIANGLE-HEADED ARROW WITH NARROW SHAFT
1F803 DOWNWARDS TRIANGLE-HEADED ARROW WITH NARROW SHAFT
1F805 UPWARDS TRIANGLE-HEADED ARROW WITH MEDIUM SHAFT
1F807 DOWNWARDS TRIANGLE-HEADED ARROW WITH MEDIUM SHAFT
1F809 UPWARDS TRIANGLE-HEADED ARROW WITH BOLD SHAFT
1F80B DOWNWARDS TRIANGLE-HEADED ARROW WITH BOLD SHAFT
1F80D UPWARDS TRIANGLE-HEADED ARROW WITH VERY HEAVY SHAFT
1F80F DOWNWARDS TRIANGLE-HEADED ARROW WITH VERY HEAVY SHAFT
1F811 UPWARDS FINGER-POST ARROW
1 F813 DOWNWARDS FINGER-POST ARROW
d) Ireland recommends ordering the characters in the table as shown below.

E1. Page 21, Row 090: Devanagari. Ireland requests to know why the dotted circle has been removed from the glyph 0903 DEVANAGARI SIGN VISARGA.

E2. Page 30, Row 0D0: Malayalam. Ireland recommends that the missing dotted circles for 0D44, 0D4E, and 0D62 be restored.

E3. Page 47, Row 230: Miscellaneous Technical. Ireland requests that the annotations for 23F4, 23F5, 23F6, and 23F7 be changed to simple cross-references to 25C0, 25B6, 25B2, and \(25 B C\) respectively. The choice of isosceles right triangle and equilateral triangle for these audio and video navigation functions is surely a matter of choice of the implementor. We request therefore that reciprocal annotations be placed in the Geometric Shapes block.

E4. Page 47, Row 230: Miscellaneous Technical. Ireland suggests that a cross reference to 2016 DOUBLE VERTICAL LINE be placed at 23F8, and vice-versa.

E5. Page 48, Row 270: Dingbats. Ireland suggests that the chart glyph for 2700 BLACK SAFETY SCISSORS be modified to look more "safety-like" and somewhat less like the glyph for 2702.

E6. Page 52, Row 2B0: Miscellaneous Symbols and Arrows. Ireland recommends the correction of the misspelling "overal" to "overall" for 2B4F.


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(http://www.unicode.org/unibook/)

\section*{Triangle－headed zigzag arrow}

2B4D 々 DOWNWARDS TRIANGLE－HEADED ZIGZAG ARROW
\(=\mathrm{w}-3055\)
\(\rightarrow 21 \mathrm{AF} \Varangle\) downwards zigzag arrow
－was 2 b96

\section*{Intonation marks for Lithuanian dialectology \\ 2B4E \(t\) SHORT NORTH EAST ARROW \\ －slight rise in tone \\ 2B4F 」 SHORT SOUTH EAST ARROW \\ －slight fall or overall fall in tone when at the end of a word or at the beginning of a phrase respectively}

\section*{Intonation marks for Lithuanian dialectology}

2B5A \(\rho\) NORTH EAST ARROW WITH HOOKED HEAD
－increasing tone with falling trend at the end
2B5B \(\urcorner\) SOUTH EAST ARROW WITH HOOKED TAIL
－sharp rise and fall in tone
2B5C \(\quad\) NORTH EAST ARROW WITH HORIZONTAL TAIL
－continued rise in tone
2B5D 7 SOUTH EAST ARROW WITH HORIZONTAL TAIL
－continued fall in tone
2B5E \(~ \sim ~ B E N T ~ A R R O W ~ P O I N T I N G ~ D O W N W A R D S ~ T H E N ~\) NORTH EAST
－sharp fall in tone with rising trend at the end
2B5F \＆SHORT BENT ARROW POINTING DOWNWARDS
THEN NORTH EAST
－slight fall in tone with rising trend at the end
Simple triangle－headed arrows
2B60 \(\leftarrow\) LEFTWARDS TRIANGLE－HEADED ARROW \(=\mathrm{w}\)－3033
\(\rightarrow 2190 \leftarrow\) leftwards arrow
－was 2 b 68
2B61 \(\uparrow\) UPWARDS TRIANGLE－HEADED ARROW \(=\mathrm{w}-3035\)
\(\rightarrow 2191 \uparrow\) upwards arrow
－was 2b6A
2B62 \(\rightarrow\) RIGHTWARDS TRIANGLE－HEADED ARROW
\(=\mathrm{w}-3034\)
\(\rightarrow\) 279D \(\rightarrow\) triangle－headed rightwards arrow
\(\rightarrow 2192 \rightarrow\) rightwards arrow
－was 2b6A
2B63 \(\downarrow\) DOWNWARDS TRIANGLE－HEADED ARROW ＝w－3036
\(\rightarrow 2193 \downarrow\) downwards arrow
－was 2b6B
2B64 \(\leftrightarrow\) LEFT RIGHT TRIANGLE－HEADED ARROW \(=\mathrm{w}\)－3049
\(\rightarrow 2194 \leftrightarrow\) left right arrow
－was 2b6C
2B65 \(\uparrow\) UP DOWN TRIANGLE－HEADED ARROW \(=\mathrm{w}-3050\)
\(\rightarrow 2195 \uparrow\) up down arrow
－was 2b6D

2B66 ₹ NORTH WEST TRIANGLE－HEADED ARROW
＝w－3037
\(\rightarrow 2196\)＜north west arrow
－was 2b6E
2B67 \(\nearrow\) NORTH EAST TRIANGLE－HEADED ARROW ＝w－3038
\(\rightarrow 2197\) 入 north east arrow
－was 2b6F
2 B 68 〉 SOUTH EAST TRIANGLE－HEADED ARROW ＝w－3040
\(\rightarrow 2198\) south east arrow
－was 2b71
2B69 \(\swarrow\) SOUTH WEST TRIANGLE－HEADED ARROW \(=\mathrm{w}\)－3039
\(\rightarrow 2199 \swarrow\) south west arrow
－was 2b70

\section*{Triangle－headed dashed arrows}

2B6A \(\quad \cdots\) LEFTWARDS TRIANGLE－HEADED DASHED ARROW
＝w－3051
\(\rightarrow 21 E 0 \leftrightarrow \cdots\) leftwards dashed arrow
－was 2b72
2B6B \(\uparrow\) UPWARDS TRIANGLE－HEADED DASHED ARROW
\(=\mathrm{w}-3053\)
\(\rightarrow 21 \mathrm{E} 1 \hat{\text { i }}\) upwards dashed arrow
－was 2 b 73
2B6C \(\rightarrow\) RIGHTWARDS TRIANGLE－HEADED DASHED ARROW
\(=\mathrm{w}-3052\)
\(\rightarrow 21 \mathrm{E} 2 \rightarrow\) rightwards dashed arrow
－was 2b74
2B6D \(\ddagger\) DOWNWARDS TRIANGLE－HEADED DASHED ARROW
＝w－3054
\(\rightarrow 21 \mathrm{E} 3\) downwards dashed arrow
－was 2 b 75
2B6E U CLOCKWISE TRIANGLE－HEADED OPEN CIRCLE ARROW
\(=\mathrm{w}-3080\)
\(\rightarrow 21 \mathrm{BB} \cup\) clockwise open circle arrow
－was 2 bA 0
2B6F U ANTICLOCKWISE TRIANGLE－HEADED OPEN CIRCLE ARROW
\(=\mathrm{w}-3081\)
\(\rightarrow 21 \mathrm{BA} \cup\) anticlockwise open circle arrow
－was 2bA1

\section*{Triangle－headed arrows to bar}

2B70 \(\leftarrow\) LEFTWARDS TRIANGLE－HEADED ARROW TO BAR
＝ w －3041
\(=\) left tab
\(\rightarrow 21 \mathrm{E} 4 \leftarrow\) leftwards arrow to bar
－was 2 b 86
2B71 \(\bar{\uparrow}\) UPWARDS TRIANGLE－HEADED ARROW TO BAR \(=\mathrm{w}\)－3043
\(=\) up tab
\(\rightarrow 2912 \uparrow\) upwards arrow to bar
－was 2 b 88
\begin{tabular}{|c|c|c|c|c|c|}
\hline 2B72 & \(\rightarrow 1\) & \begin{tabular}{l}
RIGHTWARDS TRIANGLE-HEADED ARROW TO BAR
\[
=\mathrm{w}-3042
\] \\
\(=\) right tab \\
\(\rightarrow 21 \mathrm{E} 5 \rightarrow\) rightwards arrow to bar \\
- was 2 b 87
\end{tabular} & 2 B 83 & \(\downarrow \uparrow\) & \begin{tabular}{l}
DOWNWARDS TRIANGLE-HEADED ARROW \\
LEFTWARDS OF UPWARDS TRIANGLE-HEADED ARROW
\[
=\mathrm{w}-3069
\] \\
\(\rightarrow 21 \mathrm{C} 6 \leftrightarrows\) leftwards arrow over rightwards arrow \\
- was 2 b 8 F
\end{tabular} \\
\hline \(2 \mathrm{B73}\) & \(\pm\) & \begin{tabular}{l}
DOWNWARDS TRIANGLE-HEADED ARROW TO BAR
\[
=\mathrm{w}-3044
\] \\
= down tab \\
\(\rightarrow 2913 \downarrow\) downwards arrow to bar \\
- was 2b89
\end{tabular} & \(2 B 84\)
\(2 B 85\) & F
\(\uparrow \uparrow\) & \begin{tabular}{l}
LEFTWARDS TRIANGLE-HEADED PAIRED ARROWS \\
= w-3072 \\
\(\rightarrow 21 \mathrm{C7} \leftleftarrows\) leftwards paired arrows \\
- was 2 b 92 \\
UPWARDS TRIANGLE-HEADED PAIRED
\end{tabular} \\
\hline 2B74 & \(\stackrel{\text { 1 }}{ }\) & LEFT RIGHT TRIANGLE-HEADED ARROW TO
BAR & & & ARROWS
\[
=\mathrm{w}-3074
\] \\
\hline 2B75 & \[
\frac{\overline{\mathrm{I}}}{\overline{\mathrm{I}}}
\] & UP DOWN TRIANGLE-HEADED ARROW TO BAR & & & \(\rightarrow 21 \mathrm{C} 8 \uparrow \uparrow\) upwards paired arrows \\
\hline \[
2 B 76
\] & \[
\overline{\mathrm{x}}
\] & \begin{tabular}{l}
NORTH WEST TRIANGLE-HEADED ARROW TO BAR \\
\(=\mathrm{w}-3045\) \\
= home \\
- was 2b8A
\end{tabular} & 2B86 & \(\rightrightarrows\) & \begin{tabular}{l}
- was 2 b 94 \\
RIGHTWARDS TRIANGLE-HEADED PAIRED \\
ARROWS
\[
=\mathrm{w}-3073
\] \\
\(\rightarrow 21 \mathrm{C9} \rightrightarrows\) rightwards paired arrows
\end{tabular} \\
\hline 2B77 & \(\bar{\nearrow}\) & NORTH EAST TRIANGLE-HEADED ARROW TO BAR & & & - was 2 b 93 \\
\hline 2B78 & 】 & \begin{tabular}{l}
SOUTH EAST TRIANGLE-HEADED ARROW TO \\
BAR \\
\(=\mathrm{w}-3046\) \\
= end \\
- was 2 b 8 B
\end{tabular} & 2B87 & \(\downarrow\) & \begin{tabular}{l}
DOWNWARDS TRIANGLE-HEADED PAIRED ARROWS \\
\(=\mathrm{w}-3075\) \\
\(\rightarrow 21 \mathrm{CA} \downarrow \downarrow\) downwards paired arrows \\
- was 2 b 95 , with erroneous name "downtwards"
\end{tabular} \\
\hline 2B79 & \(\underline{1}\) & SOUTH WEST TRIANGLE-HEADED ARROW TO BAR & Cir & & arrows \\
\hline Tria & & -headed arrows with double & 2B88 & E & LEFTWARDS BLACK CIRCLED WHITE ARROW \(=\mathrm{w}-1219\) \\
\hline & & tal stroke & & & - was 2bAB \\
\hline 2B7A & + & LEFTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE HORIZONTAL STROKE & 2B89 & (1) & UPWARDS BLACK CIRCLED WHITE ARROW \(=\mathrm{w}-1221\) \\
\hline 2B7B & 手 & \begin{tabular}{l}
UPWARDS TRIANGLE-HEADED ARROW WITH DOUBLE HORIZONTAL STROKE
\[
=\mathrm{w}-3047
\] \\
= page up \\
- was 2b8C
\end{tabular} & 2B8A & \(\bigcirc\) & \begin{tabular}{l}
- was 2bAD \\
RIGHTWARDS BLACK CIRCLED WHITE ARROW
\[
=\mathrm{w}-1220
\] \\
\(\rightarrow 27 B 2\) circled heavy white rightwards arrow \\
- was 2bAC
\end{tabular} \\
\hline 2B7C & + & RIGHTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE HORIZONTAL STROKE & 2B8B & (1) & DOWNWARDS BLACK CIRCLED WHITE ARROW \(=\mathrm{w}-1222\) \\
\hline 2B7D & \(\ddagger\) & DOWNWARDS TRIANGLE-HEADED ARROW WITH DOUBLE HORIZONTAL STROKE
\[
\begin{aligned}
& =\mathrm{w}-3048 \\
& =\text { page down }
\end{aligned}
\] & Cu & & \begin{tabular}{l}
- was 2bAE \\
triangle-headed arrows
\end{tabular} \\
\hline & & - was 2b8D & 2B8C & \(\bigcirc\) & ANTICLOCKWISE TRIANGLE-HEADED RIGHT USHAPED ARROW \\
\hline Pai & & triangle-headed arrows & & & \[
=\mathrm{w}-3079
\] \\
\hline 2B7E & \(\xrightarrow{1!}\) & \begin{tabular}{l}
HORIZONTAL TAB KEY
\[
=\mathrm{w}-3070
\] \\
- was 2 b 90
\end{tabular} & 2B8D & \(\cup\) & \begin{tabular}{l}
- was 2 b 9 F \\
ANTICLOCKWISE TRIANGLE-HEADED BOTTOM U-SHAPED ARROW \(=w-3077\)
\end{tabular} \\
\hline 2B7F & \(\pm \uparrow\) & \begin{tabular}{l}
VERTICAL TAB KEY
\[
=\mathrm{w}-3071
\] \\
- was 2 b 91
\end{tabular} & 2B8E & G & \begin{tabular}{l}
- was 2b9D \\
ANTICLOCKWISE TRIANGLE-HEADED LEFT USHAPED ARROW
\end{tabular} \\
\hline 2B80 & \(\leftrightarrows\) & \begin{tabular}{l}
LEFTWARDS TRIANGLE-HEADED ARROW OVER RIGHTWARDS TRIANGLE-HEADED ARROW
\[
=\mathrm{w}-3068
\] \\
\(\rightarrow 21 \mathrm{C} 6 \leftrightarrows\) leftwards arrow over rightwards arrow \\
- was 2b8E
\end{tabular} & 2B8F & \(\Omega\) & \begin{tabular}{l}
\[
=\mathrm{w}-3078
\] \\
- was 2 b 9 E \\
ANTICLOCKWISE TRIANGLE-HEADED TOP USHAPED ARROW
\[
=\text { w-3076 }
\] \\
\(\rightarrow 21 \mathrm{B6} \curvearrowleft\) anticlockwise top semicircle arrow
\end{tabular} \\
\hline 2B81 & \(\uparrow \downarrow\) & UPWARDS TRIANGLE-HEADED ARROW LEFTWARDS DOWNWARDS TRIANGLEHEADED ARROW & & & - was 2b9C \\
\hline 2B82 & \(\rightleftarrows\) & RIGHTWARDS TRIANGLE-HEADED ARROW OVER LEFTWARDS TRIANGLE-HEADED ARROW & & & \\
\hline
\end{tabular}


Arrows with small triangle arrowhead
2B94 \(\leftarrow\) LEFTWARDS ARROW WITH SMALL TRIANGLE ARROWHEAD
= w-3153
- was 1 f 800

2 B95 \(\uparrow\) UPWARDS ARROW WITH SMALL TRIANGLE ARROWHEAD
\(=\mathrm{w}\)-3155
- was 1 f 802

2 B96 \(\rightarrow\) RIGHTWARDS ARROW WITH SMALL TRIANGLE ARROWHEAD
= w-3154
- was 1 f 801

2 B97 \(\downarrow\) DOWNWARDS ARROW WITH SMALL TRIANGLE ARROWHEAD
\(=\mathrm{w}-3156\)
- was 1 f 803

\section*{Arrows with medium triangle arrowhead}

2B98 \(\leftarrow\) LEFTWARDS ARROW WITH MEDIUM TRIANGLE ARROWHEAD
= w -3157
- was 1 f 804

2 B99 \(\uparrow\) UPWARDS ARROW WITH MEDIUM TRIANGLE ARROWHEAD
\(=\mathrm{w}-3159\)
- was 1 f 806

2B9A \(\rightarrow\) RIGHTWARDS ARROW WITH MEDIUM TRIANGLE ARROWHEAD
\(=\mathrm{w}-3158\)
- was 1 f 805

2B9B \(\downarrow\) DOWNWARDS ARROW WITH MEDIUM TRIANGLE ARROWHEAD
\(=\mathrm{w}-3160\)
- was 1 f 807

Arrows with large triangle arrowhead
\(2 B 9 C \leftarrow\) LEFTWARDS ARROW WITH LARGE TRIANGLE ARROWHEAD
\(=\mathrm{w}-3161\)
- was 1 f 808

2B9D \(\uparrow\) UPWARDS ARROW WITH LARGE TRIANGLE ARROWHEAD
= w-3163
- was \(1 \mathrm{f80A}\)

2B9E \(\rightarrow\) RIGHTWARDS ARROW WITH LARGE TRIANGLE ARROWHEAD
= w-3162
- was 1 f 809

2B9F \(\downarrow\) DOWNWARDS ARROW WITH LARGE TRIANGLE ARROWHEAD
= w -3164
- was 1 f 80 B

\section*{Triangle-headed arrows with bent tips}

2BAO \(\hookleftarrow\) DOWNWARDS TRIANGLE-HEADED ARROW WITH LONG TIP LEFTWARDS
= w-3056
\(\rightarrow\) 21B2 downwards arrow with tip leftwards
- was 2 b 76

2BA1 \(\hookrightarrow\) DOWNWARDS TRIANGLE-HEADED ARROW WITH LONG TIP RIGHTWARDS
\(=\mathrm{w}-3057\)
\(\rightarrow 21 \mathrm{~B} 3 \mathrm{~L}\) downwards arrow with tip rightwards
- was 2 b 77

2BA2 \(\neg\) UPWARDS TRIANGLE-HEADED ARROW WITH LONG TIP LEFTWARDS
= w-3058
\(\rightarrow 21 \mathrm{BO}\) ヶ upwards arrow with tip leftwards
- was 2 b 78

2BA3 \(\rightarrow\) UPWARDS TRIANGLE-HEADED ARROW WITH LONG TIP RIGHTWARDS
= w-3059
\(\rightarrow\) 21B1 「 upwards arrow with tip rightwards
- was 2 b 79

2BA4 \(\uparrow\) LEFTWARDS TRIANGLE-HEADED ARROW WITH LONG TIP UPWARDS
\(=\mathrm{w}-3060\)
\(\rightarrow 2\) B11 \(\uparrow\) leftwards arrow with tip upwards
- was 2b7A

2BA5 \(\rfloor\) RIGHTWARDS TRIANGLE-HEADED ARROW WITH LONG TIP UPWARDS \(=\mathrm{w}-3061\)
\(\rightarrow 2 \mathrm{BOF} \rightarrow\) rightwards arrow with tip upwards
- was 2b7B

2BA6 \(\ulcorner\) LEFTWARDS TRIANGLE-HEADED ARROW WITH LONG TIP DOWNWARDS
= w-3062
\(\rightarrow 2 \mathrm{~B} 10 \curvearrowleft\) leftwards arrow with tip downwards
- was 2b7C

2BA7 \(\beth\) RIGHTWARDS TRIANGLE-HEADED ARROW WITH LONG TIP DOWNWARDS
\(=\mathrm{w}-3063\)
\(\rightarrow 2 \mathrm{BOE} \neg\) rightwards arrow with tip downwards
- was 2b7D

\section*{Black curved arrows}

2BA8 \(\curvearrowleft\) BLACK CURVED DOWNWARDS AND LEFTWARDS ARROW
\(=\mathrm{w}-3201\)
- was 2b7E

2BA9 \(\quad \rightarrow\) BLACK CURVED DOWNWARDS AND RIGHTWARDS ARROW
\(=\mathrm{w}-3202\)
\(\rightarrow 27\) A5 \(\Rightarrow\) heavy black curved downwards and rightwards arrow
- was 2b7F

2BAA \(\curvearrowleft\) BLACK CURVED UPWARDS AND LEFTWARDS ARROW
\(=\mathrm{w}-3203\)
- was 2 b 80

2BAB \(\rightarrow\) BLACK CURVED UPWARDS AND RIGHTWARDS ARROW
\(=\mathrm{w}-3204\)
\(\rightarrow 27 \mathrm{~A} 6 \rightarrow\) heavy black curved upwards and rightwards arrow
- was 2 b 81

2BAC t BLACK CURVED LEFTWARDS AND UPWARDS ARROW
\(=\mathrm{w}-3205\)
- was 2 b82

2BAD \(\mathbf{j}\) BLACK CURVED RIGHTWARDS AND UPWARDS ARROW
= w-3206
- was 2 b 83

2BAE 〔 BLACK CURVED LEFTWARDS AND DOWNWARDS ARROW \(=\mathrm{w}\)-3207
- was 2 b 84

2BAF 〕 BLACK CURVED RIGHTWARDS AND DOWNWARDS ARROW
\(=\mathrm{w}-3208\)
- was 2 b 85

\section*{Arrows with small equilateral arrowhead}

2BBO \(\leftarrow\) LEFTWARDS ARROW WITH SMALL EQUILATERAL ARROWHEAD \(=\mathrm{w}\)-3137
- was 1 f 818

2BB1 \(\uparrow\) UPWARDS ARROW WITH SMALL EQUILATERAL ARROWHEAD
= w-3139
- was \(1 \mathrm{f81A}\)

2BB2 \(\rightarrow\) RIGHTWARDS ARROW WITH SMALL EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3138\)
- was 1 f 819

2BB3 \(\downarrow\) DOWNWARDS ARROW WITH SMALL EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3140\)
- was 1 f 81 B

\section*{Arrows with equilateral arrowhead}

2BB4 \(\leftarrow\) LEFTWARDS ARROW WITH EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3141\)
- was 1f81C

2BB5 \(\uparrow\) UPWARDS ARROW WITH EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3143\)
- was \(1 \mathrm{f8} 1 \mathrm{E}\)

2BB6 \(\rightarrow\) RIGHTWARDS ARROW WITH EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3142\)
- was 1f81D

2BB7 \(\downarrow\) DOWNWARDS ARROW WITH EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3144\)
- was \(1 \mathrm{f8} 1 \mathrm{~F}\)

\section*{Heavy arrows with equilateral arrowhead}

2BB8 \(\leftarrow\) HEAVY LEFTWARDS ARROW WITH EQUILATERAL ARROWHEAD = w-3145
- was 1 f 820

2BB9 \(\uparrow\)
HEAVY UPWARDS ARROW WITH EQUILATERAL ARROWHEAD \(=\mathrm{w}-3147\)
- was 1 f 822

2BBA \(\rightarrow\) HEAVY RIGHTWARDS ARROW WITH EQUILATERAL ARROWHEAD = w-3146
- was 1 f 821

2BBB \(\downarrow\) HEAVY DOWNWARDS ARROW WITH EQUILATERAL ARROWHEAD \(=\mathrm{w}\)-3148
- was 18823

Heavy arrows with large equilateral arrowhead
2BBC \(\leftarrow\) HEAVY LEFTWARDS ARROW WITH LARGE EQUILATERAL ARROWHEAD = w-3149
- was 1 f 824

2BBD 4 HEAVY UPWARDS ARROW WITH LARGE EQUILATERAL ARROWHEAD \(=\mathrm{w}-3151\)
- was 1 f 826

2BBE \(\rightarrow\) HEAVY RIGHTWARDS ARROW WITH LARGE EQUILATERAL ARROWHEAD \(=\mathrm{w}-3150\)
- was 1 f 825

2BBF \(\downarrow\) HEAVY DOWNWARDS ARROW WITH LARGE EQUILATERAL ARROWHEAD
\(=\mathrm{w}-3152\)
- was 1 f 827

\section*{Sans-serif arrows}

2BCO \(\leftarrow\) LEFTWARDS SANS-SERIF ARROW \(=\mathrm{w}-3102\)
\(\rightarrow 2190 \leftarrow\) leftwards arrow
- was 1f80C

2BC1 \(\uparrow\) UPWARDS SANS-SERIF ARROW = w-3104
\(\rightarrow 2191 \uparrow\) upwards arrow
- was 1f80E
\(2 B C 2 \rightarrow\) RIGHTWARDS SANS-SERIF ARROW = w-3103
\(\rightarrow 2192 \rightarrow\) rightwards arrow
- was 1f80D

2BC3 \(\downarrow\) DOWNWARDS SANS-SERIF ARROW \(=\mathrm{w}-3105\)
\(\rightarrow 2193 \downarrow\) downwards arrow
- was 1 f 80 F

2BC4 \(\leftrightarrow\) LEFT RIGHT SANS-SERIF ARROW = w-3110
\(\rightarrow 2194 \leftrightarrow\) left right arrow
- was 1 f814

2BC5 \(\downarrow\) UP DOWN SANS-SERIF ARROW \(=\mathrm{w}-3111\)
\(\rightarrow 2195\) I up down arrow
- was 1 f 815

2BC6 \(\approx\) NORTH WEST SANS-SERIF ARROW = w-3106
\(\rightarrow 2196\) < north west arrow
- was \(1 \mathrm{f810}\)
\begin{tabular}{|c|c|c|}
\hline \(2 \mathrm{BC7}\) & \(\lambda\) & NORTH EAST SANS－SERIF ARROW \(=\mathrm{w}-3107\) \\
\hline & & \begin{tabular}{l}
\(\rightarrow 2197\) 〕 north east arrow \\
－was \(1 \mathrm{f811}\)
\end{tabular} \\
\hline 2BC8 & \(\downarrow\) & SOUTH EAST SANS－SERIF ARROW \(=\mathrm{w}-3109\) \\
\hline & & \begin{tabular}{l}
\(\rightarrow 2198 \searrow\) south east arrow \\
－was 1f813
\end{tabular} \\
\hline 2BC9 & \(\swarrow\) & SOUTH WEST SANS－SERIF ARROW \(=\mathrm{w}-3108\) \\
\hline & & \(\rightarrow 2199\) « south west arrow \\
\hline
\end{tabular}

\section*{Triangle headed arrows with heavy shaft}

Vertical alignment and thickness of the shaft fragments is compatible with heavy shaft arrows
2BCA - LEFTWARDS TRIANGLE－HEADED ARROW WITH HEAVY SHAFT
\(=\mathrm{w}-3171\)
－was 1f834
2BCB－HEAVY ARROW SHAFT WIDTH ONE \(=\mathrm{w}-3172\)
－was 1f87A
2BCC－HEAVY ARROW SHAFT WIDTH TWO THIRDS \(=\mathrm{w}-3173\)
－was 1f87B
2BCD • HEAVY ARROW SHAFT WIDTH ONE HALF ＝w－3174
－was 1f87C
2BCE • HEAVY ARROW SHAFT WIDTH ONE THIRD \(=\mathrm{w}-3175\)
－was 1f87D
2BCF \(\rightarrow\) RIGHTWARDS TRIANGLE－HEADED ARROW WITH HEAVY SHAFT
\(=\mathrm{w}-3176\)
－was \(1 \mathrm{f835}\)
2BDO 1 UPWARDS TRIANGLE－HEADED ARROW WITH HEAVY SHAFT
2BD1 】 DOWNWARDS TRIANGLE－HEADED ARROW WITH HEAVY SHAFT

\section*{White rectangular arrows}

Vertical alignment and thickness of the shaft fragments is compatible with white rectangular arrows
2BD2 今 UPWARDS WHITE RECTANGULAR ARROW \(=\mathrm{w}-1241\)
\(\rightarrow 21\) E7 介 upwards white arrow
－was 1f882
2BD3 』 DOWNWARDS WHITE RECTANGULAR ARROW
\(=\mathrm{w}-1242\)
\(\rightarrow 21\) E9 』 downwards white arrow
－was 1 f 883
2BD4 \(\Leftrightarrow\) LEFT RIGHT WHITE RECTANGULAR ARROW \(=\mathrm{w}-1243\)
\(\rightarrow 2 \mathrm{~B} 04 \Leftrightarrow\) left right white arrow
－was \(1 \mathrm{f888}\)
2BD5 令 UP DOWN WHITE RECTANGULAR ARROW \(=\mathrm{w}-1244\)
\(\rightarrow 21\) F3 \(介\) up down white arrow
－was 1 f 889

2BD6 \(\diamond\) NORTH WEST WHITE RECTANGULAR ARROW \(=\mathrm{w}-1245\)
\(\rightarrow 2 \mathrm{~B} 01 \nabla\) north west white arrow
－was 1 f 884
2 BD7 \(\curvearrowright ~ N O R T H ~ E A S T ~ W H I T E ~ R E C T A N G U L A R ~ A R R O W ~\) \(=\mathrm{w}-1246\)
\(\rightarrow 2 \mathrm{BOO} \Omega\) north east white arrow
－was 1f885
2BD8 § SOUTH EAST WHITE RECTANGULAR ARROW \(=\mathrm{w}-1248\)
\(\rightarrow 2 \mathrm{~B} 02 』\) south east white arrow
－was 1 f 887
2BD9 « SOUTH WEST WHITE RECTANGULAR ARROW \(=\mathrm{w}-1247\)
\(\rightarrow 2 \mathrm{BO} 0\)
－was 1 f 886
2BDA \(\diamond\) LEFTWARDS WHITE RECTANGULAR ARROW \(=\mathrm{w}-1239\)
\(\rightarrow 21 \mathrm{E} 6 \curvearrowleft\) leftwards white arrow
－was 1 f880
2BDB ㅁ WHITE RECTANGULAR ARROW SHAFT WIDTH ONE
\(=\mathrm{w}-1249\)
－was 1 f 878
2BDC－WHITE RECTANGULAR ARROW SHAFT WIDTH TWO THIRDS
＝w－1250
－was 1 f 879
2 BDD \(\Rightarrow\) RIGHTWARDS WHITE RECTANGULAR ARROW \(=\mathrm{w}-1240\)
\(\rightarrow 21\) E8 \(\Rightarrow\) rightwards white arrow
－was 1 f881

\section*{Keyboard symbol}

2BDE 令 UPWARDS WHITE RECTANGULAR ARROW FROM BAR
\(=\mathrm{w}-3088\)
＝caps lock
－may also be a shift lock
\(\rightarrow 21 \mathrm{EA}\) 亿 upwards white arrow from bar
－was 2bF4
2BDF 合 UPWARDS WHITE RECTANGULAR ARROW FROM BAR WITH HORIZONTAL BAR
\(=\mathrm{w}-3089\)
＝caps lock
\(\rightarrow 21 \mathrm{EC} \AA\) upwards white arrow on pedestal with horizontal bar
－was 2b4D

\section*{Ribbon arrows}

2BEO \(\langle\stackrel{y}{*}\) RIBBON ARROW DOWN LEFT
\(=\mathrm{w}-1195\)
－was 2 b 60
2BE1 \(\quad \stackrel{\text { ribBON ARROW DOWN RIGHT }}{ }\)
\(=\mathrm{w}-1196\)
－was 2 b 61
2BE2 ヶे RIBBON ARROW UP LEFT
＝w－1197
－was 2 b 62
2BE3 \(\overrightarrow{\mathrm{A}}\) RIBBON ARROW UP RIGHT
\(=\mathrm{w}-1198\)
－was 2b63

2BE4 \＆RIBBON ARROW LEFT UP
＝ \(\mathrm{w}-1199\)
－was 2 b 64
2BE5 \(\hat{\boldsymbol{y}}\) RIBBON ARROW RIGHT UP
\(=\mathrm{w}-1200\)
－was 2 b 65
2BE6 RIBBON ARROW LEFT DOWN
\(=\mathrm{w}-1201\)
－was 2 b 66
2BE7 रुे RIBBON ARROW RIGHT DOWN
\(=\mathrm{w}-1202\)
－was 2 b 67

\section*{Notched arrows}

2BE8 \(\quad\) LEFTWARDS ARROW WITH NOTCHED TAIL \(=\mathrm{w}-3185\)
－was 2 bDC
2BE9 UPWARDS ARROW WITH NOTCHED TAIL ＝w－3187
－was 2bDE
2BEA \(\Rightarrow\) RIGHTWARDS ARROW WITH NOTCHED TAIL ＝w－3186
\(\rightarrow 27 \mathrm{AF} \Rightarrow\) notched lower right－shadowed white rightwards arrow
－was 2bDD
2BEB DOWNWARDS ARROW WITH NOTCHED TAIL
＝w－3188
－was 2 bDF

\section*{Cusp shapes}

2BEC \(\diamond\) WHITE FOUR POINTED CUSP
\(=\mathrm{w}-1178\)
\(\rightarrow 2727 \diamond\) white four pointed star
－was 2bC5
2BED \(\neg\) ROTATED WHITE FOUR POINTED CUSP \(=\mathrm{w}-1179\)
\(\rightarrow 2311\) square lozenge
－was 2bC6
2BEE \(\uparrow\) LIGHT FOUR POINTED BLACK CUSP \(=\mathrm{w}-2246\)
\(\rightarrow 2726 \rightarrow\) black four pointed star
－was 2bC7
2BEF ROTATED LIGHT FOUR POINTED BLACK CUSP ＝ w －2247
－was 2bC8

\section*{Miscellaneous arrow symbol}

2BFO Ł FOUR CORNER ARROWS CIRCLING ANTICLOCKWISE
\(=\mathrm{w}-0096\)
＝loop
－was 2bA2

\section*{Centred geometric shapes}

2BF1－BLACK SQUARE CENTRED ＝w－2190
－was 2 bB 0 ，with name＂centered＂
2BF2 BLACK DIAMOND CENTRED ＝ w －2191
－was 2 bB 1 ，with name＂centered＂
2BF3 TURNED BLACK PENTAGON
\(=\mathrm{w}-2193\)
－was 2 bB 2

2BF4 HORIZONTAL BLACK OCTAGON ＝w－2196
＝black octagon 1
－was 2bB3
2BF5 BLACK OCTAGON ＝w－2197
＝black octagon 2
－was 2bB4
2BF6 \(\boldsymbol{\Delta}\) BLACK MEDIUM UP－POINTING TRIANGLE CENTRED ＝w－3129
－was 2bB5，with name＂centered＂
2BF7 BLACK MEDIUM RIGHT－POINTING TRIANGLE CENTRED
\(=\mathrm{w}-3132\)
－was 2 bB 8 ，with name＂centered＂
2BF8 \(\nabla\) BLACK MEDIUM DOWN－POINTING TRIANGLE CENTRED
＝w－3130
－was 2bB6，with name＂centered＂
2BF9
BLACK MEDIUM LEFT－POINTING TRIANGLE CENTRED
＝w－3131
－was 2bB7，with name＂centered＂

\section*{Half circles}

2BFA BOTTOM HALF BLACK CIRCLE ＝w－2189
－was 2bBA
2BFB－TOP HALF BLACK CIRCLE
\(=\mathrm{w}-2188\)
－was 2bB9

\section*{Target symbols}

2BFC © ROUND TARGET
\(=\mathrm{w}-1165\)
\(\rightarrow\) 25CE © bullseye
\(\rightarrow\) 29BE © circled white bullet
\(\rightarrow 2 \mathrm{~B} 57\) 〇 heavy circle with circle inside
－was 2 bBB
2BFD 回 SQUARE TARGET
\(=\mathrm{w}\)－2170
－was 2bBC
2BFE \(\diamond\) DIAMOND TARGET
＝w－2179
－was 2bBD

\section*{Position indicator}

2BFF 女 SQUARE POSITION INDICATOR
\(=\mathrm{w}-1176\)
\(=\) register square
\(\rightarrow 2316\) position indicator
－was 2bC9
元 1
```

Transliteration letter
A78F • LATIN LETTER MIDDLE DOT
- used for transliteration for Phags-Pa and
phonetic transcription for Tangut
\rightarrow 0 0 B 7 ~ \cdot ~ m i d d l e ~ d o t

```
Additions for Lithuanian dialectology
A794 G LATIN SMALL LETTER C WITH PALATAL HOOK
A795 h LATIN SMALL LETTER H WITH PALATAL HOOK
    \(\rightarrow A 727 \mathrm{~h}\) latin small letter heng
Additions for old Vietnamese
A796 B LATIN CAPITAL LETTER B WITH FLOURISH
A797 b LATIN SMALL LETTER B WITH FLOURISH

\section*{Archaic letters for Ewe}

A798 f LATIN CAPITAL LETTER F WITH STROKE
A799 f LATIN SMALL LETTER F WITH STROKE
- old Ewe orthography
- also used in German dialectology

\section*{Archaic letters for Volapük}

A79A J LATIN CAPITAL LETTER VOLAPUK AE
A79B u LATIN SMALL LETTER VOLAPUK AE
A79C U LATIN CAPITAL LETTER VOLAPUK OE
A79D \(\mathfrak{v}\) LATIN SMALL LETTER VOLAPUK OE
A79E \(\mathfrak{~ L}\) LATIN CAPITAL LETTER VOLAPUK UE
A79F u LATIN SMALL LETTER VOLAPUK UE

\section*{Additions for phonetic orthography}

A7AB 3 LATIN CAPITAL LETTER REVERSED OPEN E \(\rightarrow\) 025C 3 latin small letter reversed open e
A7AC 9 LATIN CAPITAL LETTER SCRIPT G \(\rightarrow 0261 \mathrm{~g}\) latin small letter script g
Additions for Celtic epigraphy
A7F6 \(ー\) LATIN CAPITAL LETTER SIDEWAYS I
A7F7 - - LATIN SMALL LETTER SIDEWAYS I





\section*{Weather symbols}

1F321 \＆THERMOMETER
＝temperature，warm
\(=\mathrm{w}-0225\)
－was 1f32D
1 F322 • BLACK DROPLET
\(=\) droplet
\(=\mathrm{w}\)－1083
\(\rightarrow\) 1F4A7 \(\Delta\) droplet
－was 1f32D
Plant symbols
1F336～HOT PEPPER
\(=\) hot
\(=\mathrm{w}-0044\)

\section*{Food symbol}

1F37D FORK AND KNIFE WITH BLACK PLATE
\(=\) dining
\(=\mathrm{w}-0228\)
\(\rightarrow\) 1F374 \(\uparrow\) f fork and knife
－was 1 f 37 E

\section*{Celebration symbols}

1F394－HEART WITH TIP ON THE LEFT
＝favorite
\(=\mathrm{w}-0089\)
\(\rightarrow 2665\) black heart suit
1F395 BOUQUET OF FLOWERS
＝occasion
\(=\mathrm{w}-0090\)
\(\rightarrow\) 1F490 第 bouquet
1F396 BEAMED ASCENDING MUSICAL NOTES
＝music，musical background
\(=\) musical performance
\(=\mathrm{w}-0175\)
－always ascending，unlike 266C 月
\(\rightarrow\) 266C F beamed sixteenth notes
－was 1f39D，with name＂musical performance＂
1F397 ふ BEAMED DESCENDING MUSICAL NOTES
－always descending，unlike 266C 月
\(\rightarrow\) 266C 月 beamed sixteenth notes
1F398 \＆REMINDER RIBBON
＝ w －0045
－was 1f3F5

\section*{Facial parts symbols}

1F441（8）EYE
\(=\) sight
\(=\mathrm{w}-0078\)

\section*{Shadowed geometric shapes}

1F53E \(\bigcirc\) LOWER RIGHT SHADOWED WHITE CIRCLE
＝ w －1109
＝circle shadow down
\(\rightarrow 274 \mathrm{D} \bigcirc\) shadowed white circle
－was 2 bC 3
1F53F O UPPER RIGHT SHADOWED WHITE CIRCLE
\(=\mathrm{w}-1166\)
\(\rightarrow 274 \mathrm{D} \bigcirc\) shadowed white circle
－was 2 bC 4

\section*{Religious symbols}
\begin{tabular}{|c|c|c|}
\hline 1F544 & 8 & \begin{tabular}{l}
NOTCHED RIGHT SEMICIRCLE WITH THREE DOTS \\
－Orthodox typikon for lower rank feast
\end{tabular} \\
\hline 1 F545 & Q & \begin{tabular}{l}
SYMBOL FOR CHAPTER MARKS \\
－Orthodox typikon for difficult sections
\end{tabular} \\
\hline 1 F546 & § & \[
\begin{aligned}
& \text { WHITE LATIN CROSS } \\
& =\text { cross outline } \\
& =\mathrm{w}-1085
\end{aligned}
\] \\
\hline \(1 F 547\) & † & \(\rightarrow 271 \mathrm{E}\) i shadowed white latin cros HEAVY LATIN CROSS
\[
=\mathrm{w}-2134
\] \\
\hline 1 F548 & \(\dagger\) & \[
\begin{aligned}
& \text { CELTIC CROSS } \\
& =\mathrm{w}-1087
\end{aligned}
\] \\
\hline 1F549 & ऊँ & \begin{tabular}{l}
\[
\begin{aligned}
& \text { OM SYMBOL } \\
& =\mathrm{w}-1092
\end{aligned}
\] \\
－devanagari font type independent \\
\(\rightarrow 0950\) ॐ \({ }^{\circ}\) devanagari om
\end{tabular} \\
\hline
\end{tabular}

Communication symbols
1F568＊RIGHT SPEAKER
\(=\) sound left
\(=\mathrm{w}-0087\)
－was \(1 \mathrm{f57C}\)
1F569（＊）RIGHT SPEAKER WITH ONE SOUND WAVE 1F56A（（r）RIGHT SPEAKER WITH THREE SOUND WAVES

\section*{Miscellaneous symbols}

1F56B \(\mathfrak{x}\) HAMMER AND SPANNER
＝tools，repair facility
＝w－0064
\(\rightarrow 2692\)＊hammer and pick
－was 1f3F6，with name＂crossed tools＂
1F56C 鼣 ROSETTE
\(=\mathrm{w}-1123\)
\(\rightarrow 2740\) white florette
－was 1 f 378
1F56D BLACK ROSETTE
\(=\mathrm{w}-1124\)
\(\rightarrow 2741\) eight petalled outlined black florette
－was 1 f 379
1F56E To WAVING WHITE FLAG
＝flag
＝ \(\mathrm{w}-1079\)
\(\rightarrow 2690 \triangleright\) white flag
－was 1 f 36 E
1F56F ß PENNANT
\(=\mathrm{w}-1080\)
\(\rightarrow\) 1F6A9 P triangular flag on post
－was 1f36F
1 F570 \＆RINGING BELL
＝ w －1037
\(\rightarrow\) 1F514 A bell
－was 1 f 36 B
1F571 \＆CANDLE
＝w－1039
－was 1 f 36 C
1F572 \(\underset{\times}{\otimes}\) BLACK SKULL AND CROSSBONES
＝skull and crossbones
\(=\mathrm{w}-1078\)
\(\rightarrow 2620\) skull and crossbones
－was 1f36D
\begin{tabular}{|c|c|}
\hline 1F573 & \begin{tabular}{l}
\[
\begin{aligned}
& \text { PORTABLE HOLE } \\
& =\mathrm{w}-0212 \\
& =\text { hole }
\end{aligned}
\] \\
－was 2 bCD ，with name＂oval shape with shadow＂
\end{tabular} \\
\hline \multicolumn{2}{|l|}{Animal symbols} \\
\hline 1F574（4） & \[
\begin{aligned}
& \text { SPIDER } \\
& =\mathrm{w}-0033 \\
& \text { - was } 1 \mathrm{f} 370
\end{aligned}
\] \\
\hline 1 F 575 娄 & \begin{tabular}{l}
SPIDER WEB \\
\(=\mathrm{w}-0034\) \\
－was 1 f 371
\end{tabular} \\
\hline \multicolumn{2}{|l|}{Communication symbols} \\
\hline 1 F 580 ¢ & \begin{tabular}{l}
LEFT HAND TELEPHONE RECEIVER \\
＝phone \\
\(=\mathrm{w}-0197\) \\
\(\rightarrow\) 1F4DE \(\boldsymbol{\jmath}\) telephone receiver \\
－was 1f57D
\end{tabular} \\
\hline 1F581 2 & \begin{tabular}{l}
RIGHT HAND TELEPHONE RECEIVER \\
\(=\) telephone handset \\
\(=\mathrm{w}\)－2040 \\
－was 1 f589
\end{tabular} \\
\hline 1 F 82 䦫 & \begin{tabular}{l}
WHITE TOUCHTONE TELEPHONE \\
\(=\) telephone \\
\(=\mathrm{w}\)－2039 \\
\(\rightarrow\) 260F ghite telephone \\
－was 1 f 588
\end{tabular} \\
\hline 1 F583 㽞 & \begin{tabular}{l}
BLACK TOUCHTONE TELEPHONE \\
＝telephone solid \\
\(=\mathrm{w}-1040\) \\
\(\rightarrow\) 260E 8 black telephone \\
－was 1 f581
\end{tabular} \\
\hline 1 F584 \(\triangle\) & \begin{tabular}{l}
BACK OF ENVELOPE \(=\mathrm{w}-1042\) \\
\(\rightarrow 2709\) envelope \\
－ 2709 shows a seal \\
－was 1 f583
\end{tabular} \\
\hline 1 F585 \(\square^{\circ}\) & \[
\begin{aligned}
& \text { STAMPED ENVELOPE } \\
& =\text { mail } \\
& =\mathrm{w}-0155 \\
& =\mathrm{w}-1043 \\
& \text { - was } 1 \text { f5 } 84
\end{aligned}
\] \\
\hline 1F586 & \begin{tabular}{l}
BLACK ENVELOPE WITH WHITE LIGHTNING
= e-mail \\
\(=\mathrm{w}-0153\) \\
\(\rightarrow\) 1F4E7 组 e－mail symbol \\
－was 1 f 585
\end{tabular} \\
\hline 15587 㐌 & \begin{tabular}{l}
FLYING ENVELOPE \\
\(=\) send message
\[
=\mathrm{w}-0154
\] \\
\(\rightarrow\) 1F4E9 㐭 envelope with downwards arrow above \\
－was 1 f586
\end{tabular} \\
\hline 1 1588 & \begin{tabular}{l}
PEN OVER STAMPED ENVELOPE
\[
\begin{aligned}
& =\text { write } \\
& =\mathrm{w}-0156
\end{aligned}
\] \\
－was 1 f 587
\end{tabular} \\
\hline
\end{tabular}
```

1F589 LINKED PAPERCLIPS
= links
= w-0039
1F4CE O paperclip
- was 1f5D7
1F58A LOWER LEFT PENCIL
= pencil
= w-1033
->270E \& lower right pencil
- was 1f5D2
1F58B LOWER LEFT BALLPOINT PEN
= ballpoint pen
= w-2033
- was 1f5D3
1F58C LOWER LEFT FOUNTAIN PEN
= fountain pen
= w-2034
->2711 ¢ white nib
- was 1f5D4
1F58D LOWER LEFT PAINTBRUSH
= brush
= w-2035
- was 1f5D5
1F58E {}\mathrm{ LOWER LEFT CRAYON
= crayon
= w-2036
- was 1f5D6

```
Hand symbols
1F590 LEFT WRITING HAND
    \(=\mathrm{w}-1064\)
    \(\rightarrow 270 \mathrm{~L}\) writing hand
    - was 1f58A
1 F591 है TURNED OK HAND SIGN
    \(=\mathrm{w}\)-1066
    \(\rightarrow\) 1F44C ok hand sign
    - was \(1 \mathrm{f5} 5 \mathrm{~B}\)
1 F592 R RAISED HAND WITH FINGERS SPLAYED
    = halt
    \(=\mathrm{w}-1073\)
    \(\rightarrow\) 270B 药 raised hand
    - was 1f58D
1F593 Nm REVERSED RAISED HAND WITH FINGERS
    SPLAYED
    \(=\mathrm{w}-2078\)
    - was 1f59C
1F594 B REVERSED THUMBS UP SIGN
    = w-2060
    \(\rightarrow\) 1F44D thumbs up sign
    - was \(1 \mathrm{f5} 8 \mathrm{E}\)
1 F595 \& REVERSED THUMBS DOWN SIGN
    \(=\mathrm{w}\)-2061
    \(\rightarrow\) 1F44E 鲑 thumbs down sign
    - was 1f58F
    REVERSED VICTORY HAND
    REVERSED HAND WITH MIDDLE FINGER
    EXTENDED
1F598 RAISED HAND WITH PART BETWEEN MIDDLE
    AND RING FINGERS
    \(\rightarrow\) 05E9 \(\mathbb{U}\) hebrew letter shin
```

1F599 WHITE DOWN POINTING LEFT HAND INDEX
= w-1072
261F 肴 white down pointing index
\F447 is white down pointing backhand index
- was 1f58C
1F59A \& SIDEWAYS WHITE LEFT POINTING INDEX
= w-2062
->261C white left pointing index
- was 1f590
1F59B SIDEWAYS WHITE RIGHT POINTING INDEX
= w-2063
~261E white right pointing index
- was 1f591
1F59C - SIDEWAYS BLACK LEFT POINTING INDEX
= w-2064
- was 1f592
1F59D - SIDEWAYS BLACK RIGHT POINTING INDEX
= w-2065
- was 1f593
1F59E - BLACK LEFT POINTING BACKHAND INDEX
= w-2068
1F448 *}\mathrm{ white left pointing backhand index
- was 1f594
1F59F BLACK RIGHT POINTING BACKHAND INDEX
= w-2069
1F449 }\approx\mathrm{ white right pointing backhand index
\bullet was 1f595
1F5AO () SIDEWAYS WHITE UP POINTING INDEX
= w-2070
->261D whid white up pointing index
- was 1f596
1F5A1 SIDEWAYS WHITE DOWN POINTING INDEX
= w-2071
->261F 鬼 white down pointing index
- was 1f597
1F5A2 SIDEWAYS BLACK UP POINTING INDEX
= w-2072
- was 1f598
1F5A3 SIDEWAYS BLACK DOWN POINTING INDEX
= w-2073
- was 1f599
1F5A4 BLACK UP POINTING BACKHAND INDEX
= w-2076
1F446 \&% white up pointing backhand index
- was 1f59A
1F5A5 BLACK DOWN POINTING BACKHAND INDEX
= w-2077
\1F447 访 white down pointing backhand index
- was 1f59B

```

\section*{Computer symbols}
```

1F5B0 DESKTOP COMPUTER
＝tower computer
＝ w －0192
－was 1 ff AC
KEYBOARD AND MOUSE
$=\mathrm{w}-0193$
$\rightarrow 2328$ keyboard
－was 1f5AD

```

1F5B2 THREE NETWORKED COMPUTERS
＝computer network
\(=\mathrm{w}-0194\)
－was \(1 \mathrm{f5} \mathrm{AE}\)
1F5B3 PRINTER
＝w－0202
\(\rightarrow\) 1F4E0 fax machine
－was 1f5AF
1F5B4 目 POCKET CALCULATOR
＝calculator
＝ \(\mathrm{w}-0203\)
－was \(1 \mathrm{f5B} 0\)
1F5B5 BLACK HARD SHELL FLOPPY DISK \(=\) disk
\(=\mathrm{w}-0205\)
\(\rightarrow\) 1F4BE H floppy disk
－was 1f5B1
1F5B6 WHITE HARD SHELL FLOPPY DISK
\(=\mathrm{w}-1060\)
\(\rightarrow\) 1F4BE H floppy disk
－was 1f5B2
1F5B7 SOFT SHELL FLOPPY DISK
＝ w －1061
\(\rightarrow\) 1F4BE H floppy disk
－was 1f5B3
1F5B8 © TAPE CARTRIDGE
\(=\mathrm{w}-2057\)
－was 1f5B4
1F5B9 WIRED KEYBOARD
＝keyboard
\(=\mathrm{w}-1055\)
\(\rightarrow 2328\) keyboard
－was 1f5B5
1F5BA \(\sim\) ONE BUTTON MOUSE
＝ \(\mathrm{w}-2058\)
－was 1f5B6
1F5BB TWO BUTTON MOUSE
\(=\mathrm{w}-1056\)
－was 1f5B7
1F5BC 侖 THREE BUTTON MOUSE
\(=\mathrm{w}-2059\)
－was 1f5B8
1F5BD 2 TRACKBALL
\(=\mathrm{w}-1057\)
＝ballpoint
－was 1f5B9
1F5BE \(\square\) OLD PERSONAL COMPUTER
\(=\) personal computer
\(=\mathrm{w}-1058\)
\(\rightarrow\) 1F4BB ㄷ．personal computer
－was 1f5BA
1F5BF 巨 HARD DISK
＝w－1059
－was 1f5BB
1F5C0 \(\square\) SCREEN
＝monitor
\(=\mathrm{w}-2053\)
\(\rightarrow\) 20E2 \(\square\) combining enclosing screen
－was 1f5BC
1F5C1 国 PRINTER ICON
\(=\mathrm{w}-2054\)
\(\rightarrow\) 1F5AF \(\square\) printer
－was 1f5BD

1F5C2 且 FAXICON
＝ \(\mathrm{w}-2055\)
\(\rightarrow\) 1F4E0 fax machine
－was \(1 \mathrm{f5}\) BE
1F5C3 \(\odot\) OPTICAL DISC ICON
\(=\) compact disc
＝w－2056
\(\rightarrow\) 1F4BF optical disc
－was 1f5BF

\section*{Office symbols}

1F5C4 屋 DOCUMENT WITH TEXT
\(=\mathrm{w}-0157\)
－was 1f5C0
1F5C5 围 DOCUMENT WITH TEXT AND PICTURE ＝w－0158
－was \(1 \mathrm{f5} \mathrm{C} 1\)
1F5C6 DOCUMENT WITH PICTURE
＝graphic document
＝w－0159
－was 1f5C2

\section*{User interface symbols}

1F5C7
FOLDER
＝directory
\(=\mathrm{w}\)－1048
\(\rightarrow\) 1F4C1 \(\rightarrow\) file folder
－was 1f5DA
1F5C8
BLACK FOLDER
＝folder
\(=\mathrm{w}-0204\)
－was 1f5DB
1F5C9 OPEN FOLDER
＝ w －1049
\(\rightarrow\) 1F4C2 \(\diamond\) open file folder
－was \(1 \mathrm{f5} \mathrm{DC}\)
1F5CA 圈 FILE CABINET
\(=\mathrm{w}-1053\)
－was 1f5DD
1F5CB © EMPTY NOTE
＝file 1
\(=\mathrm{w}-2041\)
－was 1f5DE
1F5CC \(\square\) EMPTY NOTE PAGE
＝file
＝w－2042
－was \(1 \mathrm{f5} \mathrm{DF}\)
1F5CD 国 EMPTY NOTE PAD
＝file3
\(=\mathrm{w}-2043\)
－was \(1 \mathrm{f5} \mathrm{E} 0\)
1F5CE 国 NOTE
\(=\) file text 1
＝ w －2044
－was \(1 \mathrm{f5} \mathrm{E} 1\)
1F5CF 目 NOTE PAGE
＝file text
\(=\mathrm{w}-2045\)
－was 1f5E2
1F5D0 䀏 NOTE PAD
\(=\) file text 3
\(=\mathrm{w}-2046\)
－was 1f5E3

1F5D1
EMPTY DOCUMENT
\(=\) tall file 1
＝w－2047
－was 1 f 5 E 4
1F5D2EMPTY PAGE
\(=\) tall file
\(=\mathrm{w}-2048\)
－was 1f5E5
1F5D3
回
PTY PAGES
\(=\) tall file 3
＝w－2049
－was 1f5E6
1F5D4 䍗 DOCUMENT
\(=\) tall file with text 1
＝w－1050
\(\rightarrow\) 1F4C4 萶 page facing up
－was 1f5E7
1F5D5 囸 PAGE
\(=\) tall file with text
\(=\mathrm{w}-1051\)
\(\rightarrow\) 1F4C3 圈 page with curl
－was 1f5E8
1F5D6 盽 PAGES
\(=\) tall file with text 3
＝ \(\mathrm{w}-1052\)
－was 1f5E9
1F5D7 通 WASTEBASKET
＝trashcan
＝ w －2051
－was 1f5EA
1F5D8 \(\square\) DESKTOP WINDOW
\(=\mathrm{w}\)－2052
－was 1 f5EB
1F5D9－MINIMIZE
＝w－0048
－was \(1 \mathrm{f5} \mathrm{EC}\)
1F5DA \(\square\) MAXIMIZE
＝w－0049
－was 1f5ED
1F5DB ■ OVERLAP
\(=\) tile windows
＝ w －0050
－was 1f5EE
1F5DC（）CLOCKWISE RIGHT AND LEFT SEMICIRCLE ARROWS
＝refresh
\(=\mathrm{w}-0113\)
\(\rightarrow\) 1F503 \(\mathbb{L}\) clockwise downwards and upwards open circle arrows
－was 1f5EF
1F5DD \(\times\) CANCELLATION X
＝close
\(=\mathrm{w}-0114\)
\(\rightarrow 274 \mathrm{C} \times\) cross mark
－was 1f5D9，with name＂cancellation－x＂
1F5DE AA INCREASE FONT SIZE SYMBOL
＝w－0062
－was \(1 \mathrm{f5} 5 \mathrm{EF}\) ，with name＂font size sign＂
1F5DF AA DECREASE FONT SIZE SYMBOL

\section*{Keyboard symbol}
```

1F5E0 @ UP ARROWHEAD IN A RECTANGLE BOX
= w-1121
= escape
->2353 apl functional symbol quad up caret
- possibly should remain in BMP and could be
swapped for something else
- was 2bE9

```

\section*{Ballot symbols}

1F5E1 \(\times\) BALLOT SCRIPT X
＝x mark
\(=\mathrm{w}-2079\)
－was 2bEA
1F5E2 凹 BALLOT BOX WITH SCRIPT X
＝box x mark
\(=\mathrm{w}-2081\)
－was 2 bEB
1F5E3 \(\boldsymbol{x}\) BALLOT BOLD SCRIPT X
＝ x mark bold
\(\rightarrow 2717 X\) ballot x
＝w－1251
－was 2 bEC
1F5E4 囚 BALLOT BOX WITH BOLD SCRIPT X
＝box x mark bold
\(=\mathrm{w}-1253\)
－was 2bED
1F5E5 \(\boxtimes\) BALLOT BOX WITH LIGHT X
＝box x
\(=\mathrm{w}-2083\)
\(\rightarrow 2612\) 区 ballot box with x
－was 2bEE
1F5E6 \(\otimes\) CIRCLED X
＝w－2085
\(\rightarrow 2297 \otimes\) circled times
－was 2 bEF
1F5E7＠CIRCLED BOLD X
\(=\) circled x bold
\(=\mathrm{w}\)－2086
－was 2 bF 0
1F5E8 \(Q\) CIRCLED REVERSE LIGHT SOLIDUS
＝prohibit
\(=\mathrm{w}-2087\)
－was 2 bF 1
1F5E9 \(\checkmark\) LIGHT CHECK MARK
＝check
＝w－2080
－was 2 bF 2
1F5EA \(\downarrow\) BALLOT BOX WITH BOLD CHECK
＝box mark bold
\(=\mathrm{w}-1254\)
－was 2 bF 3

\section*{Map symbol}

1F5FA WORLD MAP
\(=\mathrm{w}-0251\)


\section*{Leaf ornaments}

1 F650 \& NORTH WEST POINTING LEAF = w-1209
1 F651 \& SOUTH WEST POINTING LEAF \(=\mathrm{w}-1210\)
1 F652 \(\nabla^{\circ}\) NORTH EAST POINTING LEAF = w-1211
1 F653 \& SOUTH EAST POINTING LEAF = w-1212
1 F654 TURNED NORTH WEST POINTING LEAF = w-1206
1 F655 85 TURNED SOUTH WEST POINTING LEAF = w-1205
1F656 \(\&\) TURNED NORTH EAST POINTING LEAF \(=\mathrm{w}-1208\)
\(1 F 657\) @ TURNED SOUTH EAST POINTING LEAF \(=\mathrm{w}-1207\)

\section*{Vine leaf ornaments}

1 F658 ~ NORTH WEST POINTING VINE LEAF \(=\mathrm{w}-2102\)
1 F659 \& SOUTH WEST POINTING VINE LEAF = w-2103
1F65A \(\sim\) NORTH EAST POINTING VINE LEAF = w - 2101
1F65B \(\infty\) SOUTH EAST POINTING VINE LEAF \(=\mathrm{w}-2104\)
1F65C ~ HEAVY NORTH WEST POINTING VINE LEAF = w-1155
1F65D \(\propto\) HEAVY SOUTH WEST POINTING VINE LEAF = w-1156
1F65E なo HEAVY NORTH EAST POINTING VINE LEAF = w-1154
1F65F \(\boldsymbol{\sim}\) HEAVY SOUTH EAST POINTING VINE LEAF \(=\mathrm{w}-1157\)

\section*{Pointing bud ornaments}

1F660 so NORTH WEST POINTING BUD
\[
=\mathrm{w}-1151
\]

1F661 so south WEST POINTING BUD = w-1152
1F662 ©s NORTH EAST POINTING BUD = w-1150
1 F663 œ SOUTH EAST POINTING BUD \(=\mathrm{w}-1153\)
1F664 \& HEAVY NORTH WEST POINTING BUD \(=\mathrm{w}\)-2098
1F665 s HEAVY SOUTH WEST POINTING BUD = w-2099
1F666 cs HEAVY NORTH EAST POINTING BUD = w-2097
1 F667 ふ HEAVY SOUTH EAST POINTING BUD \(=\mathrm{w}-2100\)

\section*{Quilt square ornaments}

1F668 HOLLOW QUILT SQUARE ORNAMENT \(=\mathrm{w}-2147\)
1F669 HOLLOW QUILT SQUARE ORNAMENT IN BLACK SQUARE = w-2148
1F66A \(\mathscr{\%}\) SOLID QUILT SQUARE ORNAMENT \(=\mathrm{w}-1203\)
= fourfold knot ornament
1F66B
SOLID QUILT SQUARE ORNAMENT IN BLACK SQUARE
\(=\mathrm{w}-1204\)
\(=\) inverse fourfold knot ornament

\section*{Rocket ornaments}

1F66C - LEFTWARDS ROCKET
\(=\mathrm{w}-0247\)
\(\rightarrow\) 1F680 rocket
1F66D 1 UPWARDS ROCKET
= \(\mathrm{w}-0249\)
- was 1 f 66 E

1F66E - RIGHTWARDS ROCKET
\(=\mathrm{w}-0248\)
- was 1f66D

1F66F T DOWNWARDS ROCKET \(=\mathrm{w}-0250\)
Et ligature and ampersand ornaments
1F670 er LIGATURE ET ORNAMENT = w-1106
= italic ampersand lower case
1F671 er BOLD LIGATURE ET ORNAMENT = w-2089
1F672 \& SANS-SERIF AMPERSAND ORNAMENT = w-2091
1F673 \& BOLD SANS-SERIF AMPERSAND ORNAMENT = w-2092
1F674 \& BOLD AMPERSAND ORNAMENT = w-2090
1F675 \& SWASH AMPERSAND ORNAMENT \(=\mathrm{w}-1107\)
\(=\) italic ampersand

\section*{Quotation mark ornaments}

1 F676 ‘ SANS-SERIF HEAVY DOUBLE TURNED COMMA QUOTATION MARK ORNAMENT
\(=\mathrm{w}-1125\)
\(\rightarrow 275 \mathrm{D}\) 66 heavy double turned comma quotation mark ornament
1F677 \({ }^{\boldsymbol{3}}\) SANS-SERIF HEAVY DOUBLE COMMA QUOTATION MARK ORNAMENT
\(=\mathrm{w}-1126\)
\(\rightarrow\) 275E 99 heavy double comma quotation mark ornament
1F678 , SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT
\(\rightarrow 2760 \boldsymbol{9}\) heavy double low comma quotation mark ornament

\section*{Interrobang ornaments}

1 F679 ? BOLD INTERROBANG
= w-2094
- was 1 f 678

1F67A ? SANS-SERIF INTERROBANG \(=\mathrm{w}-2095\)
- was 1 f 679

1F67B ? BOLD SANS-SERIF INTERROBANG = w-2096
- was 1f67A

\section*{Heavy solidus ornaments}

1F67C VERY HEAVY SOLIDUS
= \(\mathrm{w}-0047\)
- was 2 bBE

1F67D VERY HEAVY REVERSE SOLIDUS
\(=\mathrm{w}-0092\)
- was 2 bBF
見
(http://www.unicode.org/unibook/)

\section*{Letterlike symbols}

1F6C6 (i) CIRCLED INFORMATION SOURCE
= information
\(=\mathrm{w}-0105\)
- was 1f6E6

1 F6C7 \(\diamond\) UNCERTAINTY SIGN
\(=\mathrm{w}-1180\)
= query
\(\rightarrow 2370\) apl functional symbol quad question
\(\rightarrow\) FFFD \(\geqslant\) replacement character
- was 2bCB


These geometric shapes are originated from the Webdings and Wingdings collections.

\section*{Isosceles right triangles}

1F780 < BLACK LEFT-POINTING ISOSCELES RIGHT TRIANGLE
\(=\mathrm{w}\)-3124
1F781 - BLACK UP-POINTING ISOSCELES RIGHT TRIANGLE
\(=\mathrm{w}-3126\)
- was 1 f782

1F782 BLACK RIGHT-POINTING ISOSCELES RIGHT TRIANGLE \(=\mathrm{w}-3125\)
- was 1f781
\(1 F 783\) BLACK DOWN-POINTING ISOSCELES RIGHT TRIANGLE \(=\mathrm{w}-3128\)

\section*{Black circle}

1F784 • BLACK SLIGHTLY SMALL CIRCLE
= black circle 3
\(=\mathrm{w}-2150\)
\(\rightarrow 22 \mathrm{C} 5 \cdot\) dot operator
\(\rightarrow 2219\) • bullet operator
\(\rightarrow 2022\) • bullet
\(\rightarrow 2981\) - z notation spot
\(\rightarrow 26 \mathrm{AB} \bullet\) medium black circle
\(\rightarrow 25 \mathrm{CF} \bigcirc\) black circle
- was 1 f786

\section*{White circles}

Adjective refers to the thickness of the ring.
1 F785 ○ MEDIUM BOLD WHITE CIRCLE
\(=\operatorname{ring} 3\)
\(=\mathrm{w}-2154\)
\(\rightarrow\) 26AA O medium white circle
\(\rightarrow 25 \mathrm{CB} \bigcirc\) white circle
\(\rightarrow 2 \mathrm{~B} 58\) ○ heavy circle
- was 1f78D

O BOLD WHITE CIRCLE
\(=\) ring 4
\(=\mathrm{w}-1162\)
\(=\) very heavy circle
- was \(1 \mathrm{f7} 7 \mathrm{E}\)
\(=\operatorname{ring} 5\)
\(=\mathrm{w}-2155\)
- was \(1 \mathrm{f7} 7 \mathrm{~F}\)

1F788 ○ VERY HEAVY WHITE CIRCLE \(=\operatorname{ring} 6\)
\(=\mathrm{w}-1163\)
- was 1 f 790

1F789 - EXTREMELY HEAVY WHITE CIRCLE
\(=\operatorname{ring} 7\)
\(=\mathrm{w}-2156\)
- was 1f791

White circles containing another black

\section*{circle}
```

1F78A \odot WHITE CIRCLE CONTAINING BLACK SMALL
CIRCLE
= ring button 2
= w-1164
\rightarrow 2 2 9 9 \odot ~ c i r c l e d ~ d o t ~ o p e r a t o r
\rightarrow 2 9 B F ~ O ~ c i r c l e d ~ b u l l e t
- was 1f793

```

\section*{Black squares}

1F78B • BLACK TINY SQUARE
= black square 1
= w-2159
\(\rightarrow\) 2B1D \(\cdot\) black very small square
\(\rightarrow\) 25AA - black small square
\(\rightarrow 25 \mathrm{FE}\) - black medium small square
\(\rightarrow 25 \mathrm{FC}\) ■ black medium square
\(\rightarrow 25 A 0 \square\) black square
- was 1f795

1F78C • BLACK SLIGHTLY SMALL SQUARE
= black square 3
= w-2160
- was 1 f797

\section*{White squares}LIGHT WHITE SQUARE
= box 2
\(=\mathrm{w}-1168\)
\(\rightarrow 25 \mathrm{~A} 1 \square\) white square
- was 1f79D

1F78EMEDIUM WHITE SQUARE
= box 3
\(=\mathrm{w}-1111\)
- was 1f79E

1F78F BOLD WHITE SQUARE
= box 4
\(=\mathrm{w}-1112\)
= heavy white square
- was 1f79F

1F790 ■ HEAVY WHITE SQUARE
\(=\) box 5
\(=\mathrm{w}-2164\)
- was 1f7A0

1F791 - VERY HEAVY WHITE SQUARE
= box 6
\(=\mathrm{w}-2165\)
- was 1f7A1

1 F792 E EXTREMELY HEAVY WHITE SQUARE
= box 7
\(=\mathrm{w}-2166\)
- was 1f7A2

White squares containing another
black square
1F793 WHITE SQUARE CONTAINING BLACK VERY SMALL SQUARE
= box button 1
\(=\mathrm{w}-2167\)
\(\rightarrow 25 \mathrm{~A} 3\) white square containing black small square
- was 1f7A3
= box button 3
\(=\mathrm{w}-2169\)
- was 1f7A5

\section*{Black diamonds}

1F795 • BLACK TINY DIAMOND
= black diamond 1
\(=\mathrm{w}-2171\)
\(\rightarrow 2 \mathrm{~B} 29\) - black small diamond
\(\rightarrow 2 \mathrm{~B} 25\) black medium diamond
\(\rightarrow\) 25C6 black diamond
- was 1f7A6

1F796 • BLACK VERY SMALL DIAMOND
= black diamond 2
\(=\mathrm{w}-2172\)
- was 1f7A7

1 F797 BLACK MEDIUM SMALL DIAMOND
= black diamond 4
\(=\mathrm{w}-1119\)
- was 1f7A9

White diamonds containing another

\section*{black diamond}

1 F798 < WHITE DIAMOND CONTAINING BLACK VERY SMALL DIAMOND
\(=\) diamond button 1
\(=\mathrm{w}-2176\)
\(\rightarrow 25 \mathrm{C} 8 \diamond\) white diamond containing black small diamond
- was 1f7AD

1 F799 \(\diamond\) WHITE DIAMOND CONTAINING BLACK
MEDIUM DIAMOND
\(=\) diamond button 3
\(=\mathrm{w}-2178\)
- was 1f7AF

\section*{Lozenges}

1F79A • BLACK TINY LOZENGE
= black lozenge 1
\(=\mathrm{w}-2180\)
\(\rightarrow\) 2B2A - black small lozenge
\(\rightarrow\) 2B27 black medium lozenge
\(\rightarrow\) 29EB black lozenge
\(\rightarrow\) 25CA \(\diamond\) lozenge
- was 1f7B0

1F79B • BLACK VERY SMALL LOZENGE
\(=\) black lozenge 2
\(=\mathrm{w}-2181\)
- was 1f7B1

1F79C • BLACK MEDIUM SMALL LOZENGE
= black lozenge 4
\(=\mathrm{w}-1115\)
- was 1f7B3

\section*{White lozenge containing another \\ black lozenge}

1F79D \(\diamond\) WHITE LOZENGE CONTAINING BLACK SMALL LOZENGE
= lozenge button
\(=\mathrm{w}-2185\)
- was 1f7B7

\section*{Greek crosses}

1F79E + THIN GREEK CROSS
\(=\) cross 1
\(=\mathrm{w}-2198\)
- was 1f7B8

1F79F + LIGHT GREEK CROSS
\(=\operatorname{cross} 2\)
\(=\mathrm{w}-2199\)
- was 1f7B9

1F7A0 + MEDIUM GREEK CROSS
\(=\operatorname{cross} 3\)
\(=\mathrm{w}\)-2200
- was 1f7BA

1 F7A1 \(\boldsymbol{+}\) BOLD GREEK CROSS
\(=\operatorname{cross} 4\)
\(=\mathrm{w}-2201\)
- was 1f7BB

1F7A2 \(\boldsymbol{+}\) VERY BOLD GREEK CROSS
\(=\operatorname{cross} 5\)
\(=\mathrm{w}-2202\)
- was 1f7BC

1 177A3 + VERY HEAVY GREEK CROSS
= cross 6
\(=\mathrm{w}-2203\)
- was 1f7BD

1F7A4 4 EXTREMELY HEAVY GREEK CROSS
\(=\operatorname{cross} 7\)
\(=\mathrm{w}-2204\)
- was 1f7BE

\section*{Saltires}

1F7A5 \(\times\) THIN SALTIRE
\(=\mathrm{x} 1\)
\(=\mathrm{w}-2205\)
- was 1f7C0

1F7A6 \(\times\) LIGHT SALTIRE
\(=\mathrm{x} 2\)
\(=\mathrm{w}-2206\)
- was 1f7C1

1F7A7 \(\times\) MEDIUM SALTIRE
\(=\mathrm{x} 3\)
\(=\mathrm{w}-2207\)
- was 1 f 7 C 2

1F7A8 \(\times\) BOLD SALTIRE
\(=x 4\)
\(=\mathrm{w}-2208\)
- was 1f7C3

1F7A9 \(\times\) HEAVY SALTIRE
\(=\mathrm{x} 5\)
\(=\mathrm{w}-2209\)
- was 1f7C4

1F7AA \(\times\) VERY HEAVY SALTIRE
=x 6
\(=\mathrm{w}-2210\)
- was 1f7C5

1F7AB * EXTREMELY HEAVY SALTIRE
\(=\mathrm{x} 7\)
\(=\mathrm{w}-2211\)
- was 1f7C6

Five spoked asterisks
1F7AC \(*\) LIGHT FIVE SPOKED ASTERISK
\(=\mathrm{w}-2212\)
- was 1f7C7
```

1F7AD * MEDIUM FIVE SPOKED ASTERISK
= w-2213
- was 1f7C8
1F7AE * BOLD FIVE SPOKED ASTERISK
= w-2214
- was 1f7C9
1F7AF * HEAVY FIVE SPOKED ASTERISK
= w-2215
- was 1f7CA
1F7B0 * VERY HEAVY FIVE SPOKED ASTERISK
= w-2216
- was 1f7CB
1F7B1 * EXTREMELY HEAVY FIVE SPOKED ASTERISK
= w-2217
- was 1f7CC

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\section*{Six spoked asterisks}
```

1F7B2 * LIGHT SIX SPOKED ASTERISK
= w-2218
- was 1f7CD
1F7B3 * MEDIUM SIX SPOKED ASTERISK
= w-2219
- was 1f7CE
1F7B4 * BOLD SIX SPOKED ASTERISK
= w-2220
- was 1f7CF
1F7B5 * HEAVY SIX SPOKED ASTERISK
= w-2221
- was 1f7D0
1F7B6 * VERY HEAVY SIX SPOKED ASTERISK
= w-2222
- was 1f7D1
1F7B7 * EXTREMELY HEAVY SIX SPOKED ASTERISK
= w-2223
- was 1f7D2

```

\section*{Eight spoked asterisks}

1F7B8＊LIGHT EIGHT SPOKED ASTERISK
\(=\mathrm{w}\)－2224
－was 1f7D3
1F7B9＊MEDIUM EIGHT SPOKED ASTERISK
＝w－2225
－was 1f7D4
1F7BA＊BOLD EIGHT SPOKED ASTERISK
＝w－2226
－was 1f7D5
1F7BB 米 HEAVY EIGHT SPOKED ASTERISK
\(=\mathrm{w}-2227\)
－was 1f7D6
1F7BC＊VERY HEAVY EIGHT SPOKED ASTERISK ＝w－2228
－was 1f7D7

\section*{Three pointed stars}

1F7BD 人 LIGHT THREE POINTED BLACK STAR
＝w－2229
－was 1f7D8
1F7BE 人 MEDIUM THREE POINTED BLACK STAR
\(=\mathrm{w}-1169\)
－was 1f7D9
1F7BF A THREE POINTED BLACK STAR
\(=\mathrm{w}\)－2230
－was 1f7DA

1F7C0 A MEDIUM THREE POINTED PINWHEEL STAR
＝w－2241
－was \(1 \mathrm{f7DB}\)
Four pointed stars
1F7C1 + LIGHT FOUR POINTED BLACK STAR \(=\mathrm{w}-2231\)
－was 1f7DC
1F7C2 \(\rightarrow\) MEDIUM FOUR POINTED BLACK STAR ＝ \(\mathrm{w}-1170\)
－was 1f7DD
1F7C3 • FOUR POINTED BLACK STAR ＝w－2232
\(\rightarrow 2726 \rightarrow\) black four pointed star
－ \(2726 \checkmark\) black four pointed star is a cusp
－was 1f7DE
1F7C4 \＆MEDIUM FOUR POINTED PINWHEEL STAR \(=\mathrm{w}-2242\)
－was 1f7DF
1F7C5 \(\rightarrow\) REVERSE LIGHT FOUR POINTED PINWHEEL STAR
＝w－0108
＝navigate
－was 1f7E0
Five pointed stars
1F7C6 \(\star\) LIGHT FIVE POINTED BLACK STAR
\(=\mathrm{w}\)－2233
\(\rightarrow 2605\) ネ black star
－was 1f7E1
1F7C7 \(\star\) HEAVY FIVE POINTED BLACK STAR \(=\mathrm{w}-2234\)
\(\rightarrow 272 \mathrm{~F} *\) pinwheel star
－was 1f7E3

\section*{Six pointed stars}

1F7C8＊MEDIUM SIX POINTED BLACK STAR \(=\mathrm{w}-1172\)
\(\rightarrow 2736 *\) six pointed black star
－was 1f7E6
1F7C9＊HEAVY SIX POINTED BLACK STAR \(=\mathrm{w}-2236\)
－was 1f7E7
1F7CA SIX POINTED PINWHEEL STAR
＝W－2244
－was 1f7E8

\section*{Eight pointed stars}

1F7CB＊MEDIUM EIGHT POINTED BLACK STAR
＝w－2237
－was 1f7E9
1F7CC＊HEAVY EIGHT POINTED BLACK STAR
\(=\mathrm{w}-1173\)
\(\rightarrow 2738\) heavy eight pointed rectilinear black star
－was 1f7EA
1F7CD VERY HEAVY EIGHT POINTED BLACK STAR
\(=\mathrm{w}-2238\)
－was 1f7EB
1F7CE＊HEAVY EIGHT POINTED PINWHEEL STAR
\(=\mathrm{w}-1175\)
\(\rightarrow 2735\) 米 eight pointed pinwheel star
－was 1f7EC

\section*{Twelve pointed stars}

1F7CF * LIGHT TWELVE POINTED BLACK STAR \(=\mathrm{w}-2239\)
\(\rightarrow 2739\) 番 twelve pointed black star
- was 1f7ED

1F7DO HEAVY TWELVE POINTED BLACK STAR \(=\mathrm{w}-1174\)
- was 1f7EF

1F7D1 滕 HEAVY TWELVE POINTED PINWHEEL STAR \(=\mathrm{w}-2245\)
- was 1f7F0


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(http://www.unicode.org/unibook/)
\begin{tabular}{|c|c|}
\hline Triangle headed arrows with narrow shaft & \begin{tabular}{l}
\(=\mathrm{w}-3180\) \\
- was 1f83D
\end{tabular} \\
\hline 1 1F800 \(\leftarrow\) Leftwards triangle-headed arrow wi & 1 1F813 DOWNWARDS FINGER-POST ARROW \\
\hline \(=\mathrm{w}\)-3165 & Squared arrows \\
\hline 19828 & \multirow[t]{2}{*}{1F814 * LEFTWARDS SQUARED ARROW
= w-3181} \\
\hline 1 F801 \(\uparrow \begin{aligned} & \text { UPWARDS TRIANGLE-HEADED ARROW WITH } \\ & \text { NARROW SHAFT }\end{aligned}\) & \\
\hline  & \[
\begin{aligned}
1 \text { F815 } & \text { UPWARDS SQUARED ARROW } \\
& =\text { w-3183 } \\
& \text { •was 1f842 }
\end{aligned}
\] \\
\hline 1F803 \(\uparrow\) DOWNWARDS TRIANGLE-HEADED ARROW WITH NARROW SHAFT &  \\
\hline \multirow[t]{5}{*}{Triangle headed arrows with medium shaft
\[
\begin{aligned}
\text { 1F804 } \leftarrow & \text { LEFTWARDS TRIANGLE-HEADED ARROW WITH } \\
& \text { MEDIUM SHAFT } \\
& =\text { w-3167 } \\
& \bullet \text { was } 1 \text { f8 } 2 \mathrm{C}
\end{aligned}
\]} & \\
\hline & 1F817 * DOWNWARDS SQUARED ARROW
\[
=w-3184
\] \\
\hline & \\
\hline & Compressed arrows \\
\hline & 1 1F818 LEFTWARDS Compr \\
\hline 1 F805 \(\uparrow \begin{aligned} & \text { UPWARDS TRIANGLE-HEADED ARROW WITH } \\ & \text { MEDIUM SHAFT }\end{aligned}\) & \[
\begin{aligned}
& =\mathrm{w}-3189 \\
& \text { - was } 1 \mathrm{f} 84
\end{aligned}
\] \\
\hline 1 F806 \(\rightarrow\) RIGHTWARDS TRIANGLE-HEADED ARROW WITH MEDIUM SHAFT = w-3168 & \[
\begin{aligned}
& 1 F 819 \text { - UPWARDS COMPRESSED ARROW } \\
&=\text { w-3191 } \\
& \text { - was } 1 \text { 1f846 }
\end{aligned}
\] \\
\hline - was 1782D & 1A RIGHTwards compressed arro \\
\hline 1 F807 \(\downarrow\) DOWNWARDS TRIANGLE-HEADED ARROW & \(=\mathrm{w}-3190\) \\
\hline Triangle headed arrows with bold shaft & \[
\begin{aligned}
\text { 1F81B } & = \\
& \text { DOWNWARDS COMPRESSED ARROW } \\
& =\text { w-3192 } \\
& \bullet \text { was } 1 f 847
\end{aligned}
\] \\
\hline 1 F808 \(\leftarrow \underset{\text { LEFTWARDS TRIANGLE-HEADED ARROW WITH }}{ }\) \(=\mathrm{w}\)-3169 & Heavy compressed arrows \\
\hline 1 F809 1 UPWARDS TRIANGLE-HEADED ARROW WITH & 1F81C ( LEFTWARDS HEAVY COMPRESSED ARROW
\(=\mathrm{w}-3193\)
• was 1 f 848 \\
\hline 1F80A \(\rightarrow \substack{\text { RIGHTWARDS TRIANGLE-HEADED ARROW } \\ \text { WTH BOLD SHAFT } \\==\text { w- } 3170}\) & 1F81D - \(\begin{aligned} & \text { UPWARDS HEAVY COMPRESSED ARROW } \\ &=\text { w-3195 } \\ & \text { •was 1f84A }\end{aligned}\) \\
\hline - was 18831 & 1F81E RIGHTWARDS HEAVY COMPRESSED AR \\
\hline 1F80B \(\downarrow \begin{aligned} & \text { DOWNWARDS TRIANGLE-HEADED ARROW } \\ & \text { WITH BOLD SHAFT }\end{aligned}\) & \begin{tabular}{l}
= w-3194 \\
\(\rightarrow 27 A 7\) squat black rightwards arrow
\end{tabular} \\
\hline \multirow[t]{4}{*}{Triangle headed arrows with very heavy shaft
\[
\begin{aligned}
1 \text { F80C }- & \text { LEFTWARDS TRIANGLE-HEADED ARROW WITH } \\
& \text { VERY HEAVY SHAFT } \\
& =\text { w-3177 }
\end{aligned}
\]} & - was 17849 \\
\hline & \multirow[t]{2}{*}{\[
\begin{aligned}
1 \text { F81F }= & \text { DOWNWARDS HEAVY COMPRESSED ARROW } \\
& =\text { w-3196 } \\
& \bullet \text { was } 1 \mathrm{f} 84 \mathrm{~B}
\end{aligned}
\]} \\
\hline & \\
\hline & Heavy arrows \\
\hline - was 17838 & \multirow[t]{2}{*}{1F820 \(\begin{gathered}\text { LEFTWARDS HEAVY ARROW } \\ =\mathrm{w}-3197\end{gathered}\)} \\
\hline 1F80D UPWARDS TRIANGLE-HEADED ARROW WITH & \\
\hline \(\begin{aligned} 1 \text { 1F80E }- & \text { RIGHTWARDS TRIANGLE-HEADED ARROW } \\ & \text { WITTVERY HEAVY SHAFT } \\ & =\text { w-3178 } \\ & \text { was } 18839\end{aligned}\) & \begin{tabular}{rl}
\(1 F 821\) & UPWARDS HEAVY ARROW \\
& \(=\mathrm{w}-3199\) \\
& • was 1 ff 8 E
\end{tabular} \\
\hline 1F80F 】 DOWNWARDS TRIANGLE-HEADED ARROW WITH VERY HEAVY SHAFT & 1 F822 \(\Rightarrow \underset{=}{=} \underset{ }{\text { RIGHTWARDS }}\) HEAVY ARROW \\
\hline Finger-post arrows & 1 18823 DOWNWARDS HEAVY ARRO \\
\hline 1F810 LEFTWARDS FINGER-POST ARROW & \(=w-3200\) \\
\hline = w-3179 & was 1f84F \\
\hline - was 1f83C & \\
\hline F811 \ UPWARDS FINGER-POST ARROW & \\
\hline
\end{tabular}
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Shaded white arrows
1F824 $\downarrow$ LEFTWARDS BOTTOM-SHADED WHITE ARROW
$=\mathrm{w}$-3090
- was 2bD0
1F825 $\Rightarrow$ RIGHTWARDS BOTTOM SHADED WHITE
ARROW
= w-3091
- was 2bD1
1 F826 $\quad$ LEFTWARDS TOP SHADED WHITE ARROW
= w-3092
- was 2 bD 2
1F827 $\Rightarrow$ RIGHTWARDS TOP SHADED WHITE ARROW
$=\mathrm{w}$-3093
- was 2 bD 3
1F828 $\diamond$ LEFTWARDS LEFT-SHADED WHITE ARROW
= w -3094
- was 2 bD 4
1F829 $\Rightarrow$ RIGHTWARDS RIGHT-SHADED WHITE ARROW
= w-3095
$\rightarrow 27 \mathrm{~A} 9 \rightarrow$ right-shaded white rightwards arrow
- was 2bD5
1F82A $\downarrow$ \&EFTWARDS RIGHT-SHADED WHITE ARROW
= w-3096
- was 2bD6
1F82B $\Rightarrow$ RIGHTWARDS LEFT-SHADED WHITE ARROW
= w-3097
$\rightarrow 27 \mathrm{AA} \Rightarrow$ left-shaded white rightwards arrow
- was 2 bD 7
1F82C $\diamond$ LEFTWARDS BACK-TILTED SHADOWED WHITE
ARROW
$=\mathrm{w}-3098$
- was 2bD8
1F82D $\Rightarrow$ RIGHTWARDS BACK-TILTED SHADOWED
WHITE ARROW
$=\mathrm{w}$-3099
$\rightarrow 27 \mathrm{AB} \Rightarrow$ back-tilted shadowed white
rightwards arrow
- was 2bD9
1F82E $\checkmark$ LEFTWARDS FRONT-TILTED SHADOWED
WHITE ARROW
$=\mathrm{w}-3100$
- was 2bDA
1F82F $\Rightarrow$ RIGHTWARDS FRONT-TILTED SHADOWED
WHITE ARROW
$=\mathrm{w}-3101$
$\rightarrow 27 A C \rightarrow$ front-tilted shadowed white
rightwards arrow
- was 2 bDB
Wide-headed light barb arrows
1 F830 $\leftarrow$ WIDE-HEADED LEFTWARDS LIGHT BARB
ARROW
$=\mathrm{w}-3209$
- was 1 f 850
1 F831 $\uparrow$ WIDE-HEADED RIGHTWARDS LIGHT BARB
ARROW
$=\mathrm{w}-3210$
- was 1f851
1F832 $\rightarrow$ WIDE-HEADED UPWARDS LIGHT BARB ARROW
= w-3211
- was 1 f 852
1F833 $\downarrow$ WIDE-HEADED DOWNWARDS LIGHT BARB
ARROW
= w-3212
- was 1 f 853

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\section*{Shaded white arrows}

1F824 \(\downarrow\) LEFTWARDS BOTTOM-SHADED WHITE ARROW = w-3090
- was 2 bD 0

1F825 \(\Rightarrow\) RIGHTWARDS BOTTOM SHADED WHITE ARROW
= w-3091
- was 2bD1

1 F826 \({ }^{\text {LEFTWARDS TOP SHADED WHITE ARROW }}\) = w-3092
- was 2bD2

1F827 \(\Rightarrow\) RIGHTWARDS TOP SHADED WHITE ARROW = w-3093
- was 2bD3

1F828 \(\hookleftarrow\) LEFTWARDS LEFT-SHADED WHITE ARROW = w-3094
- was 2bD4

1 F829 \(\Rightarrow\) RIGHTWARDS RIGHT-SHADED WHITE ARROW
\(=\mathrm{w}-3095\)
\(\rightarrow 27 \mathrm{~A} 9 \rightarrow\) right-shaded white rightwards arrow
- was 2bD5

1F82A © LEFTWARDS RIGHT-SHADED WHITE ARROW
= w-3096
- was 2bD6

1F82B \(\Rightarrow\) RIGHTWARDS LEFT-SHADED WHITE ARROW
= w-3097
\(\rightarrow 27 \mathrm{AA} \Rightarrow\) left-shaded white rightwards arrow
- was 2bD7

1F82C \(\diamond\) LEFTWARDS BACK-TILTED SHADOWED WHITE
ARROW
\(=\mathrm{w}-3098\)
- was 2bD8

1F82D \(\Rightarrow\) RIGHTWARDS BACK-TILTED SHADOWED
WHITE ARROW
\(=\mathrm{w}-3099\)
\(\rightarrow 27 \mathrm{AB} \Rightarrow\) back-tilted shadowed white
rightwards arrow
- was 2bD9

1F82E \(\quad\) LEFTWARDS FRONT-TILTED SHADOWED WHITE ARROW
\(=\mathrm{w}-3100\)
- was 2bDA

1F82F \(\Rightarrow\) RIGHTWARDS FRONT-TILTED SHADOWED
WHITE ARROW
\(=\mathrm{w}-3101\)
\(\rightarrow 27 \mathrm{AC} \rightarrow\) front-tilted shadowed white
rightwards arrow
- was 2 bDB

Wide-headed light barb arrows
1 F830 \(\leftarrow\) WIDE-HEADED LEFTWARDS LIGHT BARB ARROW
= w-3209
- was \(1 \mathrm{f850}\)

1 F831 \(\uparrow\) WIDE-HEADED RIGHTWARDS LIGHT BARB
ARROW
\(=\mathrm{w}-3210\)
- was 1 f 851

1F832 \(\rightarrow\) WIDE-HEADED UPWARDS LIGHT BARB ARROW
= w-3211
- was 1 f 852

1F833 \(\downarrow\) WIDE-HEADED DOWNWARDS LIGHT BARB
ARROW
- was 1 f 853

1 F834 \(\sim\) WIDE-HEADED NORTH WEST LIGHT BARB ARROW
\(=\mathrm{w}-3213\)
- was 1 f 854
\(1 F 8357\) WIDE-HEADED NORTH EAST LIGHT BARB ARROW
\(=\mathrm{w}=3214\)
- was 1 f 855
\(1 F 836 \searrow\) WIDE-HEADED SOUTH WEST LIGHT BARB ARROW
\(=\mathrm{w}-3215\)
- was 1 f 856

1F837 \(\leqslant\) WIDE-HEADED SOUTH EAST LIGHT BARB ARROW
= \(\mathrm{w}-3216\)
- was \(1 \mathrm{f857}\)

\section*{Wide-headed barb arrows}

1F838 \(\leftarrow\) WIDE-HEADED LEFTWARDS BARB ARROW \(=\mathrm{w}-1223\)
- was \(1 \mathrm{f858}\)

1F839 \(\uparrow\) WIDE-HEADED RIGHTWARDS BARB ARROW \(=\mathrm{w}-1224\)
- was 1 f 859

1F83A \(\rightarrow\) WIDE-HEADED UPWARDS BARB ARROW \(=\mathrm{w}-1225\)
- was \(1 \mathrm{f85} \mathrm{~A}\)

1F83B \(\downarrow\) WIDE-HEADED DOWNWARDS BARB ARROW \(=\mathrm{w}-1226\)
- was \(1 \mathrm{f85B}\)

1F83C \(\boldsymbol{\pi}\) WIDE-HEADED NORTH WEST BARB ARROW \(=\mathrm{w}-1227\)
- was \(1 \mathrm{f85C}\)

1F83D \(\pi\) WIDE-HEADED NORTH EAST BARB ARROW \(=\mathrm{w}-1228\)
- was 1f85D

1F83E \(\searrow\) WIDE-HEADED SOUTH WEST BARB ARROW \(=\mathrm{w}-1229\)
- was \(1 \mathrm{f85E}\)

1F83F \(\boldsymbol{k}\) WIDE-HEADED SOUTH EAST BARB ARROW \(=\mathrm{w}-1230\)
- was 1 f 85 F

Wide-headed medium barb arrows
1F840 \(\leftarrow\) WIDE-HEADED LEFTWARDS MEDIUM BARB ARROW
= w-3217
- was 1 f 860

1F841 \(\uparrow\) WIDE-HEADED RIGHTWARDS MEDIUM BARB ARROW
\(=\mathrm{w}-3218\)
\(\rightarrow 2794 \rightarrow\) heavy wide-headed rightwards arrow - was 1 f 861

1F842 \(\rightarrow\) WIDE-HEADED UPWARDS MEDIUM BARB ARROW \(=\mathrm{w}-3219\) - was 1 f 862

1F843 \(\downarrow\) WIDE-HEADED DOWNWARDS MEDIUM BARB ARROW \(=\mathrm{w}-3220\)
- was \(1 \mathrm{f8} 63\)

1F844 『 WIDE-HEADED NORTH WEST MEDIUM BARB ARROW
\(=\mathrm{w}-3221\)
- was 1 f 864


1F864 \& LEFTWARDS WHITE ARROW WITHIN TRIANGLE ARROWHEAD
\(=\mathrm{w}\)-3237
= draw double left
- was 2bE4

1 F865 > RIGHTWARDS WHITE ARROW WITHIN TRIANGLE ARROWHEAD
\(=\mathrm{w}-3238\)
= draw double right
- was 2bE5

1F866 ^ UPWARDS WHITE ARROW WITHIN TRIANGLE
ARROWHEAD
\(=\mathrm{w}\)-3239
= draw double up
- was 2bE6
v DOWNWARDS WHITE ARROW WITHIN TRIANGLE ARROWHEAD
\(=\mathrm{w}\)-3240
= draw double down
- was 2 bE 7

Template for comments and secretariat observations
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1 & 2 & (3) & 4 & 5 & (6) & (7) \\
\hline MB \({ }^{1}\) & Clause No./ Subclause No./ Annex (e.g. 3.1) & Paragraph/ Figure/Table/ Note (e.g. Table 1) & Type of comment \(^{2}\) & Comment (justification for change) by the MB & Proposed change by the MB & Secretariat observations on each comment submitted \\
\hline RO & The whole document & & ge & The block "Old Hungarian" is not adequate for encoding as such & Discussions with the specialists in the TC & \\
\hline & & & & & & \\
\hline & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1 & 2 & (3) & 4 & 5 & (6) & (7) \\
\hline MB \({ }^{1}\) & Clause No./ Subclause No./ Annex (e.g. 3.1) & Paragraph/ Figure/Table/ Note (e.g. Table 1) & Type of comment \(^{2}\) & Comment (justification for change) by the MB & Proposed change by the MB & Secretariat observations on each comment submitted \\
\hline GB & 31 & Latin Extended-D & te & Once again we reaffirm our support for the encoding of A78F LATIN LETTER MIDDLE DOT (see also the UK ballot comments for ISO/IEC 10646:2003 FPDAM8, SC2 N4123). This character cannot be suitably represented by any existing character, such as U+00B7 MIDDLE DOT (a punctuation mark with the wrong character properties) or U+02D1 MODIFIER LETTER HALF TRIANGULAR COLON (wrong glyph shape and wrong semantics), and no convincing arguments have been advanced for not encoding it. As there is a pressing need to use it for representing Tangut phonetic data, we would strongly object to any further delay in the encoding of this character. & None. & \\
\hline
\end{tabular}
\(1 \mathbf{M B}=\) Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)
2 Type of comment: ge = general te = technical ed = editorial
NOTE Columns 1, 2, 4, 5 are compulsory.
ISO electronic balloting commenting template/version 2001-10
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1 & 2 & (3) & 4 & 5 & (6) & (7) \\
\hline MB \({ }^{1}\) & Clause No./ Subclause No./ Annex (e.g. 3.1) & \begin{tabular}{l}
Paragraph/ \\
Figure/Table/ Note \\
(e.g. Table 1)
\end{tabular} & Type of comment \(^{2}\) & Comment (justification for change) & \begin{tabular}{|l|l} 
b the MB & Proposed change by the MB
\end{tabular} & Secretariat observations on each comment submitted \\
\hline US & & \begin{tabular}{l}
Latin \\
Extended-D
\end{tabular} & T.1. & \begin{tabular}{l}
Justification for the request to remove this character is contained \\
in N3678 (L2/09-278). A viable \\
alternative to encoding a separate letter middle dot, for the purposes cited by the original proposal, would be to use the already encoded modifier letter, U+02D1 MODIFIER LETTER HALF TRIANGULAR COLON.
\end{tabular} & The U.S. requests the removal of U+A78F LATIN LETTER MIDDLE DOT. We reiterate that this character is unnecessary and is a damaging duplication for the standard and should be removed from the amendment. & \\
\hline US & & Pau Cin Hau & T.2. & \begin{tabular}{l}
The revised names for 11AC5 PAU CIN HAU LETTER Y and 11ACA PAU CIN HAU LETTER X (to "PAU CIN HAU LETTER Z" and "PAU CIN HAU LETTER KH") better reflect the modern phonology and Latin orthography for the Tedim language, which uses this script. The new names for glottal-stop marks are better descriptors of the characters' properties and usage. The new name for 11AF1 PAU CIN \\
HAU MID-LEVEL TONE LONG \\
FINAL is a correction.
\end{tabular} & \begin{tabular}{l}
The U.S. requests the following name changes: \\
[CODE POINT CURRENT NAME > NEW NAME ] \\
11AC5 PAU CIN HAU LETTER Y > PAU CIN HAU LETTER \(Z\) \\
11ACA PAU CIN HAU LETTER \(X\) > PAU CIN HAU LETTER KH \\
11AE7 PAU CIN HAU GLOTTAL STOP VARIANT > PAU CIN HAU SANDHI GLOTTAL STOP \\
11AEA PAU CIN HAU GLOTTAL STOP VARIANT FINAL > PAU CIN HAU SANDHI GLOTTAL STOP FINAL \\
11AFO PAU CIN HAU GLOTTAL STOP OTHER > PAU CIN HAU GLOTTAL STOP VARIANT \\
11AF1 PAU CIN HAU MID-LEVEL TONE LONG > PAU CIN HAU
\end{tabular} & \\
\hline
\end{tabular}

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Paragraph/ \\
Figure/Table/ Note \\
(e.g. Table 1)
\end{tabular} & Type of comment \(^{2}\) & \multicolumn{2}{|l|}{Comment (justification for change) by the MB} & Proposed change by the MB & Secretariat observations on each comment submitted \\
\hline & & & & correction.) & \multicolumn{2}{|l|}{U+1BC80 has a recurrent typo: "Pernin ReportersÖ". It should be "Pernin Reporters', with a single quote instead of "Ö".} & \\
\hline US & & Enclosed Alphanumeric Supplement & E.4. & (Typographic error in need of correction.) & \multicolumn{2}{|l|}{\begin{tabular}{l}
The italicized comment immediately above U+1F10B should remove the "s" in "complements": \\
These digits complements the sans-serif digit sets in the Dingbat block 2780-2789 and 278A-2793.
\end{tabular}} & \\
\hline US & & \begin{tabular}{l}
Geometric \\
Shapes \\
Extended
\end{tabular} & E.5. & (Typographic error in need of correction.) & \multicolumn{2}{|l|}{\begin{tabular}{l}
In the italicized comment, the verb should just be "originate" (instead of "are originated"): \\
These geometric shapes are originated from the Webdings/Wingdings collections.
\end{tabular}} & \\
\hline
\end{tabular}

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Template for comments and secretariat observations


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Paragraph/ \\
Figure/Table/ Note \\
(e.g. Table 1)
\end{tabular} & Type of comment \(^{2}\) & Comment (justification for change) by the MB & by the \(\quad\) Proposed change by the MB & Secretariat observations on each comment submitted \\
\hline US & & Devanagari & E.7. & The proposed glyph change will more faithfully reflect the shape shown in the revised proposal N3970 (L2/10-475R), dated 23 May 2011. & \begin{tabular}{l}
The U.S. requests the glyph for U+0978 DEVANAGARI LETTER MARWARI DDA be modified as follows: \\
(Current) \\
5 \\
0978 \\
(as reflected in revised proposal)
\end{tabular} & \\
\hline US & & Cover page and pages 1 and 3 of PDAM (SC2 N4201) & E.8. & (Typographic error in need of correction.) & The title of the PDAM on the cover page of N4201 currently reads: "Amendment 1: Linear A, Palmyrene, Manichean, Khojki, Khudawadi, Bassa Vah, Duployan, and other characters". The script name "Manichean" is a typo for "Manichaean" and should also be corrected on pages 1 and 3 . & \\
\hline
\end{tabular}

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2 Type of comment: ge=general te \(=\) technical ed = editorial
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ISO electronic balloting commenting template/version 2001-10```


[^0]:    ${ }^{1}$ Form number: N3902-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03)

