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

| DOC. TYPE |  | Summary of Voting/Table of Replies |
| :---: | :---: | :---: |
| TITLE |  | Summary of Voting on SC 2 N 3714 : Combined PDAM Registration and Consideration Ballot: ISO/IEC 10646: 2003/Amd 1, Information technology -- Universal Multiple-Octet Coded Character Set (UCS) -- AMENDMENT 1: Glagolitic, Coptic, Georgian and other characters |
| SOURCE |  | SC 2 Secretariat |
| PROJECT |  | JTC1.02.10646.00.01 |
| STATUS |  | PDAM Registration: Approved. PDAM Consideration: This voting summary is forwarded to WG 2. WG 2 is requested to prepare a disposition of comments report, 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 Secretariat; ISO/IEC ITTF |
| ACCESS LEVEL |  | Def |
| ISSUE NO. |  | 188 |
| FILE | NAME <br> SIZE (KB) <br> PAGES | $\begin{array}{r} \text { 02n3730.pdf } \\ 7560 \\ 102 \end{array}$ |

Secretariat ISO/IEC JTC 1/SC 2 - IPSJ/ITSCJ *(Information Processing Society of Japan/Information Technology Standards
Commission of Japan) Room 308-3, Kikai-Shinko-Kaikan Bldg., 3-5-8, Shiba-Koen, Minato-ku, Tokyo 105-0011 Japan *Standard Organization Accredited by JISC
Telephone: +81-3-3431-2808; Facsimile: +81-3-3431-6493; E-mail: kimura@itscj.ipsj.or.jp

| Combined PDAM <br> -- Universal Mult | Registrati <br> ple-Octet | n and Consi Coded Chara | Summary SO/IEC JTC deration Bal cter Set (UC other | of Voting 1/SC 2 N ot: ISO/IL <br> S) -- AME <br> haracters | on <br> 3714 : <br> EC 10646: 20 <br> ENDMENT 1 | 03/Amd 1, I <br> : Glagolitic, | formati Coptic, | on technology Georgian and |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 : PDAM Regist <br> Q2 : PDAM Consid | ation eration |  |  |  |  |  |  |  |
|  |  | Q1 |  |  | Q2 |  |  | Comments |
|  | Approve | Disapprove | Abstention | Approve | Disapprove | Abstention | voted | Reasons |
| P-Member |  |  |  |  |  |  |  |  |
| Austria |  |  |  |  |  |  | X |  |
| Belgium |  |  |  |  |  |  | X |  |
| Canada | X |  |  | X |  |  |  | Attachment 1 |
| China |  | X\# |  |  | X\# |  |  | Attachment 2 |
| Denmark |  |  | X |  |  | X |  |  |
| Egypt |  |  |  |  |  |  | X |  |
| Finland | X |  |  | X |  |  |  |  |
| France | X |  |  | X* |  |  |  | $\begin{aligned} & \text { Attachment } 3 \\ & \text { WG2N2739 } \end{aligned}$ |
| Germany | X |  |  | X |  |  |  |  |
| Greece |  |  |  |  |  |  | X |  |
| Iceland |  |  |  |  |  |  | X |  |
| India |  |  |  |  |  |  | X |  |
| Iran, Islamic Republic of |  |  |  |  |  |  | X |  |
| Ireland |  | X |  |  | X |  |  | Attachment 4 |
| Israel | X |  |  | X |  |  |  |  |
| Italy | X |  |  | X |  |  |  |  |
| Japan | X |  |  | X |  |  |  |  |
| Korea, Democratic People's Republic |  |  |  |  |  |  | X |  |
| Korea, Republic of | X |  |  | X |  |  |  |  |
| Mongolia |  |  | X |  |  | X |  |  |
| Morocco |  | X\# |  |  | X\# |  |  | $\begin{aligned} & \text { Attachment 5 } \\ & \text { WG2N2739 } \end{aligned}$ |
| Norway | X |  |  | X |  |  |  |  |
| Poland |  |  |  |  |  |  | X |  |
| Romania | X |  |  | X |  |  |  |  |
| Russian Federation |  |  |  |  |  |  | X |  |
| Serbia and Montenegro |  |  |  |  |  |  | X |  |
| Singapore | X |  |  | X |  |  |  |  |
| Slovenia |  |  |  |  |  |  | X |  |
| Sweden | X |  |  | X |  |  |  |  |
| Thailand | X |  |  | X |  |  |  |  |
| Tunisia |  |  |  |  |  |  | X |  |
| USA | X |  |  | X* |  |  |  | Attachment 6 |
| Total (32) | 14 | 3 | 2 | 13 | 3 | 2 | 13 |  |
| *: Approve with co <br> \#: Acceptance of th | ments <br> reasons | appropriat | changes in | text will | change the | ote to approv |  |  |


| O-Member |  |
| :--- | ---: |
| Ethiopia Attachment 7 | WG 2 N 2747 |

## Attachment 1 - Canada

"Canada accepts the text of the PDAM1 as written. Also Canada requests that the following proposed additions to be approved by WG2 and included in this amendment before it progresses to the next stage:

JTC1/SC2/WG2 N2739, a joint Morocco-Canada-France proposal to add Tifinagh script JTC1/SC2/WG2/N2738 - proposal to add Roman Numeral Canopy character

## Attachment 2 - China

## China votes NO to ISO/IEC JTC 1/SC 2 N 3714

## General comments:

1. China opposes to encode those scripts less alive than Tibetan BrdaRten into BMP.
2. China would like help ISO/IEC 10646 project editor to prepare next version of Tai Lue (current 1980-19DF) and Phags-pa (current A840-A87F) for ballot.

Technical comments:
Tai Lue:

1. The Tai Lue scripts are being widely used among Dai people in China. Therefore the encoded Tai Lue scripts should be accepted by Chinese Dai experts and the users.
2. The New Tai Lue scripts had been standardized when it was improved in 1950's. And the writing rule and spelling rule was set then. All kinds of Tai Lue fonts being used should follow the rule.
3. We disagree on the ordering of Tai Lue characters in N3696. The Tai Lue characters should be listed in the order as the following: consonants, monophthongs, diphthongs, syllable-final consonants, tone marks, digits and the other marks.
A. Ordering of articulation. The consonants are ordered according to several properties in Dai tradition.

- Point of articulation: glottal, velar, apical, labial.
- Manner of articulation: plosive (unaspirated, aspirated), affricate (unaspirated, aspirated), nasal, fricative, semi-vowel.
- Tone class: high, low

The traditional way of ordering the consonants is divided the 42 consonants into 8 groups according to the point of articulation at first. The consonants among each group are ordered according to the manner of articulation. At last, the consonants are ordered according to the tone class. The group of consonants with high tone is listed before the group of consonants with low tone.
B. Ordering of vowels. The vowels are ordered in the turn of single vowels, diphthongs and syllable-final consonants. The vowels can be put before or after a consonant in a syllable, but the syllable-final consonants should be after any consonant and vowel.
C. The ordering of other characters. The tone mark is ordered after the vowel. Then come the digits listed as $0,1,2,3,4,5,6,7,8,9$. The last three are the particle mark (i.e., the 19DE in N3696), superjoin mark and subjoin mark.
4. We prefer to encode the Tai Lue characters in N3696, of which the numbers are: 1981, 199C, 19A3, 19A5, 19A6, 19A7, 19A8, 19A9, 19DF in separate way. That's more appropriate.
5. The encoding of Tai Lue vowel in N3696 is not consistent. Some of them is encoded separately, e.g., the vowel $[\leftrightarrow]$ is encoded combining 19C1 and 19B1, while the diphthong $[\leftrightarrow \iota$ ] is encoded combining 19C1 and 19CC.
6. The Tai Lue character 19 C 2 in the list of Tai Lue name is wrong.

## Phags-pa

1. Alphabet not integrated, 2 vowels ö and ü used for recording Mongolian missing.
2. Some presentation forms are regarded as cononical forms by error, e.g., A868 and A869 are presentation forms A 85 C , they should not be placed at current locations.
3. Letters sorting wrong. For instance: AB68, AB69, AB6A, AB6B, A862, A863, A864, A865.
4. Typeface in this PDAM had never been used in history of Phags-pa script.
5. Some characters' shapes are not the best choice for cononical characters, shapes selected should be thoese appear frequently. For instance: A851 and A86C.
6. Character names should conform to that of Mongolian (1800-18AF). For instance: A86F ANUSVARA, A870 BIRGA, etc..
7. At least one "Free Variation Form Selector"is needed. A "Syllable Connector" different to "general space" is also needed.
8. Phags-pa script shoud not be regarded as variant of Tibetan script.

The French national body vote yes to the PDAM, amendment 1 of l'ISO/CEI 10646:2003.
Additionnally AFNOR recommends the inclusion in this amendment discussion in Markham of the joint Morocco-Canada-France proposal to add Tifinagh to ISO/IEC 10646 (attached document N 2739).

Such decision would help to fasten appropriate satisfaction of important user's needs as shown in the proposed document.

# Irish comments on PDAM-1 for ISO/IEC 10646:2003 

Reference: SC2 N3714
Closes: 2004-05-04
Date: 2002-05-03
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.

## Technical comments

T1. Page 2, Clause Terms and definitions. The definition given here is technically imprecise. The " i " in the ligature "fi" may graphically combine with the "f" but that does not mean that " f " is the base character for "i". Compare Devanagari and Arabic scripts. This definition should be corrected by WG2 or the definition should be deleted from the PDAM.

T2. Page 1349, Annex A.1. Ireland requests that the Coptic block be extended to 2CFF. See T18 below.
T3. Page 1352, Annex A.2.1. Ireland requests that the Coptic block be extended to 2CFF. See T18 below.

T4. 0238 LATIN SMALL LETTER TH WITH STRIKETHROUGH: Ireland would support the removal of this character from the PDAM pending further study of it and similar phonetic ligatures. We do not, however, insist on this point. At the very least it ought to be moved to 1D7A with other phonetic characters.

T5. 03FD REVERSED GREEK CAPITAL LUNATE SIGMA SYMBOL. This character must be renamed GREEK CAPITAL REVERSED LUNATE SIGMA SYMBOL to be in accord with the usual naming conventions for Greek.

T6. O3FE DOTTED GREEK CAPITAL LUNATE SIGMA SYMBOL. This character must be renamed GREEK CAPITAL DOTTED LUNATE SIGMA SYMBOL to be in accord with the usual naming conventions for Greek.

T7. O3FF REVERSED DOTTED GREEK CAPITAL LUNATE SIGMA SYMBOL. This character must be renamed GREEK CAPITAL REVERSED DOTTED LUNATE SIGMA SYMBOL to be in accord with the usual naming conventions for Greek.

T8. 0767 ARABIC LETTER NOON WITH TWO DOTS BELOW AND DOT ABOVE. This character must be renamed ARABIC LETTER NOON WITH TWO DOTS BELOW to be in accord with the usual naming conventions for Arabic. The "dot above" here is an intrinsic feature of the NOON itself and should not be part of the character name.

T9. 0767 ARABIC LETTER NOON WITH DOT ABOVE AND SMALL TAH. This character must be renamed ARABIC LETTER NOON WITH SMALL TAH to be in accord with the usual naming conventions for Arabic. The "dot above" here is an intrinsic feature of the NOON itself and should not be part of the character name.

T10. 097D DEVANAGARI GLOTTAL STOP. This character must be renamed DEVANAGARI LETTER GLOTTAL STOP to be in accord with the usual naming conventions for Devanagari. The character is used as a letter.

T11. TABLE 57 - Row 19: Tai Lue. With reference to ISO/IEC JTC1/SC2/WG2 N2748 "Proposal on encoding New Tai Lue", Ireland rejects the changes proposed in that document. That new Chinese proposal requests the deletion of 11 characters, nine of which are intended to be composed using two combining diacritical marks proposed for addition. This is a reversal from the consensus on encoding
arrived at between the Chinese, Irish, and U.S. representatives who met to discuss Tai Lue at the Dublin meeting of WG2 in 2002. Further, if such a change were made, then it would be reasonable to suggest that the letters 1986, 1992, 1998, and 199E should also be decomposed to TAI LUE LETTER HIGH HA plus a set of subscripts, or that the Virama-model which was rejected for this script be reintroduced. N2748 proposes to encode TAI LUE LETTER VOWEL SIGN E as a sequence of TAI LUE LETTER VOWEL SIGN EE and TAI LUE LETTER VOWEL SIGN EE, which introduces inconsistency in the encoding model. Ireland also rejects the reorganization of the order of the characters in the code chart; we believe that the ordering of the consonants there reflects the ordering as actually presented in dictionaries (we will verify this before the WG2 meeting in Markham). Finally, N2748 proposes the unification of TAI LUE DIGIT ZERO and TAI LUE LETTER LOW VA, which is unacceptable. Ireland supports the Tai Lue encoding as given in the PDAM.

T12. 1 D79 LATIN LETTER INSULAR G. This character must be renamed LATIN SMALL LETTER INSULAR $G$ to be in accord with the usual naming conventions for Latin.

T13. TABLE 68 - Row 20: Currency Symbols. With reference to ISO/IEC JTC1/SC2/WG2 N2743 "Proposal to encode the HRYVNIA SIGN and the CEDI SIGN in the UCS", Ireland requests the addition of the two currency signs HRYVNIA SIGN and CEDI SIGN at positions 20B4 and 20B5.

T14. 2692 HAMMER AND CHISEL. The name should be changed to the more accurate HAMMER AND PICK.

T15. 2695 ROD OF AESCLEPIUS. The name of this son of Apollo is Aesculapius, though other spellings are found; interestingly, he is referenced in the Hippocratic Oath. The character name should be changed to STAFF OF AESCULAPIUS (STAFF, ROD, and WAND are all found, but a long walking-stick or staff is most common in the icons we have seen). The reference glyph for this character should not be set at an angle, but should be vertical like the related CADUCEUS; the angled glyph seems to be a peculiar use of one dictionary. We are prepared to provide a better glyph to the editor.

T16. 269A STAFF OF HERMES. Ireland requests the removal of this character until further evidence can be found. We find that the Staff of Hermes = the Caduceus, and cannot find authoritiative evidence for the winged staff in any context without the two snakes.

T17. TABLE 97 - Row 2C: Glagolitic. Ralph Cleminson, one of the authors of the Glagolitic proposal, has pointed out that Glagolitic requires a single combining mark, which was omitted from the original proposal: the COMBINING GLAGOLITIC SUSPENSION MARK, which looks a bit like an inverted COMBINING CYRILLIC TITLO (which is also used in Glagolitic). We request that this character be added to the PDAM, and suggest either one of the empty positions in the Glagolitic table or perhaps better 0487 in the Cyrillic block. An illustration of a manuscript containing numerous examples of the SUSPENSION MARK is appended to the end of this document. In addition to this, five character of the Glagolitic names need to be replaced with the following:

2C0C GLAGOLITIC CAPITAL LETTER DJERVI
2C23 GLAGOLITIC CAPITAL LETTER YU
2C2D GLAGOLITIC CAPITAL LETTER TROKUSTASTI A
2C3C GLAGOLITIC SMALL LETTER DJERVI
2C2D GLAGOLITIC SMALL LETTER TROKUSTASTI A.
T18. TABLE 98 - Row 2C: Coptic. With reference to ISO/IEC JTC1/SC2/WG2 N2744, "Revision of the Coptic block under ballot for the BMP of the UCS", Ireland requests the complete replacement of the Coptic chart and names list given in the PDAM, and the extension of the Coptic block to 2CFF. The table is also given below.

T19. TABLE 127 - Row A8: Phags-pa. With reference to ISO/IEC JTC1/SC2/WG2 N2745, "Summary of the 1st Joint Meeting on the HPhags-Pa Script Encoding", Ireland rejects the changes proposed in that document. The document deletes A868, A869, A870, A871, A872, and A873 without discussion, adds four punctuation characters which appear to be duplicates of Mongolian characters, adds two vowels which can each be rendered as strings of other characters in the proposal, adds an unnecessary glyph joiner, and duplicates four characters stating that distinct uses are made of some of these to represent some sounds on the Chinese language - which may be true, but the sounds are not described, nor is any evidence shown of the use of the characters distinctively in text. Finally, N2745 renames the Phags-Pa characters by adding unnecessary language identifiers throughout. Ireland supports the Phags-Pa encoding as given in the PDAM.

T20. Additional Phonetic Symbols. With reference to ISO/IEC JTC1/SC2/WG2 N2705 "Proposal to encode five Indo-Europeanist phonetic characters in the UCS", Ireland requests the addition of the characters LATIN SUBSCRIPT SMALL LETTER A, LATIN SUBSCRIPT SMALL LETTER E, LATIN SUBSCRIPT SMALL LETTER O, and LATIN SUBSCRIPT SMALL LETTER $X$ at suitable positions, as well as SUBSCRIPT SOLIDUS at position 208F.

T21. COMBINING RIGHT DOT ABOVE. With reference to ISO/IEC JTC1/SC2/WG2 N2628 "Proposal to add COMBINING RIGHT DOT ABOVE as required by Taiwanese Holo language Romanization to ISO/IEC 10646", as well as with reference to the 1997 document N1593 which requests the same character, Ireland requests the addition of COMBINING RIGHT DOT ABOVE at position 0358.

T22. Hebrew Characters. With reference to ISO/IEC JTC1/SC2/WG2 N2692 "Proposal to add ATNAH HAFUKH to the BMP of the UCS", to ISO/IEC JTC1/SC2/WG2 N2714 "Proposal to add two Masoretic punctuation marks to the BMP of the UCS", and to ISO/IEC JTC1/SC2/WG2 N2755 "Proposal to add QAMATS QATAN to the BMP of the UCS", Ireland requests the addition of the following: HEBREW ACCENT ATNAH HAFUKH at position 05A2 (with the glyph change of 05AA as shown in N2693), HEBREW MARK LOWER DOT at postion 05C5, and HEBREW PUNCTUATION NUN HAFUKHA at position 05C6, and HEBREW POINT QAMATS QATAN at position 05BA.

T23. Bhutanese Symbols. With reference to ISO/IEC JTC1/SC2/WG2 N2694 "Proposal to encode two Bhutanese marks for Dzongkha in the UCS", Ireland requests the addition of the two punctuation signs TIBETAN MARK BSKA- SHOG GI MGO RGYAN (ka shog gi go gyen) and TIBETAN MARK MNYAM YIG GI MGO RGYAN (nyam yig gi go gyen) at positions OFD0 and OFD1.

## Editorial comments

E1. Page 2, Clause Terms and definitions. Change "number" to "numbers".
E2. Page 15, Sub-clause 20.4 Variation selectors. Change "non base" to "non-base".
E3. Table 9 - Row 03: Combining Diacritical Marks. The glyph for 031A is missing.
E4. Table 10 - Row 03: Greek and Coptic. Replace the Coptic glyphs for 03E2-03EF with the glyphs as shown in ISO/IEC JTC1/SC2/WG2 N2744 and in the table below.

E5. Table 19-Row 07: Arabic Supplement. The glyphs for 075B and 076A have contour errors. The crossbars must be merged with the REH and LAM outlines.


COMBINING GLAGOLITIC SUSPENSION MARK

TABLE XX - Row 2C: COPTIC

2 C 8 2C9 2CA 2CB 2CC 2CD 2CE 2CF


TABLE XX - Row 2C: COPTIC

| hex | Name | hex | Name |
| :---: | :---: | :---: | :---: |
| 80 | COPTIC CAPITAL LETTER DIALECT-P ALEF | D0 | COPTIC CAPITAL LETTER L-SHAPED HA |
| 81 | COPTIC SMALL LETTER DIALECT-P ALEF | D1 | COPTIC SMALL LETTER L-SHAPED HA |
| 82 | COPTIC CAPITAL LETTER OLD COPTIC AIN | D2 | COPTIC CAPITAL LETTER OLD COPTIC HEI |
| 83 | COPTIC SMALL LETTER OLD COPTIC AIN | D3 | COPTIC SMALL LETTER OLD COPTIC HEI |
| 84 | COPTIC CAPITAL LETTER ALFA | D4 | COPTIC CAPITAL LETTER OLD COPTIC HAT |
| 85 | COPTIC SMALL LETTER ALFA | D5 | COPTIC SMALL LETTER OLD COPTIC HAT |
| 86 | COPTIC CAPITAL LETTER VIDA | D6 | COPTIC CAPITAL LETTER OLD COPTIC GANGIA |
| 87 | COPTIC SMALL LETTER VIDA | D7 | COPTII SMALL LETTER OLD COPTIC GANGIA |
| 88 | COPTIC CAPITAL LETTER GAMMA | D8 | COPTIC CAPITAL LETTER OLD COPTIC DJA |
| 89 | COPTIC SMALL LETTER GAMMA | D9 | COPTIC SMALL LETTER OLD COPTIC DJA |
| 8A | COPTIC CAPITAL LETTER DALDA | DA | COPTIC CAPITAL LETTER OLD COPTIC SHIMA |
| 8B | COPTIC SMALL LETTER DALDA | DB | COPTIC SMALL LETTER OLD COPTIC SHIMA |
| 8C | COPTIC CAPITAL LETTER EIE | DC | COPTIC CAPITAL LETTER OLD NUBIAN SHIMA |
| 8D | COPTIC SMALL LETTER EIE | DD | COPTIC SMALL LETTER OLD NUBIAN SHIMA |
| 8E | COPTIC CAPITAL LETTER CRYPTOGRAMMIC EIE | DE | COPTIC CAPITAL LETTER OLD NUBIAN NGI |
| 8F | COPTIC SMALL LETTER CRYPTOGRAMMIC EIE | DF | COPTIC SMALL LETTER OLD NUBIAN NGI |
| 90 | COPTIC CAPITAL LETTER SOU | E0 | COPTIC CAPITAL LETTER OLD NUBIAN NYI |
| 91 | COPTIC SMALL LETTER SOU | E1 | COPTIC SMALL LETTER OLD NUBIAN NYI |
| 92 | COPTIC CAPITAL LETTER ZATA | E2 | COPTIC CAPITAL LETTER OLD NUBIAN WAU |
| 93 | COPTIC SMALL LETTER ZATA | E3 | COPTIC SMALL LETTER OLD NUBIAN WAU |
| 94 | COPTIC CAPITAL LETTER HATE | E4 | COPTIC SYMBOL KAI |
| 95 | COPTIC SMALL LETTER HATE | E5 | COPTIC SYMBOL MI RO |
| 96 | COPTIC CAPITAL LETTER THETHE | E6 | COPTIC SYMBOL PI RO |
| 97 | COPTIC SMALL LETTER THETHE | E7 | COPTIC SYMBOL STAUROS |
| 98 | COPTIC CAPITAL LETTER IAUDA | E8 | COPTIC SYMBOL TAU RO |
| 99 | COPTIC SMALL LETTER IAUDA | E9 | COPTIC SYMBOL KHI RO |
| 9 A | COPTIC CAPITAL LETTER KAPA | EA | COPTIC SYMBOL SHIMA SIMA |
| 9 B | COPTIC SMALL LETTER KAPA | EB | (This position shall not be used) |
| 9 C | COPTIC CAPITAL LETTER DIALECT-P KAPA | EC | (This position shall not be used) |
| 9 D | COPTIC SMALL LETTER DIALECT-P KAPA | ED | (This position shall not be used) |
| 9 E | COPTIC CAPITAL LETTER LAULA | EE | (This position shall not be used) |
| 9 F | COPTIC SMALL LETTER LAULA | EF | (This position shall not be used) |
| A0 | COPTIC CAPITAL LETTER MI | F0 | (This position shall not be used) |
| A1 | COPTIC SMALL LETTER MI | F1 | (This position shall not be used) |
| A2 | COPTIC CAPITAL LETTER NI | F2 | (This position shall not be used) |
| A3 | COPTIC SMALL LETTER NI | F3 | (This position shall not be used) |
| A4 | COPTIC CAPITAL LETTER DIALECT-P NI | F4 | (This position shall not be used) |
| A5 | COPTIC SMALL LETTER DIALECT-P NI | F5 | (This position shall not be used) |
| A6 | COPTIC CAPITAL LETTER CRYPTOGRAMMIC NI | F6 | (This position shall not be used) |
| A7 | COPTIC SMALL LETTER CRYPTOGRAMMIC NI | F7 | (This position shall not be used) |
| A8 | COPTIC CAPITAL LETTER KSI | F8 | (This position shall not be used) |
| A9 | COPTIC SMALL LETTER KSI | F9 | COPTIC OLD NUBIAN FULL STOP |
| AA | COPTIC CAPITAL LETTER O | FA | COPTIC OLD NUBIAN DIRECT QUESTION MARK |
| AB | COPTIC SMALL LETTER O | FB | COPTIC OLD NUBIAN INDIRECT QUESTION MARK |
| AC | COPTIC CAPITAL LETTER PI | FC | COPTIC OLD NUBIAN VERSE DIVIDER |
| AD | COPTIC SMALL LETTER PI | FD | COPTIC FRACTION ONE HALF |
| AE | COPTIC CAPITAL LETTER RO | FE | COPTIC FULL STOP |
| AF | COPTIC SMALL LETTER RO | FF | COPTIC MORPHOLOGICAL DIVIDER |
| B0 | COPTIC CAPITAL LETTER SIMA |  |  |
| B1 | COPTIC SMALL LETTER SIMA |  |  |
| B2 | COPTIC CAPITAL LETTER TAU |  |  |
| B3 | COPTIC SMALL LETTER TAU |  |  |
| B4 | COPTIC CAPITAL LETTER UA |  |  |
| B5 | COPTIC SMALL LETTER UA |  |  |
| B6 | COPTIC CAPITAL LETTER FI |  |  |
| B7 | COPTIC SMALL LETTER FI |  |  |
| B8 | COPTIC CAPITAL LETTER KHI |  |  |
| B9 | COPTIC SMALL LETTER KHI |  |  |
| BA | COPTIC CAPITAL LETTER PSI |  |  |
| BB | COPTIC SMALL LETTER PSI |  |  |
| BC | COPTIC CAPITAL LETTER OOU |  |  |
| BD | COPTIC SMALL LETTER OOU |  |  |
| BE | COPTIC CAPITAL LETTER OLD COPTIC OOU |  |  |
| BF | COPTIC SMALL LETTER OLD COPTIC OOU |  |  |
| C0 | COPTIC CAPITAL LETTER SAMPI |  |  |
| C1 | COPTIC SMALL LETTER SAMPI |  |  |
| C2 | COPTIC CAPITAL LETTER CROSSED SHEI |  |  |
| C3 | COPTIC SMALL LETTER CROSSED SHEI |  |  |
| C4 | COPTIC CAPITAL LETTER OLD COPTIC SHEI |  |  |
| C5 | COPTIC SMALL LETTER OLD COPTIC SHEI |  |  |
| C6 | COPTIC CAPITAL LETTER OLD COPTIC ESH |  |  |
| C7 | COPTIC SMALL LETTER OLD COPTIC ESH |  |  |
| C8 | COPTIC CAPITAL LETTER AKHMIMIC KHEI |  |  |
| C9 | COPTIC SMALL LETTER AKHMIMIC KHEI COPTIC CAPITAL LETTER DIALECT-P HORI |  |  |
| CB | COPTIC SMALL LETTER DIALECT-P HORI COPTIC CAPITAL LETTER OLD COPTIC HORI |  |  |
| CD | COPTIC SMALL LETTER OLD COPTIC HORI |  |  |
| $\begin{aligned} & \text { CE } \\ & \text { CF } \end{aligned}$ | COPTIC CAPITAL LETTER OLD COPTIC HA COPTIC SMALL LETTER OLD COPTIC HA |  |  |

Group 00

Please find enclosed The Moroccan ballot form about the document N3714-ISO/IEC 10646: 2003/Amd 1, Information technology - Universal Multiple-Octet Coded Character Set (UCS) - AMDNDMENT 1: Glagolitic, Coptic, Georgian and other characters.

Moroccan comments consist on the addition of the Tifinaghe characters to the ISO/IEC 10646:2003. Please see the attached document N2739 or the link
http://anubis.dkuug.dk/J TC1/SC2/WG2/latestdocs.html
Best regards.
A. TAIBI

SNIMA/MOROCCO

| Title： | Comments accompanying the US positive vote on the PDAM1 to |  |
| :--- | :--- | :--- |
|  | ISO／IEC 10646：2003 |  |
| Source： | US National |  |
| Action： | Forward to INCITS |  |

The US National body is voting Yes on the PDAM1 to ISO／IEC 10646：2003．

## Technical Comments：

## T． 1 Latin Extended－B

Move the newly proposed U＋0238 LATIN SMALL LETTER TH WITH STRIKETHROUGH to U＋1D7A．
Rationale：it is more appropriate to encode it with other phonetic extensions

## T． 2 Ideographic Character

The US is supporting the glyph change requested by document IRG N1026 for the character U＋21E45 from镸 to 亞亞．It should be noted that the＇new＇glyph would be identical to the one shown by ISO／IEC 10646－ 2：2001 before its first amendment was applied to it．There is no change to the CJK source reference as a result of this glyph change．

## T． 3 Annex E Mirrored characters in bidirectional context

With the successive amendments it is obvious that the character list in E． 1 Mathematical symbols（renamed ＇Mathematical symbols and paired characters＇by this amendment）has not been kept up to date．The best source should be the Unicode file BidiMirroring－4．0．0．txt，source：http：／／www．unicode．org／Public／4．0－
Update／BidiMirroring－4．0．0．txt maintained by the Unicode Consortium．With the normative reference made by ISO／IEC 10646 to UAX\＃9（Unicode Bidi Algorithm），it is important to keep these name lists synchronized． Annex E needs to be revised to be consistent with the file mentioned above．

## T． 4 HKSCS－2001

According to http：／／www．info．gov．hk／digital21／eng／hkscs／download／big5－iso．txt there are a large number of HKSCS－2001 characters still encoded in the Private Use Area（PUA）．The following table shows the currently used PUA codes，the glyphs and proposed code allocation（as of now）．The proposed code shows as a 4－5 digit hex code（already encoded as single character），a UCS Sequence Identifier or a＇C－xxxx＇sequence indicating planned allocation for CJK Extension C．When no proposed code exists，a question mark is displayed． Given the facts that PUA usage is far from optimal for widely used repertoire and that the CJK Extension C is not yet mature，the US is in favor of accelerating the encoding of these characters by adding them in this amendment using the following categorization：
－A new block containing Unified CJK Basic Stroke types
－Additional symbols（Miscellaneous Technical block）
－CJK Unified Ideographs
（The shaded area in the glyph cells shows the character bounding box）

| HKSCS Code | PUA Code | Glyph | Proposed Code | Comment |
| :---: | :---: | :---: | :---: | :---: |
| 8840 | F303 | － | C－0001 | xx00 Unified CJK Basic Stroke |
| 8841 | F304 | ） | C－0518 | xx01 Unified CJK Basic Stroke |
| 8842 | F305 | $\downarrow$ | C－0519 | xx02 Unified CJK Basic Stroke |
| 8843 | F306 | $\checkmark$ | C－0520 | xx03 Unified CJK Basic Stroke |
| 8844 | F307 | $L$ | ？ | xx04 Unified CJK Basic Stroke |
| 8846 | F309 | L | C－0400 | xx05 Unified CJK Basic Stroke |
| 8849 | F30C | ］ | ？ | xx06 Unified CJK Basic Stroke <br> HC87A already maps to similarly shaped U＋200CC |
| 884A | F30D | 7 | C－0402 | xx07 Unified CJK Basic Stroke |
| 884D | F310 | $L$ | C－0399 | xx08 Unified CJK Basic Stroke |
| 884F | F312 | $\stackrel{\square}{5}$ | C－0403 | xx09 Unified CJK Basic Stroke |
| 8850 | F313 | $\downarrow$ | C－0404 | xx0A Unified CJK Basic Stroke |
| 8851 | F314 | 3 | C－0405 | xx0B Unified CJK Basic Stroke |
| 8852 | F315 | 3 | C－0406 | xx0C Unified CJK Basic Stroke |
| 8854 | F317 | 乙 | C－0407 | xx0D Unified CJK Basic Stroke |
| 8855 | F318 | 7 | C－0408 | xx0E Unified CJK Basic Stroke |
| 8862 | F325 | $\overline{\hat{E}}$ | ＜00CA，0304＞ | Already encoded as composite sequence |
| 8864 | F327 | $\stackrel{\text { E．}}{ }$ | ＜00CA，030C＞ | Already encoded as composite sequence |
| 88A3 | F344 | $\overline{\hat{e}}$ | ＜00EA，0304＞ | Already encoded as composite sequence |
| 88A5 | F346 | ễ | ＜00EA，030C＞ | Already encoded as composite sequence |
| 88A9 | F34A | $\stackrel{\text { ¢ }}{ \pm}$ | ？ | 23DA Miscellaneous Technical |
| 88AA | F34B | $\square$ | ？ | 23DB Miscellaneous Technical |
| 8C43 | F57A | 龦 | C－13160 | 9FA6 CJK Unified Ideographs |
| 8C6D | F5A4 | 日暑 | C－10543 | 9FA7 CJK Unified Ideographs |
| 8C74 | F5AB | 隹 | C－3169 | 9FA8 CJK Unified Ideographs |
| 8CB7 | F5CC | 立卉 | C－18342 | 9FA9 CJK Unified Ideographs |
| 8CB9 | F5CE | 走人 | C－19996 | 9FAA CJK Unified Ideographs |
| 8CBB | F5D0 | 幹 | C－20303 | 9FAB CJK Unified Ideographs |
| 8CC0 | F5D5 | 銅 | C－21171 | 9FAC CJK Unified Ideographs |


| 8CD7 | F5EC | 龭 | C－22927 | 9FAD CJK Unified Ideographs |
| :---: | :---: | :---: | :---: | :---: |
| 8CD8 | F5ED | 龮 | C－22952 | 9FAE CJK Unified Ideographs |
| 8CDA | F5EF | 鋮 | C－21016 | 9FAF CJK Unified Ideographs |
| C879 | F7E5 | $\backslash$ | C－0211 | xx0F Unified CJK Basic Stroke |
| C87E | F7EA | 入－ | 4491 | Already encoded as CJK Unified Ideograph（grass radical） looks like a mapping oversight |
| C8A1 | F7EB | 止 | C－3309 | 4DB6 CJK Unified Ideographs |
| C8A3 | F7ED | X | C－5373 | 4DB7 CJK Unified Ideographs |

It should be noted that a similar situation exits for GB18030 where many characters are also encoded in the PUA area，it could be beneficial to address both issues（HKSCS and GB18030）at the same time．For reference the following table shows these PUA characters：

| GB18030 <br> Code | PUA Code | Glyph | Proposed Code | Comment |
| :---: | :---: | :---: | :---: | :---: |
| A6D9 | E78D | ， | ？ |  |
| A6DA | E78E | － | ？ | Vertical variant of U＋3002 。 |
| A6DB | E78F | ， | ？ | Vertical variant of $\mathrm{U}+3001$ ， |
| A6DC | E790 | ： | ？ |  |
| A6DD | E791 | ； | ？ |  |
| A6DE | E792 | 1 | ？ |  |
| A6DF | E793 | ？ | ？ |  |
| A6EC | E794 | $\square$ | ？ | Vertical variant of U＋3016 【 |
| A6ED | E795 | M | ？ | Vertical variant of U＋3017 $]$ |
| A6F3 | E796 | ： | ？ | Vertical ellipsis，but can＇t use U＋22EE as it does not decompose in＜vertical＞U＋2026 |
| A8BC | E7C7 | ḿ | 1E3F |  |
| FE51 | E816 | J | 20087 |  |
| FE52 | E817 | ノ | 20089 |  |
| FE53 | E818 | J | 200CC |  |
| FE59 | E81E | $\checkmark$ | ？ |  |
| FE61 | E826 | 手 | ？ |  |
| FE66 | E82B | 表 | ？ |  |
| FE67 | E82C | \＃ | ？ | Exists as proposed C－0537 |
| FE6C | E831 | 丰 | 215D7 |  |


| FE6D | E832 | 肾， | $?$ |  |
| :--- | :--- | :--- | :--- | :--- |
| FE76 | E83B | 找 | 2298 F |  |
| FE7E | E843 | 光 | 20509 |  |
| FE90 | E854 | 龺 | $2099 D$ |  |
| FE91 | E855 | 炏 | $241 F E$ |  |
| FEA0 | E864 | 䜌糸 | $?$ | Similar to U＋470C <br> could be added as a CJK Compatibility Ideograph |

## T． 5 Phonetic symbols

a）The proposed character at position 1D79 should be renamed as follows（＇small＇inserted）：
1D79 LATIN SMALL LETTER INSULAR G
b）To complete the phonetic symbols repertoire the US is requesting the addition of the following characters：
PHONETIC EXTENSION（existing block）
1D7B LATIN SMALL CAPITAL LETTER I WITH STROKE
1D7C LATIN SMALL LETTER IOTA WITH STROKE
1D7D LATIN SMALL LETTER P WITH STROKE
1D7E LATIN SMALL CAPITAL LETTER U WITH STROKE
1D7F LATIN SMALL LETTER UPSILON WITH STROKE

New block extending the Phonetic symbols（block name to be determined）
1D80 LATIN SMALL LETTER B WITH PALATAL HOOK
1D81 LATIN SMALL LETTER D WITH PALATAL HOOK
1D82 LATIN SMALL LETTER F WITH PALATAL HOOK
1D83 LATIN SMALL LETTER G WITH PALATAL HOOK 1D84 LATIN SMALL LETTER K WITH PALATAL HOOK 1D85 LATIN SMALL LETTER L WITH PALATAL HOOK 1D86 LATIN SMALL LETTER M WITH PALATAL HOOK 1D87 LATIN SMALL LETTER N WITH PALATAL HOOK 1D88 LATIN SMALL LETTER P WITH PALATAL HOOK 1D89 LATIN SMALL LETTER R WITH PALATAL HOOK 1D8A LATIN SMALL LETTER S WITH PALATAL HOOK 1D8B LATIN SMALL LETTER ESH WITH PALATAL HOOK 1D8C LATIN SMALL LETTER V WITH PALATAL HOOK 1D8D LATIN SMALL LETTER X WITH PALATAL HOOK 1D8E LATIN SMALL LETTER Z WITH PALATAL HOOK 1D8F LATIN SMALL LETTER A WITH RETROFLEX HOOK

1D90 LATIN SMALL LETTER ALPHA WITH RETROFLEX HOOK 1D91 LATIN SMALL LETTER D WITH HOOK AND TAIL 1D92 LATIN SMALL LETTER E WITH RETROFLEX HOOK 1D93 LATIN SMALL LETTER OPEN E WITH RETROFLEX HOOK 1D94 LATIN SMALL LETTER REVERSED OPEN E WITH RETROFLEX HOOK 1D95 LATIN SMALL LETTER SCHWA WITH RETROFLEX HOOK 1D96 LATIN SMALL LETTER I WITH RETROFLEX HOOK 1D97 LATIN SMALL LETTER OPEN O WITH RETROFLEX HOOK 1D98 LATIN SMALL LETTER ESH WITH RETROFLEX HOOK
1D99 LATIN SMALL LETTER U WITH RETROFLEX HOOK 1D9A LATIN SMALL LETTER EZH WITH RETROFLEX HOOK
1D9B MODIFIER LETTER SMALL TURNED ALPHA
1D9C MODIFIER LETTER SMALL C
1D9D MODIFIER LETTER SMALL C WITH CURL
1D9E MODIFIER LETTER SMALL ETH
1D9F MODIFIER LETTER SMALL REVERSED OPEN E
1DA0 MODIFIER LETTER SMALL F
1DA1 MODIFIER LETTER SMALL DOTLESS J WITH STROKE
1DA2 MODIFIER LETTER SMALL SCRIPT G

1DA3 MODIFIER LETTER SMALL TURNED H
1DA4 MODIFIER LETTER SMALL I WITH STROKE
1DA5 MODIFIER LETTER SMALL IOTA
1DA6 MODIFIER LETTER SMALL CAPITAL I
1DA7 MODIFIER LETTER SMALL CAPITAL I WITH STROKE
1DA8 MODIFIER LETTER SMALL J WITH CROSSED-TAIL
1DA9 MODIFIER LETTER SMALL L WITH RETROFLEX HOOK
1DAA MODIFIER LETTER SMALL L WITH PALATAL HOOK
1DAB MODIFIER LETTER SMALL CAPITAL L
1DAC MODIFIER LETTER SMALL M WITH HOOK
1DAD MODIFIER LETTER SMALL TURNED M WITH LONG LEG
1DAE MODIFIER LETTER SMALL N WITH LEFT HOOK
1DAF MODIFIER LETTER SMALL N WITH RETROFLEX HOOK
1DB0 MODIFIER LETTER SMALL CAPITAL N
1DB1 MODIFIER LETTER SMALL BARRED O
1DB2 MODIFIER LETTER SMALL PHI
1DB3 MODIFIER LETTER SMALL S WITH HOOK
1DB4 MODIFIER LETTER SMALL ESH
1DB5 MODIFIER LETTER SMALL T WITH PALATAL HOOK
1DB6 MODIFIER LETTER SMALL U BAR
1DB7 MODIFIER LETTER SMALL UPSILON
1DB8 MODIFIER LETTER SMALL CAPITAL U
1DB9 MODIFIER LETTER SMALL V WITH HOOK
1DBA MODIFIER LETTER SMALL TURNED V
1DBB MODIFIER LETTER SMALL Z
1DBC MODIFIER LETTER SMALL Z WITH RETROFLEX HOOK
1DBD MODIFIER LETTER SMALL Z WITH CURL
1DBE MODIFIER LETTER SMALL EZH
1DBF MODIFIER LETTER SMALL THETA
1DC2 COMBINING SNAKE BELOW

LATIN EXTENDED-B (existing block)
0238 LATIN SMALL LETTER DB DIGRAPH
0239 LATIN SMALL LETTER QP DIGRAPH
023A LATIN SMALL LETTER C WITH STROKE
The complete character proposal is WG2 N2740.

## T. 6 Annex L Character naming guidelines

To correct the discrepancy between the introduction of the Phags-Pa character names and the naming guidelines, the US is asking the following changes to Annex L, Rule 4.

- First paragraph add 'medial' before the term 'HYPHEN-MINUS',
- In paragraph starting with 'The following six character', replace 'six' by two,
- Remove the first 4 entries, preserving the two Hangul entries.


## T. 7 Coptic

a) The following characters should be removed unless further evidence is found.

2C99 COPTIC CAPITAL LETTER AKHMIMIC KHEI and
2C9A COPTIC CAPITAL LETTER RO WITH STROKE
Rationale: Because 2C99 is not a Bohairic character, and because 2C9A is a non-alphabetic character, neither one occurs in upper-case (capital) form.
b) The character 2CBD COPTIC SYMBOL KHRISTOS should be renamed COPTIC SYMBOL STAUROS.

Rationale: The illustration for this character is not a symbol for khristos "Christ", as the character name would seem to indicate, but rather for stauros "cross".

## T. 8 Glagolitic

The following character names need to be revised as follows.

2C2D GLAGOLITIC CAPITAL LETTER TROKUSTASTI A
2C3C GLAGOLITIC SMALL LETTER DJERVI
2C5D GLAGOLITIC SMALL LETTER TROKUSTASTI A

## T. 9 Ancient Greek Numbers

The proposed block has no codepoint for 'zero' among the Greek symbols. This symbol occurs notably whenever a sexagesimal notation is used in astronomical texts to record degrees, minutes and seconds, or hours minutes and seconds, suggested new glyph at location 1018A:


1018A GREEK ZERO SIGN
The US is in support of adding that character as proposed by the document WG2 N 2708

## T. 10 Miscellaneous Mathematical

a) The proposed character at position 2692 should be renamed as follows:

## 2692 HAMMER AND PICK

b) In support of WG2 N2680, the US is asking for the addition of the following mathematical symbols with glyphs as described in the document:

```
27C3 OPEN SUPERSET
27C4 OPEN SUBSET
27C5 LEFT S-SHAPED BAG DELIMITER
27C6 RIGHT S-SHAPED BAG DELIMITER
```

Note: the two first names differ from the proposal by having 'OPEN" instead of 'BOUNDED'.

## T. 11 New Arabic characters

The US is requesting the encoding the following 5 Arabic characters as supported by document WG2 N2723 (UTC/L2 L04-25) in the following blocks:

ARABIC
065D ARABIC REVERSED DAMMA
065E ARABIC FATHA WITH TWO DOTS

## ARABIC SUPPLEMENT

076B ARABIC LETTER REH WITH TWO DOTS VERTICALLY ABOVE
076C ARABIC LETTER REH WITH HAMZA ABOVE
076D ARABIC LETTER SEEN WITH TWO DOTS VERTICALLY ABOVE

## T. 12 Tamil

The US is requesting the encoding the following Tamil character as supported by document WG2 N2741 (UTC/L2 L04-73) in the Tamil block:

0BE6 TAMIL DIGIT ZERO

## T. 13 Alternate Format Characters

With respect to the issues raised in document WG2 N2648, author V.S. Umamaheswaran, the US suggests the addition of a formal definition for Alternate Format Characters in clause 4 and would support a clarification concerning these characters as described in clause 20.3 and Annex F. The US would welcome such clarification in this PDAM text.

## T. 14 JIS-x-213 source reference

JIS-x-213 has been revised with new CJK source references; this should be added to the appropriate CJK source files.

## T. 15 Tai Lue

The US requests WG2 to make sure the ordering of the Tai Lue block respects a traditional order.

## Editorial Comments:

## E. 1 Chart page 8, Table 9 Row 3

Glyph production error in cell U+031A (not a new character). A part of the glyph shows as a rectangle instead as of an angle.

End of US comments

Greetings Ms Kimura,
Concerning the FPDAM ballot for SC2N3714; the Quality and Standards Authority of Ethiopia is in agreement with the general and technical aspects of the amendment proposal as it addresses the orthographies of other member bodies. Under Clause 33, however, we are concerned that consideration has not been given for inclusion of Extended Ethiopic elements found in the Ethiopian national character set standard of 2002. Attached to this email is a request for inclusion of Extended Ethiopic elements into Amendment 1 of ISO/IEC 10646:2003 derived from our national character set standard ES 781:2002.

The QSAE thanks the Secretariat and the distinguished members of the WG2 for consideration of this request.

Sincerely,

Mesfin Teklehaimanot
A/Director, Standards and Metrology QSAE

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

| DOC. TYPE | National Body Contribution |
| :--- | :--- |
|  | Late Tunisian Comments on SC 2 N 3714, Combined PDAM Registration and <br> Consideration Ballot: ISO/IEC 10646: 2003/Amd 1, Information technology -- Universal <br> Multiple-Octet Coded Character Set (UCS) -- AMENDMENT 1: Glagolitic, Coptic, <br> Georgian and other characters |
| SOURCE | National Body of Tunisia |
| PROJECT | JTC1.02.10646.00.01 |
| STATUS | This document is forwarded to WG 2 for consideration. |
| ACTION ID | FYI |
| DUE DATE |  |
| DISTRIBUTION | P, O and L Members of ISO/IEC JTC 1/SC 2; ISO/IEC JTC 1 Secretariat; ISO/IEC ITTF |
| ACCESS LEVEL | Def |
| ISSUE NO. | 189 |
|  | NAME <br> SIZE (KB) <br> PAGES |
| FILE | 02 n3731.pdf |

Secretariat ISO/IEC JTC 1/SC 2 - IPSJ/ITSCJ *(Information Processing Society of Japan/Information Technology Standards Commission of Japan) Room 308-3, Kikai-Shinko-Kaikan Bldg., 3-5-8, Shiba-Koen, Minato-ku, Tokyo 105-0011 Japan *Standard Organization Accredited by JISC
Telephone: +81-3-3431-2808; Facsimile: +81-3-3431-6493; E-mail: kimura@itscj.ipsj.or.jp

Date: Mon, 10 May 2004 08:26:32 +0100
From: "INORPI" [inorpi@email.ati.tn](mailto:inorpi@email.ati.tn)
To: [kimura@itscj.ipsj.or.jp](mailto:kimura@itscj.ipsj.or.jp)
Subject: Ballot on Draft amendment of the ISO/IEC 10646/2003 related to the universal characters codes

## FROM : INORPI

Email : inorpi@email.ati.tn
"P" member of the JTC 1/SC 2

## TO : TOSHIKO KIMURA

Email : kimura@itscj.ipsj.or.jp

Subject : Ballot on Draft amendment of the ISO/IEC 10646/2003 related to the universal characters codes .

Dear Sir,
We would like to inform you that INORPI approve the ISO/IEC 10646 amendment but,
considering the importance of the efforts begun by the Moroccan authorities for the protection of the amazigh language, and considering the necessity to allow and strengthen the development of the amazigh educative programs .

INORPI recommends the integration of the tifighane coded character in the project of amendment, as developed by the Institut royal de la Culture Amazighe ( IRCAM ).

Amor CHIBANI
INORPI

