Summary of Voting on SC 2 N 3442

P-Member	Approve	Approve with comments	Disapprove	Abstain	No Response	Comments
Armenia					X	
Austria					X	
Belgium	X					
Brazil	X					
Canada		X				Attachment 1
China		X				Attachment 2
Denmark	X					
Egypt	X					
Finland	X					
France					X	
Germany		X				Attachment 3
Greece	X					
Iceland					X	
India					X	
Iran, Islamic Republic of					X	
Ireland			X*			Attachment 4
Israel	X					
Italy				X		lack of experts
Japan			X*			Attachment 5
Korea, Dem. P. Rep. Of			X*			Attachment 6
Korea, Rep. of	X					
Mongolia	X					
Morocco					X	
Netherlands				X		lack of expertise
Norway	X					
Poland	X					
Romania	X					
Russian Federation					X	
Singapore					X	
Slovenia	X					
Sweden			X			Attachment 7
Thailand	X					
Tunisia					X	
Turkey	X					
USA		X				Attachment 8
Yugoslavia	X					
	17	3	4	2	10	
36	20		4	2	10	

*=Acceptance of these reasons and appropriate changes in the text will change our vote to approval

Attachment 1 - Canada

Recommend Canada APPROVEs the FCD text with the following comment:

Canada understands the difficult nature of arriving at a consensus on many of the less frequently used scripts contained in Plane 1. We also understand and congratulate the IRG in arriving at the consensus on the content of Plane 2 for the CJK Extension B. The various script experts should review the final character sets, their glyphs and allocations -- and any errors found during the final review should be corrected in the FDIS text. Canada will go along with the experts' final disposition of any such corrections.

Attachment 2 - China

China is in favour of ISO/IEC FCD 10646-2 with comments.

China requests that the latest version of CJK Unified Ideographs Extension B, which is provided by IRG, should be adopted in DIS.
The latest version contains some font changes and source information corrections as requested by HKSAR.

German comments on ISO/IEC FCD 10646-2:2000

Etruscan

Major

1. Name: Table 1 must be renamed to "Old Italic" as the letters cover not only the Etruscan script.
2. Neither documentation nor the state of research for the following characters are yet sufficiently strong to warrant their inclusion at this point in time:
    1. ETRUSCAN NUMERAL ONE HUNDRED,
    2. ETRUSCAN NUMERAL ALTERNATE ONE HUNDERED,
    3. ETRUSCAN NUMERAL ONE THOUSAND,
    4. ETRUSCAN NUMERAL ONE HUNDRED OR ONE THOUSAND;
    5. ETRUSCAN NUMERAL ONE THOUSAND OR TEN THOUSAND.

    These characters must be carefully reviewed before contemplating their inclusion. They must be removed for the time being.
3. The ETRUSCAN WORD SEPARATOR can possibly be unified with U2027 HYPHENATION POINT. Its encoding should be postponed until the encoding of punctuation characters for syllables in Old Italic scripts has been elucidated in more detail.

Points for future consideration

On these points no action is required at present. It should be stressed, however, that Row 03 is as yet not complete. When further Old Italic characters are considered for inclusion, at least the following issues must be tackled:

- Punctuation of syllables in South Etruscan and Venetian;
- Whether or not Old Italic should be unified with their direct relations, the Alpine scripts such as Venetian;
- How the Messapian script, a direct descendant from the Greek script, is to be handled;
- How and in which block local variants of the Latin script such as the retrograde Volscian C are to be coded.

Gothic

Germany is pleased to see that its comments on the Gothic script have been fully incorporated.

Deseret

As stressed in the comments on the CD Germany would strongly prefer if artificial scripts of the Deseret typ were not encoded and table 3 were removed.

Western musical symbols

Note

Germany is pleased that its comments have been largely incorporated. In particular, it welcomes WG2's invitation to submit a proposal for the missing musical characters and will endeavour to involve the relevant experts.

Comment (minor)

It would be helpful if either concrete examples for practical Musical encoding were given in

Annex E or if at least a pointer to a suitable document were given there.

Mathematical alphanumerical symbols

Note

As mentioned in our last comments, Germany is not too happy about tables 8 - 15 as these might be misused as a side door to encode font information. It sees, however, sufficient value in the tables as to not demand their removal.

Comments

1. The glyphs of U01D42C to U01D42F must be aligned with their description in the table. In particular, a glyph for a bold small s must be reinstated.

2. Care should be taken that the glyphs of table 14 and 15 correspond to their description also for the partial differential, the epsilon symbol, the theta symbol, the kappa symbol, the phi symbol, the rho symbol and the pi symbol. At present, they do not always display their indicated font style, e. g. sans bold for U01D789 to U01D78F.

Annex E

Minor

1. P. 383, 2nd column: Expand non-SPP character to character not in the special purpose plane (or similar). This abbreviation seems to be used only here and is wont to confuse the reader.

Attachment 4 - Ireland Irish comments on the FCD for ISO/IEC 10646-2
Reference: SC2 N3442
Closes: 2000-09-19
Date: 2000-09-08

Ireland **disapproves** the draft with the technical and editorial comments given below.

Technical comments
Clause 4
T.4.1. For some reason, six-digit values are used here (and in other parts of the FCD) instead of five-digit values as specified here in the second paragraph. Five digits are already in common use (U+1D000 not U+01D000). Use five-digit values throughout.

T.4.2. After second paragraph, add: "NOTE: For planes beyond Plane 0, it is recommended that the 5-digit form be used."

Clause 6
T.6.1. Second paragraph, say: "…the SMP shall not be used to encode CJK Unified Ideographs".

T.6.2. It says "Code positions 01FFFE and 01FFFF are reserved." Reserved for what? Part 1 says why U+FFFE and U+FFFF "shall not be used". ("Reserved" is the Unicode term.) As noted above, the 5-digit notation, not the 6-digit notation, should be used for U+1FFFE and U+1FFFF.

Clause 7
T.7.1. Same comment as T.6.1 for clause 6.

Clause 8
T.8.1. Same comment as T.6.1 for clause 6.

T.8.2. The Alternate format characters are said to be specified in annex F of Part 1 in this clause, but in clause 9 it says they are specified in clause 20 of Part 1. Strictly speaking, the specification is in clause 20 (which is normative) of part 1; the informative Annex F only describes the characters in greater detail. So this clause should refer to clause 20 of Part 1.

Clause 10 Table 1 - Row 03: ETRUSCAN
T.10-T1.1. This script covers more than just Etruscan, and should be renamed "Old Italic", which unifies the Etruscan, Oscan, Umbrian, Faliscan, Messapic, North Picene, and South Picene alphabets.

T.10-T1.2. In the character names and table headings, change ETRUSCAN to OLD ITALIC.

T.10-T1.3. The punctuation character at U+10320 should be deleted pending further study of unified punctuation for ancient scripts; the subsequent characters should be shifted up a space.

T.10-T1.4. A character "OLD ITALIC LETTER TA (Messapic)" should be added at 1031F. For evidence of this character, see http://www.egt.ie/standards/iso10646/pdf/old-italic.pdf.

T.10-T1.5. The four numeric characters from U+10326 - U+10269 are poorly understood and are not uniformly represented in commonly available discussions of Etruscan writing. These should be deleted from the FCD pending further study for later addition as an amendment to the standard. Better safe than sorry.

T.10-T1.6. Change the name of U+10302 to OLD ITALIC LETTER CE and the name of U+10312 to OLD ITALIC LETTER QO (from KE and KU respectively).

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Clause 10 Table 3 - Row 04: DESERET
T.10-T3.1. At U+10428 delete one of the spaces between SMALL and LETTER.

Clause 10 Table 3 - Row 04: BYZANTINE MUSICAL SYMBOLS
T.10-T3.1. At U+10428 delete one of the spaces between SMALL and LETTER.

T.10-T3.2. Delete the parentheses in U+1D0A9.

T.10-T3.3. The parenthetial comments (u), (m), and (l) should be deleted from the character names. Discussion with Greek experts has shown that these comments have not been consistently applied, and it is possible that some characters may have more than one positioning. Indication of the stripe(s) in which characters may appear should be left for further study, and an informative annex added to ISO/IEC 10646 at a later date.

T.10-T3.4. The formula GREEK BYZANTINE MUSICAL XYZ SIGN should be changed to BYZANTINE MUSICAL SYMBOL XYZ. This will align the character names with other musical symbol names (compare comment T.10-T7.3 below), and will align the character names with the block name, BYZANTINE MUSICAL SYMBOLS.

Clause 10 Table 7 - Row D1: WESTERN MUSICAL SYMBOLS
T.10-T7.1. The characters U+1D110, U+1D111, U+1D112 were not accepted for inclusion in the standard; they are unified with three characters in the BMP. Delete them.

T.10-T7.2. Delete U+1D13E WESTERN MUSICAL SYMBOL OLD STYLE C CLEF. This is just a presentation form of the preceding character.

T.10-T7.3. Change WESTERN MUSICAL SYMBOLS to MUSICAL SYMBOLS throughout. While originating in the West, these symbols are used worldwide.

T.10-T7.4. Add one character MUSICAL SYMBOL END OF STIMME after U+1D11E. This character completes the range set by HAUPTSTIMME and NEBENSTIMME.

T.10-T7.5. Add two characters MUSICAL SYMBOL FINGERED TREMOLO ONE and MUSICAL SYMBOL FINGERED TREMOLO TWO after U+1D19A.

T.10-T7.6. Rearrange the entire table as given below in Annex 2. This retains the blocks of related characters but reorders those blocks into a more coherent series. This will assist users of the standard in implementations like fonts. Note for instance that the combining characters follow the noteheads in a hierarchical sequence.

T.10-T7.7. Change the following character names:

(using the hex positions from the FCD)
```
1D196   WESTERN MUSICAL SYMBOL STEM
1D197   WESTERN MUSICAL SYMBOL SPRECHGESANG STEM
1D198   WESTERN MUSICAL SYMBOL TREMOLO STEM ONE
1D199   WESTERN MUSICAL SYMBOL TREMOLO STEM TWO
1D19A   WESTERN MUSICAL SYMBOL TREMOLO STEM THREE
1D19B   WESTERN MUSICAL SYMBOL FINGERED TREMOLO
1D16D   WESTERN MUSICAL SYMBOL AUGMENTATION DOT
1D16E   WESTERN MUSICAL SYMBOL STEM PLUS FLAG ONE
1D16F   WESTERN MUSICAL SYMBOL STEM PLUS FLAG TWO
1D170   WESTERN MUSICAL SYMBOL STEM PLUS FLAG THREE
1D171   WESTERN MUSICAL SYMBOL STEM PLUS FLAG FOUR
1D172   WESTERN MUSICAL SYMBOL STEM PLUS FLAG FIVE
1D1A6   WESTERN MUSICAL SYMBOL TIE-START
1D1A7   WESTERN MUSICAL SYMBOL TIE-END
1D1A8   WESTERN MUSICAL SYMBOL BEAM-START
1D1A9   WESTERN MUSICAL SYMBOL BEAM-END
1D1AA   WESTERN MUSICAL SYMBOL SLUR-START
1D1AB   WESTERN MUSICAL SYMBOL SLUR-END
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1D1AC   WESTERN MUSICAL SYMBOL PHRASE-START
1D1AD   WESTERN MUSICAL SYMBOL PHRASE-END
1D110   WESTERN MUSICAL SYMBOL ACCENT
1D111   WESTERN MUSICAL SYMBOL STACCATO
1D112   WESTERN MUSICAL SYMBOL TENUTO
1D113   WESTERN MUSICAL SYMBOL STACCATISSIMO
1D114   WESTERN MUSICAL SYMBOL MARCATO
1D115   WESTERN MUSICAL SYMBOL MARCATO-STACCATO
1D116   WESTERN MUSICAL SYMBOL ACCENT-STACCATO
1D117   WESTERN MUSICAL SYMBOL LOURE
1D11A   WESTERN MUSICAL SYMBOL DOIT
1D11B   WESTERN MUSICAL SYMBOL RIP
1D11C   WESTERN MUSICAL SYMBOL FLIP
1D11D   WESTERN MUSICAL SYMBOL SMEAR
1D11E   WESTERN MUSICAL SYMBOL BEND
1D11F   WESTERN MUSICAL SYMBOL DOUBLE TONGUE
1D120   WESTERN MUSICAL SYMBOL TRIPLE TONGUE
1D135   WESTERN MUSICAL SYMBOL FERMATA UNDER
1D157   WESTERN MUSICAL SYMBOL DOWN BOW
1D158   WESTERN MUSICAL SYMBOL UP BOW
1D159   WESTERN MUSICAL SYMBOL HARMONIC
1D15A   WESTERN MUSICAL SYMBOL SNAP PIZZICATO

to

(using the hex positions from the proposed Annex 2 below)
1D111   MUSICAL SYMBOL FERMATA BELOW
1D165   MUSICAL SYMBOL COMBINING STEM
1D166   MUSICAL SYMBOL COMBINING SPRECHGESANG STEM
1D167   MUSICAL SYMBOL COMBINING TREMOLO ONE
1D168   MUSICAL SYMBOL COMBINING TREMOLO TWO
1D169   MUSICAL SYMBOL COMBINING TREMOLO THREE
1D16C   MUSICAL SYMBOL FINGERED TREMOLO THREE
1D16D   MUSICAL SYMBOL COMBINING AUGMENTATION DOT
1D16E   MUSICAL SYMBOL COMBINING FLAG ONE
1D16F   MUSICAL SYMBOL COMBINING FLAG TWO
1D170   MUSICAL SYMBOL COMBINING FLAG THREE
1D171   MUSICAL SYMBOL COMBINING FLAG FOUR
1D172   MUSICAL SYMBOL COMBINING FLAG FIVE
1D175   MUSICAL SYMBOL BEGIN TIE
1D176   MUSICAL SYMBOL END TIE
1D173   MUSICAL SYMBOL BEGIN BEAM
1D174   MUSICAL SYMBOL END BEAM
1D177   MUSICAL SYMBOL BEGIN SLUR
1D178   MUSICAL SYMBOL END SLUR
1D179   MUSICAL SYMBOL BEGIN PHRASE
1D17A   MUSICAL SYMBOL END PHRASE
1D17B   MUSICAL SYMBOL COMBINING ACCENT
1D17C   MUSICAL SYMBOL COMBINING STACCATO
1D17D   MUSICAL SYMBOL COMBINING TENUTO
1D17E   MUSICAL SYMBOL COMBINING STACCATISSIMO
1D17F   MUSICAL SYMBOL COMBINING MARCATO
1D180   MUSICAL SYMBOL COMBINING MARCATO-STACCATO
1D181   MUSICAL SYMBOL COMBINING ACCENT-STACCATO
1D182   MUSICAL SYMBOL COMBINING LOURE
1D185   MUSICAL SYMBOL COMBINING DOIT
1D186   MUSICAL SYMBOL COMBINING RIP
1D187   MUSICAL SYMBOL COMBINING FLIP
1D188   MUSICAL SYMBOL COMBINING SMEAR
1D189   MUSICAL SYMBOL COMBINING BEND

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1D18A	MUSICAL SYMBOL COMBINING DOUBLE TONGUE
1D18B	MUSICAL SYMBOL COMBINING TRIPLE TONGUE
1D1AA	MUSICAL SYMBOL COMBINING DOWN BOW
1D1AB	MUSICAL SYMBOL COMBINING UP BOW
1D1AC	MUSICAL SYMBOL COMBINING HARMONIC
1D1AD	MUSICAL SYMBOL COMBINING SNAP PIZZICATO

Clause 10 Table 10 - Row D5: MATHEMATICAL ALPHANUMERIC SYMBOLS

T.10-T10.1. We object to the name OPEN-FACE for characters U+1D538 - U+1D57F. ISO/IEC 10646 already contains related characters named DOUBLE-STRUCK (in the Letterlike Symbols block), and this terminology should be retained for these characters.

T.10-T10.2. Characters U+1D56C - 1D57F should not be italic double-struck, but should be bold fraktur.

Clause 10 Table 11 - Row D5: MATHEMATICAL ALPHANUMERIC SYMBOLS

T.10-T11.1. We object to the name OPEN-FACE for characters U+1D580 - U+1D59F. Replace it with the term DOUBLE-STRUCK.

T.10-T11.2. We object to the name SANS for characters U+1D5A0 - U+1D57F. SANS is a common truncation used at the ends of font names as a kind of shorthand, but the full and technically correct term SANS-SERIF must be used in the character names. Eckersley *et al.*, Bringhurst, and other sources consulted agree and none of them says just SANS except in font names. MATHEMATICAL SANS SMALL X should be changed to MATHEMATICAL SANS-SERIF SMALL X. Note the hyphen.

T.10-T11.3. Characters U+1D580 - 1D59F should not be italic double-struck, but should be bold fraktur.

Clause 10 Table 12 - Row D6: MATHEMATICAL ALPHANUMERIC SYMBOLS

T.10-T12.1. We object to the name SANS for characters U+1D600 - U+1D66F. Replace it with the term SANS-SERIF.

Clause 10 Table 14 - Row D7: MATHEMATICAL ALPHANUMERIC SYMBOLS

T.10-T14.1. We object to the name SANS for characters U+1D756 - U+1D77F. Replace it with the term SANS-SERIF.

Clause 10 Table 15 - Row D7: MATHEMATICAL ALPHANUMERIC SYMBOLS

T.10-T15.1. We object to the name SANS for characters U+1D780 - U+1D7C9 and U+1D7E2 - U+1D7F5. Replace it with the term SANS-SERIF.

T.10-T15.2. We object to the name OPEN-FACE for characters U+1D7D8 - U+1D7E1. Replace it with the term DOUBLE-STRUCK.

Clause 11.2

T.11-2.1. At the end of the clause, change "is not used for this plane" to "does not apply to this plane".

Clause 12.1

T.12-1.1. In the rubric to Figure 2, change "General Purpose Plane" to "Supplementary Special-purpose Plane". (This change from "Special Purpose Plane" to "Supplementary Special-purpose Plane" should apply throughout the standards, and the acronym SPP should be changed to SSP throughout the standard as well.)

Clause 12.2

T.12-2.1. This text does not seem to say what it intends to say. We propose: "The characters specified in the TAGS block are not intended to have printable graphic characters. This is indicated in the code table by their representation as letters over a tag icon surrounded by a dashed box. The intended use of these characters is described in annex E" [not annex D].

Clause 12 Table 16 - Row 00: TAGS

T.12-T16.1. P=14 should read in hexadecimal P=0E to the right of the glyph table and at the foot of the names table. Otherwise people could be led to construct code positions additively, so U+140001 instead of the correct U+E0001.

Annex A.1

T.A1.1. Change "Position" to "Positions".

T.A1.2. Change ᴇᴛʀᴜꜱᴄᴀɴ to ᴏʟᴅ ɪᴛᴀʟɪᴄ.

T.A1.3. Use five-digit notation throughout.

T.A1.4. In the note after 3001 TAGS, write out "CJK EXT-B" as "CJK UNIFIED IDEOGRAPHS EXTENSION B".

T.A1.5. We are not sure what the function of collection 3002 is. Part 1 does not define a collection called ALTERNATE FORMAT CHARACTERS, so the "EXTENDED" in the collection name seems to be superfluous here and should be deleted.

T.A1.6. Is "PART 2" a valid collection name? We propose the name "UCS PART-2" (name elements should not begin with a digit according to ISO/IEC 10646-1 Annex L; presumably this applies to collection names as well as character names).

Annex A.2

T.A2.1. Change "from to" to "Positions".

T.A2.2. Change ᴇᴛʀᴜꜱᴄᴀɴ to ᴏʟᴅ ɪᴛᴀʟɪᴄ.

Annex A.3

T.A3.1. In the title, change "Block" to "Blocks". In the text, change "block is" to "blocks are".

T.A3.2. Change "from to" to "Positions".

Annex A.4

T.A4.1. In the text, change "blocks are" to "block is".

T.A4.2. Change "from to" to "Positions".

Annex B

T.B.1. Add the following characters to the list of combining characters, replacing the set of characters which is already there (it is a subset of the list here which contains revised character names as requested in T.10-T7.6 above.

```
1D165    MUSICAL SYMBOL COMBINING STEM
1D166    MUSICAL SYMBOL COMBINING SPRECHGESANG STEM
1D167    MUSICAL SYMBOL COMBINING TREMOLO ONE
1D168    MUSICAL SYMBOL COMBINING TREMOLO TWO
1D169    MUSICAL SYMBOL COMBINING TREMOLO THREE
1D16D    MUSICAL SYMBOL COMBINING AUGMENTATION DOT
1D16E    MUSICAL SYMBOL COMBINING FLAG ONE
1D16F    MUSICAL SYMBOL COMBINING FLAG TWO
1D170    MUSICAL SYMBOL COMBINING FLAG THREE
1D171    MUSICAL SYMBOL COMBINING FLAG FOUR
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1D172    MUSICAL SYMBOL COMBINING FLAG FIVE
1D17B    MUSICAL SYMBOL COMBINING ACCENT
1D17C    MUSICAL SYMBOL COMBINING STACCATO
1D17D    MUSICAL SYMBOL COMBINING TENUTO
1D17E    MUSICAL SYMBOL COMBINING STACCATISSIMO
1D17F    MUSICAL SYMBOL COMBINING MARCATO
1D180    MUSICAL SYMBOL COMBINING MARCATO-STACCATO
1D181    MUSICAL SYMBOL COMBINING ACCENT-STACCATO
1D182    MUSICAL SYMBOL COMBINING LOURE
1D185    MUSICAL SYMBOL COMBINING DOIT
1D186    MUSICAL SYMBOL COMBINING RIP
1D187    MUSICAL SYMBOL COMBINING FLIP
1D188    MUSICAL SYMBOL COMBINING SMEAR
1D189    MUSICAL SYMBOL COMBINING BEND
1D18A    MUSICAL SYMBOL COMBINING DOUBLE TONGUE
1D18B    MUSICAL SYMBOL COMBINING TRIPLE TONGUE
1D1AA    MUSICAL SYMBOL COMBINING DOWN BOW
1D1AB    MUSICAL SYMBOL COMBINING UP BOW
1D1AC    MUSICAL SYMBOL COMBINING HARMONIC
1D1AD    MUSICAL SYMBOL COMBINING SNAP PIZZICATO
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Annex D

To answer the editor's query: Yes, Annex D is needed.

T.D.1. Change ETRUSCAN to OLD ITALIC and reorder the list.

T.D.2. Delete U+10326 ETRUSCAN NUMERAL ALTERNATE ONE HUNDRED, U+10328 ETRUSCAN NUMERAL ONE HUNDRED OR ONE THOUSAND, U+10327 ETRUSCAN NUMERAL ONE THOUSAND, U+10329 ETRUSCAN NUMERAL ONE THOUSAND OR TEN THOUSAND, U+10320 ETRUSCAN WORD SEPARATOR.

T.D.3. Add "OLD ITALIC LETTER TA (Messapic)".

T.D.4. Change the spellings of U+10302 and U+10312 as noted in T.10-T1.6 and reorder the list.

T.D.5. At U+10428 delete one of the spaces between SMALL and LETTER.

T.D.6. Change WESTERN MUSICAL SYMBOL character names as noted above and reorder the list.

T.D.7. Change BYZANTINE MUSICAL SYMBOL character names as noted above and reorder the list.

T.D.8. Change names of mathematical alphanumeric characters as per comments to clause 10 Tables 10-15 above and reorder the list.

Editorial comments

Table of contents

E.C.1. The tab fill character should be "full stop + space" not just "full stop".

E.C.2. A space should follow each of the clause titles before the tab to the page number (*cf.* Scope with Definitions).

E.C.3. The subtitle "ANNEXES" is superfluous and should be deleted.

E.C.4. The titles of the annexes should not be in all caps. Conform to the formatting of ISO/IEC 10646-1:2000.

E.C.5. Annex G is "Sourc<u>e</u>s of characters".

Clause 1

E.1.1. In the third paragraph, change "This second part specifies:" to "ISO/IEC 10646-2 specifies:".

E.1.2. Change full stop into semicolon after the third bullet point on the SSP (Supplementary Special-purpose Plane).

E.1.3. Change "Graphic characters … are not repeated" to "Graphic characters … are not

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duplicated".

Clause 2

E.2.1. Say: "Conformance to this part of ISO/IEC 10646 is as specified in clause 2 of ISO/IEC 10646-1."

Clause 5

E.5.1. Change first paragraph: "In addition to the definitions specified in ISO/IEC 10646-1:2000, the following definitions apply to this part of ISO/IEC 10646:"

Clause 6

E.6.1. Change the last sentence here to: "The SMP contains coded graphic characters used in scripts of the world that are not already encoded in the BMP. Most, but not all, of the scripts encoded or roadmapped for encoding in the SMP are not in use as living scripts by modern user communities." (Living SMP scripts in use as living scripts by modern user communities would include Blissymbols and Sutton SignWriting.)

E.6.2. Delete the word "miscellaneous" before "syllabaries" in the second bullet point of the note.

Clause 8

E.8.1. Change "Alternate format characters" to "Alternate Format Characters".

E.8.2. Change "Part1" to "Part 1", or preferably to "ISO/IEC 10646-1".

Clause 9

E.9.1. Change "This part of the standard contains" to "This part of ISO/IEC 10646 specifies". Likewise the word "contained" in the last sentence should be changed to "specified".

Clause 10

E.10.1. The word "Note" in the note should be written in capital letters and followed by a space before the dash.

E.10.2. Assuming that our technical comments to clause 10 Table 1 are accepted, change the text of the note to:

> The Old Italic block represents a unified script which covers the Etruscan, Oscan, Umbrian, Faliscan, Messapic, North Picene, and South Picene alphabets. Some of these scripts have both right-to-left and left-to-right orientations. The glyphs in the code table are shown with left-to-right orientation.

E.10.3. In the table, change "Etruscan" to "Old Italic".

Clause 10 Table 1 - Row 03: ETRUSCAN

E.10-T1.1. We have reviewed the glyphs have proposed in Annex 1 a table of the most typical alphabet glyphs. These are the glyphs which should be used. We can supply the correct fonts to the editor.

E.10-T1.2. The glyph for U+10322 should be turned.

Clause 10 Table 5 - Row D0: BYZANTINE MUSICAL SYMBOLS

E.10-T5.1. Add space after E5 in the hex column of the names table so the numbers line up with the character names.

E.10-T5.2. Replace the glyphs with the glyphs given in Annex 2.

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Clause 10 Table 6 - Row D1: WESTERN MUSICAL SYMBOLS

E.10-T6.1. Add dotted circles to the following glyphs which are defined to be combining characters in Annex B. See T.B.1 above for a list of these. See Annex 3 for a table of improved glyphs. We can supply the correct fonts to the editor.

E.10-T6.2. Add dashed boxes NULL NOTEHEAD and the START and END characters.

E.10-T6.3. Increase the size of the characters in the boxes somewhat.

Clause 10 Table 10 - Row D5: MATHEMATICAL ALPHANUMERIC SYMBOLS

E.10-T10.1. Path directions for the double-struck glyphs need to be corrected as some are printing too dark (roman B K M O W etc.). See Annex 4 for a table of improved glyphs. We can supply the correct fonts to the editor.

E.10-T10.2. Characters U+1D56C - 1D57F should not be double-struck italics, but should be bold fraktur.

Clause 10 Table 11 - Row D5: MATHEMATICAL ALPHANUMERIC SYMBOLS

E.10-T11.1. Path directions for the double-struck glyphs need to be corrected as some are printing too dark (V W X h m w).

E.10-T11.2. Characters U+1D580 - 1D59F should not be double-struck italics, but should be bold fraktur.

Clause 10 Table 13 - Row D6: MATHEMATICAL ALPHANUMERIC SYMBOLS

E.10-T13.1. U+1D6B9: Fix glyph: make bolder, as U+1D6B6.

E.10-T13.2. U+1D6DB: Fix glyph: make bolder.

E.10-T13.3. U+1D6DE: Fix glyph: make bolder.

E.10-T13.4. U+1D6E9: Fix glyph: cross-bar too high.

E.10-T13.5. U+1D6F3: Fix glyph: make bolder, as U+1D6F0.

E.10-T13.6. U+1D6FB: Skew angle is too great; harmonize with the font and use turned U+1D6E5.

Clause 10 Table 14 - Row D7: MATHEMATICAL ALPHANUMERIC SYMBOLS

E.10-T14.1. U+1D715, U+1D716, U+1D71B: Fix glyphs: make lighter with a lesser skew angle.

E.10-T14.2. U+1D72D: Fix glyph: make bolder with a lesser skew angle, as U+1D72A.

E.10-T14.3. U+1D735: Fix glyph: make bolder with a lesser skew angle, as turned U+1D71F.

E.10-T14.4. U+1D74F: Fix glyph: make with a lesser skew angle.

E.10-T14.5. U+1D75D: Replace with glyph from U+1D767.

E.10-T14.6. U+1D767: Fix glyph: extend bar to merge with curve.

E.10-T14.7. U+1D76A: Fix glyph: make slightly bolder.

E.10-T14.8. U+1D76F: Fix glyph: use turned U+1D759.

Clause 10 Table 15 - Row D7: MATHEMATICAL ALPHANUMERIC SYMBOLS

E.10-T15.1. U+1D789, U+1D78A, U+1D78D: Fix glyphs; harmonize with face.

E.10-T15.2. U+1D78B: Fix glyph: make slightly bolder.

E.10-T15.3. U+1D78E, U+1D78F: Fix glyph: make slightly bolder.

E.10-T15.4. U+1D797: Replace with glyph from U+1D7A1.

E.10-T15.5. U+1D7A1: Fix glyph: extend bar to merge with curve.

E.10-T15.6. U+1D7A4: Fix glyph: make slightly bolder.

E.10-T15.7. U+1D7A9: Fix glyph: use turned U+1D793.

E.10-T15.8. U+1D7C3 - U+1D7C9: Harmonize as per comments on similar glyphs above.

Clause 11.1
E.11-1.1. In the title of Figure 2, delete "Unified".

Clause 11.2
E.11-2.1. Change "The sources references" to "The source references".
E.11-2.2. Change "in Annex C (normative)" to "in the normative Annex C".
E.11-2.3. Delete "that are" at G_KX and G_HZ.
E.11-2.4. Change "except for a 10 line header" to "in addition to a 10-line header".
E.11-2.5. The paragraph beginning "The formal definition…" should be justified.
E.11-2.6. Replace CJK double-angle parentheses with Latin round parentheses. Add parentheses for G-FZ. For G_HZ use both: (<UVWX> YZ).

Clause 11.3
E.11-3.1. Change "plane" to "planes" in the first sentence.
E.11-3.2. Capitalize the word "note" in the note and follow it by a space and a dash.

Clause 12 Table 16 - Row 00: TAGS
E.12-T16.1. Fix the path directions of U+E002F, U+E003F, U+E004D, U+E004E, U+E004F, U+E005D, U+E006D, U+E006E, U+E006F, U+E007D, U+E007F so they do not print bold.

Annex B
E.B.1. Change "enumerated" to "listed".
E.B.2. Change "level2" to "level 2".

Annex D
E.D.1. Change "CJK Ideographs" to "CJK Unified Ideographs" in the first paragraph and also in the title and text of D.2.
E.D.2. Correct paragraph formatting for MUSICAL SYMBOL FLIP through MUSICAL SYMBOL LONGA.

Annex E.1
E.E1.1. In paragraph 1, change "those" to "these".
E.E1.2. In paragraph 2, change "These tag characters are to be used" to "These tag characters can be used".
E.E1.3. In paragraph 3, change "ASCII-based" to "ISO/IEC-646-based" or "Collection-1-based".
E.E1.4. In paragraph 4, change "in details these issues" to "these issues in detail".
E.E1.5. In paragraph 5, change "contain" to "contains".
E.E1.6. In paragraph 5, change "a tag language identification character" to "a language tag identification character".
E.E1.7. In paragraph 6, delete the sentence that begins "Although only one type of tag", since this text will only have to be revised if a new tag identification character is added.

Annex E.2
E.E2.1. In paragraph 3, change "ASCII-derived" to "ISO/IEC-646-derived" or "Collection-1-derived".
E.E2.2. In paragraph 1, delete "instead".
E.E2.3. In paragraph 1, delete the sentence beginning "The resultant string" as it is superfluous.
E.E2.4. In paragraph 3, delete "only".

9

Annex E.3

E.E3.1. In paragraph 2, delete "in any way".

E.E3.2. In paragraph 2, change "language tagged" to "language-tagged".

Annex E.5

E.E5.1. Use five-digit hexadecimal representation.

E.E5.2. Change "corresponds to the Japanese language" to "corresponds to 2-letter code representing the Japanese language".

Annex F

E.F.1. In paragraph 1, change "made" to "comprised".

E.F.2. In paragraph 1, change "the following text" to "this Annex".

E.F.3. In paragraph 1, change "details" to "detail".

Annex F.1

REVIEW BYZANTINE

Annex F.2

E.F2.1. In paragraph 1, change "This standard" to "This international standard".

E.F2.2. In paragraph 1, change "solutions for these needs" to "solutions meeting these requirements".

E.F2.3. In paragraph 1, change "in general purpose text description of musical matters" to "for general purposes in text descriptions of musical notation".

E.F2.4. In paragraph 2, change "Extensive" to "Extended".

E.F2.5. In paragraph 3, delete commas at ends of the bulleted list and add a space between the bulleted list and the next line.

E.F2.6. In paragraph 4, change "rendering slurs, beams, and so forth as appropriate" to "rendering ties, slurs, beams, and phrases as appropriate".

E.F2.7. In paragraph 5, change "values and primitives" to "values as well as primitives".

E.F2.8. In paragraph 5, change "may be constructed" to "are constructed".

E.F2.9. In paragraph 5, delete the sentence on data size. Normalization of Latin 1 increases data size, and we are all expected to put up with that!

E.F2.10. In paragraph 5, change "may not want to distinguish" to "may wish to equivalence or normalize".

E.F2.11. Add code positions to the lists as shown here (using the new code positions as proposed in Annex 2). Note that in the FCD "ONE HUNDRED TWENTY-EIGHTH NOTE" is misspelled "ON HUNDRED TWENTY-EIGHTH NOTE". Note that the names are changed as per T.10-T7 above.

U+1D15E MUSICAL SYMBOL HALF NOTE ≈ U+1D157 MUSICAL SYMBOL VOID NOTEHEAD + U+1D165 MUSICAL SYMBOL COMBINING STEM

U+1D15F MUSICAL SYMBOL QUARTER NOTE ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D165 MUSICAL SYMBOL COMBINING STEM

U+1D160 MUSICAL SYMBOL EIGHTH NOTE ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D16E MUSICAL SYMBOL COMBINING FLAG ONE

U+1D1A1 MUSICAL SYMBOL SIXTEENTH NOTE ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D16F MUSICAL SYMBOL COMBINING FLAG TWO

U+1D1A2 MUSICAL SYMBOL THIRTY-SECOND NOTE ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D170 MUSICAL SYMBOL COMBINING FLAG THREE

U+1D1A3 MUSICAL SYMBOL SIXTY-FOURTH NOTE ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D171 MUSICAL SYMBOL COMBINING FLAG FOUR

U+1D1A4 MUSICAL SYMBOL ONE HUNDRED TWENTY-EIGHTH NOTE ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D172 MUSICAL SYMBOL COMBINING FLAG FIVE

•••
U+1D147 MUSICAL SYMBOL SQUARE NOTEHEAD BLACK + U+1D165 MUSICAL SYMBOL COMBINING STEM

U+1D143 MUSICAL SYMBOL X NOTEHEAD + U+1D165 MUSICAL SYMBOL COMBINING STEM

•••
U+1D160 MUSICAL SYMBOL EIGHTH NOTE + U+1D16D MUSICAL SYMBOL COMBINING AUGMENTATION DOT ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D16E MUSICAL SYMBOL COMBINING COMBINING FLAG ONE + U+1D16D MUSICAL SYMBOL COMBINING AUGMENTATION DOT

U+1D15F MUSICAL SYMBOL QUARTER NOTE + U+1D17C MUSICAL SYMBOL COMBINING STACCATO ≈ U+1D158 MUSICAL SYMBOL NOTEHEAD BLACK + U+1D165 MUSICAL SYMBOL COMBINING STEM + U+1D17C MUSICAL SYMBOL COMBINING STACCATO

•••
U+1D160 MUSICAL SYMBOL EIGHTH NOTE + U+1D16D MUSICAL SYMBOL COMBINING AUGMENTATION DOT + U+1D16D MUSICAL SYMBOL COMBINING AUGMENTATION DOT + U+1D17B MUSICAL SYMBOL COMBINING ACCENT

E.F2.12. In paragraph 4, change "pre-composed" to "precomposed".

Annex G
E.G.1. Italicize the following: *Utah Humanities Review, The Greek Byzantine Music Notation System, Norton Manual of Music,* and *Notation of Western Music.*
E.G.2. Change Eᴛʀᴜꜱᴄᴀɴ to Oʟᴅ Iᴛᴀʟɪᴄ.
E.G.3. Replace entry under Etruscan with:
>Bonfante, Larissa. 1996. "The scripts of Italy", in Peter T. Daniels and William Bright, eds. *The world's writing systems.* New York; Oxford: Oxford University Press. ISBN 0-19-507993-0

TABLE 1 - Row 03: OLD ITALIC

	030	031	032
0	A	Γ	I
1	B	M	Λ
2	C	Q	X
3	D	P	↑
4	E	S	⁂
5	F	T	
6	I	Y	
7	日	X	
8	⊗	Φ	
9	I	Y	
A	K	8	
B	L	P	
C	M	b	
D	M	⊣	
E	⊞	V	
F	O	Ψ	

G = 00
P = 01

TABLE 1 - Row 03: OLD ITALIC

hex	Name	hex	Name
00	OLD ITALIC LETTER A		
01	OLD ITALIC LETTER BE		
02	OLD ITALIC LETTER CE		
03	OLD ITALIC LETTER DE		
04	OLD ITALIC LETTER E		
05	OLD ITALIC LETTER VE		
06	OLD ITALIC LETTER ZE		
07	OLD ITALIC LETTER HE		
08	OLD ITALIC LETTER THE		
09	OLD ITALIC LETTER I		
0A	OLD ITALIC LETTER KA		
0B	OLD ITALIC LETTER EL		
0C	OLD ITALIC LETTER EM		
0D	OLD ITALIC LETTER EN		
0E	OLD ITALIC LETTER ESH		
0F	OLD ITALIC LETTER O		
10	OLD ITALIC LETTER PE		
11	OLD ITALIC LETTER SHE		
12	OLD ITALIC LETTER QO		
13	OLD ITALIC LETTER ER		
14	OLD ITALIC LETTER ES		
15	OLD ITALIC LETTER TE		
16	OLD ITALIC LETTER U		
17	OLD ITALIC LETTER EKS		
18	OLD ITALIC LETTER PHE		
19	OLD ITALIC LETTER KHE		
1A	OLD ITALIC LETTER EF		
1B	OLD ITALIC LETTER ERS		
1C	OLD ITALIC LETTER CHE		
1D	OLD ITALIC LETTER II		
1E	OLD ITALIC LETTER UU		
1F	*OLD ITALIC LETTER TA*		
20	OLD ITALIC WORD SEPARATOR		
21	OLD ITALIC NUMERAL ONE		
22	OLD ITALIC NUMERAL FIVE		
23	OLD ITALIC NUMERAL TEN		
24	OLD ITALIC NUMERAL FIFTY		
25	OLD ITALIC NUMERAL ONE HUNDRED		
26	OLD ITALIC NUMERAL ALTERNATE ONE HUNDRED		
27	OLD ITALIC NUMERAL ONE THOUSAND		
28	OLD ITALIC NUMERAL ONE HUNDRED OR ONE THOUSAND		
29	OLD ITALIC NUMERAL ONE THOUSAND OR TEN THOUSAND		
2A	(This position shall not be used)		
2B	(This position shall not be used)		
2C	(This position shall not be used)		
2D	(This position shall not be used)		
2E	(This position shall not be used)		
2F	(This position shall not be used)		

TABLE 4- Row D0: BYZANTINE MUSICAL SYMBOLS

	D00	D01	D02	D03	D04	D05	D06	D07
0	⊣	∴	∥	√	zz	⁄	∼	⤳
1	⊢	⸲	⸮	∿	✓	⸲	∿	⤳
2	⌒	⸵	⌒	⸴	X	⸲	∿	⇁
3	↗	⌣	⸾	⸵	⸾	⸲	⸴	⤳
4	∥	⊕	∨	⟆	⸲	⸲	⌒	⤳
5	╲	⸲	⸿	⟆	⸾	⌒	⸲	⤳
6	⫽	⊓	⸱	⸵	⸳	⸲	⸲	⊖
7	⌐	↓	⸲	⸵	⸺	⸲	⸲	⊖
8	∼	✕	⸲	⸵	⸺	⸲	⸲	⊖
9	⤳	Bov	⸵	⸵	⌣	⸲	⸲	⊖
A	⸲	—	⸲	⟋	⸲	⌣	⸲	⸲
B	⸲	·	⸲	⸵	⸲	→	⸲	⸲
C	✓	⸲	⸲	⸲	⸲	⌒	⸲	⌣
D	⸲	⋯	⸲	⸵	⸲	⸲	⸲	⌒
E	⸲	⸲	⫽	⸵	⸲	⸺	⸲	+
F	⊢	⊬	⟋	⸵	⸲	⸲	⸲	⸲

G = 00
P = 01

TABLE 4 - Row D0: BYZANTINE MUSICAL SYMBOLS

hex	Name	hex	Name
00	BYZANTINE MUSICAL SYMBOL PSILI	59	BYZANTINE MUSICAL SYMBOL PIASMA LATE
01	BYZANTINE MUSICAL SYMBOL DASEIA	5A	BYZANTINE MUSICAL SYMBOL PSIFISTON LATE
02	BYZANTINE MUSICAL SYMBOL PERISPOMENI	5B	BYZANTINE MUSICAL SYMBOL OMALON
03	BYZANTINE MUSICAL SYMBOL OXEIA EKFONITIKON	5C	BYZANTINE MUSICAL SYMBOL ANTIKENOMA
04	BYZANTINE MUSICAL SYMBOL OXEIA DIPLI	5D	BYZANTINE MUSICAL SYMBOL LYGISMA
05	BYZANTINE MUSICAL SYMBOL VAREIA EKFONITIKON	5E	BYZANTINE MUSICAL SYMBOL PARAKLITIKI LATE
06	BYZANTINE MUSICAL SYMBOL VAREIA DIPLI	5F	BYZANTINE MUSICAL SYMBOL PARAKALESMA LATE
07	BYZANTINE MUSICAL SYMBOL KATHISTI	60	BYZANTINE MUSICAL SYMBOL ETERON PARAKALESMA
08	BYZANTINE MUSICAL SYMBOL SYRMATIKI	61	BYZANTINE MUSICAL SYMBOL KYLISMA
09	BYZANTINE MUSICAL SYMBOL PARAKLITIKI	62	BYZANTINE MUSICAL SYMBOL ANTIKENOKYLISMA
0A	BYZANTINE MUSICAL SYMBOL YPOKRISIS	63	BYZANTINE MUSICAL SYMBOL TROMIKON LATE
0B	BYZANTINE MUSICAL SYMBOL YPOKRISIS DIPLI	64	BYZANTINE MUSICAL SYMBOL EKSTREPTON
0C	BYZANTINE MUSICAL SYMBOL KREMASTI	65	BYZANTINE MUSICAL SYMBOL SYNAGMA LATE
0D	BYZANTINE MUSICAL SYMBOL APESO EKFONITIKON	66	BYZANTINE MUSICAL SYMBOL SYRMA
0E	BYZANTINE MUSICAL SYMBOL EXO EKFONITIKON	67	BYZANTINE MUSICAL SYMBOL CHOREVMA LATE
0F	BYZANTINE MUSICAL SYMBOL TELEIA	68	BYZANTINE MUSICAL SYMBOL EPEGERMA
10	BYZANTINE MUSICAL SYMBOL KENTIMATA	69	BYZANTINE MUSICAL SYMBOL SEISMA LATE
11	BYZANTINE MUSICAL SYMBOL APOSTROFOS	6A	BYZANTINE MUSICAL SYMBOL XIRON KLASMA
12	BYZANTINE MUSICAL SYMBOL APOSTROFOS DIPLI	6B	BYZANTINE MUSICAL SYMBOL TROMIKOPSIFISTON
13	BYZANTINE MUSICAL SYMBOL SYNEVMA	6C	BYZANTINE MUSICAL SYMBOL PSIFISTOLYGISMA
14	BYZANTINE MUSICAL SYMBOL THITA	6D	BYZANTINE MUSICAL SYMBOL TROMIKOLYGISMA
15	BYZANTINE MUSICAL SYMBOL OLIGON ARCHAIC	6E	BYZANTINE MUSICAL SYMBOL TROMIKOPARAKALESMA
16	BYZANTINE MUSICAL SYMBOL GORGON ARCHAIC	6F	BYZANTINE MUSICAL SYMBOL PSIFISTOPARAKALESMA
17	BYZANTINE MUSICAL SYMBOL PSILON	70	BYZANTINE MUSICAL SYMBOL TROMIKOSYNAGMA
18	BYZANTINE MUSICAL SYMBOL CHAMILON	71	BYZANTINE MUSICAL SYMBOL PSIFISTOSYNAGMA
19	BYZANTINE MUSICAL SYMBOL VATHY	72	BYZANTINE MUSICAL SYMBOL GORGOSYNTHETON
1A	BYZANTINE MUSICAL SYMBOL ISON ARCHAIC	73	BYZANTINE MUSICAL SYMBOL ARGOSYNTHETON
1B	BYZANTINE MUSICAL SYMBOL KENTIMA ARCHAIC	74	BYZANTINE MUSICAL SYMBOL ETERON ARGOSYNTHETON
1C	BYZANTINE MUSICAL SYMBOL KENTIMATA ARCHAIC	75	BYZANTINE MUSICAL SYMBOL OYRANISMA LATE
1D	BYZANTINE MUSICAL SYMBOL SAXIMATA	76	BYZANTINE MUSICAL SYMBOL THEMATISMOS ESO
1E	BYZANTINE MUSICAL SYMBOL PARICHON	77	BYZANTINE MUSICAL SYMBOL THEMATISMOS EXO
1F	BYZANTINE MUSICAL SYMBOL STAVROS APODEXIA	78	BYZANTINE MUSICAL SYMBOL THEMA APLOUN
20	BYZANTINE MUSICAL SYMBOL OXEIAI ARCHAIC	79	BYZANTINE MUSICAL SYMBOL THES KAI APOTHES
21	BYZANTINE MUSICAL SYMBOL VAREIAI ARCHAIC	7A	BYZANTINE MUSICAL SYMBOL KATAVASMA
22	BYZANTINE MUSICAL SYMBOL APODERMA ARCHAIC	7B	BYZANTINE MUSICAL SYMBOL ENDOFONON
23	BYZANTINE MUSICAL SYMBOL APOTHEMA	7C	BYZANTINE MUSICAL SYMBOL YFEN KATO
24	BYZANTINE MUSICAL SYMBOL KLASMA	7D	BYZANTINE MUSICAL SYMBOL YFEN ANO
25	BYZANTINE MUSICAL SYMBOL REVMA	7E	BYZANTINE MUSICAL SYMBOL STAVROS
26	BYZANTINE MUSICAL SYMBOL PIASMA ARCHAIC	7F	BYZANTINE MUSICAL SYMBOL KLASMA ANO
27	BYZANTINE MUSICAL SYMBOL TINAGMA		
28	BYZANTINE MUSICAL SYMBOL ANATRICHISMA		
29	BYZANTINE MUSICAL SYMBOL SEISMA		
2A	BYZANTINE MUSICAL SYMBOL SYNAGMA ARCHAIC		
2B	BYZANTINE MUSICAL SYMBOL SYNAGMA METASTAVROU		
2C	BYZANTINE MUSICAL SYMBOL OYRANISMA ARCHAIC		
2D	BYZANTINE MUSICAL SYMBOL THEMA		
2E	BYZANTINE MUSICAL SYMBOL LEMOI		
2F	BYZANTINE MUSICAL SYMBOL DYO		
30	BYZANTINE MUSICAL SYMBOL TRIA		
31	BYZANTINE MUSICAL SYMBOL TESSERA		
32	BYZANTINE MUSICAL SYMBOL KRATIMATA		
33	BYZANTINE MUSICAL SYMBOL APESO EXO LATE		
34	BYZANTINE MUSICAL SYMBOL FTHORA ARCHAIC		
35	BYZANTINE MUSICAL SYMBOL IMIFTHORA		
36	BYZANTINE MUSICAL SYMBOL TROMIKON ARCHAIC		
37	BYZANTINE MUSICAL SYMBOL KATAVA TROMIKON		
38	BYZANTINE MUSICAL SYMBOL PELASTON		
39	BYZANTINE MUSICAL SYMBOL PSIFISTON		
3A	BYZANTINE MUSICAL SYMBOL KONTEVMA		
3B	BYZANTINE MUSICAL SYMBOL CHOREVMA ARCHAIC		
3C	BYZANTINE MUSICAL SYMBOL RAPISMA		
3D	BYZANTINE MUSICAL SYMBOL PARAKALESMA ARCHAIC		
3E	BYZANTINE MUSICAL SYMBOL PARAKLITIKI ARCHAIC		
3F	BYZANTINE MUSICAL SYMBOL ICHADIN		
40	BYZANTINE MUSICAL SYMBOL NANA		
41	BYZANTINE MUSICAL SYMBOL PETASMA		
42	BYZANTINE MUSICAL SYMBOL KONTEVMA ALLO		
43	BYZANTINE MUSICAL SYMBOL TROMIKON ALLO		
44	BYZANTINE MUSICAL SYMBOL STRAGGISMATA		
45	BYZANTINE MUSICAL SYMBOL GRONTHISMATA		
46	BYZANTINE MUSICAL SYMBOL ISON LATE		
47	BYZANTINE MUSICAL SYMBOL OLIGON LATE		
48	BYZANTINE MUSICAL SYMBOL OXEIA LATE		
49	BYZANTINE MUSICAL SYMBOL PETASTI		
4A	BYZANTINE MUSICAL SYMBOL KOUFISMA		
4B	BYZANTINE MUSICAL SYMBOL PETASTOKOUFISMA		
4C	BYZANTINE MUSICAL SYMBOL KRATIMOKOUFISMA		
4D	BYZANTINE MUSICAL SYMBOL PELASTON LATE		
4E	BYZANTINE MUSICAL SYMBOL KENTIMATA LATE ANO		
4F	BYZANTINE MUSICAL SYMBOL KENTIMA LATE ANO		
50	BYZANTINE MUSICAL SYMBOL YPSILI		
51	BYZANTINE MUSICAL SYMBOL APOSTROFOS LATE		
52	BYZANTINE MUSICAL SYMBOL APOSTROFOI SYNDESMOS LATE		
53	BYZANTINE MUSICAL SYMBOL YPORROI		
54	BYZANTINE MUSICAL SYMBOL KRATIMOYPORROON		
55	BYZANTINE MUSICAL SYMBOL ELAFRON		
56	BYZANTINE MUSICAL SYMBOL CHAMILI		
57	BYZANTINE MUSICAL SYMBOL MIKRON ISON		
58	BYZANTINE MUSICAL SYMBOL VAREIA LATE		

TABLE 5 - Row D0: BYZANTINE MUSICAL SYMBOLS

	D08	D09	D0A	D0B	D0C	D0D	D0E	D0F
0								
1								
2								
3								
4								
5								
6								
7								
8								
9								
A								
B								
C								
D								
E								
F								

G = 00
P = 01

16

TABLE 5 - Row D0: BYZANTINE MUSICAL SYMBOLS

hex	Name	hex	Name
80	BYZANTINE MUSICAL SYMBOL DIPLI ARCHAIC	D9	BYZANTINE MUSICAL SYMBOL GENIKI YFESIS
81	BYZANTINE MUSICAL SYMBOL KRATIMA ARCHAIC	DA	BYZANTINE MUSICAL SYMBOL DIASTOLI APLI MIKRI
82	BYZANTINE MUSICAL SYMBOL KRATIMA ALLO	DB	BYZANTINE MUSICAL SYMBOL DIASTOLI APLI MEGALI
83	BYZANTINE MUSICAL SYMBOL KRATIMA LATE	DC	BYZANTINE MUSICAL SYMBOL DIASTOLI DIPLI
84	BYZANTINE MUSICAL SYMBOL APODERMA LATE	DD	BYZANTINE MUSICAL SYMBOL DIASTOLI THESEOS
85	BYZANTINE MUSICAL SYMBOL APLI	DE	BYZANTINE MUSICAL SYMBOL SIMANSIS THESEOS
86	BYZANTINE MUSICAL SYMBOL DIPLI	DF	BYZANTINE MUSICAL SYMBOL SIMANSIS THESEOS DISIMOU
87	BYZANTINE MUSICAL SYMBOL TRIPLI	E0	BYZANTINE MUSICAL SYMBOL SIMANSIS THESEOS TRISIMOU
88	BYZANTINE MUSICAL SYMBOL TETRAPLI	E1	BYZANTINE MUSICAL SYMBOL SIMANSIS THESEOS TETRASIMOU
89	BYZANTINE MUSICAL SYMBOL KORONIS	E2	BYZANTINE MUSICAL SYMBOL SIMANSIS ARSEOS
8A	BYZANTINE MUSICAL SYMBOL LEIMMA ENOS CHRONOU	E3	BYZANTINE MUSICAL SYMBOL SIMANSIS ARSEOS DISIMOU
8B	BYZANTINE MUSICAL SYMBOL LEIMMA DYO CHRONON	E4	BYZANTINE MUSICAL SYMBOL SIMANSIS ARSEOS TRISIMOU
8C	BYZANTINE MUSICAL SYMBOL LEIMMA TRION CHRONON	E5	BYZANTINE MUSICAL SYMBOL SIMANSIS ARSEOS TETRASIMOU
8D	BYZANTINE MUSICAL SYMBOL LEIMMA TESSARON CHRONON	E6	BYZANTINE MUSICAL SYMBOL DIGRAMMA GG
8E	BYZANTINE MUSICAL SYMBOL LEIMMA IMISEOS CHRONOU	E7	BYZANTINE MUSICAL SYMBOL DIFTOGGOS OU
8F	BYZANTINE MUSICAL SYMBOL GORGON LATE ANO	E8	BYZANTINE MUSICAL SYMBOL STIGMA
90	BYZANTINE MUSICAL SYMBOL GORGON PARESTIGMENON ARISTERA	E9	BYZANTINE MUSICAL SYMBOL ARKTIKO PA
91	BYZANTINE MUSICAL SYMBOL GORGON PARESTIGMENON DEXIA	EA	BYZANTINE MUSICAL SYMBOL ARKTIKO VOU
92	BYZANTINE MUSICAL SYMBOL DIGORGON	EB	BYZANTINE MUSICAL SYMBOL ARKTIKO GA
93	BYZANTINE MUSICAL SYMBOL DIGORGON PARESTIGMENON ARISTERA KATO	EC	BYZANTINE MUSICAL SYMBOL ARKTIKO DI
94	BYZANTINE MUSICAL SYMBOL DIGORGON PARESTIGMENON ARISTERA ANO	ED	BYZANTINE MUSICAL SYMBOL ARKTIKO KE
95	BYZANTINE MUSICAL SYMBOL DIGORGON PARESTIGMENON DEXIA	EE	BYZANTINE MUSICAL SYMBOL ARKTIKO ZO
96	BYZANTINE MUSICAL SYMBOL TRIGORGON	EF	BYZANTINE MUSICAL SYMBOL ARKTIKO NI
97	BYZANTINE MUSICAL SYMBOL ARGON	F0	BYZANTINE MUSICAL SYMBOL KENTIMATA LATE MESO
98	BYZANTINE MUSICAL SYMBOL IMIDIARGON	F1	BYZANTINE MUSICAL SYMBOL KENTIMA LATE MESO
99	BYZANTINE MUSICAL SYMBOL DIARGON	F2	BYZANTINE MUSICAL SYMBOL KENTIMATA LATE KATO
9A	BYZANTINE MUSICAL SYMBOL AGOGI POLI ARGI	F3	BYZANTINE MUSICAL SYMBOL KENTIMA LATE KATO
9B	BYZANTINE MUSICAL SYMBOL AGOGI ARGOTERI	F4	BYZANTINE MUSICAL SYMBOL KLASMA KATO
9C	BYZANTINE MUSICAL SYMBOL AGOGI ARGI	F5	BYZANTINE MUSICAL SYMBOL GORGON LATE KATO
9D	BYZANTINE MUSICAL SYMBOL AGOGI METRIA	F6	(This position shall not be used)
9E	BYZANTINE MUSICAL SYMBOL AGOGI MESI	F7	(This position shall not be used)
9F	BYZANTINE MUSICAL SYMBOL AGOGI GORGI	F8	(This position shall not be used)
A0	BYZANTINE MUSICAL SYMBOL AGOGI GORGOTERI	F9	(This position shall not be used)
A1	BYZANTINE MUSICAL SYMBOL AGOGI POLI GORGI	FA	(This position shall not be used)
A2	BYZANTINE MUSICAL SYMBOL MARTYRIA PROTOS ICHOS	FB	(This position shall not be used)
A3	BYZANTINE MUSICAL SYMBOL MARTYRIA ALLI PROTOS ICHOS	FC	(This position shall not be used)
A4	BYZANTINE MUSICAL SYMBOL MARTYRIA DEYTEROS ICHOS	FD	(This position shall not be used)
A5	BYZANTINE MUSICAL SYMBOL MARTYRIA ALLI DEYTEROS ICHOS	FE	(This position shall not be used)
A6	BYZANTINE MUSICAL SYMBOL MARTYRIA TRITOS ICHOS	FF	(This position shall not be used)
A7	BYZANTINE MUSICAL SYMBOL MARTYRIA TRIFONIAS		
A8	BYZANTINE MUSICAL SYMBOL MARTYRIA TETARTOS ICHOS		
A9	BYZANTINE MUSICAL SYMBOL MARTYRIA TETARTOS LEGETOS ICHOS		
AA	BYZANTINE MUSICAL SYMBOL MARTYRIA LEGETOS ICHOS		
AB	BYZANTINE MUSICAL SYMBOL MARTYRIA PLAGIOS ICHOS		
AC	BYZANTINE MUSICAL SYMBOL ISAKIA TELOUS ICHIMATOS		
AD	BYZANTINE MUSICAL SYMBOL APOSTROFOI TELOUS ICHIMATOS		
AE	BYZANTINE MUSICAL SYMBOL FANEROSIS TETRAFONIAS		
AF	BYZANTINE MUSICAL SYMBOL FANEROSIS MONOFONIAS		
B0	BYZANTINE MUSICAL SYMBOL FANEROSIS DIFONIAS		
B1	BYZANTINE MUSICAL SYMBOL MARTYRIA VARYS ICHOS		
B2	BYZANTINE MUSICAL SYMBOL MARTYRIA PROTOVARYS ICHOS		
B3	BYZANTINE MUSICAL SYMBOL MARTYRIA PLAGIOS TETARTOS ICHOS		
B4	BYZANTINE MUSICAL SYMBOL GORTHMIKON N APLOUN		
B5	BYZANTINE MUSICAL SYMBOL GORTHMIKON N DIPLOUN		
B6	BYZANTINE MUSICAL SYMBOL ENARXIS KAI FTHORA VOU		
B7	BYZANTINE MUSICAL SYMBOL IMIFONON		
B8	BYZANTINE MUSICAL SYMBOL IMIFTHORON		
B9	BYZANTINE MUSICAL SYMBOL FTHORA ARCHAIC DEYTEROU ICHOU		
BA	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI PA		
BB	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI NANA		
BC	BYZANTINE MUSICAL SYMBOL FTHORA NAOS ICHOS		
BD	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI DI		
BE	BYZANTINE MUSICAL SYMBOL FTHORA SKLIRON DIATONON DI		
BF	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI KE		
C0	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI ZO		
C1	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI NI KATO		
C2	BYZANTINE MUSICAL SYMBOL FTHORA DIATONIKI NI ANO		
C3	BYZANTINE MUSICAL SYMBOL FTHORA MALAKON CHROMA DIFONIAS		
C4	BYZANTINE MUSICAL SYMBOL FTHORA MALAKON CHROMA MONOFONIAS		
C5	BYZANTINE MUSICAL SYMBOL FHTORA SKLIRON CHROMA VASIS		
C6	BYZANTINE MUSICAL SYMBOL FTHORA SKLIRON CHROMA SYNAFI		
C7	BYZANTINE MUSICAL SYMBOL FTHORA NENANO		
C8	BYZANTINE MUSICAL SYMBOL CHROA ZYGOS		
C9	BYZANTINE MUSICAL SYMBOL CHROA KLITON		
CA	BYZANTINE MUSICAL SYMBOL CHROA SPATHI		
CB	BYZANTINE MUSICAL SYMBOL FTHORA I YFESIS TETARTIMORION		
CC	BYZANTINE MUSICAL SYMBOL FTHORA ENARMONIOS ANTIFONIA		
CD	BYZANTINE MUSICAL SYMBOL YFESIS TRITIMORION		
CE	BYZANTINE MUSICAL SYMBOL DIESIS TRITIMORION		
CF	BYZANTINE MUSICAL SYMBOL DIESIS TETARTIMORION		
D0	BYZANTINE MUSICAL SYMBOL DIESIS APLI DYO DODEKATA		
D1	BYZANTINE MUSICAL SYMBOL DIESIS MONOGRAMMOS TESSERA DODEKATA		
D2	BYZANTINE MUSICAL SYMBOL DIESIS DIGRAMMOS EX DODEKATA		
D3	BYZANTINE MUSICAL SYMBOL DIESIS TRIGRAMMOS OKTO DODEKATA		
D4	BYZANTINE MUSICAL SYMBOL YFESIS APLI DYO DODEKATA		
D5	BYZANTINE MUSICAL SYMBOL YFESIS MONOGRAMMOS TESSERA DODEKATA		
D6	BYZANTINE MUSICAL SYMBOL YFESIS DIGRAMMOS EX DODEKATA		
D7	BYZANTINE MUSICAL SYMBOL YFESIS TRIGRAMMOS OKTO DODEKATA		
D8	BYZANTINE MUSICAL SYMBOL GENIKI DIESIS		

Group 00   **Plane 01**   **Row D0**

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TABLE 6 - Row D1: MUSICAL SYMBOLS

	D10	D11	D12	D13	D14	D15	D16	D17
0								
1								
2								
3								BEGIN BEAM
4								END BEAM
5								BEGIN TIE
6				8va		( )		END TIE
7				8vb				BEGIN SLUR
8				15ma				END SLUR
9	D.S.			15^{mb}		NULL NOTE HEAD		BEGIN PHRASE
A	D.C.							END PHRASE
B								
C								
D								
E								
F								

G = 00
P = 01

TABLE 6 - Row D1: MUSICAL SYMBOLS

hex	Name	hex	Name
00	MUSICAL SYMBOL SINGLE BARLINE	59	MUSICAL SYMBOL NULL NOTEHEAD
01	MUSICAL SYMBOL DOUBLE BARLINE	5A	MUSICAL SYMBOL CLUSTER NOTEHEAD WHITE
02	MUSICAL SYMBOL FINAL BARLINE	5B	MUSICAL SYMBOL CLUSTER NOTEHEAD BLACK
03	MUSICAL SYMBOL REVERSE FINAL BARLINE	5C	MUSICAL SYMBOL BREVE
04	MUSICAL SYMBOL DASHED BARLINE	5D	MUSICAL SYMBOL WHOLE NOTE
05	MUSICAL SYMBOL SHORT BARLINE	5E	MUSICAL SYMBOL HALF NOTE
06	MUSICAL SYMBOL LEFT REPEAT SIGN	5F	MUSICAL SYMBOL QUARTER NOTE
07	MUSICAL SYMBOL RIGHT REPEAT SIGN	60	MUSICAL SYMBOL EIGHTH NOTE
08	MUSICAL SYMBOL REPEAT DOTS	61	MUSICAL SYMBOL SIXTEENTH NOTE
09	MUSICAL SYMBOL DAL SEGNO	62	MUSICAL SYMBOL THIRTY-SECOND NOTE
0A	MUSICAL SYMBOL DA CAPO	63	MUSICAL SYMBOL SIXTY-FOURTH NOTE
0B	MUSICAL SYMBOL SEGNO	64	MUSICAL SYMBOL ONE HUNDRED TWENTY-EIGHTH NOTE
0C	MUSICAL SYMBOL CODA	65	*MUSICAL SYMBOL COMBINING STEM*
0D	MUSICAL SYMBOL REPEATED FIGURE ONE	66	*MUSICAL SYMBOL COMBINING SPRECHGESANG STEM*
0E	MUSICAL SYMBOL REPEATED FIGURE TWO	67	*MUSICAL SYMBOL COMBINING TREMOLO ONE*
0F	MUSICAL SYMBOL REPEATED FIGURE THREE	68	*MUSICAL SYMBOL COMBINING TREMOLO TWO*
10	MUSICAL SYMBOL FERMATA	69	*MUSICAL SYMBOL COMBINING TREMOLO THREE*
11	*MUSICAL SYMBOL FERMATA BELOW*	6A	*MUSICAL SYMBOL FINGERED TREMOLO ONE*
12	MUSICAL SYMBOL BREATH MARK	6B	*MUSICAL SYMBOL FINGERED TREMOLO TWO*
13	MUSICAL SYMBOL CAESURA	6C	*MUSICAL SYMBOL FINGERED TREMOLO THREE*
14	MUSICAL SYMBOL BRACE	6D	*MUSICAL SYMBOL COMBINING AUGMENTATION DOT*
15	MUSICAL SYMBOL BRACKET	6E	*MUSICAL SYMBOL COMBINING FLAG ONE*
16	MUSICAL SYMBOL ONE-LINE STAFF	6F	*MUSICAL SYMBOL COMBINING FLAG TWO*
17	MUSICAL SYMBOL TWO-LINE STAFF	70	*MUSICAL SYMBOL COMBINING FLAG THREE*
18	MUSICAL SYMBOL THREE-LINE STAFF	71	*MUSICAL SYMBOL COMBINING FLAG FOUR*
19	MUSICAL SYMBOL FOUR-LINE STAFF	72	*MUSICAL SYMBOL COMBINING FLAG FIVE*
1A	MUSICAL SYMBOL FIVE-LINE STAFF	73	*MUSICAL SYMBOL BEGIN BEAM*
1B	MUSICAL SYMBOL SIX-LINE STAFF	74	*MUSICAL SYMBOL END BEAM*
1C	MUSICAL SYMBOL SIX-STRING FRETBOARD	75	*MUSICAL SYMBOL BEGIN TIE*
1D	MUSICAL SYMBOL FOUR-STRING FRETBOARD	76	*MUSICAL SYMBOL END TIE*
1E	MUSICAL SYMBOL G CLEF	77	*MUSICAL SYMBOL BEGIN SLUR*
1F	MUSICAL SYMBOL G CLEF OTTAVA ALTA	78	*MUSICAL SYMBOL END SLUR*
20	MUSICAL SYMBOL G CLEF OTTAVA BASSA	79	*MUSICAL SYMBOL BEGIN PHRASE*
21	MUSICAL SYMBOL C CLEF	7A	*MUSICAL SYMBOL END PHRASE*
22	MUSICAL SYMBOL F CLEF	7B	*MUSICAL SYMBOL COMBINING ACCENT*
23	MUSICAL SYMBOL F CLEF OTTAVA ALTA	7C	*MUSICAL SYMBOL COMBINING STACCATO*
24	MUSICAL SYMBOL F CLEF OTTAVA BASSA	7D	*MUSICAL SYMBOL COMBINING TENUTO*
25	MUSICAL SYMBOL DRUM CLEF ONE	7E	*MUSICAL SYMBOL COMBINING STACCATISSIMO*
26	MUSICAL SYMBOL DRUM CLEF TWO	7F	*MUSICAL SYMBOL COMBINING MARCATO*
27	(This position shall not be used)		
28	(This position shall not be used)		
29	(This position shall not be used)		
2A	MUSICAL SYMBOL DOUBLE SHARP		
2B	MUSICAL SYMBOL DOUBLE FLAT		
2C	MUSICAL SYMBOL FLAT UP		
2D	MUSICAL SYMBOL FLAT DOWN		
2E	MUSICAL SYMBOL NATURAL UP		
2F	MUSICAL SYMBOL NATURAL DOWN		
30	MUSICAL SYMBOL SHARP UP		
31	MUSICAL SYMBOL SHARP DOWN		
32	MUSICAL SYMBOL QUARTER TONE SHARP		
33	MUSICAL SYMBOL QUARTER TONE FLAT		
34	MUSICAL SYMBOL COMMON TIME		
35	MUSICAL SYMBOL CUT TIME		
36	MUSICAL SYMBOL OTTAVA ALTA		
37	MUSICAL SYMBOL OTTAVA BASSA		
38	MUSICAL SYMBOL QUINDICESIMA ALTA		
39	MUSICAL SYMBOL QUINDICESIMA BASSA		
3A	MUSICAL SYMBOL MULTI REST		
3B	MUSICAL SYMBOL WHOLE REST		
3C	MUSICAL SYMBOL HALF REST		
3D	MUSICAL SYMBOL QUARTER REST		
3E	MUSICAL SYMBOL EIGHTH REST		
3F	MUSICAL SYMBOL SIXTEENTH REST		
40	MUSICAL SYMBOL THIRTY-SECOND REST		
41	MUSICAL SYMBOL SIXTY-FOURTH REST		
42	MUSICAL SYMBOL ONE HUNDRED TWENTY-EIGHTH REST		
43	MUSICAL SYMBOL X NOTEHEAD		
44	MUSICAL SYMBOL PLUS NOTEHEAD		
45	MUSICAL SYMBOL CIRCLE X NOTEHEAD		
46	MUSICAL SYMBOL SQUARE NOTEHEAD WHITE		
47	MUSICAL SYMBOL SQUARE NOTEHEAD BLACK		
48	MUSICAL SYMBOL TRIANGLE NOTEHEAD UP WHITE		
49	MUSICAL SYMBOL TRIANGLE NOTEHEAD UP BLACK		
4A	MUSICAL SYMBOL TRIANGLE NOTEHEAD LEFT WHITE		
4B	MUSICAL SYMBOL TRIANGLE NOTEHEAD LEFT BLACK		
4C	MUSICAL SYMBOL TRIANGLE NOTEHEAD RIGHT WHITE		
4D	MUSICAL SYMBOL TRIANGLE NOTEHEAD RIGHT BLACK		
4E	MUSICAL SYMBOL TRIANGLE NOTEHEAD DOWN WHITE		
4F	MUSICAL SYMBOL TRIANGLE NOTEHEAD DOWN BLACK		
50	MUSICAL SYMBOL TRIANGLE NOTEHEAD UP RIGHT WHITE		
51	MUSICAL SYMBOL TRIANGLE NOTEHEAD UP RIGHT BLACK		
52	MUSICAL SYMBOL MOON NOTEHEAD WHITE		
53	MUSICAL SYMBOL MOON NOTEHEAD BLACK		
54	MUSICAL SYMBOL TRIANGLE-ROUND NOTEHEAD DOWN WHITE		
55	MUSICAL SYMBOL TRIANGLE-ROUND NOTEHEAD DOWN BLACK		
56	MUSICAL SYMBOL PARENTHESIS NOTEHEAD		
57	MUSICAL SYMBOL VOID NOTEHEAD		
58	MUSICAL SYMBOL NOTEHEAD BLACK		

TABLE 7 - Row D1: MUSICAL SYMBOLS

	D18	D19	D1A	D1B	D1C	D1D	D1E	D1F
0		*m*						
1		*f*						
2								
3								
4								
5								
6		*tr*						
7								
8								
9								
A								
B								
C		*r*						
D		*s*						
E		*z*						
F		*p*						

G = 00
P = 01

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TABLE 7 - Row D1: MUSICAL SYMBOLS

hex	Name	hex	Name
80	*MUSICAL SYMBOL COMBINING MARCATO-STACCATO*	D9	MUSICAL SYMBOL PORRECTUS
81	*MUSICAL SYMBOL COMBINING ACCENT-STACCATO*	DA	MUSICAL SYMBOL PORRECTUS FLEXUS
82	*MUSICAL SYMBOL COMBINING LOURE*	DB	MUSICAL SYMBOL SCANDICUS FLEXUS
83	MUSICAL SYMBOL ARPEGGIATO UP	DC	MUSICAL SYMBOL TORCULUS RESUPINUS
84	MUSICAL SYMBOL ARPEGGIATO DOWN	DD	MUSICAL SYMBOL PES SUBPUNCTIS
85	*MUSICAL SYMBOL COMBINING DOIT*	DE	(This position shall not be used)
86	*MUSICAL SYMBOL COMBINING RIP*	DF	(This position shall not be used)
87	*MUSICAL SYMBOL COMBINING FLIP*	E0	(This position shall not be used)
88	*MUSICAL SYMBOL COMBINING SMEAR*	E1	(This position shall not be used)
89	*MUSICAL SYMBOL COMBINING BEND*	E2	(This position shall not be used)
8A	*MUSICAL SYMBOL COMBINING DOUBLE TONGUE*	E3	(This position shall not be used)
8B	*MUSICAL SYMBOL COMBINING TRIPLE TONGUE*	E4	(This position shall not be used)
8C	MUSICAL SYMBOL RINFORZANDO	E5	(This position shall not be used)
8D	MUSICAL SYMBOL SUBITO	E6	(This position shall not be used)
8E	MUSICAL SYMBOL Z	E7	(This position shall not be used)
8F	MUSICAL SYMBOL PIANO	E8	(This position shall not be used)
90	MUSICAL SYMBOL MEZZO	E9	(This position shall not be used)
91	MUSICAL SYMBOL FORTE	EA	(This position shall not be used)
92	MUSICAL SYMBOL CRESCENDO	EB	(This position shall not be used)
93	MUSICAL SYMBOL DECRESCENDO	EC	(This position shall not be used)
94	MUSICAL SYMBOL GRACE NOTE SLASH	ED	(This position shall not be used)
95	MUSICAL SYMBOL GRACE NOTE NO SLASH	EE	(This position shall not be used)
96	MUSICAL SYMBOL TR	EF	(This position shall not be used)
97	MUSICAL SYMBOL TURN	F0	(This position shall not be used)
98	MUSICAL SYMBOL INVERTED TURN	F1	(This position shall not be used)
99	MUSICAL SYMBOL TURN SLASH	F2	(This position shall not be used)
9A	MUSICAL SYMBOL TURN UP	F3	(This position shall not be used)
9B	MUSICAL SYMBOL ORNAMENT STROKE ONE	F4	(This position shall not be used)
9C	MUSICAL SYMBOL ORNAMENT STROKE TWO	F5	(This position shall not be used)
9D	MUSICAL SYMBOL ORNAMENT STROKE THREE	F6	(This position shall not be used)
9E	MUSICAL SYMBOL ORNAMENT STROKE FOUR	F7	(This position shall not be used)
9F	MUSICAL SYMBOL ORNAMENT STROKE FIVE	F8	(This position shall not be used)
A0	MUSICAL SYMBOL ORNAMENT STROKE SIX	F9	(This position shall not be used)
A1	MUSICAL SYMBOL ORNAMENT STROKE SEVEN	FA	(This position shall not be used)
A2	MUSICAL SYMBOL ORNAMENT STROKE EIGHT	FB	(This position shall not be used)
A3	MUSICAL SYMBOL ORNAMENT STROKE NINE	FC	(This position shall not be used)
A4	MUSICAL SYMBOL ORNAMENT STROKE TEN	FD	(This position shall not be used)
A5	MUSICAL SYMBOL ORNAMENT STROKE ELEVEN	FE	(This position shall not be used)
A6	MUSICAL SYMBOL HAUPTSTIMME	FF	(This position shall not be used)
A7	MUSICAL SYMBOL NEBENSTIMME		
A8	MUSICAL SYMBOL END OF STIMME		
A9	MUSICAL SYMBOL DEGREE SLASH		
AA	*MUSICAL SYMBOL COMBINING DOWN BOW*		
AB	*MUSICAL SYMBOL COMBINING UP BOW*		
AC	*MUSICAL SYMBOL COMBINING HARMONIC*		
AD	*MUSICAL SYMBOL COMBINING SNAP PIZZICATO*		
AE	MUSICAL SYMBOL PEDAL MARK		
AF	MUSICAL SYMBOL PEDAL UP MARK		
B0	MUSICAL SYMBOL HALF PEDAL MARK		
B1	MUSICAL SYMBOL GLISSANDO UP		
B2	MUSICAL SYMBOL GLISSANDO DOWN		
B3	MUSICAL SYMBOL WITH FINGERNAILS		
B4	MUSICAL SYMBOL DAMP		
B5	MUSICAL SYMBOL DAMP ALL		
B6	MUSICAL SYMBOL MAXIMA		
B7	MUSICAL SYMBOL LONGA		
B8	MUSICAL SYMBOL BREVIS		
B9	MUSICAL SYMBOL SEMIBREVIS WHITE		
BA	MUSICAL SYMBOL SEMIBREVIS BLACK		
BB	MUSICAL SYMBOL MINIMA		
BC	MUSICAL SYMBOL MINIMA BLACK		
BD	MUSICAL SYMBOL SEMIMINIMA WHITE		
BE	MUSICAL SYMBOL SEMIMINIMA BLACK		
BF	MUSICAL SYMBOL FUSA WHITE		
C0	MUSICAL SYMBOL FUSA BLACK		
C1	MUSICAL SYMBOL LONGA PERFECTA REST		
C2	MUSICAL SYMBOL LONGA IMPERFECTA REST		
C3	MUSICAL SYMBOL BREVIS REST		
C4	MUSICAL SYMBOL SEMIBREVIS REST		
C5	MUSICAL SYMBOL MINIMA REST		
C6	MUSICAL SYMBOL SEMIMINIMA REST		
C7	MUSICAL SYMBOL TEMPUS PERFECTUM CUM PROLATIONE PERFECTA		
C8	MUSICAL SYMBOL TEMPUS PERFECTUM CUM PROLATIONE IMPERFECTA		
C9	MUSICAL SYMBOL TEMPUS PERFECTUM CUM PROLATIONE PERFECTA DIMINUTION ONE		
CA	MUSICAL SYMBOL TEMPUS IMPERFECTUM CUM PROLATIONE PERFECTA		
CB	MUSICAL SYMBOL TEMPUS IMPERFECTUM CUM PROLATIONE IMPERFECTA		
CC	MUSICAL SYMBOL TEMPUS IMPERFECTUM CUM PROLATIONE IMPERFECTA DIMINUTION ONE		
CD	MUSICAL SYMBOL TEMPUS IMPERFECTUM CUM PROLATIONE IMPERFECTA DIMINUTION TWO		
CE	MUSICAL SYMBOL TEMPUS IMPERFECTUM CUM PROLATIONE IMPERFECTA DIMINUTION THREE		
CF	MUSICAL SYMBOL CROIX		
D0	MUSICAL SYMBOL GREGORIAN C CLEF		
D1	MUSICAL SYMBOL GREGORIAN F CLEF		
D2	MUSICAL SYMBOL SQUARE B		
D3	MUSICAL SYMBOL VIRGA		
D4	MUSICAL SYMBOL PODATUS		
D5	MUSICAL SYMBOL CLIVIS		
D6	MUSICAL SYMBOL SCANDICUS		
D7	MUSICAL SYMBOL CLIMACUS		
D8	MUSICAL SYMBOL TORCULUS		

TABLE 8 - Row D4: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D40	D41	D42	D43	D44	D45	D46	D47
0	**A**	**Q**	**g**	**w**	*M*	*c*	*s*	*I*
1	**B**	**R**	**h**	**x**	*N*	*d*	*t*	*J*
2	**C**	**S**	**i**	**y**	*O*	*e*	*u*	*K*
3	**D**	**T**	**j**	**z**	*P*	*f*	*v*	*L*
4	**E**	**U**	**k**	*A*	*Q*	*g*	*w*	*M*
5	**F**	**V**	**l**	*B*	*R*		*x*	*N*
6	**G**	**W**	**m**	*C*	*S*	*i*	*y*	*O*
7	**H**	**X**	**n**	*D*	*T*	*j*	*z*	*P*
8	**I**	**Y**	**o**	*E*	*U*	*k*	*A*	*Q*
9	**J**	**Z**	**p**	*F*	*V*	*l*	*B*	*R*
A	**K**	**a**	**q**	*G*	*W*	*m*	*C*	*S*
B	**L**	**b**	**r**	*H*	*X*	*n*	*D*	*T*
C	**M**	**c**	**s**	*I*	*Y*	*o*	*E*	*U*
D	**N**	**d**	**t**	*J*	*Z*	*p*	*F*	*V*
E	**O**	**e**	**u**	*K*	*a*	*q*	*G*	*W*
F	**P**	**f**	**v**	*L*	*b*	*r*	*H*	*X*

G = 00
P = 01

TABLE 9 - Row D4: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D48	D49	D4A	D4B	D4C	D4D	D4E	D4F
0	Y	o	▨	𝒰	𝓀	𝒜	𝒬	𝑔
1	Z	p	▨	𝒱	▨	ℬ	ℛ	h
2	a	q	𝒢	𝒲	m	𝒞	𝒮	i
3	b	r	▨	𝒳	n	𝒟	𝒯	j
4	c	s	▨	𝒴	▨	ℰ	𝒰	k
5	d	t	𝒥	𝒵	p	ℱ	𝒱	l
6	e	u	𝒦	a	q	𝒢	𝒲	m
7	f	v	▨	b	r	ℋ	𝒳	n
8	g	w	▨	c	s	ℐ	𝒴	o
9	h	x	𝒩	d	t	𝒥	𝒵	p
A	i	y	𝒪	▨	u	𝒦	a	q
B	j	z	𝒫	f	v	ℒ	b	r
C	k	𝒜	𝒬	▨	w	ℳ	c	s
D	l	▨	▨	h	x	𝒩	d	t
E	m	𝒞	𝒮	i	y	𝒪	e	u
F	n	𝒟	𝒯	j	z	𝒫	f	v

G = 00
P = 01

TABLE 10 - Row D5: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D50	D51	D52	D53	D54	D55	D56	D57
0	𝒲	𝔐	𝔠	𝔰	𝕀	𝕐	o	ℭ
1	𝓍	𝔑	𝔡	𝔱	𝕁		p	𝔉
2	𝓎	𝔒	𝔢	𝔲	𝕂	a	q	𝔊
3	𝓏	𝔓	𝔣	𝔳	𝕃	b	r	ℌ
4	𝔄	𝔔	𝔤	𝔴	𝕄	c	s	ℑ
5	𝔅		𝔥	𝔵		d	t	ℑ
6		𝔖	𝔦	𝔶	𝕆	e	u	𝔎
7	𝔇	𝔗	𝔧	𝔷		f	v	𝔏
8	ℭ	𝔘	𝔨	𝔸		g	w	𝔐
9	𝔉	𝔙	𝔩	𝔹		h	x	𝔑
A	𝔊	𝔚	𝔪		𝕊	i	y	𝔒
B		𝔛	𝔫	𝔻	𝕋	j	z	𝔓
C		𝔜	𝔬	𝔼	𝕌	k	𝔄	𝔔
D	ℑ		𝔭	𝔽	𝕍	l	𝔅	𝔑
E	𝔎	𝔞	𝔮	𝔾	𝕎	m	ℭ	𝔖
F	𝔏	𝔟	𝔯		𝕏	n	𝔇	𝔗

G = 00
P = 01

TABLE 11 - Row D5: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D58	D59	D5A	D5B	D5C	D5D	D5E	D5F
0	𝔘	𝔣	A	Q	g	w	**M**	**c**
1	𝔙	𝔩	B	R	h	x	**N**	**d**
2	𝔚	𝔪	C	S	i	y	**O**	**e**
3	𝔛	𝔫	D	T	j	z	**P**	**f**
4	𝔜	𝔬	E	U	k	**A**	**Q**	**g**
5	𝔷	𝔭	F	V	l	**B**	**R**	**h**
6	𝔞	𝔮	G	W	m	**C**	**S**	**i**
7	𝔟	𝔯	H	X	n	**D**	**T**	**j**
8	𝔠	𝔰	I	Y	o	**E**	**U**	**k**
9	𝔡	𝔱	J	Z	p	**F**	**V**	**l**
A	𝔢	𝔲	K	a	q	**G**	**W**	**m**
B	𝔣	𝔳	L	b	r	**H**	**X**	**n**
C	𝔤	𝔴	M	c	s	**I**	**Y**	**o**
D	𝔥	𝔵	N	d	t	**J**	**Z**	**p**
E	𝔦	𝔶	O	e	u	**K**	**a**	**q**
F	𝔧	𝔷	P	f	v	**L**	**b**	**r**

G = 00
P = 01

TABLE 12 - Row D6: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D60	D61	D62	D63	D64	D65	D66	D67
0	s	I	Y	o	E	U	k	A
1	t	J	Z	p	F	V	l	B
2	u	K	a	q	G	W	m	C
3	v	L	b	r	H	X	n	D
4	w	M	c	s	I	Y	o	E
5	x	N	d	t	J	Z	p	F
6	y	O	e	u	K	a	q	G
7	z	P	f	v	L	b	r	H
8	A	Q	g	w	M	c	s	I
9	B	R	h	x	N	d	t	J
A	C	S	i	y	O	e	u	K
B	D	T	j	z	P	f	v	L
C	E	U	k	A	Q	g	w	M
D	F	V	l	B	R	h	x	N
E	G	W	m	C	S	i	y	O
F	H	X	n	D	T	j	z	P

G = 00
P = 01

TABLE 13 - Row D6: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D68	D69	D6A	D6B	D6C	D6D	D6E	D6F
0	Q	g	w	I	Ω	o	ϱ	O
1	R	h	x	Κ	∇	π	ϖ	Π
2	S	i	y	Λ	α	ρ	A	P
3	T	j	z	M	β	ς	B	Θ
4	U	k		N	γ	σ	Γ	Σ
5	V	l		Ξ	δ	τ	Δ	T
6	W	m		O	ε	υ	E	ϒ
7	X	n		Π	ζ	φ	Z	Φ
8	Y	o	A	P	η	χ	H	X
9	Z	p	B	Θ	θ	ψ	Θ	Ψ
A	a	q	Γ	Σ	ι	ω	I	Ω
B	b	r	Δ	T	κ	∂	K	∇
C	c	s	E	ϒ	λ	ε	Λ	α
D	d	t	Z	Φ	μ	ϑ	M	β
E	e	u	H	X	ν	ϰ	N	γ
F	f	v	Θ	Ψ	ξ	ϕ	Ξ	δ

G = 00
P = 01

TABLE 14 - Row D7: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D70	D71	D72	D73	D74	D75	D76	D77
0	ε	υ	E	Υ	λ	ϵ	Λ	α
1	ζ	φ	Z	Φ	μ	ϑ	M	β
2	η	χ	H	X	ν	$\varkappa$	N	γ
3	θ	ψ	Θ	Ψ	ξ	ϕ	Ξ	δ
4	ι	ω	I	Ω	o	ϱ	O	ε
5	κ	∂	K	∇	π	ϖ	Π	ζ
6	λ	ϵ	Λ	α	ρ	A	P	η
7	μ	ϑ	M	β	ς	B	Θ	θ
8	ν	$\varkappa$	N	γ	σ	Γ	Σ	ι
9	ξ	ϕ	Ξ	δ	τ	Δ	T	κ
A	o	ϱ	O	ε	υ	E	Υ	λ
B	π	ϖ	Π	ζ	φ	Z	Φ	μ
C	ρ	A	P	η	χ	H	X	ν
D	ς	B	Θ	θ	ψ	Θ	Ψ	ξ
E	σ	Γ	Σ	ι	ω	I	Ω	o
F	τ	Δ	T	κ	∂	K	∇	π

G = 00
P = 01

TABLE 15 - Row D7: MATHEMATICAL ALPHANUMERIC SYMBOLS

	D78	D79	D7A	D7B	D7C	D7D	D7E	D7F
0	ρ	A	P	η	χ	2	8	4
1	ς	B	Θ	θ	ψ	3	9	5
2	σ	Γ	Σ	ι	ω	4	0	6
3	τ	Δ	T	κ	∂	5	1	7
4	υ	E	Y	λ	ε	6	2	8
5	φ	Z	Φ	μ	ϑ	7	3	9
6	χ	H	X	ν	ϰ	8	4	0
7	ψ	Θ	Ψ	ξ	φ	9	5	1
8	ω	I	Ω	ο	ϱ	0	6	2
9	∂	K	∇	π	ϖ	1	7	3
A	ϵ	Λ	a	ρ		2	8	4
B	ϑ	M	β	ς		3	9	5
C	ϰ	N	γ	σ		4	0	6
D	φ	Ξ	δ	τ		5	1	7
E	ϱ	O	ε	υ	0	6	2	8
F	ϖ	Π	ζ	φ	1	7	3	9

G = 00
P = 01

Attachment 5 - Japan

The national body of Japan DISAPPROVES the FCD 10646-2 (SC2 N3442) with comments.
If the comments are accommodated, Japan may change it's disapproval to APPROVAL.

Comments.

J-1: CJK UNIFIED IDEOGRAPH EXT-B (code table and associated information)
Revise the ext-B for renewed ext-B by IRG.
The revision reflects:
-    Change instruction defined in IRG N744 /N746(which is agreed in principle at #15 IRG in Kunming. China @May 2000).
-    Glyph (font) shape improvement which IRG#15 planned for mid-DEC completion

J-2: CJK COMPATIBILITY IDEOGRAPHS
Revise the format such that it should be as same as possible with the compatibility ideographs in the part-1.
Also, consider to add some more information about the characters which are suggested in the contribution documents about the compatibility ideographs such as WG2 N2221R, N2222R etc..

J-3: clause 1. SCOPE
a). Change   This second part specifies -→ This part-2 specifies
     Rationale: For consistency with the text just above.
b). First bullet: Change Plane for CJK Ideographs (SIP) and the BMP -→ Plane for CJK Ideographs (SIP) , Special Purpose Plane (SPP) and the BMP
     Rationale: Remember that the SPP also defines "graphic character"!!
c) Second bullet   Delete: Chinese/Japanese/Korean
     Rationale: Use just CJK Ideograph, unless, some political problem may happen.

J-4: clause 9 Special characters: Last paragraph.
   Clarification: Does the word "discussion (two places)" fit to the international standard?
   "specify", "define"?

J-5: clause 11.2 CJK Unified Ideographs Extension B
a) 1st line: Change   described -→specified
b) J3: add to the last part   level-3
   J4 add to the last part   level-4

J-6: Annex C:
The source data information should be provided as a part of standard (normative) in print form because this is the normal practice of ISO and IEC standards.
If there is (will) formal defined method for machine readable data supply by JTC1 (such as adding CD as a part of the standard, then ISO/IEC 10646-2 may follow the instruction.

Besides above formality requirement, Japan shares with FCD the idea of benefit of supplying machine readable data. Japan is not negative for providing an optional machine readable data along with the printed data described above.

J-7: DPRK sources
Japan recommend to add DPRK source standards for the extension-B in annex C.
The data is already proposed to IRG (but not reviewed yet).

----end -----

**ISO/IEC JTC1/SC2
CODE CHARACTER SETS
SECRETARIAT: JAPAN (JISC)**

**TITLE: FCD COMMENTS FOR THE INCLUTION OF HANJA SOURCE
              INFORMATION OF D. P. R. OF KOREA IN ISO/IEC DIS 10646-2**

DOC. TYPE: National body contribution
SOURCE: Committee for Standardization of the D. P. R. of Korea   (CSK)
DISTRIBUTION: P,O and L Members of ISO/IEC JTC1/SC2
DATE: 2000-08-10
REFERENCE: IRG N727, IRG N730, IRG N745, IRG N746, IRG N747

In D. P. R.of Korea, 24126 ideographs were specified in KPS 9566-97 and KPS 10721-2000,and they are widely in use now.

CSK submitted our proposal for the registration of our ideographs (JTC1 N5999) in 1998 and then participated in the 38th WG2 meeting and the 15th IRG meeting.

And in the 15th IRG meeting, IRG Members discussed about our proposal for the addition of 5669 ideographs of D. P. R. of Korea to ISO/IEC 10646-2 CJK Unified Ideographs Extension B and had resolved that we'll submit this subject as a FCD comment to SC2.

According to this resolution, CSK propose to include the source information of our 5669 ideographs to ISO/IEC DIS 10646-2 CJK Unified Ideographs Extension B.

In this document are included the 5669 ideographs and their code position specified in KPS 10721-2000.

The data item description for each proposed character and its supplementary information are as follows.

**Proposed
Ideograph**   **Radical**

---

   0 - 6F6E   潮   月   0-E9A4

```
UCS Code:
0 - xxxx :  BMP Hanja
2 - xxxx : CJK Unified
Ideographs Extension B
Super CJK 10.0
```

```
KPS Source Code:
   0 - KPS 9566-97
   1 - KPS 10721 -2000
```

ANNEX

KP-Hanja Sources

KPS 9566-97 Code of the Korean Graphic Character Set for Information Interchange

KPS 10721-2000 Code of the supplementary Korean Hanja Set for Information Interchange

Bibliography

새옥편	1963，과학원출판사
東國正韻	
奎章全韻	一八〇〇年
全韻玉篇	
訓蒙字會	
三國史記	
三國遺事	
高麗史	
李朝實錄	
備邊司謄錄	
大典會通	
六典條例	一八八六年
萬機要覽	一九三七年
通文館志	一九一三年
大東野乘	一九〇九年
五洲衍文長箋散稿	一九五九年
牧民心書	
新增東國輿地勝覽	
古今釋林	
韓漢淸文鑑	
吏文輯覽	
八萬大藏經	
月印釋譜	
七政算	一四五一年
九數略	
九章術解	
東醫寶鑑	一六一三年
鄕藥集成方	一九四三年
醫方類聚	
農事直說	
增補山林經濟	

Repertoires(Page 2 to 40 were omitted by SC 2 Sec.)

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Proposed                    Proposed                    Proposed
Ideograph                   Ideograph                   Ideograph
───────────────────────────────────────────────────────────────────────────

2-0009 㠪 一 1-3400         2-02B1 御 人 1-3531         2-046C 儸 人 1-3614
2-000B 丈 一 1-3403         2-02B2 倁 人 1-3533         2-046D 儝 人 1-3617
2-0043 盟 一 1-340E         2-02B7 倷 人 1-3537         2-0475 儙 人 1-3619
2-0057 壺 一 1-340F         2-02B8 偃 人 1-3558         2-047C 兀 儿 1-361C
2-006F 众 丨 1-3419         2-02BA 傮 人 1-3536         2-04BB 鼀 儿 1-3623
2-00A3 辰 丿 1-3423         2-02BB 俀 人 1-3564         2-04ED 众 入 1-3627
2-00A4 肙 丿 1-3425         2-02C7 俙 人 1-354F         2-0539 兾 八 1-362A
2-00A5 臼 丿 1-3422         2-02E7 俊 人 1-3544         2-0545 冄 冂 1-362E
2-00B0 乖 丿 1-3426         2-02ED 侃 人 1-353F         2-054B 冊 冂 1-3633
2-00BA 丞 丿 1-3428         2-02EE 傆 人 1-353C         2-05BF 洛 氵 1-3649
2-00CD 乞 乙 1-3429         2-02F7 傃 人 1-3577         2-05C5 汖 氵 1-364A
2-00E8 乱 乙 1-342F         2-02F8 傒 人 1-356D         2-05C6 浃 氵 1-364B
2-0108 乿 乙 1-343F         2-02FB 倶 人 1-3571         2-05E5 渫 氵 1-3652
2-0112 亅 亅 1-3442         2-02FC 儅 人 1-357D         2-05EF 腠 氵 1-3656
2-012F 棗 二 1-344B         2-02FD 俅 人 1-356C         2-05F0 溓 氵 1-3654
2-015A 亭 亠 1-3456         2-02FF 傻 人 1-3575         2-05F3 溏 氵 1-3653
2-015B 亮 亠 1-3454         2-0300 傻 人 1-3578         2-05FA 滲 氵 1-365A
2-01AD 仇 人 1-3462         2-0332 傴 人 1-3597         2-062E 夙 几 1-3663
2-01BA 优 人 1-346B         2-0336 儞 人 1-359A         2-0643 凱 几 1-3666
2-01DB 孤 人 1-3486         2-033C 偁 人 1-3591         2-0647 凨 几 1-3668
2-01DC 伐 人 1-349E         2-0340 偲 人 1-35A3         2-068B 函 凵 1-366D
2-01F7 休 人 1-3490         2-035D 傘 人 1-3594         2-0693 𪠯 凵 1-366F
2-0207 伍 人 1-34A0         2-036F 儌 人 1-35A8         2-06AA 刞 刀 1-3673
2-0208 保 人 1-34B8         2-037A 憖 人 1-35AB         2-06AC 刋 刀 1-3674
2-020E 倯 人 1-34A9         2-037B 儀 人 1-35A4         2-06B4 刬 刀 1-3678
2-020F 伾 人 1-34B0         2-03B4 儮 人 1-35B3         2-06E8 刑 刀 1-3687
2-0231 侄 人 1-34C4         2-03B7 憖 人 1-35AA         2-0715 削 刀 1-368E
2-0232 伻 人 1-34DA         2-03BC 僅 人 1-35D2         2-072D 剀 刀 1-3694
2-0233 企 人 1-34D5         2-03BD 傓 人 1-35D3         2-0730 剒 刀 1-3692
2-0235 侹 人 1-34F0         2-03C3 傛 人 1-35C6         2-0732 刣 刀 1-3693
2-0236 伱 人 1-34E4         2-03C4 儞 人 1-35D8         2-073A 剧 刀 1-3690
2-023A 佌 人 1-34DF         2-03C5 僃 人 1-35C8         2-075D 剝 刀 1-369E
2-023B 伮 人 1-34D4         2-03E6 僗 人 1-35CF         2-075F 剗 刀 1-36A6
2-023C 俾 人 1-34E2         2-03EC 儠 人 1-35EB         2-07A2 剢 刀 1-36AC
2-023F 佳 人 1-34F4         2-03EE 僅 人 1-35EC         2-07AA 剠 刀 1-36AA
2-025A 使 人 1-34E5         2-03F2 儔 人 1-35E0         2-07AC 剫 刀 1-36AB
2-0268 偖 人 1-3525         2-03F4 儔 人 1-35CE         2-07BF 剣 刀 1-36B2
2-0269 倍 人 1-3505         2-040B 傷 人 1-35F6         2-07C1 到 刀 1-36B1
2-026A 亂 人 1-352E         2-040D 豎 人 1-35FA         2-07E6 劀 刀 1-36B5
2-026C 做 人 1-3523         2-040E 膠 人 1-35F1         2-07F6 劖 刀 1-36B9
2-026E 傭 人 1-3507         2-040F 儸 人 1-35FE         2-0817 劗 刀 1-36BC
2-026F 條 人 1-352D         2-0410 儆 人 1-35F9         2-0847 勁 力 1-36C4
2-0271 儼 人 1-352C         2-041D 儨 人 1-35F3         2-088F 勞 力 1-36D6
2-02AA 倣 人 1-351B         2-0427 儍 人 1-3600         2-0891 勖 力 1-36D3
2-02AB 儜 人 1-3503         2-042A 傮 人 1-3603         2-08EB 匋 勹 1-36E6
2-02AC 倫 人 1-353A         2-043E 儴 人 1-3607         2-08ED 匈 勹 1-36E7
2-02AE 侉 人 1-3547         2-0447 儳 人 1-3608         2-090B 七 匕 1-36EB
2-02AF 偳 人 1-3543         2-045B 傾 人 1-3611         2-095B 甌 匚 1-36F9
2-02B0 倖 人 1-3534         2-0462 儊 人 1-3610         2-0983 舟 十 1-3707
```

Sweden votes NO the FCD for ISO/IEC 10646-2 with the following comments.

Technical comments:

SE 1, General: The FCD for 10646-2 concerns three planes: Plane 01 (SMP), Plane 02 (SIP), and Plane 0E (SPP). We have no objection to continuing with Plane 02 (SIP) at the current schedule for 10646-2. However, both the SPP (Plane 0E) as a whole and a significant portion of the SMP (Plane 01) are objectionable (see SE 9 and SE 11 below). We therefore strongly suggest to limit the *first edition* of 10646-2 to the SIP (Plane 02), and some parts of the SMP, and leave all else to possible future amendments to 10646-2. In particular, neither plane 0E, nor the "math alphanumerical" portions of plane 01 should be included at this time, if at all. (See **SE 5**, **SE 9**, and **SE 11**.)

SE 2, General: Rename the subtitle for 10646-2 to "Supplementary planes".

SE 3, Page 2: current clause 5 (should be clause 4): The definitions currently given in this clause do not define terms. Apart from the first one, which is not needed at all, they are names rather than terms, and those names are defined in later clauses, though mentioned in clause 1. (See also **SE-ed 8**.)

SE 4, Page 2: current clause 4 (should be clause 5): This clause should introduce the forms **[U][+]ghhhh**, the first hexadecimal digit non-zero, and **[U][+]10hhhh** for referencing a code position (or the character standardised at that position, if any) in the supplementary planes. The 5-digit version should be used throughout the Part 2 text, including annexes C and D, except when referring to BMP code points (for which the pre-existing 4-digit code point reference form should be used). (See also **SE-ed 10**, **SE-ed 12**, **E-ed 22**, and **SE-ed 27**.)

SE 5, Etruscan: "one hundred OR one thousand", "one thousand OR ten thousand"; does this signify difference of usage (over time or place) or that the interpretation is unknown now (but not when the script(s) were actively used)? If the latter, there is a danger that a deficient interpretation is made permanent in the character names.

SE 6, Greek Byzantine musical symbols: Annex F says "arranged in three stripes..." and "multiple signs can be stacked together in their appropriate stripe". This is unclear: "same stripe symbols stacked together in the same stripe"; or "different stripe symbols stacked together, only one per stripe". Assuming the latter, should some of the characters be made combining? E.g., a middle stripe symbol may be followed by a upper stripe combining symbol and/or a lower stripe combining symbol.

SE 7, Western musical symbols: The combining characters should have names with the word

"COMBINING" in them.

SE 8, Western musical symbols: The characters suggested at 1D100, 1D101, 1D102, 1D19F, and 1D1A0 are already encoded (at 266F, 266D, 266E, 2669, and 266A respectively). The characters should not be doubly encoded.

SE 9, **Mathematical alphanumeric symbols:** Sweden maintains its view that these characters should not be encoded, and that levels above the character encoding should be used to maintain the variation distinctions, in a suitable way. For a more detailed motivation, and a possible alternative solution for MathML, we still refer to document SC2/WG2 N 2168, where also a better solution for MathML is suggested (similar or related approaches can be used in other contexts, such as programming languages).

SE 10, Current clause 11: The names should use 5 hexadecimal digits rather than 8.

SE 11, **Special Purpose Plane (and Annex E):** Sweden maintains its view that these characters should not be encoded, and it should always be the case that levels above the character encoding should be used to maintain the language tagging, in a suitable way. All internet protocols, for instance, inherently have some kind of higher level framework to express all kinds of things, using just ASCII characters to express them. These frameworks can be extended to cover language tagging too, without needing any special characters. For a more detailed motivation, we still refer to document SC2/WG2 N 2169.

SE 12, **Annex C: Source references for CJK Unified Ideographs Extension B:** Is this intended to be part of the actually printed document? There is an **editor's** note saying that it is (as yet) in a separate file; but that note does not tell the plan for the final document. Printed, it appears both hard to read and hard to use (except for an occational lookup). It would also be hard to use for scanning and OCR due to the likelihood of OCR errors. But as a machine readable plain text file (as the somewhat cryptic introduction ("UCODE: 1-6 **BYTE**, GCODE: 7-13 **BYTE**, …") hints at) it would be easier to use. Even so, a file format that did not depend on byte counts would be preferable. For instance, instead use semicolon as separator between the fields. If this table needs to be printed, the printed version should use a tabular layout in two text columns, with grid lines and in small print, like:

Pos.	G	T	J	K	V	H
20000	G_KX	T5-2125				
20001	G_HZ					
20002		TF-2121				
20003	G_KX	T6-212F				
20004		T6-212D				
20005	G_HZ	T6-212E				
20006				K-0002		
20007	G_KX	T6-2142				
20008	G_KX	T6-2143				
20009		T5-2133				
2000A	G_HZ					
2000B	G_HZ	T3-2144	J3-2E22			
2000C	G_HZ					
2000D	G_HZ	T6-2141				
2000E	G_KX					
2000F	G_4K					
20010		TF-213E				
20011		TF-213F				
20012	G_HZ					
20013	G_HZ	T6-222B				
20014	G_HZ					
20015	G_HZ	T5-214D				
20016	G_HZ					
20017					V0-3F5F	
20018					V0-3F60	
20019	G_KX	T6-2340				
2001A	G_KX	T6-233E				
2001B	G_KX	T6-233F				
2001C	G_HZ					

Pos.	G	T	J	K	V	H
2001D	G_HZ					
2001E	G_HZ					
2001F	G_HZ					
20020	G_HZ					
20021	G_HZ	T6-2467				
20022	G_KX	T6-255F				
20023	G_KX	T5-232F				
20024		TF-2274				
20025	G_HZ					
20026	G_HZ	T6-2567				
20027	G_HZ					
20028					V0-354F	
20029					V2-6E21	
2002A	G_HZ	T6-2563				
2002B					V0-456C	
2002C					V0-456D	
2002D	G_KX	T6-2937				
2002E	G_KX	T6-293A				
2002F	G_KX	T6-2938				
20030	G_HZ					
20031	G_HZ					
20032	G_HZ					
20033					V0-305F	
20034					V2-6E25	
20035					V0-354A	
20036		TF-2922				
20037		TF-2923				
20038	G_HZ	T4-2A68				
20039	G_HZ					

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Pos.	G	T	J	K	V	H
2003A	G_HZ					
2003B	G_HZ					
2003C	G_HZ					
2003D	G_HZ	T6-2E66				
2003E	G_HZ					
2003F	G_HZ					
20040						HA-0007
20041					V2-6E27	
20042					V0-3F68	
20043	G_KX	T5-3072				
20044					V2-6E26	
20045	G_HZ	T5-3323				
20046					V0-354B	
20047	G_HZ					
20048		TF-3932				HA-0713
20049		TF-3933				
2004A	G_HZ					
2004B	G_HZ					
2004C	G_HZ					
2004D		TF-3B73				
2004E		TF-4035				
2004F		TF-4075				
20050						HA-0003

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Editorial comments:

SE-ed 1, pagination: After page 38, the page numbering restarts at 1, which it obviously should not do. Similarly, after page 335 (page 373 (or more) really) page numbering restarts at 365. (Side remark: If divided into multiple PDF files, each PDF file should begin at an odd page, and end at an even page, so that correct printing is facilitated; this is a problem with the current Part 1 PDF files, which do not fulfill this.)

SE-ed 2, Title (and where the title reoccurs): The subtitle of 10646-2 should use visible punctuation between the plane names, and the word "and" before the last name. This way the full title can more easily and comprehensibly be cited without needing to use special layout. Use "..., ..., and ..." (or "... and ...", if only two planes) in name of part 2. (See also **SE 2**.)

SE-ed 3, Foreword: Change the relevant text to

"...take part in the work.

International Standards are drafted in accordance with the rules in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1, {\em Implementation of information technology}. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

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

International Standard ISO/IEC 10646-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, Implementation of information technology, Subcommittee SC 2, Coded character sets.

ISO/IEC 10646 consists of..."

SE-ed 4, All (except clause 3): consistently refer to part 1 as "Part 1", rather than the current mixture of reference forms.

SE-ed 5, Page 1: Delete the word "Contents".

SE-ed 6, Clause 3: New text for the introductory paragraph (see clause 3 of Part 1:2000, or get (even newer?) text from ITTF).

SE-ed 7, Page 2: The "Definitions" (or "Definition of terms") should come directly after clause 3, i.e. as clause 4, not as clause 5.

SE-ed 8, Page 2: Clause 4 (current clause 5): Rename this clause to "Definitions of terms".

SE-ed 9, Page 2: Clause 4 (current clause 5): The definitions should not be numbered, since they are not subclauses.

SE-ed 10, Page 2: Clause 5 (current clause 4): Rename this clause to "Naming of code positions". (See also **SE 4**.)

SE-ed 11, Page 2: Clause 5 (current clause 4): two, three, five, six? In this clause there seems to be some confusion in the counting of digits. (See also **SE 4**.)

SE-ed 12, Page 2: Clause 5 (current clause 4): This clause has a summary of UTF-16 (as used for these three planes), and a shorter summary of UTF-8. Neither UTF need be summarised in part 2, and the summaries should be made into notes.

SE-ed 13, All: Clauses 6, 10, 9, and most of Annex B (the rest of annex B can be removed, nothing essential remains) should be merged to a single clause. Clauses 7 and 11 should be merged to a single clause. Clauses 8 and 12 should be merged to a single clause, though these should be deleted (see **SE 1** and **SE 11**).

SE-ed 14, Current clause 6: "The SMP cannot use the two-octet BMP form...". The "BMP form" should be referred to as "UCS-2". The SMP is highly inanimate (abstract even) and cannot do (or use) anything. Thus the above partial sentence should read "No character in the SMP can be represented in UCS-2, ...". (Similarly in at least one other place (current clause 7).

SE-ed 15, Current clause 6: "...reserved for CJK...". Change to "...reserved for additional CJK...".

SE-ed 16, Current clause 6: "..., the SMP is not used to encode the CJK...". Change to "..., the SMP is not used to encode any CJK...".

SE-ed 17, Current clause 6: "The SMP contains coded...". Not yet... Only very few things of what is planned for Plane 1 will get into the first edition of 10646-2. Change to "The SMP is scheduled to contain coded..." or similar.

SE-ed 18, Current clause 7: "Plane1" to "Plane 1" (add space)

SE-ed 19, Current clause 8 (should be deleted, see SE 1 and SE 11): E0000 to EF0FF is almost the entire plane. Appears incorrect, probably an editorial mistake.

SE-ed 20, Current clause 8 (should be deleted, see SE 1 and SE 11): Clause 8 and clause 9 appears to make a distinction between "Alternate format characters" (of Annex F) and "Alternate Format Characters" (of part 1 clause 20).

SE-ed 21, Current clause 10, unless merged as suggested in SE-ed 13: "Code" -> "code"

SE-ed 22, current page 6-35: Chart column headers should have 4 digits (an initial "1" followed by the current three digits); preferably followed by a period or other mark for the "chart row digit". The "hex" column in the name tables should have 5 digits. See also **SE 4**.

SE-ed 23, Current clauses 10, 11, and 12: The two-column wide illustration breaks the text flow strangely; one is supposed to read column one partially, then column 2 partially, to then continue on column one of the same page. Very strange. Put the wide figures either at the top of the respective page or at the bottom of the page, NOT in the middle.

SE ed24, Western musical symbols: Possible glyph problem: 1D1C0 and 1D1DA have very similar glyphs. Too similar? 1D1A5 is a very small point glyph. Too small?

SE-ed 25, Current clause 11, unless merged as suggested in SE-ed 13: "code tables" -> "code tables and character names"

SE-ed 26, Page 37, most of the first column: move to annex C. (See also **SE 12**.)

SE-ed 27, current page 1-335: Chart column headers should have 4 digits (an initial "2" followed by the current three digits); preferably followed by a period or other mark for the "chart row digit". See also **SE 4**.

SE-ed 28, current page 335: Unused code positions should be shaded in the chart.

SE-ed 29, current page 365, the note (should be deleted, see SE 11): "Unassigned code points in this range…". Well, **all** code points in this range should be ignored ((in normal processing and display)), ideally to the degree that none are allocated.

SE-ed 30, current page 365, the note (should be deleted, see SE 11): "…do not have printable graphic character…": English?

SE-ed 31, Table headings: Replace " :" by ": ". Possibly add "Table nn – ".

Title:	Comments accompanying the US positive vote on CD ISO/IEC 10646-2
Source:	The U.S.A.
Action:	Forward to SC2 Secretariat

The US is voting YES on the Final Committee Draft ISO/IEC 10646-2 with the following comments:

Technical Comments:

T.1 Clause 4: part-2 hex notation
5-digit notation should be used for part-2 characters. Part 2 only deals with characters from Plane 1, 2 and E, and all these codes can be expressed in 5 hex digit. BMP characters will still use 4 hex digits in appropriate context. The same convention should apply to the name for CJK characters (unified and compatibility) in clause 11.2 and 11.3.

T.2 Clause 6: SMP description
In the Note, change 'CJK Ideographic derived scripts' to 'Non CJK Ideographic scripts'.

T.3 Clause 8: SPP description
Change '0EF0FF' to 'E0FFF', to correctly reflect accepted UK comment T.5 on the CD ballot. Change 'annex F' to 'clause 10'.

T.4 Clause 10: Etruscan
Change the name of the 'Etruscan block' to 'Old Italic block'; modify character names and collection accordingly. Change the beginning of the Note as following:
"The Old Italic block covers alphabets such as Estruscan, Oscan, Umbrian and Faliscan. These alphabets can be found…"
Remove the following characters from the Etruscan block: 10320 ETRUSCAN WORD SEPARATOR, 10326-10329 ETRUSCAN NUMERAL ALTERNATE ONE HUNDRED to ETRUSCAN NUMERAL ONE THOUSAND OR TEN THOUSAND. They need further study before being encoded.

T.5 Clause 10: Deseret
Remove extra space in 10428 DESERET SMALL LETTER LONG I name in all occurrences.

T.6 Clause 10: Byzantine Musical symbols
Remove Greek from all character names (consistency with block name). Use 'MUSICAL SYMBOL' instead of 'SIGN' in names (consistency with the other musical block naming). Remove all parenthetical notes in the character names about their level. Although it would be useful and was requested by BSI in a former ballot, there is no agreement among experts at this point to justify their inclusion.
The font should be improved, many characters are too small.
Two characters do not have 'SIGN' in their name: 1D0B6 and 1D0D6, is this an oversight? It seems that all characters should have 'SIGN' in their name or 'MUSICAL SYMBOL' as suggested above.

T.7 Clause 10: Western Musical symbol

Remove 'WESTERN' from block, collection and character names. These symbols are used worldwide and the extra qualifier makes the names too long.

1D100-1D102 should be removed (according to the WG2 resolution adding the repertoire).

1D13E is a presentation variant of 1D13D and should be removed.

The characters 'MUSICAL SYMBOL END OF STIMME', 'MUSICAL SYMBOL SINGLE BAR and MUSICAL SYMBOL DOUBLE BAR' should be added for completeness.

The US also desires a re-order of the block to better reflect character classification.

T.8 Clause 10: Mathematical

Bold Fraktur characters should replace the Open Face Italic characters. This was a mistake by the US when transposing the proposal from the original submitter.

Change 'OPEN FACE' by 'DOUBLE STRUCK' in character names to be consistent with Part 1. This includes letters and digits.

The font used for Open Face should be similar to the one used for Part 1 charts.

The chart shows incorrect characters for 1D42C-1D42F.

Math Greek character glyphs need a better font.

Script and Fraktur fonts need to be reviewed by the Math community.

T.9 Clause 11: CJK Extension B

Characters 29C1C and 29D52 are in error. Furthermore the US requests that the changes introduced by the last IRG meeting in China (June 2000) be reflected in clause 11. IRG has committed to provide them before the next WG2 meeting.

T.10 Clause 11: Compatibility characters

There are 8 holes in the range 2F800-2FA16: 2F832, 2F933 and 2F96A-2F96F. These should be removed and the following characters should be moved up accordingly.

There is at least a mapping error: 2F90C is mapped incorrectly to 707D, it should be 7070.

T.11 Clause 12: SPP

Correct the Figure 3 plane name

Add the approved comment J-2 from last disposition of comment.

In clause 12.2 Annex D should be Annex E.

T.12 Annex A.1

Change 'CJK COMPATIBILITY IDEOGRAPHS EXTENSION A' to 'CJK COMPATIBILITY IDEOGRAPHS SUPPLEMENT'

Change 'ALTERNATE FORMAT CHARACTERS EXTENDED' to 'ALTERNATE FORMAT CHARACTERS'.

Remove the Note. It is meaningless (as a consequence of the CD ballot comments)

T.13 Annex A.3

Change '20100' to '20000' as the staring point for the CJK Extension B range.

Change '2FA1F' to '2FA0F' (due to holes being removed)

T.14 Annex B.1

Remove 1D134 and 1D135 (Fermata and Fermata under).

Add the following:

MUSICAL SYMBOL STEM

MUSICAL SYMBOL SPRECHGSANG STEM

MUSICAL SYMBOL TREMOLO ONE

MUSICAL SYMBOL TREMOLO TWO

MUSICAL SYMBOL TREMOLO THREE

MUSICAL SYMBOL AUGMENTATION DOT

MUSICAL SYMBOL FLAG ONE

MUSICAL SYMBOL FLAG TWO
MUSICAL SYMBOL FLAG THREE
MUSICAL SYMBOL FLAG FOUR
MUSICAL SYMBOL FLAG FIVE

T.15 Annex F.1
As a consequence of comment T.6 , references to parenthetic notations (u, m and l) should be removed.

T.16 Annex F.2
Remove the following text fragments "Although these characters are not formally…STEM PLUS FLAG FIVE" and "For Example: ….MUSICAL SYMBOL STACCATO". These text fragments introduce classification and equivalences that are out of scope of this standard.

Editorial Comments:
E.1 Clause 10, 11 and 12
These clauses should be consecutive without any charts between them. At this point it is very easy to miss clause 11 and 12 as they interspersed in long chart tables.
The charts should also include the plane value in the hex headers (going from 3 to 4 hex digits) and the hex value in the chart cells (from 4 to 5 hex digits)

E.2 Annex A
Change 'from to' to 'positions'.

E.3 Annex C and D
Annex D should become a plain text file accessible as a separate file on a CD-ROM distribution media or as a http link on a online media. This would make Annex D much more usable than the current multi-column format. Annex C should also be linked through http.

E.4 Annex A
Change 'from to' to 'positions'.

End of US comments