Letter Ballot Reference No: SC22 N3242
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SUBJECT: Summary of Voting on SC 22 N 3234, Concurrent PDAM Registration and PDAM Approval Ballot for PDAM 1 to ISO/IEC 14651 - International String Ordering and Comparison - Method for ComparingCharacter Strings and Description of a Common Tailorable Ordering Template

The following responses have been received on the subject of PDAM registration:

"P" Members supporting PDAM registration without comment

10 (Canada, Czech Republic, Denmark, Germany, Ireland, Japan, Republic of Korea, Netherlands, Russian Federation, UK, USA)

- "P" Members supporting PDAM registration with comments 0
- "P" Members not supporting PDAM registration 0
- "P" Members abstaining
- 1 (France)
- "P" Members not voting

10 (Austria, Belgium, Brazil, China, Egypt, Finland, Norway, Romania, Slovenia, Ukraine)

The following responses have been received on the subject of PDAM approval:

"P" Members supporting PDAM approval without comment

9 (Canada, Czech Republic, Denmark, Germany, Republic of Korea, Netherlands, Russian Fedration, UK, USA - see attached)

"P" Members supporting PDAM approval with comments 0

"P" Members not supporting PDAM approval

2 (Ireland - see attached, Japan - see attached)

"P" Members abstaining

- 1 (France)
- "P" Members not voting

10 (Austria, Belgium, Brazil, China, Egypt, Finland, Norway, Romania, Slovenia, Ukraine)
______end of summary, beginning on NB comments ______

Ireland

NSAI Comments on SC 22 N 3242 – Concurrent PDAM Registration and PDAM Approval Ballot for PADAM 1 to ISO/IEC 14651

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Due to the summer holidays, one of our experts was unable to report back to us by the due date of 2001-09-01. While we voted positively on 2001-08-30, Ireland would like to change our vote to DISAPPROVAL, with the following technical comment:

In the tailorable template, the Runic script is ordered according to Latin transliteration order. This produces ordering which does not fully satisfy any user community. The Runes should be reordered to the Futhark order in the tailorable template.

Note that the SC22/WG20 minutes are ambiguous as to what should have been sent out for ballot:

"Runes were added after 14651 cut-off. Order of the Runes in N833 are according to the preference of the ISO Runes project (Sweden). Other people, such as Everson and Ken, disagree with the ISO project and prefer the current usage on the web. Reason: academic work is done in transliterations and the order is for the transliterated characters. Everson's proposal is very close to the binary order in 10646 (Futhark) for all extensions in various countries. Transliterated order would have to be a tailoring. Current draft table shows the ISO Runes order.... Discussion about the merits of either ordering. Decision that the order stays as in the table which is the Futhark order."

What was in the table was the transliteration order.

For the specification and discussion of this topic, see SC22/WG20 document N809R.

http://anubis.dkuug.dk/jtc1/sc22/open/..\WG20-2001-05\n809r-runic-order.pdf

We believe that ambiguities in transliteration ordering will mean that researchers in the Nordic countries and Britain and Ireland will have to tailor ANYWAY to get a correct transliteration ordering. Therefore the not-quite-perfect transliteration order in the tailorable template serves little purpose. On the other hand, the many non-researcher users of the Runes (who far outnumber the researchers), universally prefer the Futhark order, and require no tailoring for it. Since MOST users will not need to tailor, it seems only logical that the Futhark order should be the order used in the template.

Japan

Japan approves the PDAM registration of ISO/IEC 14651 PDAM1. However, Japan disapproves the ISO/IEC 14651 itself. Japan will change it position from disapproval to approval, if the following 3 security and procedural issues are resolved appropriately.

- 1) Japan concerns the security of the approved standards. As agreed by ISO, every official documents published through Web should be located under http://www.iso.ch and controlled by ITTF. Also, since the common template table of ISO/IEC 14651 is official publication of ISO and reader of the standard will not care which committee provided the draft, it is not appropriate to store a part of ISO standard onto SC or WG level Web page. Therefore, Japan strongly suggests to store the actual contents of Common Template Table of ISO/IEC 14651 onto http://www.iso.ch/ittf. Japan has no concern if the actual contents may be referred to from SC or WG level Web page through LINK.
- 2) By nature, contents of Web page may be changed frequently, and it is impossible to confirm the integrity of the contents only by URL. Even if the URL is identical, the contents may be revised after publication or after cited date. Therefore, ISO standardized the method for reference of Electronic document in ISO 690-2. According to the standard, information of published/revised date and cited date is mandatory to refer to a electronic document. Following the heart of the standard, Japan would suggest to add the published/revised date and cited date to the URL information of the common template table.

The revised reference information might be follows.

ISO/IEC 14651 AM1 Annex A Common Template Table [online]. MONTH 2002 [cited DATE MONTH YEAR]. Available form World Wide Web: http://www.iso.ch/ittf/ISO14651_2002_TABLE1.TXT.

3) Even if we provide high security of our Web, the contents of the Web document may be changed by operation error or attack through network by a virus program or a malicious person. In order to avoid those unintentional technical change of standards, the cited date information also be needed for other standard which refer to a normative part of a standard which is available on the Web. Therefore, Japan would suggest that guidelines to refer to an online standard or a part of such a standard as normative reference in any standard should be established by ISO/IEC JTC1/SC22 and every SC22 standard should write its cited date in addition to URL if it refers to any document as normative.

US Comments on PDAM 1 to ISO/IEC 14651 - International sting ordering, Amendment #1

August 17, 2001

The US votes YES with comments (11:0:0:3; 14).

General Comments

GC1. Unicode 3.1 Repertoire. The industry has moved much more rapidly than anticipated to Unicode 3.1 / ISO/IEC 10646, Part 2. Because of this there is a large implementation demand to extend the collation algorithm to the full repertoire, including supplementary characters (those with code points between 0x10000 and 0x10FFFF). The earlier decisions to limit the repertoire handled by 14651 to the Unicode 3.0 repertoire have been overtaken by events, and it is best to extend the repertoire as soon as possible. The US thus requests that the repertoire covered in Table 1 be extended to cover the complete repertoire of Unicode 3.1.

The US is willing to supply draft weightings of these additional characters in an expanded CTT as a basis for this work.

Technical Comments

TC1. U+ 1670 CANADIAN SYLLABICS NGAI. Based on contributions from Canadian Syllabics experts consulted by the US national body, the weight entry for this character needs to be moved so that U+1670 has a primary weight after U+158D and before U+158E, as shown here:

... <S158D> % CANADIAN SYLLABICS WEST-CREE RA <**S1670> % CANADIAN SYLLABICS NGAI** <S158E> % CANADIAN SYLLABICS NGAAI

TC2. Runes. The Runic section should be reordered to be in Fu?ark order. Ordering in Swedish transliteration order is like ordering Ancient Greek by English transliteration order. Fu?ark is the order of the original alphabet, and provides a neutral ordering which is not tied to any particular locale Runic transliteration system. Fu?ark order is still widely used today by members of the general public using runes, and the expectation is that any ordering of runes be in Fu?ark order. Most people encountering runes will be dependent on default ordering provided by their platforms, whereas experts will be in a better position to work with data tables with extra columns for transliterations. The US supports the Irish position regarding the details of the Fu?ark order that should be in the CTT.

Algorithmic Consistency Issues

While running extensive stress tests and corner-case tests against the CTT, a number of consistency problems were encountered. The solutions to these problems described below have no effect on the normal use of characters, but establish the formal correctness of the standard. A separate document will be provided to WG20 that will describe these consistency problems in detail. The following technical comments represent changes required to fix these problems in the CTT.

TC3. Trailing Tertiaries. Add a tertiary symbol "<MAX>" which is always to be at the end of the tertiary symbol weight list. Currently this would occur in the following position:

. . .

```
<SQUAREDCAP>
<FRACTION>
<MAX>
```

% Second-level weight assignments

```
<BASE>
```

...

In addition a collating symbol should be provided in the list of collating symbols:

```
...
collating-symbol <FRACTION>
collating-symbol <MAX>
...
```

In the weighting elements, certain characters (limited to a subset of those that at the tertiary level contain a sequence of non-min tertiary weights) should have the second and subsequent tertiary weights replaced by this new "<MAX>". Example:

before

<U2473> "<S0032><S0030>";"<BASE><BASE>";"<CIRCLE><CIRCLE>";<U2473> % CIRCLED NUMBER TWENTY

after

```
<U2473> "<S0032><S0030>";"<BASE><BASE>";"<CIRCLE><MAX>";<U2473> % CIRCLED NUMBER TWENTY
```

The precise list of characters that require this will be supplied in a separate document. The list will minimize the number of characters required to fix the consistency problem. It is a short list -- a small subset of the compatibility characters that have expansions.

TC4. Modify handling of secondaries for Numerics. These are to be weighted consistent with the approach used in other constructed secondaries (not involving an accent), such as in:

```
<u16AA> <$16A8>;"<BASE><VRNT1>";"<COMPAT><MIN>";<U16AA> % RUNIC LETTER AC A
```

Thus, the following example for a Mongolian digit

```
<u1811> <$0031>;<MONGL>;<MIN>;<U1811> % MONGOLIAN DIGIT ONE
```

will become

```
<u1811> <$0031>;"<BASE><MONGL>";"<MIN><MIN>";<U1811> % MONGOLIAN DIGIT ONE
```

The list of numeric script secondary symbols to which this should be applied are the following:

```
<NEGATIVE>
<SANSSERIF>
<NEGSANSSERIF>
<ARABIC>
<EXTARABIC>
<ETHPC>
<NAGAR>
<BENGL>
```

- <BENGALINUMERATOR>
- <GURMU>
- <GUJAR>

- <ORIYA>
- <TAMIL>
- <TELGU>
- <KNNDA>
- <MALAY>
- <THAII>
- <LAAOO>
- <BODKA>
- <MYANM>
- <KHMER>
- <MONGL>
- <CJKVS>