Title: UTC Liaison Report from SC2, WG2
Date: 2009-10-30
Source: Peter Constable, Unicode Liaison to SC2
Action: For review by UTC, Unicode officers

WG2 and SC2 meetings were held in Tokyo from October 26 – 30, 2009. This document reports on select topics that will be of interest for the Unicode Consortium.

**CJK Font Issues**
At the Tokyo meeting, WG2 discussed various topics related to CJK fonts.

- **Status of FCD fonts**: The T-source fonts to be provided by TCA for use in the next edition of 10646 are still in development. TCA has indicated that they expect the fonts to be available soon, though it is not certain that they will be provided before the FCD document needs to be submitted for distribution. If the fonts are ready in time, they will be used in the FCD; if not, then the MingLiU font will be used in the FCD. In either case, it is evident that changes are being made and, hence, review will be needed. The plan agreed upon within the WG2 meeting is that IRG will complete a review of the final fonts by the IRG meeting in June 2010, and that final fonts will be incorporated in the FDIS (which has a target date of July 2010).

- **Revisions to CNS standards**: The T-source font revisions mentioned in the previous point are being done in conjunction with revisions to CNS standards. During the discussion, it was brought to light that some of the CNS revisions may impact T source mappings. This is a cause for concern. IRG will be giving particular attention to these changes as they review FCD fonts.

- **Status of Korean sources for K2 – K5**: In ballot comments on the new edition of 10646, Korea proposed changing the references for K2 – K5 from PKS 5700-1/-2/-3 and the Korean IRG Hanja Character Set 5th Edition to PKS X 1027-1/-2/-3/-4. Concern was expressed that changing references could lead to unintended impacts on character identities and, hence, on stability. Korea indicated that they no longer have access to the original source documents and have had to reverse engineer the source information from the published 10646 standard.

- **Questions regarding access to fonts**: Questions regarding access to fonts for use in publication of the Unicode Standard were discussed. In this regard, the Japan National Body submitted a letter (cf. L2/09-393 = N3733) giving clarification that the licensed J-source font they have provided can be used for code charts included in ISO/IEC 10646, the Unicode Standard or related documents.

**Principles and Procedures**
At UTC#119, a UTC decision was taken to request that WG2 update the Principles and Procedures document to fully document the restrictions on the ranges for right-to-left scripts and default ignorable characters. This request was presented (cf. L2/09-246R = N3675), and WG2 agreed with the proposed changes.

Separately, SEI submitted a proposal to revise the Proposal Summary Form (cf. L2/09-368 = N3709). In particular, changes were proposed to two questions related to fonts submitted along with proposals (B.5a and B.5b). The aim was to address two concerns that have often impacted editors of ISO/IEC
10646 and Unicode: (1) fonts need to be provided in a timely manner, and (2) the font licenses need to grant the permissions needed by all of the editors in the development and publication of the standards. WG2 agreed to revise the two questions as follows:

5a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?

   Note: A font must be provided to the Editor promptly after the characters have been approved by WG2 for use in printing the charts. If a font is not provided, the Editor cannot include the glyphs in the charts and, as a result, the repertoire of characters corresponding to these glyphs will not be included in draft amendments. Fonts must be in one of the following formats (in preferential order): OpenType, TrueType, Postscript Type 1.

5b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

There was some discussion of providing further comments regarding font licenses (e.g., that if the submitter has modified fonts then the licensor needs to have granted permission for such modifications). It was deemed more appropriate, however, to place any such comments in the Principles and Procedures document rather than on the Proposal Summary Form. No actions in relation to this were taken at the Tokyo meeting.

Annex S Revision
At the Tokyo WG2 meeting, the IRG proposed a set of revisions to the text of Annex S, to be incorporated into the new edition of ISO/IEC 10646. The intended nature of these changes is explanatory and editorial, not changes in the principles of Han unification. These and other editorial changes will be reflected in the FCD draft that will be distributed for balloting after the Tokyo meeting.

Ideographic Description Sequences
Earlier this year, Andrew West submitted a proposal to UTC and to WG2 to redefine the scope of Ideographic Description Sequences to support their use in relation to non-Han scripts. (Cf. L2/09-171 = N3643.) This was reviewed at the UTC#119 meeting. This proposal was also incorporated into UK ballot comments on the CD draft for the new edition of ISO/IEC 10646. The proposal was discussed by WG2 at the Tokyo meeting; no consensus was reached to introduce changes into 10646 at this time.

Character Stability in ISO/IEC 10646
While WG2 has long assumed a policy of character stability, this had only been reflected in the text of ISO/IEC 10646 as an informative note, not as a normative requirement. In discussion of the draft for the new edition of 10646, the US proposed that a change be made in the new edition to make this policy normative. (Cf. L2/09-384 = N3715.) WG2 passed a resolution to add the following in the new edition of 10646:

   The names and code point allocation of all characters in this coded character set shall remain unchanged in all future editions and amendments of this standard.
CJK Ideograph Variations and Compatibility Characters

At WG2 meeting 51 (Hangzhou), Japan presented a proposal to encode six compatibility ideographs (cf. L2/08-184 = N3318). One year later, at meeting 53 (Hong Kong), Japan presented a more comprehensive proposal to encode 2621 compatibility ideographs (cf. L2/08-371 = N3530). The first of these proposals prompted a decision within UTC to promote a new strategy for handling compatibility ideographs: rather than encode them as distinct characters, to register variation sequences in the IVD. This proposal was presented to WG2 at meeting 52 (Redmond) and again at meeting 53 (cf. L2/08-273 = N3525).

After due consideration, Japan has decided that they will not be proposing further compatibility ideographs for encoding in the UCS but rather will prepare submissions to register variation sequences in the IVD (cf. L2/09-366 = N3706). Japan is working on preparing a submission in relation to the set that they proposed at the Hong Kong meeting.

JTC1 Procedure Changes

JTC1 is planning to implement changes in procedures in order to unify procedures across all ISO and IEC committees. These changes will have significant impacts on process and timing in SC2 in development of amendments or new editions to ISO/IEC 10646 and ISO/IEC 14651. The changes are scheduled to go into effect July 1, 2010.

In general ISO procedures, development of standards begins with a “Preparatory Stage”, during which documents are circulated within a WG or SC, though without balloting. Balloting begins in the “Committee stage”, with one or more drafts being circulated and balloted within the SC. The next stage is the “Enquiry stage”, during which drafts are distributed throughout the entire technical committee (in the case of SC2, all of JTC1). The final stage is the “Approval Stage”, with ballots again being circulated throughout the TC (JTC1). This is summarized in the following table:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Standards</th>
<th>Amendments</th>
<th>Approval process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory</td>
<td>WD</td>
<td></td>
<td>Consensus</td>
</tr>
<tr>
<td>Committee</td>
<td>CD, FCD</td>
<td>PDAM, FPDAM</td>
<td>Consensus</td>
</tr>
<tr>
<td>Enquiry</td>
<td>DIS</td>
<td>DAM</td>
<td>Voting</td>
</tr>
<tr>
<td>Approval</td>
<td>FDIS</td>
<td>FDAM</td>
<td>Voting</td>
</tr>
</tbody>
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In current JTC1 procedures, the Enquiry stage is not used: after a successful FCD / FPDAM ballot within a sub-committee, documents are progressed to the Approval stage with FDIS / FDAM ballots. This is different from ISO practice outside JTC1: in all other ISO TCs, the Enquiry Stage is never by-passed.

The change in JTC 1 procedures that will be take effect next June will be for to adopt the ISO procedures within JTC1. Effectively what this will mean is that, rather than having FCD / FPDAM ballots, DIS / DAM ballots will be used. The key implications are:

- DIS / DAM ballots are open for 5 months.
- DIS / DAM ballots will get distributed by ITTF.
- DIS / DAM drafts will be balloted by all JTC1 P-members and circulated to all ISO/IEC members.

This implies either an extra technical ballot, or, at least, a technical ballot with much wider circulation than in the past.
(Note: if there are no negative votes on the DIS / DAM ballot, then it may be possible to skip the FDIS / FDAM ballot.)

SC2 members present at the Tokyo meeting expressed great concern over this development. (Reportedly, this is true across many JTC1 SCs.) This is also a concern for the Unicode Consortium. For a DIS / DAM ballot, it will be necessary to allow eight months from the time the project editor submits the document to the SC2 secretariat until when ballot results are available. This will make it problematic for WG2 to stay on the schedule of meeting at six-month intervals. Also, because a technical ballot will be distributed to all ISO/IEC members, there is greater risk that national bodies not actively participating in WG2 might seek to introduce significant changes as the DIS / DAM stage. As these may impact the dates at which the repertoire for an amendment becomes stable, it has potential to impact schedules for Unicode publication.

Note that these changes are being introduced by the ISO/IEC management board, not by JTC1 itself.