To: ISO/IEC JTC1/SC2 and WG2
From: Lisa Moore, Ad Hoc Chair
Date: June 17, 2019
Title: SC2/WG2 Mongolian Ad Hoc Report

Attendees: Deborah Anderson, Chen Zhuang, Peter Constable, Greg Eck, Baatar Enkhdalai, Michael Everson, Karljürgen Feuerherm, Andrew Glass, Liang Hai, Jan Kučera, Lu Jianchun, Ken Lunde, Lisa Moore, Nasunurt, Tetsuji Orita, Roozbeh Pournader, Michel Suignard, Suzuki Toshiya, Andrew West

1. Review of the results of MWG3 in Ulaanbaatar, Mongolia

Lisa Moore presented the results of MWG3, *Mongolian Working Group 3 (MWG3) Report* SC2/WG2 N5061), including the areas of significant interest, resolutions, and two issues to be addressed (concrete action items). MWG3 reaffirmed the position taken in MWG2 that all participants would work towards improving the current phonetic model.

In alignment with the MWG3 meeting report, China National Body (CNB) agreed that more research needs to be done before deciding that *Mongolian vowel separator* (MVS) should replace *narrow no break space* (NNBSP). CNB also asked that more linguistic experts be involved in the two action items being led by Liang Jinbao and Liang Hai. The group agreed that this would be beneficial.

Roozbeh Pournader reviewed his document, *Summary of Proposals Made During MWG3* (SC2/WG2 N5062) and encouraged Ad Hoc participants to read it in detail at a later time.

2. Discussion on the limitations on ISO/IEC 10646/Unicode Standard names list tooling

Debbie Anderson presented information on the code chart names list *The Unicode Standard and ISO 10646 Names List* and explained the current established use of Unicode Technical Notes. There was discussion about the differences between Unicode technical notes, technical reports, and technical standards. Technical notes have a very lightweight process and are most appropriate when a technical topic is undergoing frequent modifications. As agreement is reached on technical topics, it is possible and sometimes desirable for the Unicode Technical Committee to authorize changing a technical note into a technical report or technical standard. The latter two document types have a more rigorous approval process.

3. Documentation of the current names list Mongolian variant information and next steps

The Ad Hoc discussed how to proceed in order to improve the documentation of variant information and the overall specification of the Mongolian phonetic model. All participants agreed that it would be beneficial to create a separate specification to document the detailed

Mongolian phonetic encoding model including variant information. They also stressed the need for the stability of the existing standardized information for Mongolian variants currently contained in 10646 5th Edition and Amendments 1 and 2, and the Unicode Standard 12.0/12.1.

The following actions were agreed to:

- Document a snapshot of current Mongolian variant information contained in 10646 5th Edition Amendments 1 and 2 and in Unicode 12.0/12.1. Document this variant information in Unicode Technical Report #54, (see *PDUTR#54: Unicode Mongolian 12.1* (SC2/WG2 N5091)). In the next revision of UTR#54, include the PDF of the 12.1 code chart and names list directly in the text of the technical report.
- Remove the variant information from ISO/IEC 10646 6th Edition and the Unicode Standard V13 from the names list, but keep all the stable Mongolian encoding information that will never change: the character code point and name. Provide a formal, reference link to UTR#54 in 10646 and the Unicode Standard, and document that UTR#54 is the standard reference for Mongolian variant information for implementers.
- Document in detail the Mongolian phonetic encoding model including variant information in a Unicode Technical Note (UTN).
- Maintain UTR#54 and the reference links to it without change in new editions of 10646 and versions of the Unicode Standard until the new specification of the Mongolian phonetic model using a UTN has been completed. To be complete, the model specified in the UTN must be agreed to by the communities of Mongolia, China, and Unicode experts.

4. Proposed updates to the current Mongolian variant information in ISO/IEC 10646/Unicode Standard

The Ad Hoc discussed the contribution from CNB, *Comments on Mongolian in UCS 6CD.2* (SC2/WG2 N5073). The conclusion was that all involved in working on clarifying the Mongolian encoding model should review N5073 from CNB and incorporate the relevant information.

5. Other topics

The Ad Hoc discussed if MWG meetings going forward should be held under the auspices of WG2 as a WG2 Ad Hoc. While the conclusion was not clear, we will work off-line to see if such meeting sponsorship would enable experts from China to participate more easily. The next meeting, MWG4 is tentatively scheduled for 1-3 April 2020. Adobe has offered to host the meeting in San Jose, California.

A second general discussion topic was how to fully engage in reviewing documents if they are presented in English. The Ad Hoc chair asked participants to consider if translation would enable improved engagement and respond with their input.

Third, Greg Eck is reviewing and comparing full glyph repertoires as provided by the various Mongolian font vendors. This is a one-to-one exhaustive comparison of glyph repertoires to include presentation forms, positional forms, variation-sequenced forms, over-ride default forms, ligature forms, and internal forms particular to the given font. The objective of the study is to give a descriptive view of how each font vendor has implemented their particular font. Current vendors involved are Microsoft, Delehi, and Almas. Interested parties can contact Greg at greyson@postone.net.