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Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation Международная организация по стандартизации

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Title: Consensus on the encoding of the Phags-pa script in the PDAM code chart

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Status: Ad Hoc Report

Action: For consideration by JTC1/SC2/WG2

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The ad hoc discussion on encoding Phags-pa was unable to resolve all of the ballot comments on Phags-pa. There were many complex and difficult questions for which much further communication and discussion will be required.

The ad hoc on Phags-pa recommends that the Phags-pa script be *removed from Amendment 1* and be *added to Amendment 2*, so that interested national bodies can help to resolve the outstanding issues and details over a longer ballot period. The interested experts or member bodies are invited to submit a revised proposal for the next WG2 meeting.

The following discusses the items in the Chinese ballot comments regarding Phags-pa:

T7. The status of the two vowels ö and ü used for Mongolian. *Issue unresolved and to be deferred for future ballot resolution*

T8. Suggestion that A868 SUBJOINED RA and A869 SUPERFIXED RA are presentations forms of A85C RA and should be separately encoded:

Issue unresolved and to be deferred for future ballot resolution

T9. Disagreement about the order in which the characters should be encoded in the chart: *Issue unresolved and to be deferred for future ballot resolution*

T10. Preferred typeface for the glyphs in the chart:

This was discussed and there was agreement that another typeface could be appropriate, though no particular typeface was identified as the consensus choice as yet. The two best candidates are the font used in the amendment and the other is a monumental Kubla Khan font.

T11. Some of the characters in the amendment did not have optimal shapes, in particular A851 and A86C

It was agreed that the glyph shapes for A851 and A86C proposed in N2719 Point 5 were better and addressed this problem.

T12. Character names. A number of the character names in the amendment had proposed changes suggested by China in N2745.

The ad-hoc discussed a number of these changes and came to agreement about many of them; some other proposed name changes remain to be resolved in the future.

- 1 It was agreed to accept the script name PHAGS-PA as opposed to other possible spellings for the script and character names.
- 2 It was agreed that A86F should be called PHAGS-PA LETTER CANDRABINDU but that annotations would be added to clarify the ANUSVARA in Mongolian.
- 3 It was agreed not to add language names to character names, as they are not required to distinguish any of the character names in the repertoire. Usage for particular languages will be explained in annotations to the characters instead.
- 4 It was agreed that A862 PHAGS-PA LETTER QA and A863 PHAGS-PA LETTER XA are the appropriate names for those two characters because they are transliterated by [q] and [x] respectively. The ad-hoc was unable to determine a rationale for a better name for A865 PHAGS-PA LETTER GGA and invites an explanation of why the character should be named GGA or some alternative.

The remaining name issues:

- 5 The spelling of E and EE for A86E and A86C
- 6 The name -A vs MINISCULE A for A85A
- 7 The name subjoined letter way s half u and subjoined letter yays half ya for A866 and A867
- 8 The name SINGLE and DOUBLE HEAD MARK vs. BIRGA for A870 and A871.
- **T13**. The "Free-variation form selector" and a "syllable collector (joiner)": *Issue unresolved and to be deferred for future ballot resolution*

T14. Status of Phags-pa vis à vis Tibetan:

It was stipulated that the Phags-pa script is not regarded as a variant of the Tibetan script. The two scripts are related but distinct and will be documented as such in the standard.

The section above represents the ad-hoc's suggestions regarding specific resolution of ballot comments in N2773 including the identification of technical issues which had to be deferred for future discussion. In addition to items specifically identified in China's ballot comments summarized above, the ad-hoc identified several other technical issues regarding the Phags-pa encoding which will need further discussion and resolution as this technical dialogue regarding Phags-pa continues.

- 1 The status of PHAGS-PA LETTER A as consonant vs vowel and its implication on the ordering of letters.
- 2 The issue of whether Phags-pa characters should represent the visual forms of the letters directly or whether a table of conditioned variant forms are required for the encoding.
- Whether the variant forms for YA, SHA, HA, and FA occurring in *Menggu Ziyun* should be separately encoded or be represented by variation sequences.
- Whether Mongolian and Chinese punctuation can be shared with Phags-pa or needs to be separately encoded for the Phags-pa script.
- 5 Whether specific punctuation marks for SHADs and HEAD MARKS should be encoded for Phags-pa.