Clarification on Devanagari letter numerals

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L2/17-040 stated that the Devanagari Letter numerals are not valid candidates for encoding. The document misinterpreted these numerals as Akṣarapalli and says this is to be merely seen as a re-use of letter forms and hence does not warrant separate encoding.

In Background section of our document L2/17-010 it was quoted that:

"These numbers are derived from Brahmi numbers (U+11052...U+11065). North Indian letters numerals are distinct from alphasyllabic numeration used in of other parts of India such as Aksharapalli and Katapayadi systems. In these notations existing letters are reused, whereas the North Indian numerals are evolved from Brahmi numbers. The term 'letter-numerals' here does not symbolize that these numerals are evolved or conceptually derived from letters."

Akṣarapalli, Kaṭapayādi and Āryabhaṭa numerations were devised by scholars who needed to include numbers into metrical form in Sanskrit scientific literature. For example in Katapayadi notations ka, ṭa, pa & ya represent 1, kha , ṭha, pha & ra represent 2 and so on.

Clarification

However as stated earlier the term 'letter-numerals' by few scholars to distinguish from regular digits. Proposed numerals are distinct from Aksharapalli and Katapayadi systems. The proposed numerals are not used in verses and are not re-use of letter forms. These are directly derived from Brahmi numbers. It is incorrect to say that the shapes of numerals actually are those of the letters or ligatures of the period which were most similar to the numeral forms. The Figures 9-14 of the proposal evidently signify the development of these numerals from Brahmi. The table of Comparison of numerals among various Indic scripts shows its relationship with Indic scripts. For instance numbers 20 ꣓ is developed from Brahmi Ө. Similarly other numbers like ꣕,ꢷ , ꣖,꣗,ꢭ , ꣘ and so on are developed from Brahmi numbers ꢳ, Ɠ, ꢺ, ꢼ, Ɵ, ꣁ.

Need of Independent encoding

These numerals are widely used in manuscripts and occur in older inscriptions. They are studied by various scholars. An encoding of these numerals will help in documenting, digitizing and studying the archival documents containing them numerals. We recommend their encoding in Devanagari and other Indic scripts.

Allocation

Tentatively allocation of five columns was requested allocated to avoid the creation of new scattered blocks in the future. Regarding the allocation three columns is sufficient, to include some additional characters. We request to update the Roadmap to the SMP accordingly.