L2/09-281

TO: Unicode Technical Committeee
FROM: Deborah Anderson, Project Leader, Script Encoding Initiative, UC Berkeley
DATE: 6 August 2009
RE: COMBINING TRIPLE INVERTED BREVE and other triple-length combining marks

Document L2/09-028, "Proposal to encode additional characters for the Uralic Phonetic Alphabet (WG2 N3571)," includes a triple-length combining character, ◌͡◌͡◌ COMBINING TRIPLE INVERTED BREVE. This character was discussed at the Dublin WG2 meeting in April 2009, but was deferred for further study.

This is the second time the triple-length combining character has been proposed: a COMBINING TRIPLE BREVE BELOW appeared in a proposal L2/08-392 by Karl Pentzlin, but the UTC did not approve it, deciding to not encode combining marks that span over two characters.

The unconfirmed minutes of the Dublin 2009 WG2 meeting (L2 09-234 =N3603) captured a number of concerns:

- The German delegate said *only* triple-length combining characters were needed (as opposed to those that extend to 4+ characters); there are 4 or 5 such combining characters that span 3-characters. He felt it was not appropriate to use higher level protocols in this case.

- The UK representative did not understand the mechanisms that could be used to cover combining characters over two characters in length.

- The US delegate asked about marks in prosody, for example, that extend over variable lengths (3 characters and longer): how will these be covered, and how would they relate to the set of triple-length combining characters? What will be the default mechanism if a font is not available?

One suggestion from the WG2 meeting was for proposal authors to look more closely at the set of triple combining marks in light of similar characters, such as half-marks in Coptic which can be used to extend over strings.

However, the responses from Germany and the UK demonstrate that in the very least rendering/implementation issues need to be explained more fully. Since the triple-combining mark character(s) will come up again and there are clear issues of concern to implementers, I would like to recommend a response be prepared for WG2.