

TO: UTC

FROM: Harsha Wijayawardhana, Information and Communication Agency of Sri Lanka and SLSI (via Deborah Anderson, SEI)

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RE: Background information on the use of Sinhala Numerals (L2/10-337)

This document provides additional information on the two sets of number systems for Sinhala, as proposed in L2/10-337.

1. Sinhala Lith Illakkam (Sinhala Astrological numbers)

Lith digits are decimal Radix digit system where, depending upon the position, it will be multiplied by ten. For instance, eleven is written as 11 (Two Kombuvas) which mean 1 in the left is multiplied by ten. Though I have not come across fractions with a decimal point. (See NOTE below on the use in astrology.)

Regarding the names as LITH DIGITS:

Since Sinhala writers use Hindu Arabic set as the standard numeral set for day to day use presently, there could be a confusion if we were to name them as Sinhala Digit One and so forth. Therefore it is better that if we can stick to Lith digit one etc. If it is not possible, a name alias, digit one = Sinhala lith digit one may be a possibility.

2. Sinhala Illakkam or Sinhala Archaic numbers

Sinhala Illakkam is not a decimal system. It has symbols for 10, 20,30, 40. One could write 101 as symbol for 100 and symbols for one.

NOTE: Instead in Astrology, degrees and minutes are written in the following manner:
Let's take into account 40 degrees and 10 minutes, this will be written as 40-10-0 as full numbers. Astrologers know that Left corner is 40 degrees and middle is 10 minutes in base 10 each. Even large number are written as Hindu Arabic numerals. Let's say ten and half degrees (10.5) mean 10-30-0 (in other words 10 degrees and 30 minutes). When an astrologer multiplies by $2 * 10 \frac{1}{2}$ degrees, Sri Lankan astrologer used to write 10-30-0 as $10 * 2 = 20$ and 30 minutes is multiplied by 2 = 60 which means 1 degree, hence 21 degrees 0 minutes and 0 second (21-0-0) as decimal base but in Lith digits.