**Doc Type:**   Working Group Document
Title: Proposal to Encode the Samvat Date Sign for Arabic in ISO/IEC 10646
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1   Introduction

This is a proposal to encode a new character for the Arabic script: ‎ﺳﻢ‎ ᴀʀᴀʙɪᴄ sɪɢɴ sᴀᴍᴠᴀᴛ.

The ᴀʀᴀʙɪᴄ sɪɢɴ sᴀᴍᴠᴀᴛ is used in Urdu for writing dates of the Śaka *saṃvat* (سموت *samwat*, from Sanskrit संवत् *saṃvat* < संवत्सर *saṃvatsara* 'year'), or calendar.

The character is functionally similar to ‎ﺳﻨﮧ‎ U+0601 ᴀʀᴀʙɪᴄ sɪɢɴ sᴀɴᴀʜ (Arabic سنة *sanah* 'year'). However, ᴀʀᴀʙɪᴄ sɪɢɴ sᴀɴᴀʜ is a generic date marker, while ᴀʀᴀʙɪᴄ sɪɢɴ sᴀᴍᴠᴀᴛ is used specifically for writing dates of the Śaka era.

The Śaka is one of three major calendars used in India. The other two are the Islamic and Gregorian calendars. Legend holds that the Sātavāhana king Śālivāhana established the Śaka era after his victory over king Vikramāditya in 78 ᴄᴇ, which is the zero year for the era. According to another legend, Vikramāditya is the founder of another popular calendar, the Vikrama *saṃvat*, which was established in 56 ʙᴄᴇ. The Śaka, or more accurately the Śālivāhana Śaka *saṃvat*, is the basis for the Indian national calendar, which was established on Caitra 1, Śaka 1879 (March 22, 1957).

2   Basis for Glyph Shape

The glyph ‎ﺳﻢ‎ for ᴀʀᴀʙɪᴄ sɪɢɴ sᴀᴍᴠᴀᴛ is based upon the form ‎ﺳﻢ‎ shown in Figure 1. It is drawn in the Naskh style, rather than in the Nastaliq form of the original, in order to conform to the design of the Arabic font used in the code charts. The glyph represents a stylized abbreviation of سموت *samwat*, which consists of the initial form of س U+0633 ᴀʀᴀʙɪᴄ ʟᴇᴛᴛᴇʀ sᴇᴇɴ, the medial form of م U+0645 ᴀʀᴀʙɪᴄ ʟᴇᴛᴛᴇʀ ᴍᴇᴇᴍ, and a horizontal swash. It is analogous to the abbreviation of संवत् *saṃvat* as सं॰ *saṃ* in Devanagari.

3   Orthography

The ‎ﺳﻢ‎ ᴀʀᴀʙɪᴄ sɪɢɴ sᴀᴍᴠᴀᴛ is a subtending character. The date is written inside the character, to the left of the sᴇᴇɴ-ᴍᴇᴇᴍ element, and above the horizonal stroke. For example, the current Gregorian year 2009 ᴄᴇ corresponds to Śaka 1931 and is written in Urdu as ‎۱۹۳۱ﺳﻢ‎.

In Urdu orthography, years of the Islamic calendar are denoted by a ھ U+06BE ᴀʀᴀʙɪᴄ ʟᴇᴛᴛᴇʀ ʜᴇʜ ᴅᴏᴀᴄʜᴀsʜᴍᴇᴇ, which is an abbreviation of the Arabic هجري *hijrī* 'migration of Muhammad from Mecca to Medina'. The ھ is written after the year: ‎ھ۱۴۳۰‎ 1430 ᴀʜ (2009 ᴄᴇ). Years of the Gregorian calendar are marked with ء, the initial form of U+0639 ᴀʀᴀʙɪᴄ ʟᴇᴛᴛᴇʀ ᴀɪɴ, which is an abbreviation of the Arabic عیسوي *īsawī* 'Christian'. The ء is written after the year: ‎ء۲۰۰۹‎ 2009 ᴄᴇ. When dates are written with ᴀʀᴀʙɪᴄ sɪɢɴ sᴀɴᴀʜ the abbreviations are also written to indicate the era, eg. 1430 ᴀʜ ‎ﺳﻨﮧ۱۴۳۰ھ‎ and 2009 ᴄᴇ ‎ﺳﻨﮧ۲۰۰۹ء‎. There is no similar convention for denoting years of the Śaka calendar.

4   Implementation

Representation   The ARABIC SIGN SAMVAT should be represented in the code chart as ⌐؄⌐, in the manner of other subtending marks.

Allocation   The character should be encoded at U+0604 with other subtending marks.

Properties   The ARABIC SIGN SAMVAT has the following general properties, expressed in the format used in the Unicode Character Database (`UnicodeData.txt`):

```
0604;ARABIC SIGN SAMVAT;Cf;0;AN;;;;;N;;;;;
```

It has the following shaping properties, expressed in the format used in the Arabic shaping and joining properties database (`ArabicShaping.txt`):

```
0604; ARABIC SIGN SAMVAT; U; No_Joining_Group
```

5   References

Ahmad Dihlavī, Sayyid. 1974. فرہنگ آصفیة [*Farhang-i Āsafiyyah*]. vol. 2. Delhi: Taraqqī-e-Urdū Board, National Academy.

6   Acknowledgments

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سں١٨٩٦

FARHANG-E-ASIFIA–Vol.II

ترقّیِ اُردو بورڈ ایڈیشن

تعداد ـــــــــــ تین ہزار

تقسیم کار : نیشنل اکاڈمی
٩ ـ انصاری مارکیٹ، دریا گنج، دہلی ٦...١١

قیمت جلد دوم : پچّیس روپے

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Figure 1: Title page of *Farhang-i Āsafiyyah* showing use of ARABIC SIGN SAMVAT (from Ahmad Dihlavī 1974). The date in the boxed text is ١٨٩٦سں (1896 *samvat*), which corresponds to ٤١٩۷۴ء (1974) of the Gregorian calendar (*īsawī*), as shown above the boxed text.