


**Doc Type:** Working Group Document  
**Title:** Proposal to Encode the Samwat Date Sign for Arabic in ISO/IEC 10646  
**Source:** Anshuman Pandey (pandey@umich.edu)  
**Status:** Individual Contribution  
**Action:** For consideration by UTC  
**Date:** 2009-07-22

## 1 Introduction

This is a proposal to encode a new character for the Arabic script:  ARABIC SIGN SAMWAT.

The ARABIC SIGN SAMWAT is used in Urdu orthography for writing dates of the Śaka *saṃvat* (سَمَوَاتِ *saṃwat*, from Sanskrit संवत् *saṃvat* < संवत्सर *saṃvatsara* ‘year’), or calendar.



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 CE, 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 BCE. 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).

The character is functionally similar to  U+0601 ARABIC SIGN SANAH (Arabic سنة *sanah* ‘year’). However, ARABIC SIGN SANAH is a generic date marker, while ARABIC SIGN SAMWAT is used specifically for writing dates of the Śaka era.


## 2 Character Name

In the initial proposal submitted on April 15, 2009, the name for the character was specified as SAMVAT, in which the *va* is the transliteration of Devanagari व *va*. Devanagari व is transliterated in Arabic as و *waw*. The name of the character has been changed to SAMWAT in order to conform to the convention of transliterating Arabic WAW as *w*.

## 3 Basis for Glyph Shape


The glyph  for ARABIC SIGN SAMWAT is based upon the form  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 سَمَوَاتِ *saṃwat*, which consists of the initial form of س *seen* U+0633 ARABIC LETTER SEEN, the medial form of م *meem* U+0645 ARABIC LETTER MEEM, and a horizontal swash. It is analogous to the abbreviation of संवत् *saṃvat* as सं *saṃ* in Devanagari.

## 4 Orthography

The  ARABIC SIGN SAMWAT is a subtending character. The date is written inside the character, to the left of the SEEN-MEEM element, and above the horizontal stroke. For example, the current Gregorian year 2009 CE corresponds to Śaka 1931 and is written in Urdu as ۱۹۳۱س.

In Urdu orthography, years of the Islamic calendar are denoted by a  $\text{ھ}$  U+06BE ARABIC LETTER HEH DOACHASHMEE, which is an abbreviation of the Arabic *هجرى hijrī* ‘migration of Muhammad from Mecca to Medina’. The  $\text{ھ}$  is written after the year:  $\text{ھ}۱۴۳۰$  1430 AH (2009 CE). Years of the Gregorian calendar are marked with  $\text{ء}$ , the initial form of U+0639 ARABIC LETTER AIN, which is an abbreviation of the Arabic *عیسوی 'īsawī* ‘Christian’. The  $\text{ء}$  is written after the year:  $\text{ء}۲۰۰۹$  2009 CE. When dates are written with ARABIC SIGN SANAH the abbreviations are also written to indicate the era, eg. 1430 AH  $\text{ھ}۱۴۳۰$  and 2009 CE  $\text{ء}۲۰۰۹$ . There is no similar convention for denoting years of the Śaka calendar.

## 5 Implementation

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

```
0604;ARABIC SIGN SAMWAT;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 SAMWAT; U; No_Joining_Group
```

## 6 References

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

## 7 Acknowledgments

The author would like to thank Roozbeh Pournader for reviewing an earlier version of this proposal and for providing information on character shaping properties.

The glyph for ARABIC SIGN SAMWAT was designed with the assistance of Nadia S. Hasan.

۶۱۹۷۴

۱۸۹۶ھ

FARHANG-E-ASIFIA-Vol. II

ترقی اردو بورڈ ایڈیشن  
تعداد — تین ہزار

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۹۔ انصاری مارکیٹ، دریا گنج، دہلی ۱۱۰۰۰۶

قیمت جلد دوم: پچیس روپے

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کے لیے جید پریس، بلہارن، دہلی سے چھپوا کر شایع کیا۔

Figure 1: Title page of *Farhang-i Āsafiyyah* showing use of ARABIC SIGN SAMWAT (from Ahmad Dihlavī 1974). The date in the boxed text is ۱۸۹۶ھ (1896 *samwat*), which corresponds to ۱۹۷۴ء (1974) of the Gregorian calendar (*ṭsawī*), as shown above the boxed text.