To: UTC

Title: Representative glyph and annotation additions for U+033B

From: Lorna P. Evans (SIL International) and

Patricia Keating (President of the International Phonetic Association)

Date: 6 July 2016

## 1 Introduction

This is a request to change the representative glyph in the Unicode Charts for U+033B COMBINING SQUARE BELOW from a square to a horizontal rectangle. We are also requesting the addition of two annotations. One should say "IPA: laminal" and the second should say "glyph should be a horizontal rectangle for IPA usage."

Thus, we request the following additional annotations:

033B

심

## COMBINING SQUARE BELOW

- IPA: laminal
- glyph should be a horizontal rectangle for IPA usage

We are not requesting any character property changes, simply a glyph change and the annotation additions. This will help font developers to design the Laminal character appropriately for IPA usage.

## 2 Background

In 2015 the IPA updated the official IPA charts and did a review of the fonts used for the IPA charts. This request comes as a finding from that review.

The IPA website 2015 review of Doulos SIL says:

"The Laminal diacritic is square and small, and therefore tends to be confused with the voiceless diacritic. We recommend that this diacritic be made extra-large so that its shape is clearly a square, not a circle. (In IPA Kiel, *this diacritic is correctly a rectangle.*)" (Emphasis by the author.)

The 2003 IPA handback (page 181) states that U+033B is the official character to represent the Laminal. Also note that although the "Symbol Name" says "Subscript square", the representative glyph is indeed a rectangle:

	diacritic and suprerical order by IPA		ool codes			
Symbol	Symbol Name	Phonetic Description	Placement/ Status	IPA Number	UCS Code	AFII Code
,	Apostrophe	Ejective	p' k' ts' tf'	401	02BC	E249
o	Under-ring	Voiceless	ů ď	402A	0325	E229
o	Over-ring	Voiceless	ŋ ġ	402B	030A	00CA
•	Subscript wedge	Voiced	ş k	403	032C	E22A
h	Superscript H	Aspirated	ph th	404	02B0	D565
23.54	Subscript umlaut	Breathy voiced	b a	405	0324	E22B
~	Subscript tilde	Creaky voiced	b a	406	0330	23D8
200	Subscript seagull	Linguolabial	ţ d	407	033C	22E8
	Subscript bridge	Dental	n d	408	032A	E22C
	Inverted subscript bridge	Apical	n d	409	033A	23FD
	Subscript square	Laminal	n d	410	033B	23FE

In the IPA Kiel report (1989) it is clearly stated that the character for laminal should be a rectangle. The glyph is a rectangle (page 71).

The diacritics [], an inverted dental diacritic, and [], a small subscript rectangle should be used to indicate apical and laminal articulations, respectively, e. g. [t] is a voiceless apical alveolar plosive; [d] is a voiced laminal alveolar plosive.

The official IPA charts have consistently used a rectangular shape. Below is a sample from the official 2005 IPA chart which clearly demonstrates the rectangular nature of this character.

 Dental	ţф
Apical	ţġ
 Laminal	ţф

## 3 References

International Phonetic Association. 2005. IPA Chart.

International Phonetic Association. 2003. *Handbook of the International Phonetic Association: A Guide to the Use of the International Phonetic Alphabet*. Cambridge University Press.

International Phonetic Association. 1989. *Report on the 1989 Kiel Convention*. Journal of the International Phonetic Association (1989) 19:2, 67-80.

International Phonetic Association. *IPA Chart*. Reproduction of The International Phonetic Alphabet. <a href="https://www.internationalphoneticassociation.org/content/full-ipa-chart">https://www.internationalphoneticassociation.org/content/full-ipa-chart</a> (accessed 1 July 2016).