

# Telugu Phone Set & New Phonetic Transcription - KNS Notation

Defining the phone set of the language and incorporation of letter to sound rules are the two steps that are required to find the sounds in a language. Many researchers used either WX, IT3 or Roman transliteration scheme for phonetization. These transliteration schemes have drawbacks like

- i) more than one notation for representing the same sound. For example, we may use either 'aa' or 'A' for representing long form of 'a'
- ii) Not easily predictable notation like w for 't' and 'x' for 'd'

The text transcribed using these notations cannot be straight forward. We cannot read it so easily.

With an aim to overcome such drawbacks and confusions and also to consider all possible allophonic variations and to include letter to sound rules we have finalized **Telugu phoneme set** and its phonetic transcription with **our new notation called KNS Notation**. We have considered popular literature and websites to finalize our ideas. Since Indian languages have more than 26 letters, we also need to use capitals and two character codes at times. We can't code t,th,d,dh,T,Th,D,Dh etc. otherwise. The ratio between length of short and long vowel is 1:2. All high mid vowels have corresponding lowered vowels as allophones when followed by low /a,A/ vowels. These are represented as the vowel followed by [\~]. The table summarizes all the information about each phoneme at one place. It can be used as a ready reference for any kind of information about a phoneme. **It is published under Creative Commons Attribution 3.0 Unported License**. We have identified 10 vowels and 33 consonants. We may say that the overall pattern of these 10 vowels and 33 consonants broadly represents standard Telugu language.

## Phonetic Transcription - Our Notation – KNS Notation:

Basic lower case/upper case alphabets plus carrot (^), tilde (~), and back-quote(`). Maximum length of a symbol: 3 bytes. All together we have 71 phones. We have also finalized the rules of allophonic variations. We have written code to transcribe each akshara into its equivalent phone/phoneme as per the rules. e.g.,

*phoneme:* u

*Allophones:* u , u~ and u`

*Rules:* (i) lowered to **u~** when followed by the vowel 'a' e.g., *u-D-u-th-a*

(ii) becomes unrounded u` in word final position like *a-w-u-n-u*

### **Description about the table:**

For each phoneme we have included:

- basic type (v:vowel,c:consonant,d:diphthong,s:semivowel)
- Allophonic variation
- Context of the variation
- description (whether it is short/long, voiced/unvoiced, front/mid/back,fricative/retroflex etc)
- IPA notation
- ARPABET notation
- WX notation
- Our notation –KNS Notation
- Example words in Telugu and English
- Positional occurrence i.e., Initial/Middle/Final
- Remarks which include Formant frequencies for vowels and special notes in other cases

### **Attribution:**



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