Bharati Lipi Specification

Objective:
Simplicity of Roman (English) script and phonetic richness and precision of the Indian languages.

Draft Version: 1.0

Notes:

This is a draft specification of Bharati Lipi.
It is subject to modification based on the review and feedback
from language experts and enthusiasts.

This specification is technical in nature
and is meant for experts and enthusiasts of Indian language scripts,
and to the designers of Bharati Lipi.

Please see the link **bharatilipi.in/overview**
for an overview of Bharati Lipi that describes, in layman's terms,
what it is, why we need it and what its benefits are.

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1. Bharati Lipi includes letters that represent the phonetic sounds of all Indian languages.
2. Bharati Lipi includes certain sounds in forgeign languages that are often used by Indians, such as a, f and z of the English language.
3. There are no Matras or half-letters in Bharati Lipi. Consonants and vowels are written free standing, like in Roman script. For example, the word स्त्री written in any Indian language (স্ত্রী, સ્ત્રી, ਸ੍ਤ੍ਰੀ, ಸ್ತ್ರೀ, സ്ത്രീ, ସ୍ତ୍ରୀ, ஸ்த்ரீ, స్త్రీ) uses half-letters and Matras, whereas written in English script it would be 'stree' with the letters standing free and written next to each other. The same notation will be followed in Bharati Lipi.
4. In Bharati Lipi, Consonants and Liquids are pure, without any implied vowel, in contrast to all the Indian languages which have an implied 'a' sound in them. For example, the letters (क, ক, ક, ਕ, ಕ, ക, କ, க, క has an implied 'a' in them. The 'a' will be explicit in English, and we write 'ka', making k, a pure consonant conjoined with 'a'. Indian languages achieve 'pure' consonants by adding a 'Halant', such as in क्, ক্, ક્, ਕ੍, ಕ್, ക്, କ୍, க், క్. In Bharati Lipi, the

‘Halant’ is implicit, making the consonants ‘pure’, and any vowel sound including ‘a’ needs to be added explicitly.

5. The letters in Bharati Lipi are divided into two categories: Base letters and Variants. For any given Base letter, there could be zero or more Variants. Example 1: Short a (अ, অ, અ, ਅ, ಅ, അ, ଅ, அ, అ) is a Base letter and long a (आ, আ, આ, ਆ, ಆ, ആ, ଆ, ஆ, ఆ), or long nasal ‘a’ (ऑ) are Variants. Example2: ka (क, ক, ક, ਕ, ಕ, ക, କ, க, క) is a Base letter and aspirant kha (ख, খ, ખ, ਖ, ಖ, ഖ, ଖ, ఖ) is a Variant.

6. The tables on the following pages give all the Base letters and Variants, which are subject to modification, until this draft is finalized, based on the review and feedback from language experts and enthusiasts.

7. Bharati Lipi is expandable and more Base letters or Variants can be added over the years and decades, as needed.

8. The design of Bharati Lipi (i.e., the shape of the letters), which will be developed through a contest (See **bharatilipi.in/contest**) should ensure that the Variants resemble the Base letters, unlike in Indian languages, where such resemblances are rare. For example, ख, a variant of क in Devanagari, bears no resemblance to it. ఖ, a variant of క in Telugu, bears no resemblance to it. ഖ, a variant of ക in Malayalam, bears no resemblance to it.

Request for Review:

Language experts and enthusiasts are requested
to review and contribute to the finalization of this specification.

Please mention the Draft Version, which you review.

Submit your reviews in PDF form.

Link: **bharatilipi.in/myreview**

Table 1 - Vowels 1 of 2

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	अ	অ	અ	ਅ	ಅ	അ	ଅ	அ	అ	a	ə	TBD
Short	अॆ											TBD
Long	आ	আ	આ	ਆ	ಆ	ആ	ଆ	ஆ	ఆ	ā	ɑː	TBD
Nasal	अॅ											TBD
Long Nasal												TBD
Base	इ	ই	ઇ	ਇ	ಇ	ഇ	ଇ	இ	ఇ	i	ɪ	TBD
Long	ई	ঈ	ઈ	ਈ	ಈ	ഈ	ଈ	ஈ	ఈ	ī	iː	TBD
Nasal												TBD
Long Nasal												TBD
Base	उ	উ	ઉ	ਉ	ಉ	ഉ	ଉ	உ	ఉ	u	u	TBD
Long	ऊ	ঊ	ઊ	ਊ	ಊ	ഊ	ଊ	ஊ	ఊ	ū	uː	TBD
Nasal	अॅ											TBD
Long Nasal												TBD

Table 2 - Vowels 2 of 2

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	ऋ	ঋ	ઋ		ಋ	ഋ	ଋ		ఋ	ṛ	ɾɨ	TBD
Long	ॠ	ৠ	ૠ		ೠ	ൠ	ୠ		ౠ		ɾɨː	TBD
Base	ऌ	ঌ	ઌ		ಌ	ഌ	ଌ		ఌ		lɨ	TBD
Long	ॡ	ৡ	ૡ		ೡ	ൡ	ୡ		ౡ		lɨː	TBD
Base	a									a		TBD
Base	ऎ				ಎ	എ		எ	ఎ	e	e	TBD
Long	ए	এ	એ	ਏ	ಏ	ഏ	ଏ	ஏ	ఏ	ē	eː	TBD
Nasal	ऍ		ઍ									TBD
Long Nasal												TBD
Base	ऐ	ঐ	ઐ	ਐ	ಐ	ഐ	ଐ	ஐ	ఐ	ai	əɪ	TBD
Base	ऒ				ಒ	ഒ		ஒ	ఒ	o	o	TBD
Long	ओ	ও	ઓ	ਓ	ಓ	ഓ	ଓ	ஓ	ఓ	ō	oː	TBD
Nasal			ઑ									TBD
Long Nasal												TBD
Base	औ	ঔ	ઔ	ਔ	ಔ	ഔ	ଔ	ஔ	ఔ	au	əu	TBD

Table 3 - Consonants 1 of 3

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	क	ক	ક	ਕ	ಕ	ക	କ	க	క	k	kə	TBD
Variant	क़					ൿ					qə	TBD
Aspirant	ख	খ	ખ	ਖ	ಖ	ഖ	ଖ		ఖ	kh	kʰə	TBD
Variant	ख़			ਖ਼							xə	TBD
Base	ग	গ	ગ	ਗ	ಗ	ഗ	ଗ		గ	g	gə	TBD
Variant	ग़			ਗ਼							ɣə	TBD
Aspirant	घ	ঘ	ઘ	ਘ	ಘ	ഘ	ଘ		ఘ	gh	gʰə	TBD
Base	ङ	ঙ	ઙ	ਙ	ಙ	ങ	ଙ	ங	ఙ	ṅ	ŋə	TBD
Base	च	চ	ચ	ਚ	ಚ	ച	ଚ	ச	చ	c	t͡ʃə	TBD
Aspirant	छ	ছ	છ	ਛ	ಛ	ഛ	ଛ		ఛ	ch	t͡ʃʰə	TBD
Base	ज	জ	જ	ਜ	ಜ	ജ	ଜ	ஜ	జ	j	d͡ʒə	TBD
Aspirant	झ	ঝ	ઝ	ਝ	ಝ	ഝ	ଝ	ஜ	ఝ	jh	d͡ʒʰə	TBD
Variant	ज़			ਜ਼						z	zə	TBD
Variant										zha		TBD
Base	ञ	ঞ	ઞ	ਞ	ಞ	ഞ	ଞ	ஞ	ఞ	ñ	ɲə	TBD

Table 4 - Consonants 2 of 3

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	ट	ট	ટ	ਟ	ಟ	ട	ଟ	ட	ట	ṭ	ʈə	TBD
Aspirant	ठ	ঠ	ઠ	ਠ	ಠ	ഠ	ଠ		ఠ	ṭh	ʈʰə	TBD
Base	ड	ড	ડ	ਡ	ಡ	ഡ	ଡ		డ	ḍ	ɖə	TBD
Variant	ड़	ড়		ੜ			ଡ଼				ɽə	TBD
Aspirant	ढ	ঢ	ઢ	ਢ	ಢ	ഢ	ଢ		ఢ	ḍh	ɖʰə	TBD
Variant	ढ़	ঢ়					ଢ଼				ɽʰə	TBD
Base	ण	ণ	ણ	ਣ	ಣ	ണ	ଣ	ண	ణ	ṇ	ɳə	TBD
Base	त	ত	ત	ਤ	ತ	ത	ତ	த	త	t	t̪ə	TBD
Aspirant	थ	থ	થ	ਥ	ಥ	ഥ	ଥ		థ	th	t̪ʰə	TBD
Base	द	দ	દ	ਦ	ದ	ദ	ଦ		ద	d	d̪ə	TBD
Aspirant	ध	ধ	ધ	ਧ	ಧ	ധ	ଧ		ధ	dh	d̪ʰə	TBD
Base	न	ন	ન	ਨ	ನ	ന	ନ	ந	న	n	n̪ə	TBD
Variant	ऩ					ഩ		ன			nə	TBD

Table 4 - Consonants 3 of 3

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	प	প	પ	ਪ	ಪ	പ	ପ	ப	ప	p	pə	TBD
Aspirant	फ	ফ	ફ	ਫ	ಫ	ഫ	ଫ		ఫ	ph	pʰə	TBD
Variant	फ़			ਫ਼						f	fə	TBD
Base	ब	ব	બ	ਬ	ಬ	ബ	ବ		బ	b	bə	TBD
Aspirant	भ	ভ	ભ	ਭ	ಭ	ഭ	ଭ		భ	bh	bʰə	TBD
Base	म	ম	મ	ਮ	ಮ	മ	ମ	ம	మ	m	mə	TBD

Table 5 - Special Characters

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	ज्ञ	জ্ঞ	જ્ઞ	ਜ੍ਞ	ಜ್ಞ	ജ്ഞ	ଜ୍ଞ	ஜ்ஞ	జ్ఞ	jña		TBD
Base	ॐ							ௐ				TBD
Base	◌ं	◌ং	◌ં	◌ਂ	◌ಂ	◌ം	◌ଂ	ம்	◌ం	ṃ		TBD
Base	◌ः	◌ঃ	◌ઃ	:	◌ಃ	◌ഃ	◌ଃ	:	◌ః	ḥ		TBD

Table 6 - Liquids

	DN	BEN	GUJ	GUR	KA	MA	OR	TA	TE	IAST	IPA	Bharati
Base	य	য	ય	ਯ	ಯ	യ	ଯ	ய	య	y	jə	TBD
Variant	य़	য়					ୟ				ẏə	TBD
Variant												TBD
Base	र	র	ર	ਰ	ರ	ര	ର	ர	ర	r	ɾə	TBD
Variant						ർ						TBD
Variant	ऱ				ಱ	റ		ற	ఱ		rə	TBD
Base	ल	ল	લ	ਲ	ಲ	ല	ଲ	ல	ల	l	lə	TBD
Variant					ೞ	ൽ						TBD
Variant						ൾ						TBD
Variant	ळ		ળ	ਲ਼	ಳ	ള	ଳ	ள	ళ		ɭə	TBD
Variant	ऴ					ഴ		ழ			ɻə	TBD
Base	व	ব	વ	ਵ	ವ	വ		வ	వ	v	ʋə	TBD
Base	श	শ	શ	ਸ਼	ಶ	ശ	ଶ		శ	ś	ʃə	TBD
Base	ष	ষ	ષ		ಷ	ഷ	ଷ	ஷ	ష	ṣ	ʂə	TBD
Base	स	স	સ	ਸ	ಸ	സ	ସ	ஸ	స	s	s̪ə	TBD
Base	ह	হ	હ	ਹ	ಹ	ഹ	ହ	ஹ	హ	h	ɦə	TBD