Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation internationale de normalisation
Международная организация по стандартизации

L2/04-007

Doc Type: **Working Group Document**
Title: **Proposal to encode two Bhutanese marks for Dzongkha in the UCS**
Source: **Michael Everson & Chris Fynn**
Status: **Individual Contribution**
Action: **For consideration by JTC1/SC2/WG2 and UTC**
Date: **2003-12-30**

The Bhutanese make use of a set of four signs unique to Bhutanese lettering, which are used as the way of starting nearly every piece of correspondence, and hence which need to be encoded in order to represent Dzongkha. Two of these four characters are already encoded: ༉ U+0F09 TIBETAN MARK BSKUR YIG MGO, and ༊ U+0F0A TIBETAN MARK BKA- SHOG YIG MGO, called *spyir btang mgo rgyan* (or *'ba' gyan rgya*) and *zhu yig gi mgo rgyan* in Bhutanese respectively.

The first of the missing characters is ༐ *bka' shog gi mgo rgyan*, the "starting flourish for giving a command" (that is, for addressing someone of lower status). A king, guru, or other high personage would use this when writing to a subject or disciple. It is used for instance on laws and edicts signed by the king. The second of the missing signs is ༑ *mnyam yig gi mgo rgyan*, the "starting flourish for a letter to an equal", which indicates that the letter is being written to someone who is equal but close. These are proposed for encoding at U+0FD0 and U+0FD1 respectively.
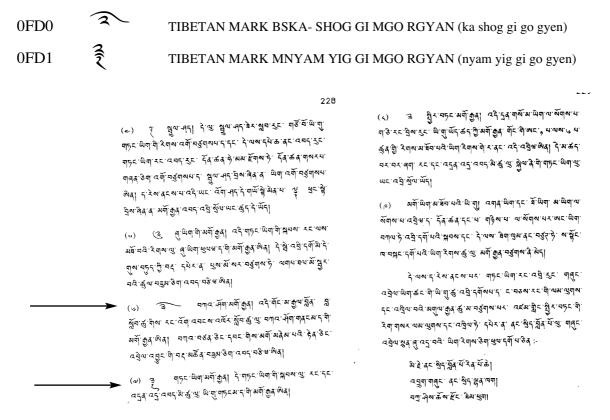
0FD0 ༐ TIBETAN MARK BSKA- SHOG GI MGO RGYAN (ka shog gi go gyen)

0FD1 ༑ TIBETAN MARK MNYAM YIG GI MGO RGYAN (nyam yig gi go gyen)

Figure 1. Dzongkha Development Commission. 1999. *The New Dzongkha Grammar (rdzong kha'i brda gzhung gsar pa).* 4th edition. Thimphu: Dzongkha Development Commission.

Figure 2. Mani Dorji. 1995. *The Complete Book of Dzongkha Letter Writing* (*rdzong kha'i yig skur rnam gzhag*). Thimphu: KMT.

Unicode Character Properties

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0F09,TIBETAN MARK BSKA- SHOG GI MGO RGYAN,Po,0,L,,,,,N,,ka shog gi go gyen,,,
0F09,TIBETAN MARK MNYAM YIG GI MGO RGYAN,Po,0,L,,,,,N,,nyam yig gi go gyen,,,
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A. Administrative

1. Title
Proposal to encode two Bhutanese marks for Dzhongkha in the UCS.
2. Requester's name
Michael Everson & Chris Fynn
3. Requester type (Member body/Liaison/Individual contribution)
Individual contribution.
4. Submission date
2003-12-30
5. Requester's reference (if applicable)
6. Choose one of the following:
6a. This is a complete proposal
Yes.
6b. More information will be provided later
No.

B. Technical -- General

1. Choose one of the following:
1a. This proposal is for a new script (set of characters)
No.
Proposed name of script
1b. The proposal is for addition of character(s) to an existing block
Yes.
1b. Name of the existing block
Tibetan.
2. Number of characters in proposal
2

3. Proposed category (see section II, Character Categories)
Category A.
4a. Proposed Level of Implementation (1, 2 or 3) (see clause 14, ISO/IEC 10646-1: 2000)
Level 1.
4b. Is a rationale provided for the choice?
Yes.
4c. If YES, reference
Spacing characters.
5a. Is a repertoire including character names provided?
Yes.
5b. If YES, are the names in accordance with the character naming guidelines in Annex L of ISO/IEC 10646-1: 2000?
Yes.
5c. Are the character shapes attached in a legible form suitable for review?
Yes.
6a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?
Michael Everson.
6b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:
Michael Everson, Fontographer.
7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?
No.
7b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?
Yes.
8. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?
No.
9. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database http://www.unicode.org/Public/UNIDATA/ UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.
The characters should have the same properties as U+0F09.

C. Technical -- Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.
No.
2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?
Yes.
2b. If YES, with whom?
Dasho Sangay Dorji, Honourable Secretary; Royal Government of Bhutan; Dzongkha Development Authority; PO Box 122, Thimphu, Bhutan
George L van Driem; Himalayan Languages Project; Leiden University; Postbus 9515; 2300 RA Leiden
2c. If YES, available relevant documents
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?
Bhutanese.
4a. The context of use for the proposed characters (type of use; common or rare)
Ordinary correspondance.
4b. Reference
5a. Are the proposed characters in current use by the user community?
Yes.
5b. If YES, where?
In Bhutan.

6a. After giving due considerations to the principles in Principles and Procedures document (a WG 2 standing document) must the proposed characters be entirely in the BMP?
Yes.
6b. If YES, is a rationale provided?
Yes.
6c. If YES, reference
Keep with other Tibetan characters.
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?
8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?
No.
8b. If YES, is a rationale for its inclusion provided?
8c. If YES, reference
9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?
No.
9b. If YES, is a rationale for its inclusion provided?
9c. If YES, reference
10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?
No.
10b. If YES, is a rationale for its inclusion provided?
10c. If YES, reference
11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?
No.
11b. If YES, is a rationale for such use provided?
11c. If YES, reference
12a. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
No.
12b. If YES, reference
13a. Does the proposal contain characters with any special properties such as control function or similar semantics?
No.
13b. If YES, describe in detail (include attachment if necessary)
14a. Does the proposal contain any Ideographic compatibility character(s)?
No.
14b. If YES, is the equivalent corresponding unified ideographic character(s) identified?