Proposal to add capital rams horn

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1. Introduction

This is a proposal to add LATIN CAPITAL LETTER RAMS HORN, an uppercase form of U+0264 LATIN SMALL LETTER RAMS HORN. The Eastern Dan orthography of 2014, created by Valentin Vydrin in collaboration with Emmanuel Zeh and five other Eastern Dan alphabetization experts, uses the letter and, being a bicameral orthography, uses both an uppercase form and a lowercase form of the letter. Easter Dan is spoken in Côte d'Ivoire by 650.000 people in the prefectures of Man, Sipilou and Biancouma, and is part of the Dan, Gio or Yacouba linguistic continuum (ISO 639-3: dnj]) estimated to be spoken by more than a million speakers in Côte d'Ivoire and Liberia. The dialect of Gouèta is the basis of most written Eastern Dan works. The 2014 orthography has been used in books and journals, including -*Pamɛbhamɛ*, a periodical published in Eastern Dan and Western Dan since 2005. The Eastern Dan edition adopted the orthography in 2019 and its name is now spelled *Päbhēnbhäbhἕn*. Several of these works are available on the Bibliothèque électronique dan (*Eletronic Dan Library*) hosted by a collaboration between the Côte d'Ivoire NGO Päbhēnbhäbhἕn, and the two French institutions Laboratoire Langues et Cultures d'Afrique Noire (LLCAN) and Institut des Langues et Civilisations Orientales (INALCO). The Eastern Dan–French dictionary was published in 2021 with the new orthography and is avaiable as a website as well.

In the 2014 Eastern Dan orthography, the ɤ U+0264 LATIN SMALL LETTER RAMS HORN replaced what was written with *ü* and *ö* in the 1982 Eastern Dan orthography.

The character is available in some SIL fonts as a PUA character. With other fonts, it is approximated with a lowercase at a larger size than the rest of the text.

The capital rams horn cannot be represented with other currently encoded characters. U+0194 LATIN CAPITAL LETTER GAMMA may have a similar shape in some fonts, but it generally extends under the baseline, which capital rams horn cannot do. Additionally, the capital shape of Latin gamma typically has straight terminals while, as confirmed by Vydrin in private communication, the capital rams horn should have curved terminals like the lowercase to avoid ambiguity between the two letters.

2. Characters to be added

Char.	Codepoint	Name
ɤ	U+A7F0	LATIN CAPITAL LETTER RAMS HORN

3. Annotations and sorting

NamesLists.txt

The following annotations are recommended for NamesList.txt:

```
@ Additional letter:
A7F0 LATIN CAPITAL LETTER RAMS HORN
        * lowercase is 0264
        * used in Eastern Dan
        x (latin capital letter gamma - 0194)
```

The following annotations should be updated in NamesList.txt:

```
0194 LATIN CAPITAL LETTER GAMMA
        * African
        * lowercase is 0263
        x (latin capital letter rams horn - A7F0)

0264 LATIN SMALL LETTER RAMS HORN
        = latin small letter baby gamma (1.0)
        * upper-mid back unrounded vowel
        * uppercase is A7F0
        * used in Eastern Dan
```

allkeys.txt

We suggest to add LATIN CAPITAL LETTER RAMS HORN after LATIN SMALL LETTER RAMS HORN in allkeys.txt.

```
0264  ; [.203E.0020.0002] # LATIN SMALL LETTER RAMS HORN
A7F0  ; # LATIN CAPITAL LETTER RAMS HORN
```

4. Annex

L'alphabet dan de l'Est

Si on ne tient compte que des lettres simples, il y en a 28 (12 voyelles + 1 semi-voyelle + 13 consonnes + h qui apparaît dans les digraphes + n qui marque la nasalisation), et l'alphabet complet est comme suit:

a, æ, ʌ, b, d, e, ɛ, f, i, g, h, k, l, n, ŋ, o, ɔ, ɤ, œ, p, s, t, u, ɯ, v, w, y, z

Et si on décide de traiter les digraphes comme des équivalents des lettres, on a 41 lettres:

a, an, æ, æn, ʌ, ʌn, b, bh, d, dh, e, ɛ, ɛn, f, i, in, g, gb, gw, k, kp, kw l, n, ŋ, o, ɔ, ɔn, ɤ, œ, œn, p, s, t, u, un, ɯ, v, w, y, z

En plus, il y a 7 marques tonales. Les voici (sur l'exemple de la lettre a):

ắ ton extra-haut	*â* ton haut-tombant
á ton haut	*a'* ton extra-bas suspendu
ā ton moyen	
à ton bas	
ä̀ ton extra-bas	

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Figure 1. Vydrin (2019) showing LATIN SMALL LETTER RAMS HORN as a letter of the Easter Dan alphabet.

dháǎndhūn *courber la tête,* dhāfìidhʌ́n *pluie fine,* dhàŋbhá *lampe tempête,* dhʌ́ngɔ̄ɔ̀n *jeune homme*

Texte : **Gblǔ̈ gɔ̀ɔn sǔ̈ yáa sʌ̀**

Ɏ́ gūn kpá wɔ̀ gblǔ̈ gɔ̀ɔn, kɤ̄ wɔ̀ wō kó zʌ̄, kɤ̄ wɔ̀ wō kó bhʌ̀ pʌ̄ súɪ à dhǔ̈n gɔ̀. Wɔ̀ bhēn dhǔ̈n kǔ̈n kɤ̄ wɔ̀ à dhǔ̈n bhʌ̀ yʌ̄ kʌ̄, kɤ̄ wɔ̀ à dhǔ̈n bhʌ̀ dhē súɪ à dhǔ̈n gɔ̀ kɤ̄ wà kʌ̄ wō bhʌ̀ ká. Wɔ̀ wō yɤ́ɛ̀ɛ̀ dhǔ̈n kǔ̈n kɤ̄ wàa kʌ̄ wō sʌ́ʌ̂ pʌ̄ ká.

Sʌ́ǹ̰tàa dhɛ̀ yɤ̀ gǔ̈n yà sǔ̈ ká, tɔ̀n wó à dhɛ̀ Glő̀bhʌ́, gbìǹ̰. Sʌ́an yɤ̀ gǔ̈n klʌ̀ʌn sǔ̈ ká à zǔ̈. Ằ sʌ́an bhā à gblɛ̀ɛn dhɛ̀ dhè bhēn plɛ̀ dō kó tʌ̀ sǔ̈ dhʌ́. Bhēn yɤ́ɛ̀ɛ̀ dhǔ̈n wáa bhɔ̀ɔn à bhʌ̀ kɤ̄ wɔ̀ dà bhūun kɤ̄ wɔ̀ bhēn zʌ̄. Gblǔ̈ kplʌ́ʌ̀ dhǔ̈n wɔ̀ yà sʌ́an tʌ̀, yʌ́ wó dhɛ̀-gʌ̀ wō yɤ́ɛ̀ɛ̀

Figure 2. Nestor et al. (2020) showing LATIN CAPITAL LETTER RAMS HORN and LATIN SMALL LETTER RAMS HORN.

Yī dō ká, yʌ́ dǔ̈ɤ gɔ̄n bhā ɏ́ dīi dō dǔ̈ɤ-dhǔ̈n bhā' dhɛ̀ɛ gbő̀ŋ sʌ̀ dō tʌ̀, yʌ́ glà dhʌ́ndhīʌ́-dhʌ́n sʌ̀ dō gúɪ, sʌ̀-dhɛ̀ ɏ́ gūn dhʌ́n bhā' gɔ̀, à síbhʌ́n yáa gūn kpő̀ŋtàa. Ɏ́ dǔ̈ɤ gɔ̄n bhā ɏ́ ɤ̄ wɔ̀ kpɔ̄' bhʌ̀ ɏ́' pɤ̄ : « Dhó, bhá dhó í wō dhʌ́nglɔ̄ɔ́n-dhʌ́n bhā' gɔ̀ yɤ́ɛdhɤ̄ kɤ̄ ɯ́' glà gúɪ pʌ̀ gbàn dō kɤ̄ í dhūn ɯ̄' pɤ̄ yī dhɛ̀ kɤ̄ yí slʌ́ bhɔ̄ɔ̀n bhʌ̀ yí' zʌ̄, yáa dhʌ́ yɤ̀ dhò kwā sūu yʌ̄n'. » Ɏ́ dǔ̈ɤ dhʌ́ndhīʌ́ɤ́-dhʌ́n bhā ɏ́ wlǔ̈ ɏ́ dhō.

Ɏ́ dhō yɤ̀ lɔ̀o pɤ̄dhɤ̄ yʌ́ǹ̰ dhɔ̀bhàa ká, kɤ̄ yʌ́ǹ̰ gɔ̀ yà tān tɔ̀n tʌ̀. Pɏ̀ pʌ́ʌ̀ɛn dhɛ́ ɏ́ wɔ̀ tʌ̀ bhā bhēn pʌ́pʌ́ dhɛ́ kʌ́ɤ wó gūn bhūn, wɔ̀ wō dhʌ́ɤ

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Figure 3. Kɛ̄bhɔ́ɔ̀n, Gèe, Vū̄dlīŋdhʌ̂ and Zʌ̌ (2019) showing LATIN CAPITAL LETTER RAMS HORN and LATIN SMALL LETTER RAMS HORN.

Sʌ́ʌdhɛ̋ bɛ̀ blɛ̀ɛsʉ̏

Ɣ́ gʉ̀n kɣ̄ n̄ kwɛ̀ yɣ̀ sɛ̋œ̀èdō, yī dō ká, yɣ́ á kpã̀n pʌ̄blɛ́ɛ̀n sʌ̀ bhã̀ sʌ́ʌdhɛ̋ gʉ́ ɣ́ gbã̀n bʉ̋gā bhã̀, wó' dhɛ̀ « Tæ̈æ̀nwɔ̀n-dhʉ̀n ». Bhá' gã̀, gblʉ̏ŋ ɣ́ w̄ū bhʌ̄nɲ́-sīʌ, yɣ̄ bhʉ̏n. Pʌ̄blɛ́ɛ̀n ɣ́ dhɣ̋ bhā, kã̀ ã̀ gã̀.
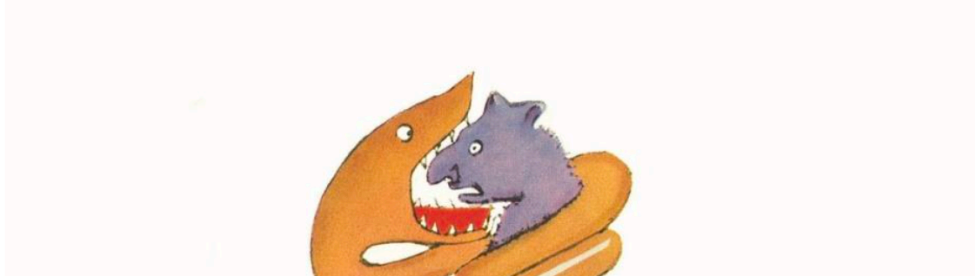
Figure 4. de Saint-Exupéry, Gèe, Vūūdlīŋdhî̀ and Zɛ̋ (2019) showing LATIN CAPITAL LETTER RAMS HORN and LATIN SMALL LETTER RAMS HORN.

O o

ɔ̀o *prt* marque d'empathie

ő o *conj* **n'importe quel**, **quel que soit** *joint deux noms identiques ou deux marqueurs dhé ... dhé pour former un syntagme distributif :* ◊ *yɣ̀ dɔ̀ tőo őo tőo ɣ́ dhɣ́ à kʌ̄dhɛ̀ ká /yɣ̀ dɔ̀ tőo dhé őo dhɣ́ ɣ́ dhɣ́ à kʌ̄dhɛ̀ ká* elle sait préparer n'importe quelle sauce

ōo, ... ōo *conj* **et ...**, **et** *marqueur de coordination des groupes nominaux en énumération non exhaustive*

Ɔ ɔ

ɔ̄ɔ́ *intj* **ah** *(exclamation pour rassurer l'interlocuteur)*

Ɣ ɣ

ɣ̄ **1** *mpp* **il**, **elle** *MPP existentiel logophorique sg.*

ɣ̄ **2** *prn* **1** **se**, **son**, **sa**, **soi** *pronom réfléchi singulier* **2** *formatif marquant la jonction entre dizaines et unités dans la constitution des numéraux composés* ◊ *tɔ̀ kɔ̀œ̀ŋ̀ sɑ̋ɑ̀gā ɣ̄ gā sɛ̋œ̀èdō* quatre-vingt six poules

ɣ́ **1** *conj conjonction introduisant une proposition relative, l'article défini, les pronoms démonstratifs* <u>Qsyn. kɣ́ 2</u>

ɣ́ **2**, yɣ́ *mpp* **il**, **elle** *MPP de la 3e pers. sg. de la série conjointe, peut être omis facultativement*

Figure 5. Vydrin (2021a) showing LATIN CAPITAL LETTER RAMS HORN next to LATIN SMALL LETTER RAMS HORN as initial letter keys in a dictionary.

U+F26E LATIN CAPITAL LETTER RAMS HORN: Ɣ

(NRSI glyph name: LtnCapRamsHorn)

This is an uppercased character to U+0264. It was added to support the Dan orthography of Côte d'Ivoire.

Properties: same as other uppercase letters. Uppercase to U+0264.

Date added: 16-JAN-2019

Figure 6. Evans (2020) showing LATIN CAPITAL LETTER RAMS HORN as a SIL PUA character.

5. Sources

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ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from
http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.
Please ensure you are using the latest Form from
http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.
See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest *Roadmaps*.
Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

A. Administrative

1.**Title:**	*Proposal to add capital rams horn*
2. Requester's name:	*Denis Moyogo Jacquerye <moyogo@gmail.com>*
3. Requester type (Member body/Liaison/Individual contribution):	*Individual contribution*
4. Submission date:	*2021-07-26*
5. Requester's reference (if applicable):	
6. Choose one of the following:	
This is a complete proposal:	*YES*
(or) More information will be provided later:	*NO*

B. Technical - General

1. Choose one of the following:
   a. This proposal is for a new script (set of characters):
       Proposed name of script:
   b. The proposal is for addition of character(s) to an existing block: *YES*
       Name of the existing block: *Latin Extended-D*
2. Number of characters in proposal: *10*
3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary	*X*	B.1-Specialized (small collection)		B.2-Specialized (large collection)	
C-Major extinct		D-Attested extinct		E-Minor extinct	
F-Archaic Hieroglyphic or Ideographic		G-Obscure or questionable usage symbols			

4. Is a repertoire including character names provided?   *YES*
   a. If YES, are the names in accordance with the "character naming guidelines"   *YES*
   b. Are the character shapes attached in a legible form suitable for review?   *YES*
5. Fonts related:
   a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
        Denis Moyogo Jacquerye
   b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
        <moyogo@gmail.com>
6. References:
   a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?   *YES*
   b. Are published examples of use (such as samples from newspapers, magazines, or other sources)
       of proposed characters attached?   *YES*
7. Special encoding issue
   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)?   *YES*
        presentation, sorting

8. 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 UAX#44: http://www.unicode.org/reports/tr44/ and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	*NO*
If YES explain	

2. 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***

    If YES, available relevant documents: ***Examples***

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? ***YES***

    Reference: ***See proposal***

4. The context of use for the proposed characters type of use; common or rare) ***YES***

    Reference: ***See proposal***

5. Are the proposed characters in current use by the user community? ***YES***

    If YES, where? Reference: ***Easter Dan alphabetization experts in Côte d'Ivoire***

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? ***YES***

    If YES, is a rationale provided? ***Yes***

      If Yes, reference: ***See proposal***

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? ***YES***

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? ***NO***

    If YES, is a rationale for its inclusion provided?

      If Yes, reference:

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? ***NO***

    If YES, is a rationale for its inclusion provided?

      If Yes, reference:

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character? ***NO***

    If YES, is a rationale for its inclusion provided? ***&nbps;***

      If Yes, reference:

11. Does the proposal include use of combining characters and/or use of composite sequences? ***NO***

    If YES, is a rationale for such use provided?

      If Yes, reference:

    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

      If Yes, reference:

12. Does the proposal contain characters with any special properties such as control function or similar semantics? ***NO***

    If YES, describe in detail (include attachment if necessary)

13. Does the proposal contain any Ideographic compatibility characters? ***NO***

    If YES, are the equivalent corresponding unified ideographic characters identified?

      If Yes, reference: