**DATE:** 2002-02-13

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| **DOC TYPE:** | Expert contribution |
| **TITLE:** | **Proposal to Encode Khmer Lunar Dates** |
| **SOURCE:** | CHEA Sok Huor, LAO Kim Leang, HARADA Shiro, Norbert KLEIN |
| **PROJECT:** | |
| **STATUS:** | Proposal |
| **ACTION ID:** | |
| **DUE DATE:** | -- |
| **DISTRIBUTION:** | Worldwide |
| **MEDIUM:** | Paper |
| **NO. OF PAGES:** | |

# A. Administrative

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|---|---|
| 1. Title | Proposal to encode Khmer lunar date symbols |
| 2. Requester's name | CHEA Sok Huor, LAO Kim Leang, HARADA Shiro, Norbert KLEIN |
| 3. Requester type | Expert request. |
| 4. Submission date | 2002-02-13 |
| 5. Requester's reference | ISO/IEC JTC 1/SC 2/WG 2 N2380R |
| 6a. Completion | This is a complete proposal. |
| 6b. More information to be provided? | Only as required for clarification. |

# B. Technical – General

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| 1a. New script? Name? | No. |
| 1b. Addition of characters to existing block? Name? | No. New Block called "Khmer Extended" is required as contiguous area is not available |
| 2. Number of characters | 32 |
| 3. Proposed category | |
| 4. Proposed level of implementation and rationale | |
| 5a. Character names included in proposal? | Yes. |
| 5b. Character names in accordance with | Yes. |

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| guidelines? | |
| 5c. Character shapes reviewable? | Yes. |
| 6a. Who will provide computerized font? | Committee for Standardization of Khmer Characters in Computers |
| 6b. Font currently available? | No. |
| 6c. Font format? | TrueType. |
| 7a. Are references (to other character sets, dictionaries, descriptive texts, etc.) provided? | No. |
| 7b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached? | No. |
| 8. Does the proposal address other aspects of character data processing? | Yes. Compatibility mapping. |

# C. Technical – Justification

| | |
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| 1. Contact with the user community? | Yes. National Body Contribution |
| 2. Information on the user community? | Native. |
| 3a. The context of use for the proposed characters? | Used for specifying lunar calendar dates |
| 3b. Reference | |
| 4a. Proposed characters in current use? | Yes. |
| 4b. Where? | Cambodia. |
| 5a. Characters should be encoded entirely in BMP? | Yes. |
| 5b. Rationale | Daily use of these symbols in Cambodia. |
| 6. Should characters be kept in a continuous range? | Yes. |
| 7a. Can the characters be considered a presentation form of an existing character or character sequence? | No. |
| 7b. Where? | |
| 7c. Reference | |
| 8a. Can any of the characters be considered to be similar (in appearance or function) to | No. Current Khmer implementation does not address lunar date usage. |

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| an existing character? | |
| 8b. Where? | |
| 8c. Reference | |
| 9a. Combining characters or use of composite sequences included? | N/A |
| 9b. List of composite sequences and their corresponding glyph images provided? | |
| 10. Characters with any special properties such as control function, etc. included? | |

# D. SC2/WG2 Administrative

To be completed by SC2/WG2

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|---|---|
| 1. Relevant SC 2/WG 2 document numbers: | |
| 2. Status (list of meeting number and corresponding action or disposition) | |
| 3. Additional contact to user communities, liaison organizations etc. | |
| 4. Assigned category and assigned priority/time frame | |
| Other Comments | |

The proposed Khmer Extended block includes lunar date symbols that are used with Khmer. The proposed range is U+19E0 – U+19FF.

Sorting order – The sorting order of the Khmer Extended block should be in the order of the Unicode characters.

Typographical form of Khmer lunar dates – The typographical form of Khmer lunar dates is a top and bottom section of the same size text. The dividing line between the upper and lower half of the symbol is the vertical center of the line height.

Compatibility mapping – These considered as atomic units. Creating compatibility mappings would make sorting more difficult. Numbers are sometimes superscript and sometimes subscript.

| | 19E | 19F |
|---|---|---|
| 0 | 19E0 | 19F0 |
| 1 | 19E1 | 19F1 |
| 2 | 19E2 | 19F2 |
| 3 | 19E3 | 19F3 |
| 4 | 19E4 | 19F4 |
| 5 | 19E5 | 19F5 |
| 6 | 19E6 | 19F6 |
| 7 | 19E7 | 19F7 |
| 8 | 19E8 | 19F8 |
| 9 | 19E9 | 19F9 |
| A | 19EA | 19FA |
| B | 19EB | 19FB |
| C | 19EC | 19FC |
| D | 19ED | 19FD |
| E | 19EE | 19FE |
| F | 19EF | 19FF |

**Lunar Date Symbols**

19E0 – KHMER SYMBOL PATHAMASAT;No;0;L;;0;0;0;N;;;;;
19E1 – KHMER SYMBOL MUOY KOET;No;0;L;;0;0;0;N;;;;;
19E2 – KHMER SYMBOL PII KOET;No;0;L;;0;0;0;N;;;;;
19E3 – KHMER SYMBOL BEI KOET;No;0;L;;0;0;0;N;;;;;
19E4 – KHMER SYMBOL BUON KOET;No;0;L;;0;0;0;N;;;;;
19E5 – KHMER SYMBOL PRAM KOET;No;0;L;;0;0;0;N;;;;;
19E6 – KHMER SYMBOL PRAM-MUOY KOET;No;0;L;;0;0;0;N;;;;;
19E7 – KHMER SYMBOL PRAM-PII KOET;No;0;L;;0;0;0;N;;;;;
19E8 – KHMER SYMBOL PRAM-BEI KOET;No;0;L;;0;0;0;N;;;;;
19E9 – KHMER SYMBOL PRAM-BUON KOET;No;0;L;;0;0;0;N;;;;;
19EA – KHMER SYMBOL DAP KOET;No;0;L;;0;0;0;N;;;;;
19EB – KHMER SYMBOL DAP-MUOY KOET;No;0;L;;0;0;0;N;;;;;
19EC – KHMER SYMBOL DAP-PII KOET;No;0;L;;0;0;0;N;;;;;
19ED – KHMER SYMBOL DAP-BEI KOET;No;0;L;;0;0;0;N;;;;;
19EE – KHMER SYMBOL DAP-BUON KOET;No;0;L;;0;0;0;N;;;;;
19EF – KHMER SYMBOL DAP-PRAM KOET;No;0;L;;0;0;0;N;;;;;
19F0 – KHMER SYMBOL TUTEYASAT;No;0;L;;0;0;0;N;;;;;
19F1 – KHMER SYMBOL MUOY ROC;No;0;L;;0;0;0;N;;;;;
19F2 – KHMER SYMBOL PII ROC;No;0;L;;0;0;0;N;;;;;
19F3 – KHMER SYMBOL BEI ROC;No;0;L;;0;0;0;N;;;;;
19F4 – KHMER SYMBOL BUON ROC;No;0;L;;0;0;0;N;;;;;
19F5 – KHMER SYMBOL PRAM ROC;No;0;L;;0;0;0;N;;;;;
19F6 – KHMER SYMBOL PRAM-MUOY ROC;No;0;L;;0;0;0;N;;;;;
19F7 – KHMER SYMBOL PRAM-PII ROC;No;0;L;;0;0;0;N;;;;;
19F8 – KHMER SYMBOL PRAM-BEI ROC;No;0;L;;0;0;0;N;;;;;
19F9 – KHMER SYMBOL PRAM-BUON ROC;No;0;L;;0;0;0;N;;;;;
19FA – KHMER SYMBOL DAP ROC;No;0;L;;0;0;0;N;;;;;
19FB – KHMER SYMBOL DAP-MUOY ROC;No;0;L;;0;0;0;N;;;;;
19FC – KHMER SYMBOL DAP-PII ROC;No;0;L;;0;0;0;N;;;;;
19FD – KHMER SYMBOL DAP-BEI ROC;No;0;L;;0;0;0;N;;;;;
19FE – KHMER SYMBOL DAP-BUON ROC;No;0;L;;0;0;0;N;;;;;
19FF – KHMER SYMBOL DAP-PRAM ROC;No;0;L;;0;0;0;N;;;;;