Report on the Khmer Root Zone LGR

Rapid SUN | APrIGF 2016 | 28 July 2016
Agenda

- Introduction to Khmer Language
- Introduction to Khmer Script
- Membership of Khmer GP
- Project Schedule
- Methodology
- Feedback
Khmer language has been written since the early 7th century using a script (Abugida Type) originating in South India (from Brahmi). Khmer borrowed some words from Sanskrit and Pāli. Khmer was borrowed and found in Thai, Lao, Kuay, Stieng, Samre, Cham, and others. Official language in Cambodia with 15 million people. 1.3 million people in southeastern Thailand. More than a million people in southern Vietnam.

Source: http://www.britannica.com/topic/Khmer-language
Introduction to Khmer Script

- ISO 15924 - Khmr 355
  - Direction Left-to-right
  - 146 Characters
- Unicode range
  - U+1780–U+17FF Khmer
  - U+19E0–U+19FF

Source - https://en.wikipedia.org/wiki/Khmer_alphabet
## Membership of Khmer GP

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Sopheap Seng</td>
<td>National Institute of Posts, Telecoms and ICT (NIPTICT)</td>
</tr>
<tr>
<td>Secretary</td>
<td>Rapid Sun</td>
<td>Center of Research and Development, NIPTICT</td>
</tr>
<tr>
<td>Member</td>
<td>Daro Chin</td>
<td>Telecom Cambodia</td>
</tr>
<tr>
<td>Member</td>
<td>An Ra</td>
<td>Ministry of Post and Telecommunications</td>
</tr>
<tr>
<td>Member</td>
<td>Hong Danh</td>
<td>Unicode Expert</td>
</tr>
<tr>
<td>Member</td>
<td>Ken Rangsey</td>
<td>Royal University of Phnom Penh</td>
</tr>
<tr>
<td>Member</td>
<td>Yatal Lim</td>
<td>Telecom Regulator of Cambodia</td>
</tr>
<tr>
<td>Member</td>
<td>Mok Khemera</td>
<td>Ministry of Posts and Telecommunications</td>
</tr>
<tr>
<td>Member</td>
<td>Than Makara</td>
<td>R &amp; D Center, NIPTICT</td>
</tr>
<tr>
<td>Member</td>
<td>Chhan Kimsoeun</td>
<td>Royal University of Phnom Penh</td>
</tr>
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# Project Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Start Date</th>
<th>Finish Date</th>
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<tbody>
<tr>
<td><strong>Develop Principles</strong></td>
<td>Principles to be used to determine valid code points, variants and labels</td>
<td>10 June 2015</td>
<td>10 June 2015</td>
</tr>
<tr>
<td><strong>Determine Code Points</strong></td>
<td>Select the code points from MSR which are needed for Root Zone LGR</td>
<td>10 July 2015</td>
<td>10 July 2015</td>
</tr>
<tr>
<td><strong>Determine (any) Variants</strong></td>
<td>From the codes points selected, determine if the end-user may confuse two code points</td>
<td>10 Sep 2015</td>
<td>10 Nov 2015</td>
</tr>
<tr>
<td><strong>Determine Label Rules</strong></td>
<td>Determine if there are any label level constrains on the use of selected code points</td>
<td>10 Nov 2015</td>
<td>12 Feb 2016</td>
</tr>
<tr>
<td><strong>Hold Public Consultation</strong></td>
<td>Hold a workshop on the work accomplished by the generation panel to get feedback from the community and experts.</td>
<td>Early December 2015</td>
<td>15 Feb 2016</td>
</tr>
<tr>
<td><strong>Write Proposal and Create XML</strong></td>
<td>Write up the Root Zone LGR proposal, including references to each code point included, why variants needed and details of label rules developed + XML file</td>
<td>10 December 2015</td>
<td>12 Feb 2016</td>
</tr>
<tr>
<td><strong>Submit</strong></td>
<td>Get Public Comments, Finalize and Submit</td>
<td>10 February 2016</td>
<td>19 Feb 2016</td>
</tr>
</tbody>
</table>
Methodology

- Discussion within linguists and unicode expert in Khmer Generation Panel
  - Develop Code Point – 71 code points
    - Consonants - 33
    - Dependent Vowels - 16
    - Independent Vowels - 12
    - Consonant Shifters - 2
    - Diacritics – 7
    - Subscript - 1

- Develop Variant
  - Khmer Variant
Methodology (Cont)

- Develop Cross Script Variant
  - Khmer-Thai homoglyphs - 17
  - Khmer-Lao homoglyphs - 15
  - Khmer-Burmese homoglyphs - 7

- Develop 11 Label Rules

- Develop XML file
Feedback

- 10 Proposal Editions (0.1 to 1.0)
- Share 10 proposal editions with Khmer GP
- 3 feedbacks from integration panel
- 1 public workshop invited GP, universities, NGOs, Companies
- Public comments ended by 28 May 2016
Thank You and Questions

Reach us at:
Email: KhmerGP@icann.org
Website: https://community.icann.org/display/croscomgrprocedure/Khmer+GP

twitter.com/icann
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weibo.com/ICANNorg
linkedin.com/company/icann
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