There is a need to encode dot patterns used in Arabic letters for pedagogical and other purposes, as exemplified in the original proposal L2/06-039 and related documents.

That proposal requested 22 characters to be encoded within the 0600 block, but there is a better open area of right-to-left codepoints tentatively reserved for Arabic additions in the range from 0880 through 08BF. This range is probably the best place to put a set of spacing dot pattern characters.

A good deal of required information and examples are contained in the previous proposal L2/06-039, as well as discussion documents L2/06-240, L2/07-094 and L2/07-174. That information will not be re-iterated here.

The proposed 22 characters, their glyphs, names, and annotations are shown on the accompanying chart and nameslist.

These would be given characters properties as follows (in the syntax of the UnicodeData.txt file):

```
08nn;---NAME---;Sk;0;AL;;;;;N;;;;;
```

The line-breaking behavior of these characters would be similar to ordinary Arabic letters or symbols. They should also be allowed as parts of identifiers.
<table>
<thead>
<tr>
<th>Arabic Nuqtah</th>
<th>Arabic Danda</th>
<th>Arabic Circle</th>
<th>Arabic Tota</th>
</tr>
</thead>
<tbody>
<tr>
<td>0880</td>
<td>0881</td>
<td>0882</td>
<td>0883</td>
</tr>
<tr>
<td>0884</td>
<td>0885</td>
<td>0886</td>
<td>0887</td>
</tr>
<tr>
<td>0888</td>
<td>0889</td>
<td>088A</td>
<td>088B</td>
</tr>
<tr>
<td>088C</td>
<td>088D</td>
<td>088E</td>
<td>088F</td>
</tr>
<tr>
<td>0890</td>
<td>0891</td>
<td>0892</td>
<td>0893</td>
</tr>
<tr>
<td>0894</td>
<td>0895</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Arabic Single Nuqtah Above**: 0880
- **Arabic Single Nuqtah Below**: 0881
- **Arabic Double Nuqtah Above**: 0882
- **Arabic Double Nuqtah Below**: 0883
- **Arabic Triple Nuqtah Above**: 0884
- **Arabic Triple Nuqtah Below**: 0885
- **Arabic Triple Inverted Nuqtah Above**: 0886
- **Arabic Triple Inverted Nuqtah Below**: 0887
- **Arabic Quadruple Nuqtah Above**: 0888 (Sindhi)
- **Arabic Quadruple Nuqtah Below**: 0889 (Sindhi)
- **Arabic Double Danda Above**: 088A (Sindhi)
- **Arabic Double Danda Below**: 088B (Sindhi)
- **Arabic Double Nuqtah Vertical Above**: 088C (Sindhi)
- **Arabic Double Nuqtah Vertical Below**: 088D (Sindhi)
- **Arabic Single Kashida Above**: 088E (Sindhi)
- **Arabic Single Kashida Below**: 088F (Urdu)
- **Arabic Double Kashida Above**: 0890 (Urdu)
- **Arabic Double Kashida Below**: 0891 (Urdu)
- **Arabic Single Circle Above**: 0892 (Pashto)
- **Arabic Single Circle Below**: 0893 (Pashto)
- **Arabic Tota Above**: 0894 (Urdu)
- **Arabic Tota Below**: 0895 (Urdu)
**Proposal to encode 22 characters for Arabic pedagogical use**

**Title:** Proposal to encode 22 characters for Arabic pedagogical use  

**Requester's name:** Dr. Attash Durrani (NLA, Pakistan) ; Kamal Mansour ; Rick McGowan  

**Requester type (Member body/Liaison/Individual contribution):** Member body  

**Submission date:** April 20, 2008  

**Requester's reference (if applicable):** L2/06-039 L2/06-240 L2/07-094 L2/07-174  

**Number of characters in proposal:** 22  

**Proposed category (select one from below - see section 2.2 of P&P document):**  

<table>
<thead>
<tr>
<th>A-Contemporary</th>
<th>B.1-Specialized (small collection)</th>
<th>B.2-Specialized (large collection)</th>
<th>C-Major extinct</th>
<th>D-Attested extinct</th>
<th>E-Minor extinct</th>
<th>F-Archaic Hieroglyphic or Ideographic</th>
<th>G-Obscure or questionable usage symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B.1</td>
<td>B.2</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

**Is a repertoire including character names provided?** YES  

**Are the names in accordance with the “character naming guidelines” in Annex L of P&P document?** YES  

**Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?** Kamal Mansour (Monotype Imaging)  

**If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:** Truetype font – used to create this proposal – Kamal Mansour  

**References:**  

| a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? | See L2/06-039  
| b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? | See L2/06-039, and other references above  

**Special encoding issues:**  

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  

**Additional Information:**  

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](http://www.unicode.org) for such information on other scripts. Also see [http://www.unicode.org/Public/UNIDATA/UCD.html](http://www.unicode.org/Public/UNIDATA/UCD.html) 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?  
   If YES explain *This is a significant revision of earlier proposals submitted to UTC. See references above.*
   YES

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.)?  
   If YES, with whom? National Language Authority, Pakistan
   If YES, available relevant documents: See references above.
   YES

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?  
   Reference:  
   NO

4. The context of use for the proposed characters (type of use; common or rare)  
   Reference:  
   Common

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

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?  
   If YES, is a rationale provided?  
   If YES, reference:  
   YES

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?  
   If YES, is a rationale for its inclusion provided?  
   If YES, reference:  
   NO

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?  
   If YES, is a rationale for its inclusion provided?  
   If YES, reference:  
   NO

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?  
    If YES, is a rationale for its inclusion provided?  
    If YES, reference:  
    NO

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

12. Does the proposal contain characters with any special properties such as control function or similar semantics?  
    If YES, describe in detail (include attachment if necessary)  
    NO

13. Does the proposal contain any Ideographic compatibility character(s)?  
    If YES, is the equivalent corresponding unified ideographic character(s) identified?  
    If YES, reference:  
    NO