The following action was unclear to me, and the more I looked into it, the more I think it might touch more places. So I wrote up a strawman for discussion in the UTC.

[153-A34] Action Item for Mark Davis, Editorial Committee: Document in Proposed Update UTS #39 that virama followed by ZWJ followed by IndicSyllabicCategory=Vowel Dependent, and describe how to check for that sequence, for Unicode 11.0.

The action was in the context of the discussion of Peter C's document
http://www.unicode.org/L2/L2017/17365-visual-ambiguity-indic.pdf, which points out the visual ambiguity with cases like GA + virama + zwj + VOWEL SIGN AA.

I'm guessing that the action should be:

[153-A34] Action Item for Mark Davis, Editorial Committee: Document in Proposed Update UTS #39 and Proposed Update UAX #31 that the following sequence should be disallowed: virama followed by ZWJ followed by a character with property value Indic_Syllabic_Category=Vowel_Dependent; and describe how to check for that sequence, for Unicode 11.0.

Background
UTS #39 doesn't currently talk about ZWJ; that is deferred to UAX #31. The latter has:

B. Allow ZWJ in the following context:
   In a conjunct context. That is, a sequence of the form:
   ○ A Letter, followed by a Virama, followed by a ZWJ

   This corresponds to the following regular expression (in Perl-style syntax): \$/L $V ZWJ/
   where:
   $L = [:General_Category=Letter:]
   $V = [:Canonical_Combining_Class=Virama:]

There is also the following having to do with Virama.

A2. Allow ZWNJ in the following context:

   In a conjunct context. That is, a sequence of the form:

   ● A Letter, followed by a Virama, followed by a ZWNJ

   This corresponds to the following regular expression (in Perl-style syntax): \$/L $V ZWNJ, where:
Strawman proposal

I tried to make minimal changes to the text; clearly certain areas could benefit from further rewrite.

1. modify UAX #31 to change B to

B. Allow ZWJ in the following context:
   ○ A Letter, followed by a Virama, followed by a ZWJ, not followed by a character of type Indic_Syllabic_Category=Vowel_Dependent

This corresponds to the following regular expression (in Perl-style syntax): /$L $V ZWJ (?(!$D))/

   where:

   $L = [:General_Category=Letter:]

   $V = [:Canonical_Combining_Class=Virama:]

   $D = [:Indic_Syllabic_Category=Vowel_Dependent:]

2. Allow for combining marks.

   This isn't directly related, but as discussed in other contexts, B and A2 need to allow combining marks between the $L and virama or virama and ZWJ/ZWNJ, so that they don't forbid nukta and others. (They have to be allowed on both sides of $V for canonical equivalence.)

   So the formulations for B and A2 should

   ● Replace “followed by a Virama” by “followed by a Virama (optionally preceded or succeeded by certain non-spacing marks)

   ● Change $V to $C $V $C

   ● Add $C = [:General_Category=Mn:]

   (Note: we could tighten $C by only allowing those with CCC≠0 between the Virama and ZWJ/ZWNJ. So the regex would be $C $V $C.)

3. Add a section 3.1.1 to
   http://www.unicode.org/reports/tr39/#General_Security_Profile

   3.1.1 Joining Controls

   The determination of whether ZWJ and ZWNJ are allowed or restricted depends on the context, as described in [UAX31]. That is, they are only allowed in the following contexts; otherwise they are Restricted.

   /$LJ $T* ZWNJ $T* $RJ/ or
/$L$V ZWNJ/ or
/$L$V ZWJ (?!!$D)/

where
$T = [:Joining_Type=Transparent:]$
$RJ = [:Joining_Type=Dual_Joining:] [:Joining_Type=Right_Joining:]$
$LJ = [:Joining_Type=Dual_Joining:] [:Joining_Type=Left_Joining:]$
$L = [:General_Category=Letter:]$
$V = [:Canonical_Combining_Class=Virama:]$
$D = [:Indic_Syllabic_Category=Vowel_Dependent:]$

$V$ Contents

FYI, because of the discussion in discussion around
http://www.unicode.org/reports/tr29/proposed.html, I checked the above formulation of $V$ against

$V' = [:Indic_Syllabic_Category=Virama:] [:Indic_Syllabic_Category=Invisible_Stacker:]$

As it turns out, $V'$ is a proper subset of $V$. The following characters are in $V$ but not in $V'$

<table>
<thead>
<tr>
<th>$U$</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U+0D3B</td>
<td>MALAYALAM SIGN VERTICAL BAR VIRAMA</td>
</tr>
<tr>
<td>U+0D3C</td>
<td>MALAYALAM SIGN CIRCULAR VIRAMA</td>
</tr>
<tr>
<td>U+0E3A</td>
<td>THAI CHARACTER PHINTHU</td>
</tr>
<tr>
<td>U+0F84</td>
<td>TIBETAN MARK HALANTA</td>
</tr>
<tr>
<td>U+103A</td>
<td>MYANMAR SIGN ASAT</td>
</tr>
<tr>
<td>U+1714</td>
<td>TAGALOG SIGN VIRAMA</td>
</tr>
<tr>
<td>U+1734</td>
<td>HANUNOO SIGN PAMUDPOD</td>
</tr>
<tr>
<td>U+1BAA</td>
<td>SUNDANESE SIGN PAMAAEH</td>
</tr>
<tr>
<td>U+1BF2</td>
<td>BATAK PANGOLAT</td>
</tr>
<tr>
<td>U+1BF3</td>
<td>BATAK PANONGONAN</td>
</tr>
<tr>
<td>U+2D7F</td>
<td>TIFINAGH CONSONANT JOINER</td>
</tr>
<tr>
<td>U+A806</td>
<td>SYLOTI NAGRI SIGN HASANTA</td>
</tr>
<tr>
<td>U+A953</td>
<td>REJANG VIRAMA</td>
</tr>
<tr>
<td>U+ABED</td>
<td>MEETEI MAYEK APUN IYEK</td>
</tr>
<tr>
<td>U+1107F</td>
<td>BRAHMI NUMBER JOINER</td>
</tr>
<tr>
<td>U+11134</td>
<td>CHAKMA MAAYYAA</td>
</tr>
<tr>
<td>U+112EA</td>
<td>KHUDAWADI SIGN VIRAMA</td>
</tr>
</tbody>
</table>
From Cibu:

Couple of thoughts from the Malayalam point of view:
Following contexts should be allowed for requesting reformed or traditional conjuncts as per Unicode10.0.0/ch12 page 505. This needs to be called out in the section 3 of the above proposal.
/$L\ ZWNJ\ $V\ $L/$
/$L\ ZWJ\ $V\ $L/$

Also, when we disallow/$L\ $V\ ZWJ\ $D/$, it is disallowing the sequences involving legacy chillus. That is, for example, <CHILLU N, VOWEL SIGN E> is a valid sequence (Examples in Unicode10.0.0/ch12 Table 12.36). It’s legacy equivalent would be <NA, VIRAMA, ZWJ, VOWEL SIGN E>. It might be OK to disallow this; but, we should be mindful of this side effect.