# Reactivate reduced form of UTS 52 mechanism in UTR 51

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From: Mark Davis, Peter Edberg

Draft: link

This is a proposal to reactivate a portion of the tag mechanism originally proposed in <u>draft UTS 52</u>, but in modified form and with reduced scope. The proposal here is to integrate the mechanism into UTR51 rather than have a separate UTS52, so that there is a single document that specifies all of the emoji sequences.

The initial support is only for subregion flags, although the mechanism is general enough to expand later. The reduction in scope is motivated by the fact that a different mechanism (with better fallback) is already in use for gender variants, while the direction and hair color tags in the original proposal were deemed of lower priority than the other proposed tags. Moreover, with the ZWJ sequence mechanism now widely supported, cases where that works (like hair color) should use ZWJ sequences instead.

Note: there is a proposal to have a "reduced" format for just flags that should be discussed at the same time as this document <u>L2/16-234</u>. That reduced format has the disadvantage that it is more complicated for segmentation.

Proposed Changes to: <a href="http://unicode.org/reports/tr51/#Emoji\_Sequences">http://unicode.org/reports/tr51/#Emoji\_Sequences</a>

Renumber old ED-15a. emoji zwj element to ED-15b.

#### Add new definition

## ED-15a. emoji tag sequence (ETS)

A sequence consisting of an emoji core sequence followed by one or more non-terminating TAG characters, followed by tag\_term.

```
emoji_tag_sequence
                                  tag_base tag_value+ tag_term
                        :=
                                  emoji character | emoji modifier sequence
tag base
                        :=
                                  \mathbf{x} \{ \mathbf{E007F} \}
                                             // CANCEL TAG
tag term
                        :=
                                  [x{E0020}-x{E0040}\x{E005B}-x{E007E}]+
tag_value
                                             // TAGs - tag A..tag Z - tag term
OLD
                                  tag key tag value
tag key value pair
                        :=
                                  tag key
```

The above defines a well-formed emoji tag sequence. Each tag\_value defines a particular visual variant to be applied to the tag\_base character(s). The values [\x{E0041}-\x{E005A}] are reserved for future extensions.

The meaning and validity criteria for emoji\_tag\_sequences and expected visual variants for tag\_values are determined by the documentation in *Annex C. Emoji Tag Sequences*. Whenever an emoji\_tag\_sequence is not well-formed according to ED15a or not valid according to Annex C, it should be shown as the base character with an overlay, as in <a href="Flag Presentation">Flag Presentation</a>.

Add emoji\_tag\_sequence to: ED-17. emoji sequence

### Add Review Note below it

**Review Note:** If emoji tag sequences are to be allowed within ZWJ sequences, then **emoji\_tag\_sequence** would be added not to ED-17, but to ED-15b. emoji zwj element. Feedback is welcome on this issue.

Add new Annex C.

# Annex C. Emoji Tag Sequences

While the syntax of emoji tag sequences is defined in ED15a, only valid emoji tag sequences are to be displayed. The only valid sequences in this version of Unicode Emoji are defined by sections in this annex. Whenever an emoji tag sequence is not well-formed according to ED15a *or* not valid according to Annex C, it should be shown as the base character with an overlay, as in <a href="Flag\_Presentation">Flag\_Presentation</a>.

Only the combinations of <tag base> characters and <tag value> sequences in this section are valid.

In examples, underlined ASCII characters represent the corresponding tag characters, while + represents the tag term.

# C.1 Flag emoji tag sequences

A valid flag emoji tag sequence must satisfy the following constraints:

a. The tag base and tag value are limited to the following:

tag_base	U+1F3F3 WAVING WHITE FLAG
tag_value	(Tag_0Tag_9, Tag_aTag_z)+

- b. Let SD be the result of mapping each character in the TAG value to [0-9a-z] by subtracting 0xE0000.
  - i. SD must then be a specification as per [CLDR] of either a Unicode <u>subdivision\_id</u> □ or a 3-digit <u>unicode\_region\_subtag</u> □, and
  - ii. SD must have CLDR idStatus equal to "regular" or "deprecated".

### **Notes:**

- 1. The deprecated values are only included for compatibility, and should not be used.
- 2. Note that there is no hyphen in the tag\_value, unlike ISO subdivisions like "GB-SCT".
- 3. Like the emoji flag sequences, these are used to request an image for whatever is currently the flag of the specified subregion. They are *not* intended to provide a mechanism for versioned representations of any particular flag image.
- 4. The choice of which emoji extended flag sequences to support is entirely up to platforms and programs. There is no requirement that any be supported.

**Review Note:** To promote interoperability, we expect to catalog those subdivision sequences that are commonly supported on platforms, as is done with ZWJ sequences.

## **Examples:**

Name	Image	Encoding
Flag for England		<u>gbeng</u> ◆
Flag for Scotland	×	<u>gbsct</u> ◆
Flag for Wales		<u>gbwls</u> ◆