Proposal to define Regional Indicator Sequences for England, Scotland, Wales and Northern Ireland

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1. Introduction

The mechanism for showing flag symbols for countries and territories in Unicode relies on the definition of two-letter alphabetical codes in ISO 3166-1. However, these codes are not an exact match to nation states, and include many territories that are not member states of the United Nations, such as Hong Kong, Macau, and Antarctica. This results in the anomaly that British Crown dependencies and overseas territories such as the Isle of Man, Jersey, Guernsey, and Gibraltar have defined Regional Indicator sequences, but there are no Regional Indicator sequences defined for the four component nations of the United Kingdom (England, Scotland, Wales and Northern Ireland), and hence there is no defined mechanism for representing the flags for these four nations in Unicode.

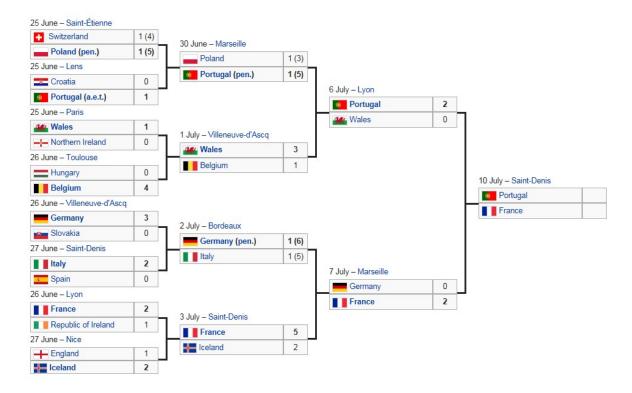
There is a pressing need to be able to represent flags for England (ENG), Scotland (SCT), Wales (WLS) and Northern Ireland (NIR) in Unicode because these four nations are represented as separate countries in many international sporting events, including:

- FIFA World Cup (for football) [ENG, SCT, WLS, NIR]
- UEFA European Championship (for football) [ENG, SCT, WLS, NIR]
- Rugby World Cup [ENG, SCT, WLS]
- Cricket World Cup [ENG, SCT]
- Commonwealth Games [ENG, SCT, WLS, NIR]

When competitions such as these are held supporters want to be able to show support for their team on the internet (and especially on social media) by displaying the flag of their team. At the recent 2016 UEFA European Championship, three of the participating teams were England, Wales and Northern Ireland, and although Twitter provided hashflags for all participating teams, it was not possible for internet users to interchange flags representing these three countries across applications using Unicode.

With the 2018 FIFA World Cup qualification matches starting in September 2016, and the competition including England, Scotland, Wales and Northern Ireland teams, there is a pressing need to finally resolve the current unfortunate situation, and define a mechanism for representing flags for England, Scotland, Wales and Northern Ireland in Unicode.

Knockout phase of 2016 UEFA European Championship showing flags of all participating countries, including England, Wales and Northern Ireland



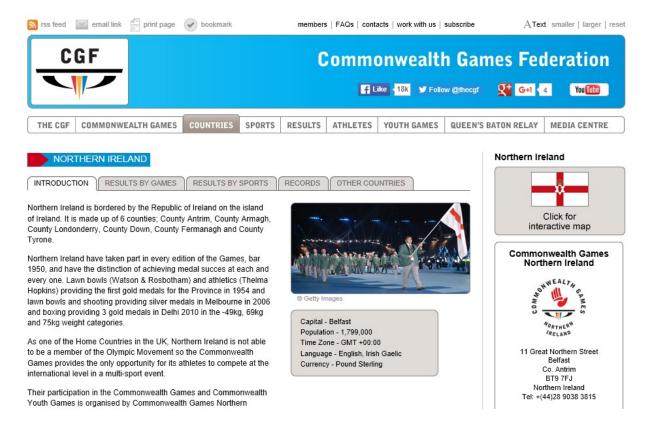
https://en.wikipedia.org/wiki/UEFA_Euro_2016

Tweet showing Twitter's hashflags, including Wales, England and Northern Ireland



https://twitter.com/BBCRadioWales/status/750793865095999489

Countries of the Commonwealth Games: Northern Ireland



http://www.thecgf.com/countries/intro.asp

Teams qualified for the Rugby World Cup 2019

Qualified Teams

Below are the 12 teams that have qualified for Rugby World Cup 2019 to date. Click on each of the team names to find out more.



http://www.rugbyworldcup.com/teams

2. Scope of this Proposal

Some people have indicated a wish to be able to represent as Unicode characters the flags for any and all sub-national entities, such as the states of USA, the provinces and territories of Canada, and the counties of the UK. Whilst it may be desirable in the long term to be able to represent flags for such sub-national entities using an extended Regional Indicator sequence syntax or a tag-based language, there is no pressing urgency to do so as these sub-national entities do not participate in international events at the national level.

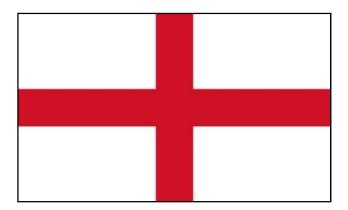
It is also the case that some autonomous regions of some countries have vigorous independence movements, and supporters of independence for these regions obviously want to be able to display the flag of their 'country'. I think that it would be highly inappropriate for the Unicode Standard to appear to support or endorse particular independence movements by defining a mechanism for displaying flags for such regions solely on the basis of popular demand. There are, for example, high profile independence movements for Catalonia (currently part of Spain) and Tibet (currently part of China), and images of flags for Catalonia and Tibet are widely used on the internet. However, as neither Catalonia nor Tibet participates in major international sporting events at the national level (Catalonia has a national football team, but it is not affiliated with either FIFA or UEFA), it would be inappropriate to define a mechanism in Unicode for displaying flags for Catalonia and Tibet separately from a general mechanism for representing flags of sub-national entities.

There is also a demand to be able to represent flags for non-governmental entities such as organizations and popular movements. In particular, there have been recent calls to encode a rainbow flag representing the LGBT movement, and a red-and-black flag representing the anarcho-syndicalist movement. Such flags should not be represented using the Regional Indicator mechanism, but should be considered for encoding as atomic characters in the Unicode and ISO/IEC 10646 standards on their individual merits.

In consideration of the above, I propose that only flags for sub-national entities that regularly participate in major international events at the national level should be represented using the mechanism proposed in this document. Currently, only England, Scotland, Wales and Northern Ireland qualify for consideration.

3. Flags for England, Scotland, Wales and Northern Ireland

The flag of England is:



The flag of Scotland is:



The flag of Wales is:



Due to the troubled political history of Northern Ireland, there is currently no official flag for Northern Ireland. However, the flag that was officially used from 1953 to 1972 is usually used by Northern Ireland teams when participating in international sporting competitions (see examples shown above), and implementers may wish to use this flag. As the Unicode Standard only defines the Regional Indicator sequences to represent flags for countries and territories, and does not define or depict the flag glyph, it is sufficient for the Unicode Standard to define a Regional Indicator sequence representing the flag for Northern Ireland, and leave it to implementers to decide what the appropriate flag glyph should be.

4. Proposal

There are several possible mechanisms for adding flag symbols for England, Scotland, Wales and Northern Ireland. Perhaps the simplest approach would be to encode four new characters at discrete code points. However, this would not be a good solution as: a) it sets a precedent for encoding other sub-national flag symbols as atomic characters; b) it would take at least a year for the characters to be encoded; and c) it means that the standard would have to define a flag glyph for Northern Ireland.

Another approach previously considered by the UTC is to use sequences of a base flag character followed by tag characters to represent ISO 3166-1 codes and ISO 3166-2 country subdivision codes. In my opinion, this mechanism is overly complex and liable to unforeseen implementation issues, and so should not be adopted without public consultation and detailed analysis of possible problems.

I therefore propose using the existing Regional Indicator mechanism to define flags for England, Scotland, Wales and Northern Ireland. There are two possible ways of doing this. Firstly, the Unicode Standard could define sequences of two letters that are unassigned in ISO 3166-1 for England, Scotland, Wales and Northern Ireland. The standard already does this for the flag of the European Union, which is assigned to the Regional Indicator sequence EU, corresponding to the exceptionally reserved two-letter code EU in ISO 3166-1. However, there are no exceptionally reserved codes for England, Scotland, Wales and Northern Ireland in ISO 3166-1, and unilaterally making use of an unassigned code risks serious problems in years to come if the ISO 3166-1 code is assigned to another country. However, ISO 3166-1 does reserve forty-two user-assigned two-letter codes: AA, QM to QZ, XA to XZ, and ZZ. The Unicode Standard already assigns the flag for Kosovo to the Regional Indicator sequence XK, corresponding to the ISO 3166-1 user-assigned code XK. I therefore propose that the following Regional Indicator sequences corresponding to ISO 3166-1 user-assigned codes are defined in the Unicode Standard as the flags for England, Scotland, Wales and Northern Ireland:

- RIS X + RIS E (XE) = flag for England
- RIS X + RIS S (XS) = flag for Scotland
- RIS X + RIS W (XW) = flag for Wales
- RIS X + RIS N (XN) = flag for Northern Ireland

As far as I know, these do not conflict with any other major use of the ISO 3166-1 user-assigned two-letter codes.

An important advantages of this mechanism is that the only change required to the Unicode Standard is to update emoji-sequences.txt, and changes to emoji data may be made outside the Unicode release schedule or within the context of an update version of the standard. Thus, the emoji data could be updated for the new Regional Indicator sequences, and vendors could start to implement them, well before the scheduled release of Unicode 10.0 in June 2017.

5. Regional Indicator Sequence Stability

If in the future, standard ISO 3166-1 codes are assigned to any of England, Scotland, Wales or Northern Ireland, then the corresponding X sequence in the Unicode Standard can be deprecated. However, it should not be undefined as that would affect existing data. To this end I suggest adding a Regional Indicator Sequence stability guarantee to the Unicode Character Encoding Stability Policies (http://unicode.org/policies/stability_policy.html), to the effect that Regional Indicator sequences will not be removed or their meanings substantively redefined, even if the corresponding ISO 3166-1 two-letter code is unassigned or reassigned. The implication of this is that if in the future an existing ISO 3166-1 two-letter code is reassigned to a different country or territory, the Unicode-defined Regional Indicator sequence will still refer to the flag for the original country or territory, and the flag for the new country or territory will have to be represented by a new Regional Indicator sequence corresponding to an ISO 3166-1 user-assigned code.