Re: Unicode Release Schedules From: ICU & CLDR Committees

To: UTC

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The Unicode committees came up with the fixed annual Unicode and CLDR release schedules some time ago, and for the most part it has worked well. In particular, (a) it has been very valuable for Unicode implementers to have a predictable schedule for Unicode, CLDR, and ICU; (b) some people are involved in more than one project, so we have to make sure that we are not resource-starved.

Problems

However, it has become clear that the current schedule is not optimal for implementers. In particular, implementers need Unicode releases (new characters, updated properties) earlier in the year. To some extent this reflects the shift to mobile, which has a longer cycle (integration; developer release; vendor development; carrier development; carrier release) with major device launches in Q4 for the Christmas shopping season.

On a smaller scale, it's become clear that we really want the final-candidate of CLDR to be done a few weeks before ICU, but not have the official release of CLDR until basically the same time as ICU. Trying to space them out just led to more work, since we inevitably needed a dot-dot release of CLDR to address problems exposed by the integration into ICU. The following table takes that into account.

Current Releases

CLDR1α	02-15
Unicodeβ	03-15
CLDR1/ICU1	03-30
Unicode release	06-15
CLDR2α	08-15
CLDR2/ICU2	09-30

In particular, this year to get a usable release for ICU for implementers earlier than the Unicode release, it required a lot of extra work, including patches to ICU. Due to this, ICU 59 has a mix of mostly Unicode 9.0, emoji 5.0, Unicode 10 beta bidi, and Unicode 10 beta segmentation, without other new properties like GC and Name. (Bidi & segmentation are needed for reasonable support of new emoji.)

But even without emoji, the overall schedule of the Unicode, CLDR, and ICU releases is not timed right for a mobile world. In an ideal world, Unicode would release enough in advance of the ICU spring release so that it can be incorporated in. This would also mean that Unicode gets into the hands of most implementers much faster, since there is no longer a ~3 month wait between when Unicode comes out and when ICU does. (And an even longer wait until a Unicode release is available on mobile devices.)

Proposal

The ICU and CLDR committees propose moving the Unicode release up by 3.5 months, to late February. Essentially, that means shifting the schedule forward by a quarter, so a Unicode beta after the Q4 meeting, not the Q1 meeting.

Proposed Schedule starting with 2017q4

Date	Event	Comments
Oct w3 or w4	UTC meeting	Final code points for Unicode characters (inc emoji). Properties (names, etc.) not final
Nov w2 or w3	Unicode beta	Start beta for UCD for next major version
Jan w3 or w4	UTC meeting	Close Unicode beta Finalize Unicode release contents
Feb w2 or w3	CLDR final candidate	= release-branch. Trunk available for next release
Feb w3 or w4	Unicode release	Including emoji
Mar w3 or w4	CLDR&ICU release	Including recently released Unicode & emoji
Aug w3 or w3	CLDR final candidate	= release-branch. Trunk available for next release
Sept w3 or w4	CLDR&ICU release	

Transition

There would be a one-time change: Unicode 11 would be a "smaller" release: It would likely need to hold off on including some characters that wouldn't be far enough through the ISO process yet — those would need to go into Unicode 12. Successive versions would have a full year cycle again.

Issues

The main barriers to adoption of this new schedule appear to be the following, so we'd need to figure out approaches to those. Other issues may come up in discussion.

- 1. Contention for resources
- 2. Coordination with ISO