Charts WG Report to UTC #189

Liang Hai, UTC Charts Working Group
October 24, 2026

Meetings since the last report: August 14, August 21, August 28, September 11, September 18, September 25, October 9.

Meeting participants:

- Huang Junliang 黄俊亮 (new participant since last quarter)
- Jan Kučera
- Ken Whistler
- Kushim Jiang 姜兆勤 (new participant since last quarter)
- Liang Hai 梁海 (vice-chair)
- Michel Suignard (chair)
- Peter Constable

Contents:

1. Version 18.0 recap
2. Version 19.0 plan
3. Previous versions of the code charts
4. Public feedback
    4.1 L2/26-211: Feedback regarding Unicode 18 additions
    4.2 PRI #556: Other Feedback for UTC #189

Recommendations:

> **Action Item** for Ken Whistler, CHARTS: Make appropriate changes to NamesList.txt, for Unicode Version 19.0. [Ref: 4.1 in L2/26-240]

1. Version 18.0 recap

Major changes:

- **Block-by-block charts** (previously known as “unversioned charts”) are now archived per version (eg, 18.0 charts).

    - On the release day, the 17.0 block-by-block charts were also archived in this way. See section 3 for our plan for earlier versions.
- The remaining three types of **auxiliary charts** have been revamped:
    - The collation and casing auxiliary charts, along with their new index page that's parallel to the main chart index page, are now maintained by Ken Whistler.
    - The names list auxiliary charts are now maintained by Liang Hai. This project takes advantage of our next-generation NamesList.txt parser as well as our source controlled representative glyphs. Now character entries have permalinks and their cross-references are clickable (eg, U+00A0).
- URLs for what used to exist under the unversioned directory https://unicode.org/charts/ (but are now archived per version) are now permanently **redirected** to their new locations under /Public/latest/charts/, which are further temporarily redirected to the current version.
    - For example, /charts/PDF/U0080.pdf is redirected to /Public/18.0.0/charts/PDF/U0080.pdf.
    - Note it's intentional that only index URLs of auxiliary charts are redirected. Because of the original <frameset> user experience, we don't consider URLs like /charts/collation/chart_Latin.html (see its archived 17.0 version) a public API.

The **French charts** haven't been updated to 18.0 yet, because we're still waiting for the translated NamesList.txt in order to produce them. Currently the index page at /Public/18.0.0/charts/fr/ is a copy from 17.0, with a banner noting the temporary unavailability, and all links on the page to code charts are redirected to 17.0.

Our source controlled **representative glyphs** resource now includes all the source-specific glyphs of Han and Seal characters, and they're already used in the core spec for prerendering Han characters. On the other hand, the default spacing of representative glyphs in the core spec has been changed from the outline bounds (because these glyphs don't have reliable widths) to the union of the width and the outline bounds.

2. Version 19.0 plan

The code chart sources are ready for all characters currently targeted for 19.0. If characters that haven't been provisionally assigned yet get approved at this UTC, we will need their chart fonts as soon as possible in order to produce the alpha charts.

We plan to stop publishing /Public/<version>/charts/(fr/)Readme.txt (eg, the 18.0 version). We do not plan to redirect those URLs, because they are meant for humans, and their function has been replaced by the index.html and About.html.

There will be no directory structure changes for the charts for 19.0.

For the names list auxiliary charts, we plan to achieve functionality parity with Unibook in terms of chart production, so we can start validating if the tooling is a viable replacement for Unibook. But we will continue using Unibook for chart production in the foreseeable future.

3. Previous versions of the code charts

Version-specific archives of the block-by-block charts (previously known as “unversioned charts”) are now available for 18.0 and 17.0. We have located archives of them for earlier versions, from 16.0 back to 5.0. We plan to soon make those earlier versions available at /Public/<version>/charts/PDF/U*.pdf, but notably without an index.html.

4. Public feedback

4.1 L2/26-211: Feedback regarding Unicode 18 additions

> ***Comments:*** We will review this document and make appropriate changes to the names list. However, note that in general, encyclopedic additions go beyond the requirement for annotations to help with identification of characters.
> **Action Item** for Ken Whistler, CHARTS: Make appropriate changes to NamesList.txt, for Unicode Version 19.0. [Ref: 4.1 in L2/26-240]

4.2 PRI #556: Other Feedback for UTC #189

Date/Time: Sat Aug 29 07:27:19 PT 2026
ReportID: ID20260829072719
Name: Kang Seonghoon
Report Type: Report Error in Publication/Data
Opt Subject: U+031C refers to a wrong character

```
In NamesList.txt from UCD 17.0.0:

031C    COMBINING LEFT HALF RING BELOW
```

```
    * IPA: open variety of vowel
    x (modifier letter down tack - 02D5)
031D    COMBINING UP TACK BELOW
    * IPA: vowel raising or closing
    x (modifier letter up tack - 02D4)
    x (combining up tack above - 1DF5)
031E    COMBINING DOWN TACK BELOW
    * IPA: vowel lowering or opening
    x (modifier letter down tack - 02D5)
    x (combining down tack above - 1ADB)

Apparently the reference for U+031E was incorrectly copied to U+031C. In my
understanding there is no character named MODIFIER LETTER LEFT HALF RING BELOW
(U+02BF is close but different) so the reference should be simply removed.
```

Comments: This has been fixed for 19.0.

Date/Time: Wed Sep 23 08:11:26 PT 2026
ReportID: ID20260923081126
Name: Denis Moyogo Jacquerye
Report Type: Report Error in Publication/Data
Opt Subject: Annotation of Latin small letter q with hook tail

```
In Unicode 18.0 an annotation was added to 024B q LATIN SMALL LETTER Q WITH HOOK
TAIL following the addition of English Phonetic Alphabet (EPA) characters based
on L2/24-277
https://www.unicode.org/L2/L2024/24277-epa-proposal-fifth-edition.pdf. This
modification didn't not appear in the 18.0 Delta Charts index.

The Unicode 18.0 charts show:

024B q LATIN SMALL LETTER Q WITH HOOK TAIL
• this is actually a small letter alpha with a hook tail

This is inaccurate. The letter is a small letter alpha with a hook tail in the
EPA, not in other systems.

The character q LATIN SMALL LETTER Q WITH HOOK TAIL was proposed in L2/04-348
https://www.unicode.org/L2/L2004/04348-phonetic.pdf for use in  Lutheran
missionaries orthographies for the Numanggang (until 2002) and Kâte languages of
Papua New Guinea. It is also used in the related Kube language orthography. In
those orthographies, the q LATIN SMALL LETTER Q represents [kp] and the q LATIN
SMALL LETTER Q WITH HOOK TAIL represents [gb]. The letter is not related to alpha
in those systems.

The annotation should clarify the use in EPA, not in general:

024B q LATIN SMALL LETTER Q WITH HOOK TAIL
• In the English Phonotypic Alphabet, this is actually a small letter alpha with
a hook tail
```

Comments: This has been fixed for 19.0.