Recommendations of the source code working group for UTC #173

To: PAGFrom: Robin Leroy, Source code ad hoc working groupDate: 2022-10-28

The source code ad hoc working group was created by consensus <u>170-C2</u> of the UTC, on the recommendation of the Properties & Algorithms Group, as described in document <u>L2/22-007R2</u>, section "Proposed Plan", with Mark Davis as the chair.

The source code ad hoc working group recommends that the PAG recommend that the UTC take the following dispositions:

- 1. The UTC notes document <u>L2/22-233</u> "Process report from the source code working group", but takes no further action.
- Consensus: Accept the proposals in <u>L2/22-229R</u> "Proposed changes to Unicode properties and reports for source code handling" for changes to the proposed updates of UAX #9, UAX #14, UAX #31, UTS #39, and UTS #51, to the property Other_ID_Continue, and to emoji variation sequences, for Unicode Version 15.1.
 - a. Action Item for Mark Davis, PAG: Add the zero width joiner and non-joiner to Other_ID_Continue and its derivative properties, as described in P/(A) of <u>L2/22-229R</u>, for Unicode Version 15.1.
 - b. Action Item for Mark Davis, ESC: Add sequences to emoji-variation-sequences.txt as described in section P/(B) of L2/22-229R, for Unicode Version 15.1.
 - c. Action Item for Mark Davis, PAG: incorporate the changes to UAX #9 described in <u>L2/22-229R</u> into the proposed update, for Unicode Version 15.1.
 - d. **Action Item** for Robin Leroy, PAG: incorporate the changes to UAX #14 described in L2/22-229R into the proposed update, for Unicode Version 15.1.
 - e. **Action Item** for Robin Leroy, PAG: incorporate the changes to UAX #31 described in <u>L2/22-229R</u> into the proposed update, for Unicode Version 15.1.
 - f. Action Item for Mark Davis, PAG: incorporate the changes to UTS #39 described in L2/22-229R into the proposed update, for Unicode Version 15.1.
 - g. Action Item for Mark Davis, ESC: incorporate the changes to UTS #51 described in L2/22-229R into the proposed update, for Unicode Version 15.1.
 - h. Action Item for Robin Leroy, Murray Sargent, PAG: Incorporate a discussion of programming language identifiers into a future revision of UTR #25.
- 3. **Consensus:** Authorize a Proposed Draft Unicode Technical Standard #55, Unicode Source Code Handling, as described in document <u>L2/22-229R</u> "Proposed changes to Unicode properties and reports for source code handling", for Unicode Version 15.1.
 - a. Action Item for Robin Leroy, PAG: incorporate the text from <u>L2/22-229R</u> into the proposed draft UTS, for Unicode Version 15.1.
 - b. Action Item for Mark Davis, PAG: Draft a proposed update of UTR #36 that incorporates references to the proposed UTS #55.
- 4. The UTC notes documents <u>L2/22-230</u> "Mathematical notation profile for default identifiers", <u>L2/22-231R</u> "Mixed-script detection in identifier chunks", and <u>L2/22-232</u> "Unicode identifier styles", but takes no further action.

Note: These are rationales for some of the proposals in <u>L2/22-229R</u>.

- 5. **Consensus:** The UTC recommends to the officers that they establish a Category A liaison between The Unicode Consortium and <u>ISO/IEC_JTC_1/SC_22</u> (Programming languages, their environments and system software interfaces), with Robin Leroy as the liaison officer.
- 6. Action Item for Asmus Freytag, PAG: Add support for sequence-to-sequence confusables in UTS #39, for a future version of Unicode.
- 7. Action Item for Asmus Freytag, PAG: In UTS #39, define a style of confusable detection that does not treat as confusable those characters that are commonly used together and are distinct in fonts used in programming environments $(1/I/1/1, 0/\sigma, 0/0)$, and recommend its usage in UTS #55, for a future version of Unicode.
- 8. Action Item for Asmus Freytag, PAG: Define a way to identify the characters with good confusable data regardless of their usage (perhaps as part of Identifier_Type), and recommend its usage in UTS #55, for a future version of Unicode.
- 9. Document <u>L2/22-267</u> "Comments on L2/22-230 "Mathematical notation profile for default identifiers"" is a late contribution which requires further discussion within the SCWG.