INTERNATIONAL ORGANISATION FOR STANDARDISATION

**ORGANISATION INTERNATIONALE DE NORMALISATION**

**ISO/IEC JTC1/SC 29/WG 3**

**CODING OF MOVING PICTURES AND AUDIO**

**ISO/IEC JTC1/SC 29/WG 3/M57032**

**July 9, 2021**

**Source: AHG on Font Format**

**Status: Contribution to the 4th SC29/WG3 (MPEG Systems) Meeting**

**Title: Report of the AHG on Font Format**

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# Ad Hoc group mandates

1. Review and discuss the text of of ISO/IEC CD 14496-22 Committee Draft amendment.
2. Explore potential future changes and updates, and propose new work items (if applicable) for consideration in the future new edition of the OFF specification.

# Input Contributions for this meeting

|  |  |
| --- | --- |
| m57032 | Report of the AHG on Font Format |
| m57280 | Proposed changes and updates for ISO/IEC 14496-22 AMD2 |

# AHG Activities

* + - 1. Moderate level of COLR v1 related discussions [to address the first mandate of the AHG] have happened in the [public GitHub repo](https://github.com/googlefonts/colr-gradients-spec), where many AHG members are active participants and collaborators. Based on the implementers’ input, these discussions were mainly centered on improving the encoding efficiency of various Paint Formats.
      2. Summary of discussions and proposed changes (see m57280 for details):
* *Provide dedicated Paint formats to support specific and frequently used transform types.*  
  Adding reduced-precision Paint formats supporting frequently used transformations such as Scale, ScaleAroundCenter, Rotate, RotateAroundCenter, Skew, SkewAroundCenter, etc. (and their variation-enabled versions) substantially improves color glyphs encoding efficiency.
* *Optimize the use of transforms via offsets.*
* *Remove support for virtual glyph IDs.*
* *Editorial improvements and updates.*

# AHG Recommendations

The AHG recommends to review and accept the proposed changes (with modifications if necessary, based on the break-out group discussions), and to update the text of the Committee Draft of ISO/IEC 14496-22:2019 AMD2.

The AHG also recommends that the updated Committee Draft of ISO/IEC 14496-22:2019 AMD2 be published under ballot immediately after the WG3 meeting to allow sufficient time for ballot comments, and to have the comments available for the next WG3 meeting in October 2021.