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/M56303**

**April 16, 2021**

**Source: AHG on Font Format**

**Status: Contribution to the 3rd SC29/WG3 (MPEG Systems) Meeting**

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

**Author: Vladimir Levantovsky, on behalf of AHG**

# Ad Hoc group mandates

1. Review and discuss the text of Working Draft amendment of ISO/IEC 14496-22:2019\_AMD2 to improve and update COLR v1 table / data structure descriptions.
2. Discuss clarifications and updates to other parts of the OFF specification, and submit AHG recommendations for proposed changes to address identified technical issues.

# Input Contributions for this meeting

|  |  |
| --- | --- |
| m56303 | Report of the AHG on Font Format |
| m56339 | Adding support for sweep gradients in ISO/IEC 14496-22 AMD2 |
| m56340 | Clarifying interpolation of colors in ISO/IEC 14496-22 AMD2 |
| m56341 | Clarifying linear and radial gradients in ISO/IEC 14496-22 AMD2 |
| m56342 | Adding support for non-variable paint table formats in ISO/IEC 14496-22 AMD2 |
| m56343 | Proposed additional updates in ISO/IEC 14496-22 AMD2 |

# AHG Activities

* + - 1. The vast majority 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. Covering a variety of topics, these discussions were mainly centered on addressing the issues that were identified at the 2nd WG3 MPEG Systems meeting summarized in the break-out group (BOG) report (see **m56219** from the last meeting), and the results of the discussions and proposed changes were also summarized in the [MPEGGroup/OpenFontFormat GitHub repo](https://github.com/MPEGGroup/OpenFontFormat/issues), see issues 41 – 45 for details.
      2. Summary of discussions and proposed changes relevant to the AHG mandates:
* *Updates to COLR v1 tables / data structures specification.*  
  Substantial amount of proposed changes are addressing issues identified during the BOG discussion and documented in **m56219**.   
  **m56340**: The contribution addresses the issues related to color interpolation that were not sufficiently specified in the Working Draft of AMD2;  
  **m56341**: The contribution proposes updated language to address the various issues related to descriptions of linear and radial gradients;
* *Proposed new changes and amendments.*  
  Three additional proposals introduce proposed new changes.  
  **m56339**: The contribution proposes adding support for sweep color gradients, in addition to linear and radial gradients that are already a part of the amendment;  
  **m56342**: The contribution proposes additional paint formats that can be used in non-variable fonts resulting in a significant increase of coding efficiency and eliminating the variable font “size tax” (see [issue 43](https://github.com/MPEGGroup/OpenFontFormat/issues/43) for details);  
  **m56343**: The contribution proposes additional miscellaneous updates that have been discussed on the AHG list (‘DSIG’ table and algorithm description), including corrections and updates to other parts of the OFF text (see [issue 45](https://github.com/MPEGGroup/OpenFontFormat/issues/45) for details).

# AHG Recommendations

The AHG recommends to accepted all proposed changes, and to implement them as part of the Working Draft of ISO/IEC 14496-22:2019 AMD2.

The AHG also recommends that the updated Working Draft of ISO/IEC 14496-22:2019 AMD2 should be promoted to Proposed Draft Amendment stage, and that a two-months ballot is opened upon the conclusion of the WG3 meeting to allow sufficient time for ballot comments be processed at the next WG meeting in July 2021.