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/M63628**

**July 12, 2023**

**Source: AHG on Font Format**

**Status: Contribution to the 12th SC29/WG3 (MPEG Systems) Meeting**

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

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# Ad Hoc group mandates

1. Review the text of the updated Working Draft of ISO/IEC 14496-22 5th edition (WG03N0847).
2. Review the content of “Technologies under consideration for ISO/IEC 14496-22 5th edition Open Font Format” document (WG03N0888) and provide recommendations for the WG3 on if / how these changes can be integrated in the “Open Font Format” standard.
3. Explore potential future changes and updates and propose new items (if applicable) for consideration in the 5th edition of the OFF specification.

# Input Contributions for this meeting

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| --- | --- |
| m63628 | Report of the AHG on Font Format |
| m64287 | Updating AVAR table in OFF to support the needs of modern computing platforms. |

# AHG Activities

* + - * The updated text of the ISO/IEC 14496-22/WD (MDS22589\_WG03\_N00847) and the new “Technologies under consideration for ISO/IEC 14496-22” document (MDS22631\_WG03\_N00888) were published for public review on May 4, 2023. In the time that followed, new discussions have been mostly focused on proposed improvements and new functionality for the OFF standard described in the TuC document (N00888).
			* As a result of active email exchange and the AHG Zoom call conducted on July 6, 2023, the following topics were discussed and recommendations were made:
			- Recommend the submission of the proposed changes to 'avar' (version 2) as a separate input contribution and recommend adoption of these changes as part of the next revision of the Working Draft OFF.
			- Prioritize further discussion and spec development work related to overcoming current 16-bit glyph ID limitation and extending the format capabilities to support large fonts that would include more than 64K glyphs. This work should be primarily focused on developing a mechanism that would be backward compatible, would allow new larger fonts to be compatible with older implementations (and essentially behave like currently supported fonts). The efforts for the next 6-9 months should be focused on this approach, until such time when the determination is made on whether achieving this goal is feasible and practical.
			- Postpone the work on the remaining parts described by the TuC document, namely 'glyf' table support for cubic Bezier curves and variable composites until the work on extending the 64K glyph limit is completed.

# AHG Recommendations

AHG would like to note that new functionality and updates described in the “Technologies under consideration” document (N00888) need to be discussed further, and their impact on existing specification and implementations needs to be carefully evaluated. The AHG also would like to note that while there is a strong interest and support from members in overcoming 64K glyph limit, the backward compatibility with many platforms and currently deployed implementations is a significant concern that warrants continued discussions.

The AHG recommends reviewing and adopting the proposed updates introducing ‘avar’ version 2 table in theISO/IEC 14496-22 Working Draft [summarized in m64287], and republish the updated version of the Working Draft text of the 5th edition of ISO/IEC 14496-22 making it available for public review.