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Standards for Audio

This month I want to update you on progress on the standards that are being developed to enhance the audio experience in cinema.

Technology committee TC-25CSS Cinema Sound Systems has several current projects aimed at improving the quality of sound in conventional movie theaters, as well as standardization of new immersive 3D systems.

One project group is developing a set of Recommended Practices that codifies and expands currently practiced measurement methodology using today's technology and analyzers into step-by-step procedure(s) for measuring and calibrating the frequency response and sound pressure levels of the B-chain sound system in indoor theater spaces. Most of the measurement and calibration work is complete and document drafting is now in full swing. The group is drafting three documents:


- RP 2096-1 Cinema Sound System Baseline Setup and Calibration
- RP 2096-2 Cinema Sound System Recurring/Maintenance Setup and Calibration

- EG 2096-x Engineering Guideline capturing the work done in this group as a knowledge document

TC-25CSS has a Working Group on Interoperability of Immersive Sound Systems in Digital Cinema. This working group has identified several areas of the D-Cinema architecture that require standardization to achieve interoperability of audio for systems with capability greater than 7.1. It is creating a suite of engineering documents, including standardizing a single object-based distribution file format and related protocols for interoperable

playback into a variety of theatrical speaker configurations.

To date the documents being drafted include the following:

- ST 2098-1 Immersive Audio Metadata
- ST 2098-2 Immersive Audio Bitstream Specification
- EG 2098-3: Immersive Audio Renderer Expectations
- RP 2098-4: Immersive Audio Renderer Interoperability Testing Procedure
- ST 2098-5: Digital Cinema Master Audio Channels and Soundfield Groups for Immersive Audio 

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UPCOMING STANDARDS MEETINGS

20–23 September 2017 (following IBC)
London, England
Hosted by Sky

4–8 December 2017
Santa Clara, CA, USA
Hosted by Arista

The outcome report from each of these meetings will be posted on the SMPTE website to report publicly on SMPTE standards activities.
The most recent meeting report is available at <https://www.smpte.org/standards/engineering-committees>.

Standards Update Webcasts are open to everyone interested in learning about SMPTE Standards. The standards development process is crucial to the motion imaging industry. The process by which SMPTE standards are developed is best understood by those directly involved in it, but now, anyone can learn about SMPTE Standards by participating in this unique opportunity “peek under the hood.” For more information, visit <https://www.smpte.org/webcasts>.