Notice and DRAFT agenda for the meeting of the SC-02-12 Working Group on audio applications of networks of the SC-02 Subcommittee on Digital Audio

To be held in conjunction with the upcoming AES 155th Convention. The meeting is scheduled to take place online, 2023-10. Please check the latest schedule at: http://www.aes.org/standards/

1. Formal notice on patent policy

2. Introduction to working group and attendees

3. Amendments to and approval of agenda
   Note that projects where there is no current proposal for revision or amendment, and where there is at least 12 months before any formal review is due, are listed in an annex to this agenda. Please let the chair know if you propose to discuss any projects in this annex.

4. Approval of report of previous meeting, held online, 2023-05.

5. Open Projects
   NOTE: One or more of these projects may be in the process of a formal Call for Comment (CFC), as indicated by the project status. In these cases only, due process requires that any comments be published.

   **scope:** This standard defines an interoperability mode for transport of high-performance audio over networks based on the Internet Protocol. For the purposes of the standard, high-performance audio refers to audio with full bandwidth and low noise. These requirements imply linear PCM coding with a sampling frequency of 44.1 kHz and higher and resolution of 16 bits and higher. High performance also implies a low-latency capability compatible with live sound applications. The standard considers latency performance of 10 milliseconds or less.
   **status:** Review for reaffirmation or revision
<table>
<thead>
<tr>
<th>intent: Review</th>
<th>initiated: 2018</th>
<th>intent target: 2023</th>
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<tbody>
<tr>
<td>goal: Revised Standard</td>
<td>goal target: Continuing</td>
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   **scope:** AES70 defines a scalable control-protocol architecture for the control and monitoring of professional media networks. AES70 addresses device control and monitoring only; it does not define standards for transporting streaming media or for describing media content. This Part 1 describes the models and mechanisms of the AES70 Open Control Architecture. These models and mechanisms together form the AES70 Framework. This document should be read in conjunction with Part 2, Class Structure and Part 3, TCP/IP communications protocol.
   **status:** Review for reaffirmation or revision
<table>
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<th>intent: Review</th>
<th>initiated: 2015</th>
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<tbody>
<tr>
<td>goal: Status report</td>
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AES70-2-R  Review of AES70-2-2018: AES standard for audio applications of networks - Open Control Architecture - Part 2: Class structure

scope: AES70 defines a scalable control-protocol architecture for professional media networks. X210 addresses device control and monitoring only; it does not define standards for streaming media transport. AES70 is divided into a number of separate parts. This Part 2 specifies the control class structure for X210 that defines the control and monitoring functional capabilities of the standard and should be read in conjunction with Part 1, Framework.

status: Review for reaffirmation or revision

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scope: AES70 defines a scalable control-protocol architecture for professional media networks. AES70 addresses device control and monitoring only; it does not define standards for streaming media transport. AES70 is divided into a number of separate parts. This Part 3 specifies a protocol implementation for TCP/IP networks. It should be read in conjunction with Part 1, Framework, and Part 2, Class Tree.

status: Review for reaffirmation or revision

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AES71-R  AES Recommended Practice: Loudness Guidelines for Over the Top Television and Online Video Distribution

scope: This AES document addresses OTT and OVD Loudness challenges by leveraging already established Over-the-Air Television practices, providing guidelines focused on the Loudness and Content Dynamic Range for connected set-top and mobile devices. When followed, these guidelines will: • Provide consistent Loudness across different Programs, service providers and advertising Content • Provide appropriate playback Loudness Range for different devices and listening conditions • Prevent excessive Peak Limiting or other processing from degrading the audio quality • Preserve the artistic intent of wide Dynamic Range content (movies, drama, live music) • Improve the listening experience

status: Review for reaffirmation or revision

<table>
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AES74-R  Review of AES74-2019 AES standard for audio applications of networks - Requirements for Media Network Directories and Directory Services

scope: This document sets forth technical recommendations for media network directories and directory-related services and mechanisms such as network discovery. It is hoped that this document will inform future industry directory and directory services standards.

status: Review for reaffirmation or revision

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AES77-R Loudness Guidelines for Internet Audio Streaming and On-Demand Distribution

**scope:** This document recommends appropriate loudness for streaming and On-Demand File Playback content to:

- Optimize distribution and the listener experience
- Recognize the evolutionary process by recommending a Distribution Loudness that is well-suited for current fixed and mobile listening, while creating awareness for Loudness Management using metadata encoded in streams and in future ANSI/CTA-2075 devices
- Recommend a consistent real-time Distribution Loudness for streams
- Ensure loudness consistency of on-demand files and online streams from different sources
- Provide loudness consistency within a specific online stream composed of different Long-form Content and Interstitials, which will alleviate loudness jumps when Interstitial Content (ads, promos, PSA’s) is inserted
- Prevent excessive peak limiting or other processing from degrading perceived audio quality
- Avoid loudness wars
- Encourage the use of audio metadata

Note that this document does not recommend Loudness Range (LRA), device target playback loudness or device dynamic range.

**status:** Review for reaffirmation or revision

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AES-X242 Streaming audio metadata over IP

**scope:** To define a standardized method for transporting metadata associated with audio in an AES67 stream. The audio metadata shall be transported in a separate stream that is sent in parallel to AES67 streams rather than part of the AES67 stream. The standard shall define synchronization between the audio metadata transport and the associated AES67 transport. The transmission method shall be low latency and have a level of network performance equivalent to AES67. Within the scope is formatting of the streaming audio metadata for transport. Suggested is an open standards based framework that supports both static and dynamic, time synchronous metadata that is optimized for live workflow applications. The standard shall consider all use cases for metadata associated with AES67, support existing AES audio metadata standards, and be extensible for future metadata requirements. The standard will consider binding between the audio metadata transport and the associated AES67 transport.

**status:** Waiting for input from SMPTE

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AES-X243 Audio applications of networks - Using AES70 for managing AES67 and SMPTE ST 2110-30 media stream connections.

**scope:** Define a new standard in the AES70 family for using the AES70-CM4 connection management mechanism to set up, manage, and tear down AES67 and SMPTE ST 2110-30 media stream connections.

**status:** Regular online meetings to generate text

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AES-X252 AES70 Milan Adaptation

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The document will specify a common way to control routing of AVDECC/Milan audio streams using an adaptation of the AES70 CM4 feature set. The document will also define a programmatic interface between AES70 and AVDECC software drivers that is suitable for implementing the defined adaptation.

AES-X258 Using AES70 to manage Audinate Dante® media transport

This standard specifies the use of AES70 to manage Audinate Dante® media stream connections between devices, where AES70 is used to control at least one of the devices, while other devices may be controlled using Audinate mechanisms or other out-of-scope means.

6. Liaisons
7. New Projects
8. New Business
9. Date of next meeting
Annex to the agenda

The following projects assigned to this group have no current proposal for revision or amendment, and no formal review is due to report in less than 12 months.

Please let the chair know if you propose to discuss any projects in this annex.


scope: to describe unique requirements for professional audio carried over 1394.
status: Stabilized

intended: Maintenance  initiated: 2019  intended: None
goal: None  goal target: None

AES-R10-R  Review of AES-R10-2008, AES standards project report - Use cases for networks in professional audio

scope: to identify and clarify use cases for networks in professional audio applications for Recording, Live sound, and Installations
status: Revision halted until effort available to re-start

intended: Revision  initiated: 2008-08-25  intended: 2013
goal: PTD  goal target: 2013-05

AES-R16  AES Standards Report - PTP parameters for AES67 and SMPTE ST 2059-2 interoperability

scope: Three profiles for Precision Time Protocol (PTP) might potentially be used in the professional media environment: the Peer-to-Peer Default PTP Profile of IEEE Std 1588-2008, the Media Profile of AES67 and the SMPTE Profile of SMPTE ST 2059-2. This report compares the profiles and identifies features and parameter ranges that should enable interoperability among equipment conforming to the different profiles.
status: Revised version published

intended: Report  initiated: 2016-04-23  intended target: none
goal: none  goal target: none


scope: This report summarizes the AES67 interoperability test event ("plugfest") held at the headquarters of British Broadcasting Corporation (BBC), London on 13 to 16 February 2017. Twenty four companies tested 36 products against each other to confirm interoperability. The results are presented, together with the results of a range of tests of optional operational modes described in the standard.
status: Report will be left unchanged

intended: Report  initiated: 2017-01-16  intended target: none
goal: none  goal target: none

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End of annex to agenda