

CEA Standards Update

New Fee Structure for CEA T&S Forum

The economic slowdown has affected many of CEA's members, and therefore it has affected CEA too. In the past CEA has been able to subsidize T&S Forums, covering all or most of the cost of meals, meeting rooms and audio/video support. Unfortunately we are no longer able to do this. Beginning with this fall's Forum we will have a registration fee for all participants of \$299 (\$475 if your company is not a CEA member).

There is an early bird discount if you register on or before August 7. People registering by that date will pay \$229 (\$399 if your company is not a CEA member).

If you're only going to be at the Forum for a day or two there is an option to pay \$100 per day (\$150 per day if your company is not a CEA member).

Anyone who registers after October 9 will pay higher rates than those quoted above.

So please register by August 7 and save.

Register online at <http://registration.experient-inc.com/ShowCES095/Default.aspx>. Or, if you prefer, a paper registration form is included at the end of this document.

New Projects

- ✚ CEA/CEDIA-CEB23, *Home Theater Video Design*
- ✚ CEA-2013-B, *Digital STB Background Power Consumption*
- ✚ CEA-2022-A, *Digital STB Active Power Consumption Measurement*

Recently Published ANSI Standards

- ✚ ANSI/CEA-2006-B, *Testing and Measurement Methods for Mobile Audio Amplifiers* (published June 2009)

Recently Published CEA Standards

- ✚ CEA-11 R-2009, *Turntable Measurement Standard* (published June 2009)

- ✚ CEA-762-B, *DTV Remodulator Specification* (published November 2008, ANSI public review closed 1/5/09, awaiting ANSI approval)
- ✚ CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channels* (published June 2009, ANSI public review closes 8/3/09)
- ✚ CEA-861-E Errata, *A DTV Profile for Uncompressed High Speed Digital Interfaces* (published April 2009)

Publications Nearing CEA Completion

- ✚ CEA-109-D, *Intermediate Frequencies for Entertainment Receivers* (reaffirmed 5/12/09, will be sent to ANSI for public review)
- ✚ CEA-516 R-2008, *Joint EIA/CVCC Recommended Practice for Teletext: North American Basic Teletext Specification (NABTS)* (reaffirmation approved 2/4/09)
- ✚ Pre-vote comments on the following CEBus-related standards were due 6/25/09. A vote to withdraw them is expected in late July.
 - ANSI/CEA-600.10 R-2004, Introduction to the CEBus Standard
 - ANSI/CEA-600.31 R-2004, Power Line Physical Layer and Medium Specification
 - ANSI/CEA-600.32 R-2004, Twisted Pair Physical Layer & Medium Specification
 - ANSI/CEA-600.33 R-2004, Coax Cable Physical Layer & Medium Specification
 - ANSI/CEA-600.34 R-2004, IR Physical Layer & Medium Specification
 - ANSI/CEA-600.35 R-2004, RF Physical Layer & Medium Specification
 - ANSI/CEA-600.37 R-2004, Symbol-Encoding Sublayer
 - ANSI/CEA-600.38 R-2004, Power Line/Radio Frequency Symbol Encoding Sublayer
 - ANSI/CEA-600.41 R-2004, Description of the Data Link Layer
 - ANSI/CEA-600.42 R-2004, Node Medium Access Control Sublayer
 - ANSI/CEA-600.43 R-2004, Node Logical Link Control Sublayer
 - CEA-600.45 R-2005, Node Network Layer Specification
 - CEA-600.46 R-2004, Node Application Layer Specification
 - ANSI/CEA-600.81 R-2004, Common Application Language (CAL) Specification
 - ANSI/CEA-600.82 R-2004, CAL Context Description

- CEA-633.10 R-2004, Introduction to EIA-600 Conformance Specification
- ANSI/CEA-633.37 R-2004, Symbol Encoding Sublayer Physical Layer Conformance
- ANSI/CEA-633.38 R-2004, PL and RF Symbol Encoding Physical Layer Conformance
- ANSI/CEA-633.42 R-2006, Node Data Link Layer Conformance
- CEA-633.46 R-2004, Node Application Layer Conformance Specification
- ANSI/CEA-721.1 R-2004, Generic Common Application Language (Generic CAL) Specification
- ANSI/CEA-721.2 R-2004, Generic CAL Context Description
- ANSI/CEA-721.3 R-2004, Node Application Layer Specification
- ANSI/CEA-721.4 R-2004, Generic Common Application Language Quality of Service
- ANSI/CEA-844 R-2005, XML Encoding of Generic Common Application Language
- ✚ ANSI/CEA-633.31 R-2000, *Power Line Physical Layer Conformance Specification* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA-633.32 R-2004, *Twisted Pair Physical Layer Conformance* (approved for withdraw 5/11/09, in final editorial review)
- ✚ CEA-633.34 *Infrared Physical Layer Conformance* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA-633.81, *CAL Conformance Specification* (approved for withdraw 5/11/09, in final editorial review)
- ✚ CEA-775.1, *Web Enhanced DTV 1394 Interface Specification* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA 776.1, *CEBus-EIB Router Communication Protocol - Description of the CEBus-EIB Router* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA-776.2, *CEBus-EIB Router Communications Protocol – CEBus-EIB Router Medium Access Control Sublayer* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA-776.3, *CEBus-EIB Router Communications Protocol - CEBus-EIB Router Logical Link Control Sublayer* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA-776.4, *CEBus-EIB Router Communication Protocol – CEBus-EIB Router Network Layer* (approved for withdraw 5/11/09, in final editorial review)
- ✚ ANSI/CEA-776.5, *CEBus-EIB Router Communications Protocol-The EIB Communications*
- Protocol* (approved for withdraw 5/11/09, in final editorial review)
- ✚ CEA-852-B, *Tunneling Component Network Protocols Over Internet Protocol Channels* (pre-vote comments due 7/8/09, this standard was approved 12/7/06 but publication was held pending completion of CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channel*, CEA-852-B is going through the review/approval process again before publication due to the length of time that's elapsed)
- ✚ CEA-2007, *QOS Priority Groupings for 802.1Q* (approved for withdrawal 5/11/09, in final editorial review)
- ✚ CEA-2008, *Digital Entertainment Network* (approved for withdrawal 5/11/09, in final editorial review)
- ✚ CEA-2017-A, *Common Interconnection for Portable Media Players* (vote scheduled for 7/29/09)
- ✚ CEA-2035 (aka J-STD-070), *Emergency Alert Signaling for the Home Network* (approved by ballot, in final editorial review)
- ✚ CEA-2037, *Determination of Television Average Power Consumption* (pre-vote comments due 7/12/09)
- ✚ CEA-CEB11-A, *NTSC/ATSC Loudness Matching* (recirculation ballot closed 4/2/09, second recirculation ballot pending)
- ✚ CEA-CEB12-B, *PSIP Recommended Practice*, (ballot closes 7/1/09)
- ✚ CEA-CEB15, *CRT X-Radiation Compliance Training Manual* (approved for withdrawal 2/4/09)
- ✚ CEA-CEB20, *A/V Synchronization Processing* (approved 5/12/09, in final editorial review)
- ✚ CEA-CPEB6-A, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products* (approved for withdrawal 5/13/09, in final editorial review)

Ongoing Work

- ✚ CEA-23-B, *Measurement Procedures for Determining Compliance with FCC Rules for “Cable-Ready Consumer Electronics Equipment”*
- ✚ CEA-544-C, *Low Frequency Immunity of Tuners in a Cable System*
- ✚ CEA-709.1-C, *Control Network Protocol Specification*
- ✚ CEA-709.2-B, *Control Network Power Line (PL) Channel Specification*
- ✚ CEA-851.2-A, *Security Services for the Versatile Home Network*
- ✚ CEA-861-F, *A DTV Profile for Uncompressed High Speed Digital Interfaces*
- ✚ CEA-909-B, *Antenna Control Interface*
- ✚ CEA-2009-B, *Performance Specification for Public Alert Receivers*

- ✚ Remote User Interface Test Specification for CEA-2014-A
- ✚ CEA-2014-B, *Web-based Protocol and Framework for Remote User Interface on UPnP™ Networks and the Internet (Web4CE)*
- ✚ CEA-2021, *Auto Discovery & Self-configuring Home Control Networks*
- ✚ CEA-2030-A, *Multi-Room Audio Cabling Standard*
- ✚ CEA-2034, *Standard Method of Measurement for In-Home Loudspeakers*
- ✚ CEA-2036, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products*
- ✚ CEA-CEB21, *Recommended DTV Audio Metadata Normalization Practices*

Summary of Projects by CEA Product Division

Audio

✚ Standard Audio Levels

The Audio Systems Committee approved withdrawal of CEA-CPEB6-A, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products* on 5/13/09. This bulletin defines preferred voltage and impedance values for inputs and outputs of generally available, mass produced, audio products and accessories. By following these guidelines manufacturers can facilitate the interconnection of products from different manufacturers and permit the addition of other products or accessories to integrated systems. The Audio Systems Committee has begun a new project that will result in a standard (CEA-2036) to replace CEA-CPEB6-A. CEA-CPEB6-A is now undergoing final editorial review.

✚ Turntable Measurement

The Audio Systems Committee reaffirmed CEA-11, *Turntable Measurement Standard* on 5/13/09. This standard provides the common basis for specification and measurement of performance of record playing equipment. It defines both primary and secondary performance specifications together with practical and simple methods of measuring these specifications.

✚ Public Alert Receivers

The Audio Systems Committee is beginning work on a revision to ANSI/CEA-2009-A, *Receiver Performance Specification for Public Alert Receivers*. This standard defines minimum performance criteria for consumer electronics products designed to receive all hazard alert signals broadcast by the National Oceanic and

Atmospheric Administration's (NOAA) Weather Radio Network. The revision effort will consider changes to the minimum set of features that compliant receivers must have, as well as changes to the performance criteria. Interested? Join [R3 WG4](#).

✚ Loudspeaker Performance

An Audio Systems Committee working group is currently developing CEA-2034, *Standard Method of Measurement for In-Home Loudspeakers*, which it hopes will describe a method for measuring and reporting frequency response and perhaps other loudspeaker characteristics in a manner that will be easy for non-technical consumers to understand. Interested? [Join R3 WG1](#).

Portable, Handheld & In-Vehicle Electronics

✚ Mobile Audio Amplifiers

The Mobile Electronics Committee published ANSI/CEA-2006-B, *Testing and Measurement Methods for Mobile Audio Amplifiers* in June 2009. This standard describes a method for testing the performance of mobile audio amplifiers and reporting the results.

✚ PDMI Connector

The Mobile Electronics Committee is nearing completion of CEA-2017-A, *Common Interconnection for Portable Media Players*. A vote has been scheduled for 7/29/09. This revised version of ANSI/CEA-2017 includes a "digital overlay" for the portable digital media interface (PDMI) connector. It enables both USB and DisplayPort signals to be carried over the connector, though in order to do this the "digital version" of the connector sacrifices some analog functionality available in the first version. It is hoped that this connector will eventually become a standard feature on vehicle dashboards, making it easy for consumers to plug their portable media devices into their vehicle power supplies and audio/video systems. Interested? Join [R6 WG15](#).

Home Networks

✚ CEBus

The Home Networks Committee approved the withdrawal of ANSI/CEA-633.31 R-2000, *Power Line Physical Layer Conformance Specification* on 5/11/09. This portion of the CEBus conformance standard specifies tests to determine conformance of a node's power line physical layer to IS-60. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA-633.32 R-2004, *Twisted Pair Physical Layer Conformance* on 5/11/09. This standard specifies tests to determine conformance of a device's Twisted Pair Physical Layer to CEA-600. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of CEA-633.34 *Infrared Physical Layer Conformance* on 5/11/09. This standard specifies tests to determine conformance of an infrared physical layer to IS-60. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA-633.81, *CAL Conformance Specification* on 5/11/09. This portion of the CEBus conformance standard specifies tests to determine conformance of a node's CAL to CEA-600.81. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA 776.1, *CEBus-EIB Router Communication Protocol - Description of the CEBus-EIB Router* on 5/11/09. This standard describes the operation of a CEBus-EIB Router. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA-776.2, *CEBus-EIB Router Communications Protocol – CEBus-EIB Router Medium Access Control Sublayer* on 5/11/09. This standard specifies a sublayer that is almost identical to the CEBus or EIB Node MAC Sublayer corresponding to the “CEBus side” or the “EIB side” of the router. The differences are in the way the Router does address matching on a received packet and on the information exchanged in some of the service primitives. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA-776.3, *CEBus-EIB Router Communications Protocol - CEBus-EIB Router Logical Link Control Sublayer* on 5/11/09. This standard specifies the CEBus-EIB Router Logical Link Control Sublayer interfaces to the Router Network Layer and to the Layer System Management. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA-776.4, *CEBus-EIB Router Communication Protocol – CEBus-EIB Router Network Layer* on 5/11/09. This standard defines interfaces between elements of the CEBus-EIB Router Network Layer. The document is now in final editorial review.

The Home Networks Committee approved the withdrawal of ANSI/CEA-776.5, *CEBus-EIB Router Communications Protocol-The EIB Communications Protocol* on 5/11/09. The European Installation Bus (EIB) is a control system for related applications in homes and buildings. The document is now in final editorial review.

The Home Networks Committee is now reviewing and considering the possible withdrawal of the following CEBus-related standards:

- ANSI/CEA-600.10 R-2004, Introduction to the CEBus Standard
- ANSI/CEA-600.31 R-2004, Power Line Physical Layer and Medium Specification
- ANSI/CEA-600.32 R-2004, Twisted Pair Physical Layer & Medium Specification
- ANSI/CEA-600.33 R-2004, Coax Cable Physical Layer & Medium Specification
- ANSI/CEA-600.34 R-2004, IR Physical Layer & Medium Specification
- ANSI/CEA-600.35 R-2004, RF Physical Layer & Medium Specification
- ANSI/CEA-600.37 R-2004, Symbol-Encoding Sublayer
- ANSI/CEA-600.38 R-2004, Power Line/Radio Frequency Symbol Encoding Sublayer
- ANSI/CEA-600.41 R-2004, Description of the Data Link Layer
- ANSI/CEA-600.42 R-2004, Node Medium Access Control Sublayer
- ANSI/CEA-600.43 R-2004, Node Logical Link Control Sublayer
- CEA-600.45 R-2005, Node Network Layer Specification
- CEA-600.46 R-2004, Node Application Layer Specification
- ANSI/CEA-600.81 R-2004, Common Application Language (CAL) Specification
- ANSI/CEA-600.82 R-2004, CAL Context Description
- CEA-633.10 R-2004, Introduction to EIA-600 Conformance Specification
- ANSI/CEA-633.37 R-2004, Symbol Encoding Sublayer Physical Layer Conformance
- ANSI/CEA-633.38 R-2004, PL and RF Symbol Encoding Physical Layer Conformance
- ANSI/CEA-633.42 R-2006, Node Data Link Layer Conformance
- CEA-633.46 R-2004, Node Application Layer Conformance Specification
- ANSI/CEA-721.1 R-2004, Generic Common Application Language (Generic CAL) Specification

- ANSI/CEA-721.2 R-2004, Generic CAL Context Description
- ANSI/CEA-721.3 R-2004, Node Application Layer Specification
- ANSI/CEA-721.4 R-2004, Generic Common Application Language Quality of Service
- ANSI/CEA-844 R-2005, XML Encoding of Generic Common Application Language

Interested in participating? [Join R7 WG2](#).

LonTalk®-based Control Network Protocol

The Home Systems Control Subcommittee is working on CEA-709.1-C, *Control Network Protocol Specification*. This standard describes a control network protocol that can be used over different physical links. This protocol is suitable for implementing both peer-to-peer and master-slave system strategies. Interested? [Join R7.1](#).

Web Enhanced 1394 Interface

The Home Networks Committee is planning to withdraw CEA-775.1, *Web Enhanced DTV 1394 Interface Specification*. This standard describes a method for allowing a TV or other video display to present graphics associated with the remote control of an associated source of MPEG video, such as a set-top box or digital video recorder. A vote is scheduled for 5/11/09. Interested? [Join R7](#).

Security Services for Versatile Home Network

The Home Networks Committee is working on CEA-851.2-A, *Security Services for the Versatile Home Network*. This standard defines security services for the home network defined in ANSI/CEA-851-A, *Versatile Home Network*. It assumes a VHN that is digital and IP-based, and that uses web tools like HTTP for device control. Interested? [Join R7](#).

IP Tunneling

The Home Systems Control Subcommittee is reviewing CEA-852-B, *Tunneling Component Network Protocols Over Internet Protocol Channels* again. This standard specifies a communications method that allows networked data acquisition and control devices to communicate with each other over the Internet. It was approved on 12/7/06, but publication was held pending completion of CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channel*. Now that CEA-852.1 has been approved CEA-852-B is going through the review and approval process again prior to

publication because so much time has passed since it was first approved. Pre-vote comments are due 7/8/09.

The subcommittee approved CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channels* on 5/8/09. This standard will now be sent to ANSI for public review. It addresses limitations in the CEA-852-B protocol and provides improvements in performance, scalability, and robustness. Some of the provisions in CEA-852.1 might not be backward compatible with earlier versions of CEA-852.

Quality of Service for 802.1Q

The Home Networks Committee approved withdrawal of CEA-2007, *QOS Priority Groupings for 802.1Q* on 5/11/09. This standard describes how to use the priority field in IEEE 802.1Q Ethernet packets to allow internet protocols (IP) on Ethernet networks to concurrently support different quality of service (QoS) implementations. The document is now in final editorial review.

Digital Entertainment Network

The Home Networks Committee approved withdrawal of CEA-2008, *Digital Entertainment Network* on 5/11/09. This standard defines a home entertainment network by referencing existing standards and specifying how they should work together. Its purpose is to make interoperability between different manufacturers' audio, video, and imaging products possible using Ethernet and Internet Protocol (IP) as the common network connection. The document is now in final editorial review.

Remote User Interface for UPnP™ Devices

The Home Networks Committee is working on a revision to CEA-2014-A, *Web-Based Protocol and Framework for Remote User Interface on UPnP™ Networks and the Internet (Web4CE)*. This revision is expected to extend the functionality of the standard while preserving existing functionality and maintaining backward compatibility. It is expected to add new functionality in the following general areas: remote user interface access to the underlying platform resources, the level of security available within the remote user interface and protocol framework, and the remote user interface experience. Interested? [Join R7 WG9](#).

The Remote User Interface Test Special Interest Group (RUI Test SIG) is developing a CEA-2014-A test specification that will be used for interoperability testing. The test specification will cover test configurations based on the numbered requirements found in CEA-2014-A. Anyone knowledgeable in the areas of CEA-2014 and

remote user interfaces is encouraged to [join the RUI Test SIG](#).

Power Line Carrier

The Home Control Systems 1 Subcommittee is working on CEA-709.2-B, *Control Network Power Line (PL) Channel Specification*. This standard describes the physical characteristics of a communications network that uses power lines to collect and distribute information. Interested? [Join R7.1](#).

The Home Control Systems 1 Subcommittee is also working on CEA-2021, *Auto Discovery & Self-configuring Home Control Networks*. This standard is expected to define a method for devices on a home control network to automatically discover each other and exchange data. It will facilitate the development of future home automation devices that may be installed by CE installers, electricians, or do-it-yourself homeowners. It will provide a set of standard application-layer services for the ANSI/CEA-709.1 protocol, thus enabling devices and appliances from different manufacturers to work together in a home network. Interested? [Join R7.1](#).

Residential Systems

Multi-room Audio Cabling

The Residential Systems Committee is working on an addition to CEA-2030, *Multi-Room Audio Cabling Standard*, which defines how to configure cabling and connectors in order to distribute analog and digital audio throughout a home. The new addition will explain how to document distributed audio systems installed in homes. Interested? [Join R10 WG2](#). Note: This project was transferred from R3 WG7.

Home Theater Video Design

The Residential Systems Committee has begun work on CEA/CEDIA-CEB23, *Home Theater Video Design*. This document describes how to design a home theater video system that follows proper industry guidelines and supports other media uses such as music, gaming, and broadcast TV. Interested? [Join R10 WG3](#).

Video

Testing “Cable Readiness”

The Cable Compatibility Committee has begun work on CEA-23-B, *Measurement Procedures for Determining Compliance with FCC Rules for “Cable-Ready Consumer Electronics Equipment.”* This revision to CEA-23-A will

define the measurement procedures for determining compliance with FCC rules for "cable ready consumer electronics equipment," under 47 C.F.R. §15.118(c). Interested? [Join R8 WG3](#).

Intermediate Frequencies

The Video Systems Committee reaffirmed CEA-109-D, *Intermediate Frequencies for Entertainment Receivers* on 5/12/09. The standard will now be sent to ANSI for public review. This standard defines intermediate frequencies to be used by AM, FM and TV broadcast receivers.

North American Teletext

The Television Data Systems Subcommittee approved reaffirmation of CEA-516, *Joint EIA/CVCC Recommended Practice for Teletext: North American Basic Teletext Specification (NABTS)* on 2/4/09. This standard describes the transmission technique, coding language, and user interface for one-way broadcast teletext service applications in North America using NTSC television signals.

Cable Tuner Immunity

The Cable Compatibility Committee is working on a revision to CEA-544-B, *Low Frequency Immunity of Tuners in a Cable System*. This standard describes how to measure the low frequency (5-54 MHz) immunity of tuners in a cable system, based on requirements in FCC regulations that define the assumed levels of the desired signal, low frequency interference and the required receiver immunity. Interested? [Join R8 WG3](#).

DTV Remodulator Specification

The DTV Interface Subcommittee published CEA-762-B, *DTV Remodulator Specification*, in November 2008. This standard defines minimum specifications for a one-way data path utilizing an 8-VSB trellis remodulator that complies with ATSC Standard A/53B, Annex D. This standard applies to any device used to connect to an ATSC compliant digital television (DTV) receiver. Devices meeting this standard should interoperate with any ATSC compliant receiver that also supports “monitor mode.” The ANSI public review period for this standard closed on 1/5/09 and publication is pending final ANSI approval.

HDMI Reference Standard

The DTV Interface Subcommittee published an errata for CEA-861-E in April 2009. It clarifies the relationship between the automatic format descriptor (AFD) line numbering scheme used in CEA-861-E, *A DTV Profile for*

Uncompressed High Speed Digital Interfaces, and a slightly different line numbering scheme used by the Society of Motion Picture and Television Engineers (SMPTE).

At its meeting on May 11, 2009 CEA's Video Systems Committee observed that many broadcasters, DVD distributors and CE manufacturers are moving forward with 3D video, and it concluded that establishing a standard for transporting 3D video over an uncompressed high speed digital interface is very important. It directed the DTV Interface Subcommittee to consider extending CEA-861-E to support the carriage of 3D content and bi-directional 3D format signaling.

Smart Antenna Systems

Some implementations of smart antenna systems have been alleged to be performing less than optimally. To determine if changes to CEA-909-A, *Antenna Control Interface*, are needed to improve the performance of future systems the Video Systems Committee has agreed to review the standard. Interested? [Join R4 WG4](#).

Digital STB Background Power Consumption

The Video Systems Committee is working on a revision to CEA-2013-A, *Digital STB Background Power Consumption*. This standard defines maximum background mode (SLEEP state) energy consumption of basic digital set top boxes (STBs), whose primary function is video reception and delivery. Interested? [Join R4 WG13](#).

Digital STB Active Power Consumption

The Video Systems Committee is working on a revision of CEA-2022, *Digital STB Active Power Consumption Measurement*. This standard defines a method for measuring power consumption of a digital set top box (STB) when the STB is in the active, or "on," state. Interested? [Join R4 WG13](#).

XML Schema for Emergency Alert Information

The Cable Compatibility Committee approved CEA-2035, *Emergency Alert Signaling for the Home Network* by ballot in June 2009. This new standard will define an XML Schema to signal emergency alert information from home network servers to home network client devices, in harmony with existing standards (CAP v1.1, ANSI J-042-A, and ATIS 0800012). The document is now undergoing final editorial review.

TV Average Power Consumption

The Video Systems Committee is working on CEA-2037, *Determination of Television Average Power Consumption*. This document will describe a method of measuring the average power consumption of TV sets. Interested? [Join R4 WG13](#).

Loudness Matching Between Analog/Digital TV

On 4/2/09 the Video Systems Committee completed a recirculation ballot for CEA-CEB11-A, *NTSC/ATSC Loudness Matching*. An error was discovered in the draft bulletin and a second recirculation ballot will be issued soon. This bulletin provides guidance to TV set makers on how to maintain uniform audio loudness between analog NTSC programs and digital ATSC programs. It assumes that NTSC broadcasters follow accepted North American broadcast practices for audio levels, and that ATSC broadcasters have encoded their signals with the correct "dialnorm" value, a number that corresponds to the actual dialog level of the program material.

PSIP Recommended Practice

The Television Data Systems Subcommittee is working on CEA-CEB12-B, *PSIP Recommended Practice*. This bulletin provides guidance for designing DTV receivers, cable TV receivers, video recorders and other consumer products that make use of the Advanced Television Systems Committee's (ATSC) Program and System Information Protocol (PSIP). It provides recommendations and suggestions for device functionality. The ballot on this document closes on 7/1/09. Interested? [Join R4.3](#).

X-Radiation Compliance

The Video Systems Committee approved the withdrawal of CEA-CEB15, *CRT X-Radiation Compliance Training Manual* on 2/4/09. This document provides guidance to TV manufacturers on how to test CRT products for X-radiation compliance.

DTV Receiver Audio/Video Synchronization

The Video Systems Committee approved CEA-CEB20, *A/V Synchronization Processing* on 5/12/09. This bulletin recommends methods for synchronizing audio and video content at the receiver using time stamps in MPEG-2 transport streams. The document is now undergoing final editorial review.

DTV Audio Metadata

The Television Data Systems Subcommittee is working on CEA-CEB21, *Recommended DTV Audio Metadata Normalization Practices*, a recommended practice that will give guidance to receiver manufacturers on how to parse the relevant portions of an ATSC audio stream, particularly in situations where the broadcaster is sending audio in multiple languages. It is considering what practices might be followed in order to help consumers most easily find the audio streams that they are looking for. Interested? [Join R4.3 WG12](#).

Energy Consumption of Digital Video Recorders

The Video Systems Committee has authorized a new project to develop a standard method for measuring and reporting the energy consumption of digital video recorders (DVRs). Interested? [Join R4 WG13](#).



CEA Technology & Standards Forum

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*Reservation cut-off September 16, 2009

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Regular Fee (Aug. 8 - Oct. 9)	<input type="checkbox"/> \$299	<input type="checkbox"/> \$475	\$ _____
Monday Only	<input type="checkbox"/> \$100	<input type="checkbox"/> \$150	\$ _____
Tuesday Only	<input type="checkbox"/> \$100	<input type="checkbox"/> \$150	\$ _____
Wednesday Only	<input type="checkbox"/> \$100	<input type="checkbox"/> \$150	\$ _____
Thursday Only	<input type="checkbox"/> \$100	<input type="checkbox"/> \$150	\$ _____
Onsite (after Oct. 9)	<input type="checkbox"/> \$349	<input type="checkbox"/> \$525	\$ _____
Monday Only	<input type="checkbox"/> \$150	<input type="checkbox"/> \$175	\$ _____
Tuesday Only	<input type="checkbox"/> \$150	<input type="checkbox"/> \$175	\$ _____
Wednesday Only	<input type="checkbox"/> \$150	<input type="checkbox"/> \$175	\$ _____
Thursday Only	<input type="checkbox"/> \$150	<input type="checkbox"/> \$175	\$ _____

PAYMENT INFORMATION

- Visa
- Master Card
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- Check [Payable to CEA]

Card # _____ Expiration Date _____

Cardholder Name _____

Signature _____

CEA CANCELLATION POLICY

- Cancellations received in writing by October 9, 2009, are refundable, minus a \$50 processing fee. After October 9, 2009, cancellations are subject to the entire seminar fee.
- Please note that if you don't cancel by October 9, 2009, and don't attend the 2009 CEA Technology & Standards Forum, you are still responsible for payment.
- Substitutions are permitted at any time.

WEATHER POLICY

Any paid attendee unable to travel to a CEA conference due to inclement weather may choose one of the following options:

- Receive a credit of the full registration fee paid for the conference to be applied toward registration for another CEA conference;
- Receive a 50% refund of the registration fee paid and a copy of all materials provided at the conference.





CEA Technology & Standards Forum

ARE YOU PART OF THE PROCESS?

October 19-22, 2009 | Arizona Grand Resort | Phoenix, AZ

For planning purposes, please indicate the sessions you hope to attend.

MONDAY, OCTOBER 19, 2009

- 10 a.m.–Noon R3 Audio Committee
- Noon–2 p.m. Lunch
- 3–5 p.m. Portable Handheld and In-Vehicle Electronics Committee

TUESDAY, OCTOBER 20, 2009

- 9 a.m.–Noon R7 Home Networks Committee
- Noon–2 p.m. Lunch
- 3–6 p.m. RIO Residential Systems Committee
- 7–10 p.m. Hall of Fame Dinner (Business Attire)

WEDNESDAY, OCTOBER 21, 2009

- 8 a.m.–10 a.m. Technology & Standards Council (TSC members only)
- 10 a.m.–Noon Television Manufacturers Council (TVMC members only)
- Noon–1:30 p.m. Lunch
- 2–3:30 p.m./TBD R4.8 DTV Interface Subcommittee
- TBD/3:30–5 p.m. R4.3 Television Data Systems Subcommittee
- 7–10 p.m. Technology & Standards Awards Dinner

THURSDAY, OCTOBER 22, 2009

- 9 a.m.–Noon R4 Video Systems Committee
- 12:30–1:30 p.m. Lunch