

# CEA Standards Update

## CEA to Implement Non-Member Fee for Working Groups

Beginning January 1, 2010 CEA will charge people who are not employed by a CEA member a \$250 annual fee to participate on working groups within CEA's standards program. CEA has a long established practice of charging such people for participation in formulating groups, but to date has not charged a fee for working group participation. The new fee will be per person, but will allow unlimited access to all working groups under CEA's standards formulating groups. Note that this is slightly different than the fee for formulating groups, which is \$1,000 per person per formulating group per year. Non-members who pay the \$1,000 fee to participate on a formulating group do not have to pay an additional fee to participate on working groups. CEA is adding the new working group fee to offset some of its costs associated with working group support.

Companies who are not members of CEA and who wish to continue to participate on CEA working groups may find that becoming a CEA member is a better value than simply paying the working group fee. In addition to free participation in any working group, membership in the association provides free access to market research, exclusive benefits at CES, discounts at CEA events and conferences and much more.

For details about CEA membership benefits and rates please visit <http://www.ce.org/membership>.

## DVD Test Disc and F-Connector Color Coding Standards to be Reviewed

The Residential Systems Committee is about to begin its scheduled periodic review of CEA-896-A, *Standard Method of Measurement for Digital Versatile Disc-Video Players*. This standard describes how to measure and report the performance of consumer digital versatile disc (DVD-video) players.

The committee will also be reviewing CEA-897, *F-Connector Color Coding for Home Television Systems*. This standard defines colors for marking F-connectors commonly used in home theater systems.

Interested? [Join R10 WG8](#).

## New Projects

- ✚ ANSI/CEA-805-D Errata, *Data Services on the Component Video Interfaces* (pre-vote comments due 10/2/09)
- ✚ CEA-2011, *OTG Transceiver Specification* (five-year review, proposed for reaffirmation, vote scheduled for 10/19/09)
- ✚ CEA-2039, *Residential Systems Documentation Standard*
- ✚ CEA/CEDIA-CEB24, *Home Theater HVAC Guidelines for use of Common Alerting Protocol (CAP) emergency messages by portable, handheld and in-vehicle devices*
- ✚ Wireless charging of portable and handheld devices

## Recently Published CEA Standards

- ✚ CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channels* (published June 2009, ANSI public review closed 8/3/09, in final editorial review)
- ✚ CEA-2017-A, *Common Interconnection for Portable Media Players* (published September 2009, ANSI public review closes 11/16/09)
- ✚ CEA-2035 (draft ANSI J-STD-70), *Emergency Alert Metadata for the Home Network* (published September 2009, ANSI public review closes 11/16/09)
- ✚ CEA-CEB11-A, *NTSC/ATSC Loudness Matching* (published September 2009)

## Publications Nearing CEA Completion

- ✚ CEA-23-B, *Measurement Procedures for Determining Compliance with FCC Rules for "Cable-Ready Consumer Electronics Equipment"* (pre-vote comments were due 9/29/09, a vote is expected on 10/22/09)
- ✚ CEA-109-D, *Intermediate Frequencies for Entertainment Receivers* (reaffirmed 5/12/09, will be sent to ANSI for public review)
- ✚ CEA-544-C, *Low Frequency Immunity of Tuners in a Cable System* (pre-vote comments were due 8/12/09, vote expected on 10/22/09)
- ✚ A vote to withdraw the following CEBus-related standards was taken 7/27/09, absentee ballots were due 8/7/09, ANSI public review closes 10/12/09.
  - 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-844 R-2005, XML Encoding of Generic Common Application Language
  - ✚ A vote to reaffirm the following CEBus-related standards was taken 7/27/09, absentee ballots were due 8/7/09, a “no with comments” vote was received, attempts to resolve the “no with comment” vote were unsuccessful, a recirculation vote will occur on 10/20/09
    - 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-633.31 R-2000, *Power Line Physical Layer Conformance Specification* (approved for withdraw 5/11/09, ANSI public review closed 9/14/09, will be withdrawn)
- ✚ ANSI/CEA-633.32 R-2004, *Twisted Pair Physical Layer Conformance* (approved for withdraw 5/11/09, ANSI public review closed 9/14/09, will be withdrawn)
- ✚ ANSI/CEA-633.81, *CAL Conformance Specification* (approved for withdraw 5/11/09, ANSI public review closed 10/12/09, will be withdrawn)
- ✚ CEA-639-R2009, *Consumer Camcorder or Video Camera Low Light Performance* (pre-vote comments were due 8/18/09, vote expected on 10/22/09)
- ✚ CEA-709.1-C, *Control Network Protocol Specification* (vote was scheduled for 9/18/09, substantive edits were required, new CPP will be issued)
- ✚ 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, ANSI public review closed 9/28/09, 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, ANSI public review closed 9/28/09, 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, ANSI public review closed 9/28/09, in final editorial review)
- ✚ ANSI/CEA-776.4, *CEBus-EIB Router Communication Protocol – CEBus-EIB Router Network Layer* (approved for withdraw 5/11/09, ANSI public review closed 9/28/09, in final editorial review)
- ✚ ANSI/CEA-776.5, *CEBus-EIB Router Communications Protocol-The EIB Communications Protocol* (approved for withdraw 5/11/09, ANSI public review closed 9/28/09, in final editorial review)
- ✚ CEA-852-A, *Tunneling Component Network Protocols Over Internet Protocol Channels* (approved 7/9/04 and published August 2004, was approved to be sent to ANSI but ANSI paperwork was not filed, paperwork was recently filed and ANSI public review closes 10/12/2009)
- ✚ CEA-852-B, *Tunneling Component Network Protocols Over Internet Protocol Channels* (approved 9/18/09, will be sent to ANSI for public review)

## Summary of Projects by CEA Product Division

### Audio

#### Standard Audio Levels

The Audio Systems Committee is working on a new standard, CEA-2036, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products*, that will define preferred voltage and impedance values for inputs and outputs of generally available mass produced audio products and accessories. The new standard will take the place of CEA-CPEB6-A, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products* which was withdrawn by the Audio Systems Committee on 5/13/09.

#### 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

#### USB On-The-Go Transceivers

The Portable, Handheld & In-Vehicle Electronics Committee is conducting a scheduled five year review of CEA-2011, *OTG Transceiver Specification*. This document describes the requirements for an OTG transceiver. It has been proposed that this document be reaffirmed and a vote is scheduled for 10/19/09. Interested? [Join R6](#).

- ✚ 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-2037, *Determination of Television Average Power Consumption* (pre-vote comments were due 7/12/09, vote expected on 10/22/09)
- ✚ CEA-CEB3 R-2009, *Recommended Practice for Camcorder Specifications* (pre-vote comments were due 9/30/09, vote expected on 10/22/09)
- ✚ CEA-CEB4 R-2009, *Recommended Practice for VCR Specifications* (pre-vote comments were due 9/30/09, vote expected on 10/22/09)
- ✚ CEA-CEB12-B, *PSIP Recommended Practice*, (approved 7/15/09 by ballot, in final editorial review)

### Ongoing Work

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

## PDMI Connector

The Portable, Handheld & In-Vehicle Electronics Committee published CEA-2017-A, *Common Interconnection for Portable Media Players* in September 2009. 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. ANSI public review closes on 11/16/09.

## Fixed and Mobile Alert Warning Devices

The Portable, Handheld and In-Vehicle Electronics Committee’s Fixed and Mobile Alert Warning Devices Working Group is reviewing a project proposal for the development of guidelines for rendering emergency alert information. The guidelines would provide expandable alert message information that can be defined by breaking a Common Alerting Protocol (CAP) message into elements that are assumed to reach a receiver. Interested? [Join R6 WG16](#).

## Wireless Charging

CEA’s Wireless Charging Discovery Group recommended that the Portable/Handheld and In-Vehicle Electronics Committee form a task group to continue studying the area of wireless charging and the possible need for related industry standards. The task group will determine if CEA should develop standards related to wireless charging and, if the recommendation is that CEA should, the task group will develop a recommended scope for these standardization efforts. The task group has until the end of the year to complete its work. It’s chaired by John Suh of General Motors. Interested? [Join R6 TG1](#).

# 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. ANSI public review closes 9/14/09.

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. ANSI public review closes 9/14/09.

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. ANSI public review closes 10/12/09.

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. ANSI public review closes 9/28/09.

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. ANSI public review closes 9/28/09.

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. ANSI public review closes 9/28/09.

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. ANSI public review closes 9/28/09.

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. ANSI public review closes 9/28/09.

The Home Networks Committee voted on withdrawal of the following CEBus-related standards on 7/27/09,

absentee ballots were due 8/7/09 and ANSI public review closes on 10/12/09:

- 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-844 R-2005, XML Encoding of Generic Common Application Language

✚ The Home Networks Committee voted on reaffirmation of the following CEBus-related standards on 7/27/09 and absentee ballots were due 8/7/09:

- 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
- A “no with comments” vote was received and attempts to resolve the “no with comment” vote were unsuccessful. A recirculation vote will occur during the R7 meeting on 10/20/09.

#### ✚ **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. A vote was scheduled for 9/18/09 but substantive edits were required, so a new CPP will be issued. 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 approved CEA-852-B, *Tunneling Component Network Protocols Over Internet Protocol Channels* on 9/18/09. This standard specifies a communications method that allows networked data acquisition and control devices to communicate with each other over the Internet.

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.

Also, CEA-852-A, *Tunneling Component Network Protocols Over Internet Protocol Channels* was approved 7/9/04 and published in August 2004. It was approved to be sent to ANSI but the ANSI paperwork was not filed. In order to clean up this outstanding item the paperwork was recently filed and ANSI public review closes on 10/12/2009.

#### **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.

#### **Multi-room Audio Cabling**

The Residential Systems Committee has begun work on CEA-2039, *Residential Systems Documentation Standard*. This standard will describe a set of unified blue-print icons that represent all facets of pre-wire and installation of electronic systems products and devices. It will not cover anything outside of architectural blue-prints. Interested? [Join R10 WG7](#).

#### **Home Theater Video Design**

The Residential Systems Committee is working 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](#).

### **Home Theater HVAC**

The Residential Systems Committee is working on CEA/CEDIA-CEB24, *Home Theater HVAC*. This document will describe best practices for the design and installation of heating, ventilation and air conditioning in a home theater. It will focus on sound abatement for air handling equipment, proper air exchange, and treating equipment racks and spaces to maintain adequate operating temperatures and humidity. Interested? [Join R10WG5](#).

## **Video**

### **Testing “Cable Readiness”**

The Cable Compatibility Committee has been disbanded and the Video Systems Committee has now taken over responsibility for 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). Pre-vote comments were due by 9/29/09 and a vote is expected on 10/22/09. Interested? [Join R4](#).

### **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.

### **Cable Tuner Immunity**

The Cable Compatibility Committee has been disbanded and the Video Systems Committee has taken over responsibility for CEA-544-C, *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. Pre-vote comments were due 8/12/09 and a vote is expected on 10/22/09. Interested? [Join R4](#).

### **Camcorder Low Light Performance**

The Video Systems Committee is considering the reaffirmation of CEA-639-R2009, *Consumer Camcorder or Video Camera Low Light Performance*. This standard

describes a procedure for determining the low light sensitivity of consumer camcorders operating on the North American 525 line, 60 Hz NTSC color video standard. Pre-vote comments were due 8/18/09 and a vote is expected on 10/22/09. Interested? [Join R4 WG10](#).

### **Data Over Component Video Interface**

The DTV Interface Subcommittee published ANSI/CEA-805-D, *Data Services on the Component Video Interfaces* in November 2008. An error was discovered in section 4.5 and an errata is now being developed. This standard describes how to transmit data over the analog component video interfaces (CVI) described in CEA-770.2-C and CEA-770.3-D, and it covers all CE devices carrying data on the CVI vertical blanking interval (VBI). Interested? [Join R4.8 WG5](#).

### **HDMI Reference Standard**

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, *A DTV Profile for Uncompressed High Speed Digital Interfaces*, 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 published CEA-2035 (draft ANSI J-STD-70), *Emergency Alert Signaling for the Home Network* in September 2009. This new standard defines 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). ANSI public review closes on 11/16/09.

#### **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. Pre-vote comments were due 7/12/09 and a vote is expected on 10/22/09. Interested? [Join R4 WG13](#).

#### **Camcorder and VCR Specifications**

The Video Systems Committee is conducting a periodic review of CEA-CEB3, *Recommended Practice for Camcorder Specifications*. Pre-vote comments were due on 9/30/09 and a vote is expected to occur on 10/22/09. Interested? [Join R4](#).

The Video Systems Committee is conducting a periodic review of CEA-CEB4, *Recommended Practice for VCR Specifications*. Pre-vote comments were due on 9/30/09 and a vote is expected to occur on 10/22/09. Interested? [Join R4](#).

#### **Loudness Matching Between Analog/Digital TV**

The Video Systems Committee published CEA-CEB11-A, *NTSC/ATSC Loudness Matching* in September 2009. 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 approved CEA-CEB12-B, *PSIP Recommended Practice* by ballot on 7/15/09. 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 document is now in final editorial review.

#### **DTV Receiver Audio/Video Synchronization**

The Video Systems Committee published CEA-CEB20, *A/V Synchronization Processing* in July 2009. This bulletin recommends methods for synchronizing audio and video content at the receiver using time stamps in MPEG-2 transport streams.

#### **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 an standard method for measuring and reporting the energy consumption of digital video recorders (DVRs). Interested? [Join R4 WG13](#).