

# CEA Standards Update

## T&S Forum Registration Discount Extended to August 21

The registration fee for this fall's T&S Forum is \$299 (\$475 if your company is not a CEA member). There is an early bird discount if you register on or before August 21. 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 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 21 and save.**

Register online at <http://registration.experient-inc.com/ShowCES095/Default.aspx>.

## 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

- ✚ CEA-639-R2009, *Consumer Camcorder or Video Camera Low Light Performance*
- ✚ 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 ANSI Standards

- ✚ ANSI/CEA-762-B, *DTV Remodulator Specification* (published July 2009)
- ✚ 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-516 R-2008, *Joint EIA/CVCC Recommended Practice for Teletext: North American Basic Teletext Specification (NABTS)* (published July 2009)
- ✚ CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channels* (published June 2009, ANSI public review closes 8/3/09)
- ✚ CEA-CEB20, *A/V Synchronization Processing* (published July 2009)

## Recently Withdrawn Standards

- ✚ CEA-633.34 *Infrared Physical Layer Conformance*
- ✚ CEA-CPEB6-A, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products*
- ✚ CEA-CEB15, *CRT X-Radiation Compliance Training Manual*

## 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-544-C, *Low Frequency Immunity of Tuners in a Cable System* (pre-vote comments due 8/12/09)
- ✚ A vote to withdraw the following CEBus-related standards was taken 7/27/09, absentee ballots are due 8/7/09.
  - 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 are 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
- ✚ 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)
- ✚ 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 were due 7/8/09, comments are now being addressed, 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* (approved 7/29/09, in final editorial review)
- ✚ 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 were due 7/12/09, comments being addressed)
- ✚ CEA-CEB11-A, *NTSC/ATSC Loudness Matching* (approved on second recirculation ballot 7/21/09, in final editorial review)
- ✚ CEA-CEB12-B, *PSIP Recommended Practice*, (approved 7/15/09 by ballot, in final editorial review)

## Ongoing Work

- ✚ CEA-23-B, *Measurement Procedures for Determining Compliance with FCC Rules for “Cable-Ready Consumer Electronics Equipment”*
- ✚ 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*
- ✚ 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*

## Summary of Projects by CEA Product Division

### Audio

#### ✚ Standard Audio Levels

The Audio Systems Committee withdrew 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.

#### ✚ 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 Portable, Handheld & In-Vehicle 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 Portable, Handheld & In-Vehicle Electronics Committee approved CEA-2017-A, *Common Interconnection for Portable Media Players* on 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. The document is in final editorial review and will be published soon.

### **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. 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 withdrew 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 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 voted on withdrawal of the following CEBus-related standards on 7/27/09, absentee ballots are due 8/7/09:

- 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-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

The Home Networks Committee voted on reaffirmation of the following CEBus-related standards on 7/27/09, absentee ballots are 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

#### **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 were due 7/8/09 and comments are now being addressed.

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 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](#).

## **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 reaffirmed 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 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 are due 8/12/09. Interested? [Join R8 WG3](#).

#### **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. Interested? [Join R4 WG10](#).

#### **DTV Remodulator Specification**

The DTV Interface Subcommittee published ANSI/CEA-762-B, *DTV Remodulator Specification*, in July 2009. 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.”

#### **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 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. Pre-vote comments were due 7/12/09 and comments are now being addressed. Interested? [Join R4 WG13](#).

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

On 7/21/09 the Video Systems Committee approved CEA-CEB11-A, *NTSC/ATSC Loudness Matching* by a second recirculation ballot. 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.

## **X-Radiation Compliance**

The Video Systems Committee withdrew 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 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](#).