CEA Standards Update

Metadata, Charging Discovery Groups to Meet at T&S Forum

CEA's Portable, Handheld and In-Vehicle Electronics Committee will host two Discovery Group meetings on May 14, during the 2009 Technology & Standards Spring Forum in Saint Louis, MO. The meetings will cover potential standards projects related to metadata transfer between devices and power/charging issues.

It has been suggested that the ability to transfer metadata (title, author, artist, etc.) between portable/handheld devices and other devices in a standardized manner would be very helpful. It might enable, for example, allow song title and artist information from any portable device to be easily displayed on any dashboard. It might also allow program information from any portable device to be easily displayed on any video display. Issues like these, and others related to metadata and portable/handheld devices, will be the focus of the Discovery Group addressing metadata issues.

It has also been observed that the numerous types of charging systems out there are a great frustration to consumers. While industry might not be able to settle on a standard wired charger for portable/handheld devices because of individual companies' business models, it may be able to settle on a standard wireless charger that could be installed in automobiles and in homes and offices alike. In the wired charging world there is no standard connector or voltage that all portable/handheld devices use, but there is a standard supply voltage and connector (120 V AC in the home, 12 V DC in the car). Perhaps something similar could be done in the wireless charging world by defining a standard mat, pad, container or whatever that will wirelessly charge products. Such topics will be the focus of the Discovery Group addressing power charging issues.

ATSC to Hold Annual Meeting in Conjunction with CEA T&S Forum

The Advanced Television Systems Committee's Technology & Standards Group, and the ATSC Planning Committee will meet on May 13 at the Four Seasons Hotel in St. Louis, MO in conjunction with the CEA T&S Forum. On May 14 the ATSC will hold its annual meeting, also at the Four Seasons. Then the ATSC board will meet on May 15. For further information please visit www.atsc.org.

New Projects

- 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*

Recently Published ANSI Standards

- ANSI/CEA-774-B, *TV Receiving Antenna Performance Presentation and Measurement* (published February 2009)
- ANSI/CEA-2028-A, *Color Codes for Outdoor TV Receiving Antennas* (published February 2009)
- ANSI/CEA-2032-A, *Indoor TV Receiving Antenna Performance Standard* (published February 2009)

Recently Published CEA Standards

- CEA-542-C, *Cable Television Channel Identification Plan* (published February 2009)
- CEA-762-B, *DTV Remodulator Specification* (published November 2008, ANSI public review closed 1/5/09)
- CEA-851.1-A, *IP-Based Digital Telephony for the Versatile Home Network* (published February 2009)
- CEA-861-E Errata, *A DTV Profile for Uncompressed High Speed Digital Interfaces* (published April 2009)
- CEA-2002-A, *Test Procedure for Powerline Carrier Technology* (published February 2009)
- CEA-2006-B, *Testing and Measurement Methods for Mobile Audio Amplifiers* (published February 2009, ANSI public review closes 4/13/2009)
- CEA/CEDIA-CEB22, *Home Theater Recommended Practice: Audio Design* (published March 2009)

Publications Nearing CEA Completion

- CEA-11 R-2009, *Turntable Measurement Standard* (vote scheduled for 5/13/09)
- CEA-109-D, *Intermediate Frequencies for Entertainment Receivers* (proposed for re-affirmation, vote scheduled for 5/12/09)
- CEA-516 R-2008, *Joint EIA/CVCC Recommended Practice for Teletext: North American Basic Teletext Specification (NABTS)* (reaffirmation approved 2/4/09)

- ANSI/CEA-633.31 R-2000, *Power Line Physical Layer Conformance Specification* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA-633.32 R-2004, *Twisted Pair Physical Layer Conformance* (proposed for withdrawal, vote scheduled for 5/11/09)
- CEA-633.34 *Infrared Physical Layer Conformance* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA-633.81, *CAL Conformance Specification* (proposed for withdrawal, vote scheduled for 5/11/09)
- CEA-775.1, *Web Enhanced DTV 1394 Interface Specification* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA 776.1, *CEBus-EIB Router Communication Protocol - Description of the CEBus-EIB Router* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA-776.2, *CEBus-EIB Router Communications Protocol – CEBus-EIB Router Medium Access Control Sublayer* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA-776.3, *CEBus-EIB Router Communications Protocol - CEBus-EIB Router Logical Link Control Sublayer* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA-776.4, *CEBus-EIB Router Communication Protocol – CEBus-EIB Router Network Layer* (proposed for withdrawal, vote scheduled for 5/11/09)
- ANSI/CEA-776.5, *CEBus-EIB Router Communications Protocol-The EIB Communications Protocol* (proposed for withdrawal, vote scheduled for 5/11/09)
- CEA-852-B, *Tunneling Component Network Protocols Over Internet Protocol Channels* (approved 12/7/06, in final editorial review, awaiting completion of CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channel*)
- CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channels* (vote scheduled for 5/8/09)
- CEA-2007, *QOS Priority Groupings for 802.1Q* (proposed for withdrawal, vote scheduled for 5/11/09)
- CEA-2008, *Digital Entertainment Network* (proposed for withdrawal, vote scheduled for 5/11/09)
- CEA-2035 (aka J-STD-070), *Emergency Alert Signaling for the Home Network* (pre-vote comment period closed 9/3/08, comments being addressed)
- CEA-CEB11-A, *NTSC/ATSC Loudness Matching* (recirculation ballot closes 4/2/09)
- CEA-CEB12-B, *PSIP Recommended Practice*, (pre-vote comment period closed 4/28/09, comments being addressed)
- CEA-CEB15, *CRT X-Radiation Compliance Training Manual* (approved for withdrawal 2/4/09)
- CEA-CEB20, *A/V Synchronization Processing* (vote scheduled for 5/12/09)
- CEA-CPEB6-A, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products* (proposed for withdrawal, vote scheduled for 5/13/09)

Ongoing Work

- 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-2014-B, *Web-based Protocol and Framework for Remote User Interface on UPnP™ Networks and the Internet (Web4CE)*
- CEA-2017-A, *Common Interconnection for Portable Media Players*
- 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

Accessories

- **Smart Antenna Performance**

CEA's Antennas Committee published ANSI/CEA-774-B, *TV Receiving Antenna Performance Presentation and Measurement*, ANSI/CEA-2028-A, *Color Codes for Outdoor TV Receiving Antennas*, and ANSI/CEA-2032-A, *Indoor TV Receiving Antenna Performance Standard* in February 2009. ANSI/CEA-774-B was updated to include test procedures for smart antennas, and ANSI/CEA-2028-A and ANSI/CEA-2032-A were updated to include performance requirements for outdoor and indoor smart antennas, respectively. Smart antennas automatically steer themselves, usually by adjusting the positions of nulls or lobes in their patterns. They enable consumers to enjoy free over-the-air television without having to manually adjust their antennas every time they change channels.

Audio

Standard Audio Levels

The Audio Systems Committee is planning to withdraw CEA-CPEB6-A, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products*. 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. The vote to withdraw CEA-CPEB6-A is scheduled for 5/13/09. Interested? Join R3 WG9.

Turntable Measurement

The Audio Systems Committee is expected to reaffirm CEA-11, *Turntable Measurement Standard*. 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. A vote is scheduled for 5/13/09. Interested? Join R3.

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 CEA-2006-B, *Testing and Measurement Methods for Mobile Audio Amplifiers* in February 2009. This standard describes a method for testing the performance of mobile audio amplifiers and reporting the results. ANSI public review for this document closes on 4/13/09.

PDMI Connector

The Mobile Electronics Committee is working on a proposed “digital overlay” for the portable digital media interface (PDMI) connector. It is mapping the pins on the PDMI connector to accommodate additional digital signals. These digital signals, including USB 3.0 and/or HD video, would be supported in addition to the analog signals that have already been accommodated. However, in order to make this work the “digital version” of the connector would sacrifice some analog functionality. For example, the connector likely would not support serial connectivity or analog audio in/out at the same time as USB v3.0 or HD video. This would not mean that serial connectivity or analog audio in/out would be removed from the connector, only that they would not be supported simultaneously with USB v3.0 or HD video.

PDMI connectors comply with CEA-2017, *Common Interconnection for Portable Media Players,* which was approved as an American National Standard in July 2007. 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 is considering the withdrawal of ANSI/CEA-633.31 R-2000, *Power Line Physical Layer Conformance Specification.* This portion of the CEBus conformance standard specifies tests to determine conformance of a node's power line physical layer to IS-60. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is considering the withdrawal of ANSI/CEA-633.32 R-2004, *Twisted Pair Physical Layer Conformance.* This standard specifies tests to determine conformance of a device's Twisted Pair Physical Layer to CEA-600. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is planning to withdraw CEA-633.34 *Infrared Physical Layer Conformance*. This standard specifies tests to determine conformance of an infrared physical layer to IS-60. A vote is scheduled for 5/11/09.

The Home Networks Committee is considering the withdrawal of ANSI/CEA-633.81, *CAL Conformance Specification.* This portion of the CEBus conformance

standard specifies tests to determine conformance of a node's CAL to CEA-600.81. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is considering the withdrawal of ANSI/CEA 776.1, *CEBus-EIB Router Communication Protocol - Description of the CEBus-EIB Router*. This standard describes the operation of a CEBus-EIB Router. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is considering the withdrawal of ANSI/CEA-776.2, *CEBus-EIB Router Communications Protocol – CEBus-EIB Router Medium Access Control Sublayer*. 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. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is considering the withdrawal of ANSI/CEA-776.3, *CEBus-EIB Router Communications Protocol - CEBus-EIB Router Logical Link Control Sublayer*. This standard specifies the CEBus-EIB Router Logical Link Control Sublayer interfaces to the Router Network Layer and to the Layer System Management. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is considering the withdrawal of ANSI/CEA-776.4, *CEBus-EIB Router Communication Protocol – CEBus-EIB Router Network Layer*. This standard defines interfaces between elements of the CEBus-EIB Router Network Layer. A vote is scheduled for 5/11/09. Interested? Join R7.

The Home Networks Committee is considering the withdrawal of ANSI/CEA-776.5, *CEBus-EIB Router Communications Protocol-The EIB Communications Protocol*. The European Installation Bus (EIB) is a control system for related applications in homes and buildings. A vote is scheduled for 5/11/09. Interested? Join R7.

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.

VOIP for Versatile Home Network

The Home Networks Committee published CEA-851.1-A, *IP-Based Digital Telephony for the Versatile Home Network* in February 2009. This standard defines IP-based telephony for the Versatile Home Network.

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 12/7/06. This standard specifies a communications method that allows networked data acquisition and control devices to communicate with each other over the Internet. It is currently under final editorial review and will be published after CEA-852.1, which it references, is completed.

The subcommittee is also nearing completion of CEA-852.1, *Enhanced Tunneling Device Area Network Protocols Over Internet Protocol Channels*. This standard will address limitations in the CEA-852-B protocol and provide 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. A vote is scheduled for 5/8/09. Interested? Join R7.1 WG2.

Powerline Carrier Test Procedure

The Home Networks Committee published CEA-2002-A, *Test Procedure for Powerline Carrier Technology* in February 2009. This standard defines a test procedure that

can be used to validate key aspects of power line carrier systems.

Quality of Service for 802.1Q

The Home Networks Committee is planning to withdraw CEA-2007, *QOS Priority Groupings for 802.1Q*. 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. A vote is scheduled for 5/11/09. Interested? Join R7.

Digital Entertainment Network

The Home Networks Committee is planning to withdraw CEA-2008, *Digital Entertainment Network.* 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. A vote is scheduled for 5/11/09.

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 Audio Design

The Residential Systems Committee published CEA/CEDIA-CEB22, *Home Theater Recommended Practice: Audio Design* in March 2009. This document provides baseline recommendations for the design and installation of home theater and multi-channel music playback audio systems in residential spaces. This was the first project started by the new Residential Systems Committee, a committee formed jointly by CEA and CEDIA.

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 is currently reviewing and is expected to reaffirm CEA-109-D, *Intermediate Frequencies for Entertainment Receivers.* This standard defines intermediate frequencies to be used by AM, FM and TV broadcast receivers. A vote is scheduled for 5/12/09. Interested? Join R4.

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 Channel Numbering

The Cable Compatibility Committee published CEA-542-C, *Cable Television Channel Identification Plan* in February 2009. This standard defines 6 MHz channel allocations for 158 channels up to 1002 MHz, and includes a method for specifying higher channels. It does not preclude channel mapping in cable systems. It applies to channels carrying analog or digital signals, though it does not specify a numbering plan for the tuning of digitally multiplexed services within one or more RF channels.

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.” This standard has been submitted to ANSI for public review, and the public review comment period closes 1/5/09.

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 schemed used by the Society of Motion Picture and Television Engineers (SMPTE).

XML Schema for Emergency Alert Information

The Cable Compatibility Committee is working on CEA-2035, *Emergency Alert Signaling for the Home Network*. 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 pre-vote comment period closed on 9/3/08 and comments are now being addressed. Interested? Join R8 WG5.

Loudness Matching Between Analog/Digital TV

The Video Systems Committee held an initial vote on CEA-CEB11-A, *NTSC/ATSC Loudness Matching* on 2/4/09. A recirculation ballot is being prepared to address some comments that were received during the vote. 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. Interested? Join R4 WG10.

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. Pre-vote comments were due 4/28/09 and are now being addressed. Interested? Join R4.3.

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.

DTV Receiver Audio/Video Synchronization

The Video Systems Committee is working on CEA-CEB20, *A/V Synchronization Processing*, a bulletin that will recommend methods for synchronizing audio and video content at the receiver using time stamps in MPEG-2 transport streams. A vote is scheduled for 5/12/09. Interested? Join R4 WG15.

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.

Five-Year Reviews Due in Next 12 Months

Five-year reviews of the following documents must be completed by the date indicated. Documents highlighted in red are overdue.

R3 Audio Systems Committee

Due by December 2008:
- CEA-CPEB06-A R-2004, *Preferred Voltage and Impedance Values for the Interconnection of Audio Products*

Due by January 2009:
- CEA-11, *Turntable Measurement Standard*

Due by January 2010:
- CEA-560-R-2005, *Standard Method of Measurement for Compact Disc Players*

Due by March 2010:
- ANSI/CEA-863-A, *Connection Color Codes for Home Theater Systems*
- ANSI/CEA-2009-A, *Receiver Performance Specification for Public Alert Receivers*

R4 Video Systems Committee

Due by August 2003:
- CEA-CEB03, *Recommended Practice for Camcorder Specifications*
- CEA-CEB04, *Recommended Practice for VCR Specifications*

Due by May 2007:
- CEA-CEB11, *NTSC/ATSC Loudness Matching*

Due by December 2007:
- CEA-896-A, *Standard Method of Measurement for Digital Versatile Disc - Video Players*
- CEA-897, *F-Connector Color Coding for Home Television Systems*

Due by September 2008:
- CEA-639, *Consumer Camcorder or Video Camera Low Light Performance*

Due by May 2009:
- CEA-CEB15, *CRT X-Radiation Compliance Training Manual*

Due by November 2009:
- CEA-109-D, *Intermediate Frequencies for Entertainment Receivers*

Due by January 2010:
- CEA-TVSB5-R2005, *Multi-Channel TV Sound System BTSC System Recommended Practices*

R4.3 TV Data Systems Subcommittee

Due by October 2008:
- CEA-CEB12-A, *PSIP Recommended Practice*

R4.8 DTV Interface Subcommittee

None.

R5 Antennas Committee

None.

R6 Mobile Electronics Committee

Due by December 2009:
- CEA-2011, *OTG Transceiver Specification*

R7 Home Networks Committee

Due by March 2005:
- CEA-775.1, *Web Enhanced DTV 1394 Interface Specification*

Due by December 2007:
- CEA-851.1, *IP-Based Digital Telephony for the Versatile Home Network*
- CEA-851.2, *Security Services for the Versatile Home Network*

Due by November 2008:
- CEA-2007, *QOS Priority Groupings for 802.1Q*

Due by July 2008:
- CEA-2008, *Digital Entertainment Network*

Due by April 2009:
- 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*
- ANSI/CEA-600.81-R-2004, *Common Application Language (CAL) Specification*
- ANSI/CEA-600.82-R-2004, *CAL Context Description*
- ANSI/CEA-633.32-R-2004, *Twisted Pair Physical Layer Conformance*
- 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-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*

Due by May 2009:
- ANSI/CEA-600.10-R-2004, *Introduction to the CEBus Standard*
- CEA-600.46-R-2004, *Node Application Layer Specification*
- CEA-633.10-R-2004, *Introduction to EIA-600 Conformance Specification*
- ANSI/CEA-633.31-R-2004, *Power Line Physical Layer Conformance Specification*
- ANSI/CEA-633.34, *Infrared Physical Layer Conformance*
- CEA-633.46-R-2004, *Node Application Layer Conformance Specification*
- ANSI/CEA-633.81-R-2004, *CAL Conformance Specification*
- ANSI/CEA-776.1-R-2004, *CEBus-EIB Router Communication Protocol - Description of the CEBus-EIB Router*
- ANSI/CEA-776.2-R-2004, CEBus-EIB Router Communications Protocol - CEBus-EIB Router Medium Access Control Sublayer
- ANSI/CEA-776.3-R-2004, *CEBus-EIB Router Communications Protocol - CEBus-EIB Router Logical Link Control Sublayer*
- ANSI/CEA-776.4-R-2004, *CEBus-EIB Router Communications Protocol - CEBus-EIB Router Network Layer*
- ANSI/CEA-776.5-R-2004, *CEBus-EIB Router Communications Protocol - The EIB Communications Protocol*

Due by January 2010:
- CEA-600.45-R-2005, *Node Network Layer Specification*

R7.1 Home Control Systems Subcommittee

Due August 2005:
- ANSI/CEA-709.4, *Fiber-Optic Channel Specification*

Due September 2007:
- ANSI/CEA-709.1-B, *Control Network Protocol Specification*

Due December 2007:
- CEA-860-A, *Device Plug-In Interface to EIA/CEA-709.1 Network Tools*

Due by April 2009:
- ANSI/CEA-709.3-R-2004, *Free-Topology Twisted-Pair Channel Specification*

Due by August 2009:

- CEA-852-A, *Tunneling Component Network Protocols Over Internet Protocol Channels*

R8 Cable Compatibility Committee

Due by November 2009:

- CEA-544-B, Low Frequency Immunity of Tuners in A Cable System

Due by December 2009:

- CEA-23-A, *RF Interface Specification for Television Receiving and Cable Television Systems*

R10 Residential Systems

Due by March 2010:

- ANSI/CEA-2030, *Multi-Room Audio Cabling Standard*