

# CTA Standard

**OpenEPG™ – A Specification for  
Electronic Program Guide Data  
Interchange**

**CTA-2033 R2016**

**(Formerly ANSI/CEA-2033)**

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(Formulated under the cognizance of the **CTA R7 Consumer Electronics Networking Committee.**)

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## **FOREWORD**

This standard was developed under the auspices of the Consumer Technology Association (CTA) R7 Consumer Electronics Networking Committee.

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# **OpenEPG™<sup>1</sup> - A specification for Electronic Program Guide Data Interchange**

## **1 Introduction and Scope**

### **1.1 Scope and Purpose**

The OpenEPG™ standard defines a field structure and access method for obtaining electronic program guide (EPG) data, also known as metadata, for describing audio-video content and its availability using IP-related protocols. The OpenEPG standard facilitates access by home entertainment devices to scheduled event data for terrestrial, cable and satellite programming; to video on demand (VOD) services; and to content stored locally on a home networked device. OpenEPG allows for aggregation of metadata provided by multiple sources such as various metadata service providers (MSPs,) including small and local MSPs (such as churches, schools, etc.), and personal metadata for content provided by a user.

This standard defines the format and structure of OpenEPG data fields, and it defines methods of querying OpenEPG metadata services to request subsets of the available data. Electronic versions of the complete OpenEPG XML schemas and example files can be obtained from CEA [24].

This standard leverages the field structures used in the TVAnytime field set, but extends their use for the North American broadcast, cable and satellite infrastructure and conventions. This standard uses other common field structures, such MPEG-7, to the fullest extent possible.

### **1.2 General Capabilities**

This standard enables the following capabilities:

- Enables devices to communicate using messages based upon IP protocols.
- Provides mechanisms that enable applications to tune to content.
- Provides mechanisms that enable applications to record content.
- Limits complexity to allow small providers to create and define program metadata elements.
- Provides alignment with existing DLNA architecture for in-home network device interaction.
- Provides methods of filtering EPG data for a particular geographical area (“localization”)
- Provides optional methods for user and/or device authentication and secure data communications with the EPG MSP.

The following capabilities have been identified for future consideration.

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