



The Broadcast
Standards
Association



ATSC Standard: A/337:2024-04 Amendment No. 1, “MMT AEI”

Doc. A/337:2024-04 Amend. No. 1
14 October 2025

ATSC, the Broadcast Standards Association, is an international, non-profit organization developing voluntary standards and recommended practices for broadcast television and multimedia data distribution. ATSC member organizations represent the broadcast, professional equipment, motion picture, consumer electronics, computer, cable, satellite, and semiconductor industries. ATSC also develops implementation strategies and supports educational activities on ATSC standards. ATSC was formed in 1983 by the member organizations of the Joint Committee on Inter-society Coordination (JCIC): the Consumer Technology Association (CTA), the Institute of Electrical and Electronics Engineers (IEEE), the National Association of Broadcasters (NAB), the Internet & Television Association (NCTA), and the Society of Motion Picture and Television Engineers (SMPTE). For more information visit www.atsc.org.

© Copyright 2025 ATSC. All rights reserved.

Note: The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to the validity of this claim or of any patent rights in connection therewith. One or more patent holders have, however, filed a statement regarding the terms on which such patent holder(s) may be willing to grant a license under these rights to individuals or entities desiring to obtain such a license. Details may be obtained from the ATSC Secretary and the patent holder.

Implementers with feedback, comments, or potential bug reports relating to this document may contact ATSC at <https://www.atsc.org/feedback/>.

Revision History

Version	Date
Amendment approved	14 October 2025

ATSC Standard: A/337:2024-04 Amendment No. 1, “MMT AEI”

1. OVERVIEW

1.1 Definition

An Amendment is generated to document an enhancement, an addition or a deletion of functionality to previously agreed technical provisions in an existing ATSC document. Amendments shall be published as attachments to the original ATSC document. Distribution by ATSC of existing documents shall include any approved Amendments.

1.2 Scope

This document describes a change to bring the MMT AEI capability in line with current DASH events.

1.3 Rationale for Changes

The changes described in this document are being proposed to ensure that events can be handled the same way for both MMT and DASH linear services. The DASH spec currently allows events with XML data or string data, and critically, the various SCTE-35 schemeIdUris require XML data. The MMT AEI table only allows string data, which means the SCTE-35 schemeIdUris, amongst others, cannot be utilized as written.

This amendment is intended to satisfy part of NPP-085.

1.4 Compatibility Considerations

Non-updated receivers may not process XML child elements for AEI events and so may ignore events sent using the updated options. This likely would cause reduced capability for features like content replacement or event-based BA displays on these receivers, but should not impact the core content of the video service.

2. LIST OF CHANGES

Change instructions are given below in *italics*. Unless otherwise noted, inserted text, tables, and drawings are shown in **blue**; deletions of existing text are shown in ~~red-strikeout~~. The text “[ref]” indicates that a cross reference to a cited referenced document should be inserted.

2.1 Change Instructions

Modify A/337:2024-04 Section 4.1.2 in the semantics for Event as shown:

Event – Each instance of this element and its attributes shall define information about an event in the context of the parent event stream element. ~~This element includes the data corresponding to the event~~ Each instance of an event shall contain a corresponding Event element with either data coded as an XML string or XML content using elements external to the AEI namespace.

For new event schemes, string content should be used, making use of Base 64 encoding if needed.

The schema allows “mixed” content within this element; however, only string data or XML elements are permitted by the above options, not a combination of string data and XML elements.

Modify A/337:2024-04 Table 4.1 as shown:

Element Name	Use Data Type		Description
AEI			Set of static event streams
@assetId	1	String	Identifier of the MMT asset used for time reference
@mpuSegNum	1	unsignedInt	Identifier of the anchor MPU used for time reference
@timeStamp	1	unsignedLong	The presentation time of the anchor MPU
EventStream	1..N		Event Stream
@schemeIdUri	1	anyURI	Identifier scheme of the event stream. The string may use URN or URL syntax.
@value	0..1	string	Identifier “value” attribute of the event stream
@timescale	0..1	unsignedInt	Time scale to be used for events in the event stream
Event	1..N	string	Event envelope and string data for the event. The content of the string depends on the event scheme and value attributes. Event and message of the event. The content of this element depends on the event scheme. The contents shall be either: <ul style="list-style-type: none"> • A string • XML content using elements external to the AEI namespace
@presentationTime	0..1	unsignedLong	Presentation time of the event relative to the presentation time of the first access unit in the anchor MPU, which is indicated by @timestamp
@duration	0..1	unsignedLong	Duration of this event
@id	0..1	unsignedInt	Identifier for this event.

– End of Document –