



***Society of Cable  
Telecommunications  
Engineers***

---

**ENGINEERING COMMITTEE**  
**Digital Video Subcommittee**

---

**AMERICAN NATIONAL STANDARD**

**ANSI/SCTE 130-9 2014**

**Recommended Practices for SCTE 130  
Digital Program Insertion—Advertising Systems  
Interfaces**

## NOTICE

The Society of Cable Telecommunications Engineers (SCTE) Standards and Recommended Practices (hereafter called documents) are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interchangeability, best practices and ultimately the long term reliability of broadband communications facilities. These documents shall not in any way preclude any member or non-member of SCTE from manufacturing or selling products not conforming to such documents, nor shall the existence of such standards preclude their voluntary use by those other than SCTE members, whether used domestically or internationally.

SCTE assumes no obligations or liability whatsoever to any party who may adopt the Standards. Such adopting party assumes all risks associated with adoption of these Standards, and accepts full responsibility for any damage and/or claims arising from the adoption of such Standards.

Attention is called to the possibility that implementation of this standard may require the use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. SCTE shall not be responsible for identifying patents for which a license may be required or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Patent holders who believe that they hold patents which are essential to the implementation of this standard have been requested to provide information about those patents and any related licensing terms and conditions. Any such declarations made before or after publication of this document are available on the SCTE web site at <http://www.scte.org>.

All Rights Reserved

© Society of Cable Telecommunications Engineers, Inc. 2014

140 Philips Road

Exton, PA 19341

## Table of Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2</b>	<b>INFORMATIVE REFERENCES .....</b>	<b>1</b>
<b>3</b>	<b>GLOSSARY OF TERMS.....</b>	<b>3</b>
<b>4</b>	<b>ABBREVIATIONS.....</b>	<b>3</b>
<b>5</b>	<b>OVERVIEW .....</b>	<b>3</b>
5.1	SCOPE OF THE RECOMMENDED PRACTICES DOCUMENT .....	3
5.2	PURPOSE .....	4
5.3	EXAMPLE MESSAGING AND UUIDS .....	4
<b>6</b>	<b>STRUCTURE AND SUMMARY .....</b>	<b>4</b>
<b>7</b>	<b>PLACEMENT DECISION USAGE PATTERNS .....</b>	<b>6</b>
7.1	ADS/ADM REGISTRATION .....	6
7.1.1	<i>ListADMServicesRequest/ListADMServicesResponse.....</i>	<i>8</i>
7.1.2	<i>ListADSRegistrationRequest/ListADSRegistrationResponse .....</i>	<i>9</i>
7.1.3	<i>ADSRegistrationRequest/ADSRegistrationResponse .....</i>	<i>12</i>
7.2	ADS-CENTRIC VOD .....	14
7.2.1	<i>PlacementRequest.....</i>	<i>15</i>
7.2.2	<i>ContentQueryRequest/ContentQueryResponse .....</i>	<i>16</i>
7.2.3	<i>POISQueryRequest/POISQueryResponse .....</i>	<i>19</i>
7.2.4	<i>SISQueryRequest/SISQueryResponse .....</i>	<i>20</i>
7.2.5	<i>PlacementResponse.....</i>	<i>21</i>
7.2.6	<i>PlacementStatusNotification/PlacementStatusAcknowledgement.....</i>	<i>22</i>
7.3	ADM-CENTRIC VOD .....	24
7.3.1	<i>ContentQueryRequest/ContentQueryResponse .....</i>	<i>25</i>
7.3.2	<i>POISQueryRequest/POISQueryResponse .....</i>	<i>29</i>
7.3.3	<i>SISQueryRequest/SISQueryResponse .....</i>	<i>31</i>
7.3.4	<i>PlacementRequest/PlacementResponse.....</i>	<i>33</i>
7.3.5	<i>PlacementStatusNotification/PlacementStatusAcknowledgement.....</i>	<i>35</i>
7.4	VOD WITH AN INTERMEDIARY.....	36
7.4.1	<i>PlacementRequest.....</i>	<i>38</i>
7.4.2	<i>ContentQueryRequest/ContentQueryResponse .....</i>	<i>39</i>
7.4.3	<i>POISQueryRequest/POISQueryResponse .....</i>	<i>42</i>
7.4.4	<i>SISQueryRequest/SISQueryResponse .....</i>	<i>44</i>
7.4.5	<i>PlacementRequest/PlacementResponse.....</i>	<i>46</i>
7.4.6	<i>PlacementResponse.....</i>	<i>48</i>
7.4.7	<i>PlacementStatusNotification.....</i>	<i>48</i>
7.4.8	<i>PlacementStatusNotification/PlacementStatusAcknowledgement.....</i>	<i>50</i>

7.4.9	<i>PlacementStatusAcknowledgement</i> .....	51
7.5	ADS INITIATED DEREGISTRATION.....	52
7.5.1	<i>ADSDeregisterRequest/ADSDeregisterResponse</i> .....	53
7.6	ADM INITIATED DEREGISTRATION .....	54
7.6.1	<i>ADSDeregistrationNotification/ADSRegistrationAcknowledgement</i> .....	55
<b>8</b>	<b>INFORMATION SERVICE USAGE PATTERNS</b> .....	<b>56</b>
8.1	SIS.....	57
8.1.1	<i>SIS Feature Discovery</i> .....	57
8.1.2	<i>SIS Notifications</i> .....	60
8.1.3	<i>SIS Queries</i> .....	63
8.1.4	<i>SIS Cursors</i> .....	68
8.2	POIS.....	71
8.2.1	<i>POIS Feature Discovery</i> .....	71
8.2.2	<i>POIS Notifications</i> .....	74
8.2.3	<i>POIS Queries</i> .....	77
8.2.4	<i>POIS Cursors</i> .....	81
8.3	CIS .....	84
8.3.1	<i>CIS Feature Discovery</i> .....	84
8.3.2	<i>CIS Notifications</i> .....	86
8.3.3	<i>CIS Queries</i> .....	89
8.3.4	<i>CIS Cursors</i> .....	91
<b>9</b>	<b>ADVANCED TOPICS</b> .....	<b>94</b>
9.1	FILL VERSUS REPLACE .....	95
9.2	MIDROLLS .....	99
9.3	PLAYLISTING.....	101
9.3.1	<i>PlacementRequest</i> .....	102
9.3.2	<i>PlacementResponse (EntertainmentNPT-based)</i> .....	102
9.3.3	<i>PlacementResponse (SCTE 130-3 2013-based)</i> .....	104
9.3.4	<i>Incorporating Asset Metadata via ADI 3.0</i> .....	105
9.4	STREAM RESTRICTION.....	106
9.5	MULTIPLE PLACEMENT OPPORTUNITY OWNERSHIP .....	108
9.5.1	<i>Registration</i> .....	109
9.5.2	<i>Placement</i> .....	110
9.6	EXTENSION .....	116
9.6.1	<i>Ext</i> .....	116
9.6.2	<i>##any</i> .....	116
9.7	SUBSTITUTION.....	117
9.8	PLAYDATA VARIATIONS .....	118
9.9	SERVICE MONITORING AND RECOVERY .....	119
9.9.1	<i>ServiceCheckRequest</i> .....	119
9.9.2	<i>ListADSRegistrationRequest</i> .....	119
9.9.3	<i>@resend attribute</i> .....	120

## List of Figures

Figure 1: Registration Messaging Overview.....	7
Figure 2: Registration Sequence Diagram.....	7
Figure 3: List ADM Placement Services Message Exchange.....	8
Figure 4: ADM Registration Status Message Exchange .....	9
Figure 5: Registration Message Exchange.....	12
Figure 6: ADS-centric VOD Messaging Overview.....	14
Figure 7: ADS-centric VOD Sequence Diagram.....	15
Figure 8: ADS-centric VOD Placement Request Message Exchange .....	15
Figure 9: ADS-Centric VOD Content Query Message Exchange .....	16
Figure 10: ADS-Centric VOD POIS Query Message Exchange .....	19
Figure 11: ADS-Centric VOD SIS Query Message Exchange .....	20
Figure 12: ADS-centric VOD Placement Response Message Exchange.....	22
Figure 13: ADS-centric VOD Placement Status Message Exchange.....	23
Figure 14: ADM-centric VOD Messaging Overview .....	24
Figure 15: ADM-centric VOD Sequence Diagram .....	25
Figure 16: ADM-centric VOD Content Query Message Exchange.....	26
Figure 17: ADM-centric VOD CIS/PlacementRequest Link .....	29
Figure 18: ADM-centric VOD POIS Query Message Exchange.....	29
Figure 19: ADM-centric VOD POIS/PlacementRequest Link.....	31
Figure 20: ADM-centric VOD SIS Query Message Exchange.....	31
Figure 21: ADM-centric VOD SIS/PlacementRequest Link.....	33
Figure 22: ADM-centric VOD Placement Message Exchange .....	33
Figure 23: ADM-centric VOD Placement Status Message Exchange.....	35
Figure 24: VOD with an Intermediary Messaging Overview.....	36
Figure 25: VOD with an Intermediary Sequence Diagram.....	37
Figure 26: VOD with an Intermediary Placement Request Message Exchange .....	38
Figure 27: VOD with an Intermediary Content Query Message Exchange .....	39
Figure 28: Intermediary-centric VOD CIS/PlacementRequest Link .....	42
Figure 29: VOD with an Intermediary POIS Query Message Exchange .....	42
Figure 30: Intermediary-centric VOD POIS/PlacementRequest Link.....	44
Figure 31: VOD with an Intermediary SIS Query Message Exchange .....	45
Figure 32: Intermediary-centric VOD SIS/PlacementRequest Link.....	46
Figure 33: VOD with an Intermediary Placement Message Exchange.....	46
Figure 34: VOD with an Intermediary Placement Response Message Exchange.....	48
Figure 35: VOD with an Intermediary Placement Status Notification Message Exchange .....	49
Figure 36: VOD with an Intermediary Placement Status Message Exchange .....	50
Figure 37: VOD with an Intermediary Placement Status Acknowledgement Message Exchange .....	52
Figure 38: ADS Initiated Deregistration Messaging Overview .....	52
Figure 39: ADS Initiated Deregistration Sequence Diagram .....	53
Figure 40: ADS Initiated Deregistration Message Exchange .....	53
Figure 41: ADM Initiated Deregistration Messaging Overview .....	54
Figure 42: ADM Initiated Deregistration Sequence Diagram.....	55
Figure 43: ADM Initiated Deregistration Message Exchange.....	55
Figure 44: SIS Overview .....	57
Figure 45: SIS Discovery Sequence Diagram .....	57
Figure 46: SIS List Supported Features Message Exchange.....	58
Figure 47: SIS List Qualifiers Message Exchange.....	59
Figure 48: SIS Notification Sequence Diagram .....	61
Figure 49: SIS Notification Registration Message Exchange .....	61
Figure 50: SIS Notification Message Exchange.....	62

Figure 51: SIS Query Sequence Diagram.....	64
Figure 52: SIS Query Message Exchange.....	64
Figure 53: SIS Cursor Sequence Diagram.....	68
Figure 54: SIS Create Cursor Message Exchange.....	69
Figure 55: SIS Query Message Exchange.....	70
Figure 56: SIS Cancel Cursor Message Exchange.....	70
Figure 57: POIS Overview.....	71
Figure 58: POIS Discovery Sequence Diagram.....	72
Figure 59: POIS List Supported Features Message Exchange.....	72
Figure 60: POIS List Qualifiers Message Exchange.....	73
Figure 61: POIS Notification Sequence Diagram.....	75
Figure 62: POIS Notification Registration Message Exchange.....	75
Figure 63: POIS Notification Message Exchange.....	76
Figure 64: POIS Query Sequence Diagram.....	78
Figure 65: POIS Query Message Exchange.....	78
Figure 66: POIS Cursor Sequence Diagram.....	81
Figure 67: POIS Create Cursor Message Exchange.....	82
Figure 68: POIS Query Message Exchange.....	83
Figure 69: POIS Cancel Cursor Message Exchange.....	83
Figure 70: CIS Overview.....	84
Figure 71: CIS Discovery Sequence Diagram.....	85
Figure 72: CIS List Supported Features Message Exchange.....	85
Figure 73: CIS Notification Sequence Diagram.....	86
Figure 74: CIS Notification Registration Message Exchange.....	87
Figure 75: CIS Notification Message Exchange.....	88
Figure 76: CIS Query Sequence Diagram.....	89
Figure 77: CIS Query Message Exchange.....	89
Figure 78: CIS Cursor Sequence Diagram.....	92
Figure 79: CIS Create Cursor Message Exchange.....	92
Figure 80: CIS Query Message Exchange.....	93
Figure 81: CIS Cancel Cursor Message Exchange.....	94
Figure 82: Placement Element.....	96
Figure 83: Contiguous Entertainment Asset.....	97
Figure 84: Entertainment Asset with a fill Placement.....	98
Figure 85: Entertainment Asset with a replace Placement.....	98
Figure 86: OpportunityBinding Element.....	99
Figure 87: Scope Element.....	108
Figure 88: Multiple Ownership Placement Messaging Sequence Diagram.....	111
Figure 89: Multiple Ownership POIS Messaging.....	112
Figure 90: Multiple Ownership Placement Messaging.....	114
Figure 91: Multiple Ownership PSN Messaging.....	115
Figure 92: Ext Element.....	116

## List of Tables

Table 1: Values for the @action attribute.....	97
Table 2: Values for the @opportunityType attribute.....	100
Table 3: Values for Scope.....	109

## **1 Introduction**

The goal of this recommended practices document is to serve as an informational enhancement to SCTE 130, Digital Program Insertion—Advertising Systems Interfaces. SCTE 130 is necessarily brief in many areas in order to maintain conciseness and accuracy. This document serves as a companion to SCTE 130.

This document makes reference to versions of SCTE 130 documents from both the first and second editions of the standard, as outlined in Section 2. For further details concerning the differences between the first and second editions of SCTE 130, see SCTE130-1 2013: Digital Program Insertion—Advertising Systems Interfaces Part 1 – Overview.

## **2 Informative References**

At the time of publication, the editions indicated below were current. All standards are subject to revision, and parties to agreement based on this document are encouraged to apply the most recent editions of the documents listed below when appropriate.