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## S T A N D A R D S

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**Data Standards Subcommittee**

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**AMERICAN NATIONAL STANDARD**

**ANSI/SCTE 260-5 2020**

**DPoE OAM Extensions Specification**

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## 1. Introduction

### 1.1. Executive Summary

The present document provides the SCTE endorsement of CableLabs specification: DPoE-SP-OAMv2.0-I14-190213.

### 1.2. Scope

Since the vCM operates on the DPoE System (instead of the D-ONU), a means of communication from the vCM to the D-ONU is required. The D-ONU does not require an IP stack. Therefore, [802.3] standard EPON OAM is used for messaging between the vCM on the DPoE System and the D-ONU. The OAM Extensions specified here provide additional means for such messaging for parameters not supported in the [802.3] standard EPON OAM. The [802.3] specifications allow vendor-specific OAM extensions. This document describes the usage of this extension feature to provide for a common set of OAM extensions to support interoperability between all vendors that choose to develop products in accordance with the DPoE specifications.

This document defines the interface used for conveying management information between a DPoE System and D-ONU. This specification defines message format and contents for the following types of configuration or information collection:

- General management and device capabilities
- Forwarding provisioning
- Statistics collection
- Alarm status
- Security key exchange
- Frame processing and classification
- Quality of Service provisioning
- Time Synchronization (ToD, Frequency, and Phase)

Implementations that conform to this specification are required to implement all the features defined in this specification.

Implementations may also implement other [802.3] Clause 57 OAM extensions if desired. DPoE implementations that conform to this specification must fully interoperate with other DPoE implementations that conform to this specification regardless of the presence or absence of other OAM extensions.

## 2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

### 2.1. SCTE References

- No normative references are applicable.

## 2.2. Standards from Other Organizations

[1] DPoE OAM Extensions Specification, DPoE-SP-OAMv2.0-I14-190213, February 13, 2019, Cable Television Laboratories, Inc. [www.cablelabs.com](http://www.cablelabs.com)

## 2.3. Published Materials

- No normative references are applicable.

## 3. Informative References

The following documents might provide valuable information to the reader but are not required when complying with this document.

### 3.1. SCTE References

- No informative references are applicable.

### 3.2. Standards from Other Organizations

- No informative references are applicable.

### 3.3. Published Materials

- No informative references are applicable.

## 4. Compliance Notation

<i>shall</i>	This word or the adjective “ <i>required</i> ” means that the item is an absolute requirement of this document.
<i>shall not</i>	This phrase means that the item is an absolute prohibition of this document.
<i>forbidden</i>	This word means the value specified shall never be used.
<i>should</i>	This word or the adjective “ <i>recommended</i> ” means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighted before choosing a different course.
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<i>deprecated</i>	Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of this document. Implementations should avoid use of deprecated features.

## **5. Abbreviations and Definitions**

### **5.1. Abbreviations**

For the purposes of the present document, the abbreviations given in CableLabs specification: DPoE-SP-OAMv2.0-I14-190213, [1] apply.

### **5.2. Definitions**

For the purposes of the present document, the definitions given in CableLabs specification: DPoE-SP-OAMv2.0-I14-190213 [1] apply.

## **6. Endorsement Notice**

All elements of CableLabs specification: DPoE-SP-OAMv2.0-I14-190213 [1] *shall* apply without modifications.