



***Society of Cable  
Telecommunications  
Engineers***

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**ENGINEERING COMMITTEE  
Network Operations Subcommittee**

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**SCTE Standard**

**SCTE 38-7 2017**

**Hybrid Fiber/Coax Outside Plant Status Monitoring  
SCTE-HMS-Transponder Interface Bus (TIB)-MIB  
Management Information Base (MIB) Definition**

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## 1. Scope

This document is identical to SCTE 38-7 2008 except for informative components which may have been updated such as the title page, NOTICE text, headers and footers. No normative changes have been made to this document.

This document contains information about the communications state of devices connected to the transponder, as well as indicating what device-specific MIB each device supports. These devices are typically connected to the transponder via a serial communications link (bus).

## 2. Copyright

The MIB definition found in this document may be incorporated directly in products without further permission from the copyright owner, SCTE.

## 3. Normative Reference

|  |  |
|--|--|
| ANSI/SCTE 25-3<br>2005                       | Hybrid Fiber Coax Outside Plant Status Monitoring – Power Supply to Transponder Interface Bus (PSTIB) Specification v1.1 |
| ANSI/SCTE 36 2007<br>(formerly HMS 028)      | SCTE-ROOT Management Information Base (MIB) Definitions  |
| ANSI/SCTE 37 2008<br>(formerly HMS 072)      | Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-ROOTS Management Information Base (MIB) Definition            |
| ANSI/SCTE 38-1<br>2004 (formerly HMS<br>026) | Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-PROPERTY-MIB Management Information Base (MIB) Definition     |
| ANSI/SCTE 38-3<br>2008 (formerly HMS<br>024) | Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-COMMON-MIB Management Information Base (MIB) Definition       |
| IETF RFC 1155                                | Structure and Identification of Management Information for TCP/IP-based Internets [RFC1155-SMI]                          |
| IETF RFC 1157                                | A Simple Network Management Protocol (SNMP) [RFC1157-SNMP]   |
| IETF RFC 1212                                | Concise MIB Definitions for SNMPv1   |
| IETF RFC 1213                                | MIB for Network Management of TCP/IP-based internets: MIB-II [RFC1213-MIB] for SNMPv1                                    |
| IETF RFC 1215                                | A Convention for Defining Traps for use with the SNMP for SNMPv1   |

## 4. Informative Reference

None

## 5. Terms and Definitions

This document defines the following terms:

**Management Information Base (MIB)** - the specification of information in a manner that allows standard access through a network management protocol.

## 6. Requirements

This section defines the mandatory syntax of the SCTE-HMS-TIB-MIB MIB. It follows the IETF Simple Network Management Protocol (SNMP) for defining the managed objects.

The syntax is given below.

```
-- *****
-- *
-- * Module Name: HMS050R5.MIB (SCTE 38-7)
-- *
-- * SCTE Status: ADOPTED JANUARY 11, 2002
-- *
-- * This MIB contains information about the communications state of
-- * devices connected to the transponder, as well as indicating what
-- * device-specific MIB each device supports. These devices are typically
-- * connected to the transponder via a serial communications link (bus).
-- *
-- *****
```

SCTE-HMS-TIB-MIB DEFINITIONS ::= BEGIN

IMPORTS

```
OBJECT-TYPE
FROM RFC-1212
transponderInterfaceBusIdent
FROM SCTE-HMS-ROOTS
;
```

tibAttachedDevices OBJECT-TYPE

```
SYNTAX INTEGER
ACCESS read-only
STATUS mandatory
DESCRIPTION
```

"Bit Map that indicates addresses of attached devices. Bit set means a device using that address is attached to NE.

| Bits | Addresses |
|------|-----------|
| 0    | Not used  |
| 1    | 1         |
| 2    | 2         |
| 3    | 3         |
| 4    | 4         |
| 5    | 5         |
| 6    | 6         |
| 7    | 7         |
| 8    | 8         |
| 9    | 9         |
| 10   | 10        |
| 11   | 11        |
| 12   | 12        |
| 13   | 13        |
| 14   | 14        |
| 15   | 15        |
| 16   | 16        |
| 17   | 17        |
| 18   | 18        |
| 19   | 19        |
| 20   | 20        |
| 21   | 21        |
| 22   | 22        |
| 23   | 23        |
| 24   | 24        |

```

25 25
26 26
27 27
28 28
29 29
30 30
31 31
"

```

```
 ::= { transponderInterfaceBusIdent 1 }
```

tibCommStatus OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

"Bit Map that indicates attached devices that are not communicating. Bit set means a device using that address is not communicating. This only applies to addresses whose bit is set in tibAttachedDevices.

| Bits | Addresses |
|------|-----------|
| 0    | Not used  |
| 1    | 1         |
| 2    | 2         |
| 3    | 3         |
| 4    | 4         |
| 5    | 5         |
| 6    | 6         |
| 7    | 7         |
| 8    | 8         |
| 9    | 9         |
| 10   | 10        |
| 11   | 11        |
| 12   | 12        |
| 13   | 13        |
| 14   | 14        |
| 15   | 15        |
| 16   | 16        |
| 17   | 17        |
| 18   | 18        |
| 19   | 19        |
| 20   | 20        |
| 21   | 21        |
| 22   | 22        |
| 23   | 23        |
| 24   | 24        |
| 25   | 25        |
| 26   | 26        |
| 27   | 27        |
| 28   | 28        |
| 29   | 29        |
| 30   | 30        |
| 31   | 31        |
| "    |           |

```
 ::= { transponderInterfaceBusIdent 2 }
```

tibDevicesAddressedTable OBJECT-TYPE

SYNTAX SEQUENCE OF TibDevicesAddressedEntry

ACCESS not-accessible  
 STATUS mandatory  
 DESCRIPTION  
 "Table containing identity of devices addressed by this NE.  
 This table should contain entries ONLY for devices that are physically  
 connected to the NE. If a device is not connected, no entry should be  
 created in the table for that address/index."  
 ::= { transponderInterfaceBusIdent 3 }

tibDevicesAddressedEntry OBJECT-TYPE  
 SYNTAX TibDevicesAddressedEntry  
 ACCESS not-accessible  
 STATUS mandatory  
 DESCRIPTION  
 "Entry containing information about individual devices"  
 INDEX { tibDeviceAddress }  
 ::= { tibDevicesAddressedTable 1 }

TibDevicesAddressedEntry ::= SEQUENCE  
 {  
     tibDeviceAddress  
         INTEGER,  
     tibDeviceIdentity  
         OBJECT IDENTIFIER,  
     tibControlMode  
         INTEGER  
 }

tibDeviceAddress OBJECT-TYPE  
 SYNTAX INTEGER ( 1..31 )  
 ACCESS read-only  
 STATUS mandatory  
 DESCRIPTION  
 "Index into tibDevicesAddressedTable."  
 ::= { tibDevicesAddressedEntry 1 }

tibDeviceIdentity OBJECT-TYPE  
 SYNTAX OBJECT IDENTIFIER  
 ACCESS read-only  
 STATUS mandatory  
 DESCRIPTION  
 "Device identification. root OID for MIB that this device supports.  
 For Power Supply use psIdent from SCTE-HMS-ROOTS (1.3.6.1.4.1.5591.1.4)  
 For Fiber Node use fnIdent from SCTE-HMS-ROOTS (1.3.6.1.4.1.5591.1.5)  
 For Generator use genIdent from SCTE-HMS-ROOTS (1.3.6.1.4.1.5591.1.6)"  
 ::= { tibDevicesAddressedEntry 2 }

tibControlMode OBJECT-TYPE  
 SYNTAX INTEGER { remote(1), local(2), notCommunicating(3) }  
 ACCESS read-only  
 STATUS optional  
 DESCRIPTION  
 "Control mode for this device"

- 1 = Remote device will respond to commands from master NE
- 2 = Local device is under local control and will not respond to commands from master NE
- 3 = This device is not responding.

This item requires entries in the discrete property table"

::= { tibDevicesAddressedEntry 3 }

END