Society of Cable Telecommunication Engineers

ENGINEERING COMMITTEE
Hybrid Management Sub-Layer Subcommittee

AMERICAN NATIONAL STANDARD

ANSI/SCTE 38-7 2008

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

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Contents

1. Scope

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 2005	Hybrid Fiber Coax Outside Plant Status Monitoring – Power Supply to Transponder Interface Bus (PSTIB) Specification v1.1
ANSI/SCTE 36 2007 (formerly HMS 028)	SCTE-ROOT Management Information Base (MIB) Definitions
ANSI/SCTE 37 2008 (formerly HMS 072)	Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-ROOTS Management Information Base (MIB) Definition
ANSI/SCTE 38-1 2004 (formerly HMS 026)	Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-PROPERTY-MIB Management Information Base (MIB) Definition
ANSI/SCTE 38-3 2008 (formerly HMS 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