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**ENGINEERING COMMITTEE
HFC Management Subcommittee**

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**HMS Inside Plant
Management Information Base (MIB)
SCTE-HMS-HE-FAN-MIB**

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SCOPE

This document provides the branch object identifiers for each of the Fan MIBs within the SCTE HMS Tree.

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NORMATIVE REFERENCE

IETF RFC 1907 SNMPv2-MIB
IETF RFC 2578 SNMPv2-SMI
IETF RFC 2579 SNMPv2-TC
IETF RFC 2580 SNMPv2-CONF
IETF RFC 2737 ENTITY-MIB
SCTE 36 SCTE-ROOT
SCTE 37 SCTE-HMS-ROOTS
SCTE 38-11 SCTE-HMS-HEADENDIDENT-MIB
SCTE 38-1 SCTE-HMS-HE-PROPERTY-MIB
SCTE 84-1 SCTE-HMS-HE-COMMON-MIB

INFORMATIVE REFERENCE

None

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.

REQUIREMENTS

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

The syntax is given below.

SCTE-HMS-HE-FAN-MIB DEFINITIONS ::= BEGIN

IMPORTS

OBJECT-TYPE, MODULE-IDENTITY, Unsigned32
FROM SNMPv2-SMI

OBJECT-GROUP, MODULE-COMPLIANCE
FROM SNMPv2-CONF

entPhysicalIndex
FROM ENTITY-MIB

heFans, HeMilliAmp, HeFaultStatus
FROM SCTE-HMS-HEADENDIDENT-MIB;

heFanModuleMIB MODULE-IDENTITY

LAST-UPDATED "200403250410Z"

ORGANIZATION

"SCTE HMS Working Group"

CONTACT-INFO

"SCTE HMS Subcommittee, Chairman
mail to: standards@scte.org"

DESCRIPTION

"The MIB module is for representing Fans and Fan Groupings present
in the headend (or indoor) plant which are supported by a SNMP

agent."

::= { heFans 1 }

heFanMIBObjects OBJECT IDENTIFIER ::= { heFanModuleMIB 1 }

-- Conformance information

heFanMIBConformance OBJECT IDENTIFIER ::= { heFanModuleMIB 2 }

heFanMIBCompliances OBJECT IDENTIFIER ::= { heFanMIBConformance 1 }

heFanMIBGroups OBJECT IDENTIFIER ::= { heFanMIBConformance 2 }

-- The Fan Unit Table

heFanUnitTable OBJECT-TYPE

SYNTAX SEQUENCE OF HeFanUnitEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"A table containing information about headend (or indoor)
fan groupings. Fans can be in a Fan Tray, Power Supplies,
attached to the Cabinet, or any fan entity managed by this
SNMP agent. Each fan grouping will have an associated entry
in the Entity mib."

::= { heFanMIBObjects 1 }

heFanUnitEntry OBJECT-TYPE

SYNTAX HeFanUnitEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Information about each Fan Grouping in the subsystem."

INDEX { entPhysicalIndex }

::= { heFanUnitTable 1 }

HeFanUnitEntry ::= SEQUENCE {

heFanUnitAlarm

HeFaultStatus

}

heFanUnitAlarm OBJECT-TYPE

SYNTAX HeFaultStatus

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The fan grouping status. If every fan in the grouping is operating in normal condition the value returned is normal(1), otherwise the value returned will be fault(2).

This object must provide for the alarm management capabilities with a corresponding entry in the discretePropertyTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

An Alarm Shall be recorded as an entry in the currentAlarmTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

A log record shall be added as an entry in the heCommonLogTable.

An heCommonAlarmEvent notification shall be sent."

::= { heFanUnitEntry 1 }

-- The Fan Status Table

heFanStatusTable OBJECT-TYPE

SYNTAX SEQUENCE OF HeFanStatusEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"A list of monitorable parameter entries for each fan or fan grouping."

::= { heFanMIBObjects 2 }

heFanStatusEntry OBJECT-TYPE
SYNTAX HeFanStatusEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"An entry containing management information applicable
to a particular fan or fan grouping for this particular fan entity
unit."

INDEX { entPhysicalIndex,
heFanStatusIndex }
::= { heFanStatusTable 1 }

HeFanStatusEntry ::= SEQUENCE {
heFanStatusIndex
Unsigned32,
heFanStatusCurrent
HeMilliAmp,
heFanStatusAlarm
HeFaultStatus
}

heFanStatusIndex OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"An arbitrary value which uniquely identifies the fan or fan grouping
for this particular fan entity unit."
::= { heFanStatusEntry 1 }

heFanStatusCurrent OBJECT-TYPE
SYNTAX HeMilliAmp
UNITS "milliamperes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Current of this fan or fan grouping for this particular fan entity unit."
::= { heFanStatusEntry 2 }

heFanStatusAlarm OBJECT-TYPE
SYNTAX HeFaultStatus
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"This object contains the current alarm status for

this fan or fan grouping for this particular fan entity unit.

This object must provide for the alarm management capabilities with a corresponding entry in the discretePropertyTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

An alarm shall be recorded as an entry in the currentAlarmTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

A log record shall be added as an entry in the heCommonLogTable.

An heCommonAlarmEvent notification shall be sent."

```
::= { heFanStatusEntry 3 }
```

```
-- Compliance statements
```

```
heFanCompliance MODULE-COMPLIANCE
```

```
STATUS current
```

```
DESCRIPTION
```

```
"The minimum compliance statement for indoor fans."
```

```
MODULE
```

```
MANDATORY-GROUPS { heFanUnitMandatoryGroup }
```

```
GROUP heFanStatusGroup
```

```
DESCRIPTION
```

```
"The heFanStatusGroup is unconditionally optional."
```

```
::= { heFanMIBCompliances 1 }
```

```
-- this module
```

```
heFanUnitMandatoryGroup OBJECT-GROUP
```

```
OBJECTS { heFanUnitAlarm }
```

```
STATUS current
```

```
DESCRIPTION
```

```
"The main group defines mandatory objects for all indoor fans."
```

```
::= { heFanMIBGroups 1 }
```

```
heFanStatusGroup OBJECT-GROUP
```

```
OBJECTS { heFanStatusAlarm,
```

```
heFanStatusCurrent }
```

```
STATUS current
```

```
DESCRIPTION
```

```
"A collection of objects that provide information applicable  
to a particular fan's status parameters."
```

```
::= { heFanMIBGroups 2 }
```

```
END
```