

PKTC-EXCENTIS-SIG-MIB DEFINITIONS ::= BEGIN

IMPORTS

```
MODULE-IDENTITY,
OBJECT-TYPE,
Integer32,
Unsigned32,
mib-2
    FROM SNMPv2-SMI                -- [RFC2578]
InetAddressType,

InetAddress,
InetAddressPortNumber
    FROM INET-ADDRESS-MIB          -- [RFC4001]
TEXTUAL-CONVENTION,
RowStatus,
TruthValue
    FROM SNMPv2-TC                -- [RFC2579]
OBJECT-GROUP,
MODULE-COMPLIANCE
    FROM SNMPv2-CONF              -- [RFC2580]
SnmAdminString
    FROM SNMP-FRAMEWORK-MIB        -- [RFC3411]
ifIndex
    FROM IF-MIB                    -- [RFC2863]
Dscp
    FROM DIFFSERV-DSCP-TC          -- [RFC3289]
excentis
    FROM EXCENTIS-MIB;
```

```
pktcExcentisSigMib MODULE-IDENTITY
LAST-UPDATED      "200509090000Z" -- September 9, 2005
ORGANIZATION      "IETF IPCDN Working Group"
CONTACT-INFO
```

```
"Sumanth Channabasappa
Cable Television Laboratories, Inc.
858 Coal Creek Circle,
Louisville, CO 80027, USA
Phone: +1 303-661-3307
Email: Sumanth@cablelabs.com
```

```
Gordon Beacham
Motorola, Inc.
6450 Sequence Drive, Bldg. 1
San Diego, CA 92121, USA
Phone: +1 858-404-2335
Email: gordon.beacham@motorola.com
```

```
Satish Kumar Mudugere Eswaraiah
Texas Instruments India (P) Ltd.,
Golf view, Wind Tunnel Road
Murugesh Palya
Bangalore 560 017, INDIA
Phone: +91 80 5269451
Email: satish.kumar@ti.com
```

```
IETF IPCDN Working Group
General Discussion: ipcdn@ietf.org
Subscribe: http://www.ietf.org/mailman/listinfo/ipcdn
Archive: ftp://ftp.ietf.org/ietf-mail-archive/ipcdn
Co-Chair: Jean-Francois Mule, jf.mule@cablelabs.com
Co-Chair: Richard Woundy, Richard_Woundy@cable.comcast.com"
```

DESCRIPTION

"This MIB module supplies the basic management object for the PacketCable and IPCablecom Signaling protocols. This version of the MIB includes common signaling and Network Call Signaling (NCS) related signaling objects.

Copyright (C) The Internet Society (2005). This version of this MIB module is part of RFC yyyy; see the RFC itself for full legal notices."

-- RFC Ed: replace yyyy with actual RFC number and remove this note

REVISION "200509090000Z"

DESCRIPTION

"Initial version, published as RFC yyyy."

-- RFC Ed: replace yyyy with actual RFC number and remove this note

::= { excentis 2 }

-- Until IANA assigns the official number in the mib-2 tree,
-- the Excentis tree is being used.

-- Will be: mib-2 XXX

-- RFC Ed: replace XXX with IANA-assigned number and remove this

-- note

-- Textual Conventions

TenthdBm ::= TEXTUAL-CONVENTION

DISPLAY-HINT "d-1"

STATUS current

DESCRIPTION

"This textual convention represents power levels that are normally expressed in dBm. Units are in tenths of a dBm; for example, -13.5 dBm will be represented as -135."

SYNTAX Integer32

PktnCodecType ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

" This textual convention defines various types of codecs that MAY be supported. The description for each enumeration is listed below:

Enumeration	Description
other	a defined codec not in the enumeration
unknown	a codec not defined in PacketCable
g729	ITU-T Recommendation G.729
reserved	for future use
g729E	ITU-T Recommendation G.729E
pcmu	Pulse Code Modulation u-law (PCMU)
g726at32	ITU-T Recommendation G.726-32 (32 kbit/s)
g728	ITU-T Recommendation G.728

pcma	Pulse Code Modulation a-law (PCMA)
g726at16	ITU-T Recommendation G.726-16 (16 kbit/s)
g726at24	ITU-T Recommendation G.726-24 (24 kbit/s)
g726at40	ITU-T Recommendation G.726-40 (40 kbit/s)
ilbc	IETF internet low bit rate codec
bv16	Broadcom BroadVoicel6

. The list of codecs is consistent with the IETF Real Time Transport Protocol (RTP) Profile registry and the RTP Map Parameters Table in [PKT-SP-CODEC]. The literal codec name for each codec is listed below:

Codec	Literal	Codec Name
g729		G729
g729E		G729E
pcmu		PCMU
g726at32		G726-32
g728		G728
pcma		PCMA
g726at16		G726-16
g726at24		G726-24
g726at40		G726-40
ilbc		iLBC
bv16		BV16

The literal codec name is the second column of the table with codec RTP Map Parameters. Literal Codec Name Column contains the codec name used in the local connection options (LCO) of the NCS messages create connection (CRCX)/modify connection (MDCX) and is also used to identify the codec in the Call Management System (CMS) Provisioning Specification. RTP Map Parameter Column of the Table contains the string used in the media attribute line (a=) of the session description protocol (SDP) parameters in NCS messages."

```
SYNTAX INTEGER {
    other          (1),
    unknown       (2),
    g729           (3),
    reserved      (4),
    g729E         (5),
    pcmu          (6),
    g726at32      (7),
    g728          (8),
    pcma          (9),
    g726at16     (10),
    g726at24     (11),
    g726at40     (12),
    ilbc         (13),
    bv16         (14)
}
```

```
PktcRingCadence ::= TEXTUAL-CONVENTION
STATUS          current
DESCRIPTION
```

"This object provides an encoding scheme for ring cadences, including repeatability characteristics. All fields in this object MUST be encoded in network-byte order.

The first three higher order octets are reserved. The octets that follow are used to encode a 'bit-string', with each bit corresponding to 50 milliseconds. A bit value of '1' indicates the presence of a ring-tone and a bit value of '0' indicates the absence of a ring-tone, for that duration (50 ms) (Note: A minimum number of octets required to encode the bit-string MUST be used).

The first two of the reserved octets MUST indicate the length of the encoded cadence (in bits) and MUST range between 1 and 264. (Note: The length in bits MUST also be consistent with the number of octets that encode the cadence). The MTA MUST ignore any unused bits in the last octet, but MUST reflect the value as provided on subsequent SNMP GETs.

The third of the reserved octets indicates 'repeatability' and MUST be either 0x80 or 0x00 - the former value indicating 'non-repeatability' and the latter indicating 'repeatability'.

The MTA MUST reject attempts to set a value that violates any of the above requirements"

SYNTAX OCTET STRING (SIZE(4..36))

PktcSigType ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

" This object lists the various types of signaling that may be supported:

other - set when signaling other than ncs is used

reserved - for future use

ncs - Network call signaling is a derivation of MGCP

(Media Gateway Control Protocol) defined for

IPCablecom/PacketCable MTAs."

SYNTAX INTEGER {

other(1),

reserved(2),

ncs(3)

}

pktcSigMibObjects OBJECT IDENTIFIER ::= { pktcExcentisSigMib 1 }

pktcSigDevConfigObjects OBJECT IDENTIFIER ::=

{ pktcSigMibObjects 1 }

pktcNcsEndPntConfigObjects OBJECT IDENTIFIER ::=

{ pktcSigMibObjects 2 }

--

-- The codec table (pktcSigDevCodecTable) defines all combinations

-- of codecs supported by the Multimedia Terminal Adapter (MTA).

--

pktcSigDevCodecTable OBJECT-TYPE

SYNTAX SEQUENCE OF PktcSigDevCodecEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

" This table describes the MTA supported codec types. An MTA MUST populate this table with all possible combinations of codecs it supports for simultaneous operation. For example, an MTA with two endpoints may be designed with a particular DSP and memory architecture that allows it to support the following fixed combinations of codecs for simultaneous operation:

Codec Type	Maximum Number of Simultaneous Codecs
PCMA	3
PCMA	2
PCMU	1
PCMA	1
PCMU	2
PCMU	3
PCMA	1
G729	1

G729	2
PCMU	1
G729	1

Based on this example, the entries in the codec table would be:

CodecComboIndex	pktcSigDevCodecType	pktcSigDevCodecMax
1	pcma	3
2	pcma	2
2	pcmu	1
3	pcma	1
3	pcmu	2
4	pcmu	3
5	pcma	1
5	g729	1
6	g729	2
7	pcmu	1
7	g729	1

An operator querying this table is able to determine all possible codec combinations the MTA is capable of simultaneously supporting.

This table MUST NOT include non-voice codecs."

```
 ::= { pktcSigDevConfigObjects 1 }
```

```
pktcSigDevCodecEntry OBJECT-TYPE
SYNTAX      PktcSigDevCodecEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "Each entry represents the maximum number of active
    connections with a particular codec the MTA is capable of
    supporting. Each row is indexed by a composite key
    consisting of a number enumerating the particular codec
    combination and the codec type."
INDEX { pktcSigDevCodecComboIndex, pktcSigDevCodecType }
 ::= { pktcSigDevCodecTable 1 }
```

```
PktcSigDevCodecEntry ::= SEQUENCE {
    pktcSigDevCodecComboIndex  Unsigned32,
    pktcSigDevCodecType       PktcCodecType,
    pktcSigDevCodecMax        Unsigned32
}
```

```
pktcSigDevCodecComboIndex OBJECT-TYPE
SYNTAX      Unsigned32 (1..255)
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    " The index value which enumerates a particular codec
    combination in the pktcSigDevCodecTable."
 ::= { pktcSigDevCodecEntry 1 }
```

```
pktcSigDevCodecType OBJECT-TYPE
SYNTAX      PktcCodecType
MAX-ACCESS  not-accessible
STATUS      current
```

DESCRIPTION

```

    " A codec type supported by this MTA."
 ::= { pktcSigDevCodecEntry 2 }

pktcSigDevCodecMax OBJECT-TYPE
SYNTAX      Unsigned32(1..255)
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " The maximum number of simultaneous sessions of a
      particular codec that the MTA can support."
 ::= { pktcSigDevCodecEntry 3 }

--
-- These are the common signaling related definitions that affect
-- the entire MTA device.
--

pktcSigDevEchoCancellation OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This object specifies if the device is capable of echo
      cancellation."
 ::= { pktcSigDevConfigObjects 2 }

pktcSigDevSilenceSuppression OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This object specifies if the device is capable of
      silence suppression (Voice Activity Detection)."
 ::= { pktcSigDevConfigObjects 3 }

pktcSigDevCallerIdSigProtocol OBJECT-TYPE
SYNTAX      INTEGER {
                    fsk (1),
                    dtmf (2)
                }
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "This object identifies the subscriber line protocol used
    for signaling on-hook caller id information. Different
    countries define different caller id signaling protocols to
    support caller identification. Frequency shift keying (FSK)
    is most commonly used. Dual tone multi-frequency (DTMF)

    is an alternative."
REFERENCE
    "ETSI-EN-300-659-1 Specification"
DEFVAL { fsk }
 ::= { pktcSigDevConfigObjects 4 }

pktcSigDevR0Cadence OBJECT-TYPE
SYNTAX      PkctRingCadence
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    " This object specifies ring cadence 0 (a user defined
      field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 5 }

```

```

pktcSigDevR1Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 1 (a user defined
          field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 6 }

pktcSigDevR2Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 2 (a user defined
          field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 7 }

pktcSigDevR3Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 3 (a user defined
          field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 8 }

pktcSigDevR4Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 4 (a user defined
          field). This object is required for the L line package."

 ::= { pktcSigDevConfigObjects 9 }

pktcSigDevR5Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 5 (a user defined
          field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 10 }

pktcSigDevR6Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 6 (a user defined
          field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 11 }

pktcSigDevR7Cadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence 7 (a user defined
          field). This object is required for the L line package."
 ::= { pktcSigDevConfigObjects 12 }

```

```

pktcSigDevRgCadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence rg (a user defined
          field). This object is required for the L line package."
    ::= { pktcSigDevConfigObjects 13 }

pktcSigDevRsCadence      OBJECT-TYPE
    SYNTAX                PktcRingCadence
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object specifies ring cadence rs (a user defined
          field) The MTA MUST reject any attempt to make this object
          repeatable. This object is required for the L line
          package."
    ::= { pktcSigDevConfigObjects 14 }

pktcSigDefCallSigDscp    OBJECT-TYPE
    SYNTAX                Dscp -- RFC 3289: DIFFSERV-DSCP-TC
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " The default value used in the IP header for setting the
          Differentiated Services Code Point (DSCP) value for call
          signaling."
    DEFVAL { 0 }
    ::= { pktcSigDevConfigObjects 15 }

pktcSigDefMediaStreamDscp OBJECT-TYPE
    SYNTAX                Dscp -- RFC 3289: DIFFSERV-DSCP-TC
    MAX-ACCESS             read-write
    STATUS                 current
    DESCRIPTION
        " This object contains the default value used in the IP
          header for setting the Differentiated Services Code Point
          (DSCP) value for media stream packets. The MTA MUST NOT
          update this object with the value supplied by the CMS in
          the NCS messages (if present). Any currently active
          connections are not affected by updates to this object.
          When the value of this object is updated by SNMP, the MTA
          MUST use the new value as a default starting only from
          new connections."
    DEFVAL { 0 }
    ::= { pktcSigDevConfigObjects 16 }

--
-- pktcSigCapabilityTable - This table defines the valid signaling
-- types supported by this MTA.
--

pktcSigCapabilityTable    OBJECT-TYPE
    SYNTAX                SEQUENCE OF PktcSigCapabilityEntry
    MAX-ACCESS             not-accessible
    STATUS                 current
    DESCRIPTION
        " This table describes the signaling types supported by this
          MTA."
    ::= { pktcSigDevConfigObjects 17 }

pktcSigCapabilityEntry    OBJECT-TYPE

```



```

SYNTAX          PktcSigCapabilityEntry
MAX-ACCESS      not-accessible
STATUS          current
DESCRIPTION
    " Entries in pktcMtaDevSigCapabilityTable - List of
      supported signaling types, versions and vendor extensions

      for this MTA. Each entry in the list provides for one
      signaling type and version combination. If the device
      supports multiple versions of the same signaling type it
      will require multiple entries."
INDEX { pktcSignalingIndex }
 ::= { pktcSigCapabilityTable 1 }

PktcSigCapabilityEntry ::= SEQUENCE {
    pktcSignalingIndex      Unsigned32,
    pktcSignalingType       PktcSigType,
    pktcSignalingVersion    SnmpAdminString,
    pktcSignalingVendorExtension SnmpAdminString
}

pktcSignalingIndex      OBJECT-TYPE
SYNTAX          Unsigned32 (1..255)
MAX-ACCESS      not-accessible
STATUS          current
DESCRIPTION
    " The index value which uniquely identifies an entry in the
      pktcSigCapabilityTable."
 ::= { pktcSigCapabilityEntry 1 }

pktcSignalingType       OBJECT-TYPE
SYNTAX          PktcSigType
MAX-ACCESS      read-only
STATUS          current
DESCRIPTION
    " This object identifies the type of signaling used. This
      value has to be associated with a single signaling
      version."
 ::= { pktcSigCapabilityEntry 2 }

pktcSignalingVersion    OBJECT-TYPE
SYNTAX          SnmpAdminString
MAX-ACCESS      read-only
STATUS          current
DESCRIPTION
    " Provides the version of the signaling type - reference
      pktcSignalingType. Examples would be 1.0 or 2.33 etc."
 ::= { pktcSigCapabilityEntry 3 }

pktcSignalingVendorExtension OBJECT-TYPE
SYNTAX          SnmpAdminString
MAX-ACCESS      read-only
STATUS          current
DESCRIPTION
    " The vendor extension allows vendors to provide a list of
      additional capabilities, vendors can decide how to encode

      these extensions, although space separated text is
      suggested."
 ::= { pktcSigCapabilityEntry 4 }

pktcSigDefNcsReceiveUdpPort OBJECT-TYPE
SYNTAX          InetPortNumber (1025..65535)

```

```

MAX-ACCESS read-only
STATUS current
DESCRIPTION
    " This object contains the MTA User Datagram Protocol (UDP)
    receive port that is being used for NCS call signaling.
    This object should only be changed by the configuration
    file."
REFERENCE
    "PacketCable NCS Specification"
DEFVAL { 2427 }
 ::= { pktcSigDevConfigObjects 18 }

```

```

pktcSigPowerRingFrequency OBJECT-TYPE

```

```

SYNTAX INTEGER {
    f20Hz(1),
    f25Hz(2),
    f33Point33Hz(3),
    f50Hz(4),
    f15Hz(5),
    f16Hz(6),
    f22Hz(7),
    f23Hz(8),
    f45Hz(9)
}

```

```

UNITS "Hertz"

```

```

MAX-ACCESS read-only
STATUS current

```

```

DESCRIPTION

```

" This object must only be provided via the configuration file during the provisioning process. The power ring frequency is the frequency at which the sinusoidal voltage must travel down the twisted pair to make terminal equipment ring. Different countries define different electrical characteristics to make terminal equipment ring.

The f20Hz setting corresponds to a power ring frequency of 20 Hertz. The f25Hz setting corresponds to a power ring frequency of 25 Hertz. The f33Point33Hz setting corresponds to a power ring frequency of 33.33 Hertz. The f50Hz setting corresponds to a power ring frequency of 50 Hertz. The f15Hz setting corresponds to a power ring frequency of 15 Hertz. The f16Hz setting corresponds to a power ring frequency of 16 Hertz. The f22Hz setting

corresponds to a power ring frequency of 22 Hertz. The f23Hz setting corresponds to a power ring frequency of 23 Hertz. The f45Hz setting corresponds to a power ring frequency of 45 Hertz."

```

REFERENCE

```

"ETSI-EN-300-001 contains a list of frequency ranges that are defined for each country."

```

DEFVAL { f20Hz }

```

```

 ::= { pktcSigDevConfigObjects 19 }

```

```

pktcSigPulseSignalTable OBJECT-TYPE

```

```

SYNTAX SEQUENCE OF PktcSigPulseSignalEntry

```

```

MAX-ACCESS not-accessible

```

```

STATUS current

```

```

DESCRIPTION

```

" The Pulse signal table defines the pulse signal operation. There are nine types of international pulse signals, with each signal having a set of provisionable parameters. The values of the MIB objects in this table take effect only if these parameters are not defined via signaling, in

which case the latter determines the values of the parameters. This object is required for the E line package. Signals defined in this table are triggered using the E line package.

Objects in this table do not persist across MTA reboots."

REFERENCE

"ETSI-TS-101-909-4 Specification"

::= { pktcSigDevConfigObjects 20 }

pktcSigPulseSignalEntry OBJECT-TYPE
SYNTAX PktcSigPulseSignalEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION

" This object defines the set of parameters associated with each particular value of pktcSigPulseSignalType. Each entry in the pktcSigPulseSignalTable is indexed by the pktcSigPulseSignalType object."

INDEX { pktcSigPulseSignalType }
::= { pktcSigPulseSignalTable 1 }

PktcSigPulseSignalEntry ::= SEQUENCE {
 pktcSigPulseSignalType INTEGER,
 pktcSigPulseSignalFrequency INTEGER,
 pktcSigPulseSignalDbLevel TenthdBm,
 pktcSigPulseSignalDuration Unsigned32,
 pktcSigPulseSignalPulseInterval Unsigned32,
 pktcSigPulseSignalRepeatCount Unsigned32
}

pktcSigPulseSignalType OBJECT-TYPE
SYNTAX INTEGER
 {
 initialRing(1),
 pulseLoopClose(2),
 pulseLoopOpen(3),
 enableMeterPulse(4),
 meterPulseBurst(5),
 pulseNoBattery(6),
 pulseNormalPolarity(7),
 pulseReducedBattery(8),
 pulseReversePolarity(9)
 }

MAX-ACCESS not-accessible
STATUS current

DESCRIPTION

"There are nine types of international pulse signals. These signals are defined as follows:

initial ring
pulse loop close
pulse loop open
enable meter pulse
meter pulse burst
pulse no battery
pulse normal polarity
pulse reduced battery
pulse reverse polarity"

REFERENCE

"ETSI-EN-300-324-1 Specification"

::= { pktcSigPulseSignalEntry 1 }

pktcSigPulseSignalFrequency OBJECT-TYPE

```

SYNTAX      INTEGER {
              twentyfive (1),
              twelvethousand(2),
              sixteenthousand(3)
            }
UNITS       "Hertz"
MAX-ACCESS  read-write
STATUS      current

```

DESCRIPTION

" This object is only applicable to the initialRing, enableMeterPulse, and meterPulseBurst signal type. This object identifies the frequency of the generated signal. The following table defines the default values for this object depending on signal type:

pktcSigPulseSignalType	Default
------------------------	---------

initialRing	25
enableMeterPulse	16000
meterPulseBurst	16000

The value of twentyfive MUST only be used for the initialRing signal type. The values of twelvethousand and sixteenthousand MUST only be used for enableMeterPulse and meterPulseBurst signal types. An attempt to set this object while the value of pktcSigPulseSignalType is not initialRing,enableMeterPulse, or meterPulseBurst will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-001 Specification"
 ::= { pktcSigPulseSignalEntry 2 }

pktcSigPulseSignalDbLevel OBJECT-TYPE

```

SYNTAX      TenthdBm (-350..0)
UNITS       "dBm"
MAX-ACCESS  read-write
STATUS      current

```

DESCRIPTION

" This object is only applicable to the enableMeterPulse and meterPulseBurst signal types. This is the decibel level for each frequency at which tones could be generated at the a and b terminals (TE connection point). An attempt to set this object while the value of pktcSigPulseSignalType is not enableMeterPulse, or meterPulseBurst will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-001 Specification"

DEFVAL { -135 }
 ::= {pktcSigPulseSignalEntry 3 }

pktcSigPulseSignalDuration OBJECT-TYPE

```

SYNTAX      Unsigned32 (0..5000)
UNITS       "Milliseconds"
MAX-ACCESS  read-write
STATUS      current

```

DESCRIPTION

" This object specifies the pulse duration for each signal type. In addition, the MTA must accept the values in the incremental steps specific for each signal type. The following table defines the default values and the incremental steps for this object depending on the signal type.

pktcSigPulseSignaltype	Default (ms)	Increment (ms)
initialRing	200	50
pulseLoopClose	200	10
pulseLoopOpen	200	10

enableMeterPulse	150	10
meterPulseBurst	150	10
pulseNoBattery	200	10
pulseNormalPolarity	200	10
pulseReducedBattery	200	10
pulseReversePolarity	200	10

An attempt to set this object to a value that does not fall on one of the increment boundaries, or on the wrong increment boundary for the specific signal type will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-324-1 Specification"
 ::= {pktcSigPulseSignalEntry 4 }

pktcSigPulseSignalPulseInterval OBJECT-TYPE

SYNTAX Unsigned32 (0..5000)
 UNITS "Milliseconds"
 MAX-ACCESS read-write
 STATUS current

DESCRIPTION

" This object specifies the repeat interval, or the period for each signal type. In addition, the MTA must accept the values in the incremental steps specific for each signal type. The following table defines the default values and the incremental steps for this object depending on the signal type.

pktcSigPulseSignaltype	Default (ms)	Increment (ms)
initialRing	200	50
pulseLoopClose	1000	10
pulseLoopOpen	1000	10
enableMeterPulse	1000	10
meterPulseBurst	1000	10
pulseNoBattery	1000	10
pulseNormalPolarity	1000	10
pulseReducedBattery	1000	10
pulseReversePolarity	1000	10

An attempt to set this object to a value that does not fall on one of the increment boundaries, or on the wrong increment boundary for the specific signal type will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-324-1 Specification"
 ::= { pktcSigPulseSignalEntry 5}

pktcSigPulseSignalRepeatCount OBJECT-TYPE

SYNTAX Unsigned32
 MAX-ACCESS read-write
 STATUS current

DESCRIPTION

" This object specifies how many times to repeat a pulse.

This object is not used by the enableMeterPulse signal type and as such must have a value of zero. The following table defines the default values and the valid ranges for this object depending on the signal type.

pktcSigPulseSignaltype	Default	Range
initialRing	1	1-5
pulseLoopClose	1	1-50
pulseLoopOpen	1	1-50
enableMeterPulse	0	Not Used
meterPulseBurst	1	1-50
pulseNoBattery	1	1-50

```
pulseNormalPolarity      1      1-50
pulseReducedBattery      1      1-50
pulseReversePolarity     1      1-50
```

An attempt to set this object to a value that does not fall within the range (or is not used) for the specific signal type will result in an 'inconsistent value' error."

```
::={ pktcSigPulseSignalEntry 6 }
```

```
pktcSigDevCIDMode      OBJECT-TYPE
```

```
SYNTAX      INTEGER {
                duringRingingETS(1),
                dtAsETS(2),
                rpAsETS(3),
                lrAsETS(4)
            }
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
DESCRIPTION
```

" For on-hook Caller ID, pktcSigDevCIDMode selects the method of Caller ID. For the duringRingingETS method, the Frequency Shift Keying (FSK) containing the Caller ID information is sent between the first and second ring pattern. For the dtAsETS, rpAsETS, and lrAsETS methods, the FSK containing the Caller ID information is sent before the first ring pattern. For the dtAsETS method, the FSK is sent after the Dual Tone Alert Signal. For the rpAsETS method, the FSK is sent after a Ring Pulse. For the lrAsETS method, the Line Reversal occurs first, then the Dual Tone Alert Signal, and finally the FSK is sent."

```
DEFVAL { rpAsETS }
```

```
::= {pktcSigDevConfigObjects 21 }
```

```
pktcSigDevCIDFskAfterRing  OBJECT-TYPE
```

```
SYNTAX      Unsigned32 (50..2000)
```

```
UNITS      "Milliseconds"
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
DESCRIPTION
```

" This object specifies the delay between the end of first ringing pattern and the start of the transmission of the FSK containing the Caller ID information. It is only used when pktcSigDevCIDMode is duringRingingETS. The following table defines the default values for this object depending on signal type:

pktcSigDevCIDMode	Default
duringringingETS	550 ms
dtAsETS	not used
rpAsETS	not used
lrAsETS	not used

An attempt to set this object while the value of pktcSigDevCIDMode is not duringringingETS will result in an 'inconsistent value' error."

```
REFERENCE
```

"ETSI-EN-300-659-1 Specification"

```
DEFVAL { 550 }
```

```
::= {pktcSigDevConfigObjects 22 }
```

```
pktcSigDevCIDFskAfterDTAS  OBJECT-TYPE
```

```
SYNTAX      Unsigned32 (45..500)
```

```
UNITS      "Milliseconds"
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
DESCRIPTION
```

" This object specifies the delay between the end of the Dual Tone Alert Signal (DT-AS) and the start of the transmission of the FSK containing the Caller ID information. This object is only used when pktcSigDevCIDMode is dtAsETS or lrAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevCIDMode	Default
duringringingETS	not used
dtAsETS	50 ms
rpAsETS	not used
lrAsETS	50 ms

An attempt to set this object while the value of pktcSigDevCIDMode is not dtAsETS or lrAsETS will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-659-1 Specification"

DEFVAL { 50 }

::= {pktcSigDevConfigObjects 23 }

pktcSigDevCIDFskAfterRPAS OBJECT-TYPE
SYNTAX Unsigned32 (500..800)
UNITS "Milliseconds"
MAX-ACCESS read-write

STATUS current

DESCRIPTION

" This object specifies the delay between the end of the Ring Pulse Alert Signal (RP-AS) and the start of the transmission of the FSK containing the Caller ID information. This object is only used when pktcSigDevCIDMode is rpAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevCIDMode	Default
duringringingETS	not used
dtAsETS	not used
rpAsETS	650 ms
lrAsETS	not used

An attempt to set this object while the value of pktcSigDevCIDMode is not rpAsETS will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-659-1 Specification"

DEFVAL { 650 }

::= {pktcSigDevConfigObjects 24 }

pktcSigDevCIDRingAfterFSK OBJECT-TYPE
SYNTAX Unsigned32 (50..500)
UNITS "Milliseconds"
MAX-ACCESS read-write
STATUS current

DESCRIPTION

" This object specifies the delay between the end of the complete transmission of the FSK containing the Caller ID information and the start of the first ring pattern. It is only used when pktcSigDevCIDMode is dtAsETS, rpAsETS or lrAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevCIDMode	Default
duringringingETS	not used
dtAsETS	250 ms
rpAsETS	250 ms
lrAsETS	250 ms

An attempt to set this object while the value of pktcSigDevCIDMode is not dtAsETS, rpAsETS, or lrAsETS will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-659-1 Specification"

DEFVAL { 250 }

::= {pktcSigDevConfigObjects 25 }

pktcSigDevCIDDTASAfterLR OBJECT-TYPE
SYNTAX Unsigned32 (50..655)

UNITS "Milliseconds"

MAX-ACCESS read-write

STATUS current

DESCRIPTION

" This object specifies the delay between the end of the Line Reversal and the start of the Dual Tone Alert Signal (DT-AS). This object is only used when pktcSigDevCIDMode is lrAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevCIDMode	Default
duringringingETS	not used
dtAsETS	not used
rpAsETS	not used
lrAsETS	250 ms

An attempt to set this object while the value of pktcSigDevCIDMode is not lrAsETS will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-659-1 Specification"

DEFVAL { 250 }

::= {pktcSigDevConfigObjects 26 }

pktcSigDevVmwiMode OBJECT-TYPE

SYNTAX INTEGER {
dtAsETS(1),
rpAsETS(2),
lrAsETS(3),
osi(4)
}

MAX-ACCESS read-write

STATUS current

DESCRIPTION

" For visual message waiting indicator (VMWI), pktcSigDevVmwiMode selects the alerting signal method. For the dtAsETS, rpAsETS, lrAsETS, and OSI methods, the FSK containing the VMWI information is sent after an alerting signal. For the dtAsETS method, the FSK is sent after the Dual Tone Alert Signal. For the rpAsETS method, the FSK is sent after a Ring Pulse. For the lrAsETS method, the Line Reversal occurs first, then the Dual Tone Alert Signal, and finally the FSK is sent. For the OSI method, the FSK is sent after the Open Switching Interval."

DEFVAL { dtAsETS }

::= {pktcSigDevConfigObjects 27 }

pktcSigDevVmwiFskAfterDTAS OBJECT-TYPE

SYNTAX Unsigned32 (45..500)

UNITS "Milliseconds"

MAX-ACCESS read-write

STATUS current

DESCRIPTION

" This object specifies the delay between the end of the Dual Tone Alert Signal (DT-AS) and the start of the transmission of the FSK containing the VMWI information. This object is only used when pktcSigDevVmwiMode is dtAsETS or lrAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevVmwiMode	Default
dtAsETS	50 ms
rpAsETS	not used
lrAsETS	50 ms

An attempt to set this object while the value of pktcSigDevVmwiMode is not dtAsETS or lrAsETS will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-659-1 Specification"

DEFVAL { 50 }

::= {pktcSigDevConfigObjects 28 }

pktcSigDevVmwiFskAfterRPAS OBJECT-TYPE

SYNTAX Unsigned32 (500..800)

UNITS "Milliseconds"

MAX-ACCESS read-write

STATUS current

DESCRIPTION

" This object specifies the delay between the end of the Ring Pulse Alert Signal (RP-AS) and the start of the transmission of the FSK containing the VMWI information. This object is only used when pktcSigDevVmwiMode is rpAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevVmwiMode	Default
dtAsETS	not used
rpAsETS	650 ms
lrAsETS	not used

An attempt to set this object while the value of pktcSigDevVmwiMode is not rpAsETS will result in an 'inconsistent value' error."

REFERENCE

"ETSI-EN-300-659-1 Specification"

DEFVAL { 650 }

::= {pktcSigDevConfigObjects 29 }

pktcSigDevVmwiDTASafterLR OBJECT-TYPE

SYNTAX Unsigned32 (50..655)

UNITS "Milliseconds"

MAX-ACCESS read-write

STATUS current

DESCRIPTION

" This object specifies the delay between the end of the Line Reversal and the start of the Dual Tone Alert Signal (DT-AS) for VMWI information. This object is only used when pktcSigDevVmwiMode is lrAsETS. The following table defines the default values for this object depending on signal type:

pktcSigDevVmwiMode	Default
dtAsETS	not used
rpAsETS	not used
lrAsETS	250 ms

An attempt to set this object while the value of pktcSigDevVmwiMode is not lrAsETS will result in an

```

        'inconsistent value' error."
REFERENCE
    "ETSI-EN-300-659-1 Specification"
DEFVAL { 250 }
 ::= { pktcSigDevConfigObjects 30 }

pktcSigDevRingCadenceTable    OBJECT-TYPE
SYNTAX      SEQUENCE OF PktcSigDevRingCadenceEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "Cadence rings are defined by the telco governing
    body for each country. The MTA must be able to support
    various ranges of cadence patterns and cadence periods.
    The MTA will be able to support country specific
    provisioning of the cadence and idle period. Each
    cadence pattern will be assigned a unique value ranging
    from 0-127 (inclusive) corresponding to the value of x,
    where x is the value sent in the cadence ringing (cr)
    signal cr(x), requested per the appropriate NCS
    message, and defined in the E package. The MTA will derive
    the cadence periods from the ring cadence table entry as
    provisioned by the customer. The MTA is allowed to provide
    appropriate default values for each of the ring cadences.
    This table only needs to be supported when the MTA
    implements the E package. Objects in this table do not
    persist across MTA reboots."
REFERENCE
    "ETSI-TS-101-909-4 Specification"
 ::= { pktcSigDevConfigObjects 31 }

pktcSigDevRingCadenceEntry    OBJECT-TYPE
SYNTAX      PktcSigDevRingCadenceEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    " Unique value ranging from 0 to 127 that will correspond to
    the different ring cadences that are being supported by
    the device."
INDEX { pktcSigDevRingCadenceIndex }
 ::= { pktcSigDevRingCadenceTable 1 }

PktcSigDevRingCadenceEntry ::= SEQUENCE {
    pktcSigDevRingCadenceIndex    Unsigned32,
    pktcSigDevRingCadence        PktcRingCadence
}

pktcSigDevRingCadenceIndex    OBJECT-TYPE
SYNTAX      Unsigned32 (0..127)
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    " Unique value ranging from 0 to 127 that corresponds to the
    value sent by the LE based on country specific cadences,
    one row per cadence cycle. In any given system
    implementation for a particular country, it is anticipated
    that a small number of ring cadences will be in use. Thus,
    this table most likely will not be populated to its full
    size."
 ::= { pktcSigDevRingCadenceEntry 1 }

pktcSigDevRingCadence        OBJECT-TYPE
SYNTAX      PktcRingCadence

```

```

MAX-ACCESS    read-write
STATUS        current
DESCRIPTION
    "This is the Ring Cadence. This object is required for the
    E line package."
 ::= { pktcSigDevRingCadenceEntry 2 }

```

```

pktcSigDevToneTable    OBJECT-TYPE
SYNTAX              SEQUENCE OF PktcSigDevToneEntry
MAX-ACCESS          not-accessible
STATUS              current
DESCRIPTION
    " The Tone Table defines the various tone operations. Any
    definition of the tones callWaiting1-4 in this table
    should just contain the audible tone itself and NOT
    contain the delay between tones or the tone repeat count.
    The delay between tones or the repeat count is controlled
    by the objects pktcNcsEndPntConfigCallWaitingDelay, and

    pktcNcsEndPntConfigCallWaitingMaxRep. If the
    pktcSigDevToneType is set to either of the values
    callWaiting1, callWaiting2, callWaiting3 or callWaiting4,
    then the value of the pktcSigDevToneWholeToneRepeatCount
    object has no effect on the tone. The MTA MUST
    make sure that, after the provisioning cycle, the table is
    fully populated (i.e., for each possible index, an entry
    MUST be defined) using reasonable defaults for each row
    that was not defined by the provisioning information
    delivered by the MTA Configuration File.
    The frequency composition of each tone is defined by the
    pktcSigDevMultiFreqToneTable. For each ToneType defined
    in pktcSigDevToneTable, the MTA MUST populate at least
    one entry in the pktcSigDevMultiFreqToneTable.
    Objects in this table do not persist across MTA reboots.
    For tones with multiple frequencies refer to the MIB table
    pktcSigDevMultiFreqToneTable."
REFERENCE
    "PacketCable NCS Specification, ETSI-TS-101-909-4
    Specification."
 ::= { pktcSigDevConfigObjects 32 }

```

```

pktcSigDevToneEntry    OBJECT-TYPE
SYNTAX                PktcSigDevToneEntry
MAX-ACCESS            not-accessible
STATUS                current
DESCRIPTION
    " The different tone types that can be provisioned based on
    country specific needs.
    Each entry contains the tone generation parameters for
    a specific Tone Type. The different parameters can be
    provisioned by the MTA configuration file based on
    country specific needs. An MTA MUST populate all entries
    of this table for each tone type."
INDEX { pktcSigDevToneType }
 ::= { pktcSigDevToneTable 1 }

```

```

PktcSigDevToneEntry ::= SEQUENCE {
    pktcSigDevToneType          INTEGER,
    pktcSigDevToneWholeToneRepeatCount Unsigned32,
    pktcSigDevToneSteady        TruthValue
}

```

pktcSigDevToneType OBJECT-TYPE

```
SYNTAX INTEGER {
    busy(1),
    confirmation(2),
    dial(3),

    messageWaiting(4),
    offHookWarning(5),
    ringBack(6),
    reOrder(7),
    stutterdial(8),
    callWaiting1(9),
    callWaiting2(10),
    callWaiting3(11),
    callWaiting4(12),
    alertingSignal(13),
    specialDial(14),
    specialInfo(15),
    release(16),
    congestion(17),
    userDefined1(18),
    userDefined2(19),
    userDefined3(20),
    userDefined4(21)
}
```

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Unique value that will correspond to the different tone types. These tones can be provisioned based on country specific needs. This object defines the type of tone being accessed.

The alertingSignal, specialDial, specialInfo, release, congestion, userDefined1, userDefined2, userDefined3 and userDefined4 tone types are used in the E line package."

::= { pktcSigDevToneEntry 1 }

pktcSigDevToneWholeToneRepeatCount OBJECT-TYPE

```
SYNTAX Unsigned32 (0..5000)
```

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is the repeat count, which signifies how many times to repeat the entire on-off cadence sequence. Setting this

object

may result in a cadence duration longer or shorter than the overall signal duration specified by the time out (TO) object for a particular signal. If the repeat count results in a longer tone duration than the signal duration specified by the TO, the tone duration defined by the TO object for a particular signal always represents the overall signal duration for a tone. In this case, the tone duration repeat count will not be fully exercised and the desired tone duration will be truncated per the TO

setting. If the repeat count results in a shorter tone duration than the signal duration specified by the TO, the tone duration defined by the repeat count takes precedence over the TO and will end the signal event. In this case, the TO represents a time not to be exceeded for the signal. It is recommended to ensure proper telephony signaling that The TO duration setting should always be longer than the

```

        desired repeat count time duration."
 ::= { pktcSigDevToneEntry 2 }

pktcSigDevToneSteady      OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS   read-only
    STATUS      current
    DESCRIPTION
        "This is the steady tone. Device must play out the on-off
        cadence sequence for pktcSigDevToneWholeRepeatCount times
and
        then apply the last tone forever. Setting this object
        may result in a tone duration longer or shorter than the
        overall signal duration specified by the time out (TO)
        object for a particular signal. If the repeat count results
        in a longer tone duration than the signal duration
        specified by the TO, the tone duration defined
        by the TO object for a particular signal always represents
        the overall signal duration for a tone. In this case, the
        tone duration repeat count will not be fully exercised and
        the desired tone duration will be truncated per the TO
        setting. If the repeat count results in a shorter tone
        duration than the signal duration specified by the TO, the
        tone duration defined by the repeat count takes precedence
        over the TO and will end the signal event. In this case,
        the TO represents a time not to be exceeded for the signal.
        It is recommended to ensure proper telephony signaling that
        The TO duration setting should always be longer than the
        desired repeat count time duration plus the desired maximum
        steady tone period."
 ::= { pktcSigDevToneEntry 3 }

pktcSigDevMultiFreqToneTable      OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcSigDevMultiFreqToneEntry
    MAX-ACCESS   not-accessible
    STATUS      current

    DESCRIPTION
        " This MIB table defines the characteristics of tones
        with multiple frequencies. The constraints imposed
        on the tones by the MIB table pktcSigDevToneTable

        need to be considered for MIB objects in this table
        as well.
        The MTA MUST populate the corresponding row(s)
        of the pktcSigDevMultiFreqToneTable for each tone
        defined in the pktcSigDevToneTable.
        The contents of the table may be provisioned using
        the MTA configuration file."

    REFERENCE
        "PacketCable NCS Specification, ETSI-TS-101-909-4
        Specification."
 ::= { pktcSigDevConfigObjects 33 }

pktcSigDevMultiFreqToneEntry      OBJECT-TYPE
    SYNTAX      PktcSigDevMultiFreqToneEntry
    MAX-ACCESS   not-accessible
    STATUS      current
    DESCRIPTION
        " The different tone types with multiple frequencies
        that can be provisioned based on country specific
needs."
    INDEX {pktcSigDevToneType, pktcSigDevToneNumber}

```

```
::= { pktcSigDevMultiFreqToneTable 1 }
```

```
PktcSigDevMultiFreqToneEntry ::= SEQUENCE {  
  pktcSigDevToneNumber          Unsigned32,  
  pktcSigDevToneFirstFreqValue  Unsigned32,  
  pktcSigDevToneSecondFreqValue Unsigned32,  
  pktcSigDevToneThirdFreqValue  Unsigned32,  
  pktcSigDevToneFourthFreqValue Unsigned32,  
  pktcSigDevToneFreqMode        INTEGER,  
  pktcSigDevToneFreqAmpModePrtg Integer32,  
  pktcSigDevToneDbLevel         TenthdBm,  
  pktcSigDevToneFreqOnDuration  Unsigned32,  
  pktcSigDevToneFreqOffDuration Unsigned32,  
  pktcSigDevToneFreqRepeatCount Unsigned32  
}
```

```
pktcSigDevToneNumber OBJECT-TYPE  
  SYNTAX      Unsigned32(1..8)  
  MAX-ACCESS  not-accessible  
  STATUS      current  
  DESCRIPTION  
    "This MIB Object represents the frequency reference  
    of a multi-frequency tone."  
  ::= { pktcSigDevMultiFreqToneEntry 1 }
```

```
pktcSigDevToneFirstFreqValue OBJECT-TYPE  
  SYNTAX      Unsigned32(0..4000)  
  MAX-ACCESS  read-only  
  
  STATUS      current  
  DESCRIPTION  
    "This MIB Object represents the value of the first  
    frequency of a tone type. A value of Zero implies  
    absence of the referenced frequency."  
  ::= { pktcSigDevMultiFreqToneEntry 2 }
```

```
pktcSigDevToneSecondFreqValue OBJECT-TYPE  
  SYNTAX      Unsigned32(0..4000)  
  MAX-ACCESS  read-only  
  STATUS      current  
  DESCRIPTION  
    "This MIB Object represents the value of the second  
    frequency of a tone type. A value of Zero implies  
    absence of the referenced frequency."  
  ::= { pktcSigDevMultiFreqToneEntry 3 }
```

```
pktcSigDevToneThirdFreqValue OBJECT-TYPE  
  SYNTAX      Unsigned32(0..4000)  
  MAX-ACCESS  read-only  
  STATUS      current  
  DESCRIPTION  
    "This MIB Object represents the value of the third  
    frequency of a tone type. A value of Zero implies  
    absence of the referenced frequency."  
  ::= { pktcSigDevMultiFreqToneEntry 4 }
```

```
pktcSigDevToneFourthFreqValue OBJECT-TYPE  
  SYNTAX      Unsigned32(0..4000)  
  MAX-ACCESS  read-only  
  STATUS      current  
  DESCRIPTION  
    "This MIB Object represents the value of the fourth  
    frequency of a tone type. A value of Zero implies  
    absence of the referenced frequency."
```

```
::={ pktcSigDevMultiFreqToneEntry 5}
```

pktcSigDevToneFreqMode OBJECT-TYPE

```
SYNTAX      INTEGER {  
            firstModulatedBySecond (1),  
            summation (2)  
            }
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

DESCRIPTION

"This MIB Object provides directive on the modulation or summation of the frequencies involved in the tone.

It is to be noted that while summation can be done without any constraint on the number of frequencies, the modulation (amplitude) holds good only when there are two frequencies (first and second).

Thus:

- If the mode is set to a value of firstModulatedBySecond (1), the first frequency MUST be modulated by the second and the remaining frequencies (third and fourth) ignored. The percentage of amplitude modulation to be applied is defined by the MIB Object 'pktcSigDevToneFreqAmpModePrtg'.
- If the mode is set to a value of summation (2), all the frequencies MUST be summed, without any modulation

"

```
::={ pktcSigDevMultiFreqToneEntry 6}
```

pktcSigDevToneFreqAmpModePrtg OBJECT-TYPE

```
SYNTAX      Integer32(0..100)
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

DESCRIPTION

"This MIB Object represents the percentage of amplitude modulation applied to the second frequency when the MIB Object 'pktcSigDevToneFreqMode' is set to a value of 'firstModulatedBySecond (1)'.

If the MIB Object 'pktcSigDevToneFreqMode' is set to value of 'summation (2)' then this MIB Object MUST be ignored."

```
::={ pktcSigDevMultiFreqToneEntry 7}
```

pktcSigDevToneDbLevel OBJECT-TYPE

```
SYNTAX      TenthdBm (-250..-30)
```

```
UNITS      "dBm"
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

DESCRIPTION

"This MIB Object contains the decibel level for each analog signal (tone) that is locally generated (versus in band supervisory tones) and sourced to the a-b terminals (TE connection point). Each tone in itself may consist of multiple frequencies as defined by the MIB table 'pktcSigDevMultiFreqToneTable'.

This MIB Object MUST reflect the desired level at the Telco (POTS) a-b (T/R) terminals including the affect of any MTA receiver gain (loss). This is required so that locally generated tones are consistent with remotely generated in band tones at the a-b terminals, consistent with user expectations.

This MIB Object must be set for each tone. When tones are formed by combining multi-frequencies, the level of each frequency shall be set so as to result in the tone level specified in this object at the a-b (T/R) terminals.

The wide range of levels for this Object is required to provide signal generator levels across the wide range of gains (loss) - but does not imply the entire range is to be achievable given the range of gains (loss) in the MTA."

```
DEFVAL { -40 }
```

```
::={ pktcSigDevMultiFreqToneEntry 8}
```

```
pktcSigDevToneFreqOnDuration          OBJECT-TYPE
    SYNTAX      Unsigned32(0..5000)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This MIB Object represents the duration for which the
        frequency reference corresponding to the tone type
        is turned on."
    ::= { pktcSigDevMultiFreqToneEntry 9}
```

```
pktcSigDevToneFreqOffDuration         OBJECT-TYPE
    SYNTAX      Unsigned32(0..5000)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This MIB Object represents the duration for which the
        frequency reference corresponding to the tone type
        is turned off."
    ::= { pktcSigDevMultiFreqToneEntry 10}
```

```
pktcSigDevToneFreqRepeatCount        OBJECT-TYPE
    SYNTAX      Unsigned32(0..5000)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This MIB Object indicates the number of times
        to repeat the cadence cycle represented by the
        on/off durations (refer to the MIB Objects
```

pktcSigDevToneFreqOnDuration and
pktcSigDevToneFreqOffDuration).

Setting this object may result in a tone duration longer or shorter than the overall signal duration specified by the time out (TO) object for the corresponding tone type. If the value of this MIB Object indicates a longer duration than the specified by the TO, the latter overrules the former and the desired tone duration will be truncated according to the TO.

However, if the repeat count results in a shorter tone duration than the signal duration specified by the TO, the tone duration defined by the repeat count takes precedence over the TO and will end the signal event. In this case, the TO represents a time not to be exceeded for the signal. It is recommended to ensure proper telephony signaling that the TO duration setting should always be longer than the desired repeat count time duration. A value of zero means the tone sequence is to be played once but not repeated."

```
::={ pktcSigDevMultiFreqToneEntry 11}
```

```
--  
-- The NCS Endpoint Config Table is used to define attributes that  
-- are specific to connection EndPoints.  
--
```

```
pktcNcsEndPntConfigTable OBJECT-TYPE
```

```
SYNTAX SEQUENCE OF PktcNcsEndPntConfigEntry
```

```
MAX-ACCESS not-accessible
```

```
STATUS current
```

```
DESCRIPTION
```

```
" This table describes the information pertaining to each  
endpoint of the MTA. All entries in this table represent  
the provisioned endpoints provisioned with the information  
required by the MTA to maintain the NCS signaling protocol  
communication with the CMS. Each endpoint can be assigned  
to its own CMS. If the specific endpoint does not have  
the corresponding CMS information in this table, the  
endpoint is considered as not provisioned with voice  
services. Objects in this table do not persist across  
MTA reboots."
```

```
::= { pktcNcsEndPntConfigObjects 1 }
```

```
pktcNcsEndPntConfigEntry OBJECT-TYPE
```

```
SYNTAX PktcNcsEndPntConfigEntry
```

```
MAX-ACCESS not-accessible
```

```
STATUS current
```

```
DESCRIPTION
```

```
"Each entry in the pktcNcsEndPntConfigTable represents  
required signaling parameters for the specific endpoint  
provisioned with voice services."
```

```
INDEX { ifIndex }
```

```
::= { pktcNcsEndPntConfigTable 1 }
```

```
PktcNcsEndPntConfigEntry ::= SEQUENCE {
```

```
pktcNcsEndPntConfigCallAgentId SnmpAdminString,
```

```
pktcNcsEndPntConfigCallAgentUdpPort InetPortNumber,
```

```
pktcNcsEndPntConfigPartialDialTO Unsigned32,
```

```
pktcNcsEndPntConfigCriticalDialTO Unsigned32,
```

```
pktcNcsEndPntConfigBusyToneTO Unsigned32,
```

```
pktcNcsEndPntConfigDialToneTO Unsigned32,
```

```
pktcNcsEndPntConfigMessageWaitingTO Unsigned32,
```

```
pktcNcsEndPntConfigOffHookWarnToneTO Unsigned32,
```

```
pktcNcsEndPntConfigRingingTO Unsigned32,
```

```
pktcNcsEndPntConfigRingBackTO Unsigned32,
```

```
pktcNcsEndPntConfigReorderToneTO Unsigned32,
```

```
pktcNcsEndPntConfigStutterDialToneTO Unsigned32,
```

```
pktcNcsEndPntConfigTSMMax Unsigned32,
```

```
pktcNcsEndPntConfigMax1 Unsigned32,
```

```
pktcNcsEndPntConfigMax2 Unsigned32,
```

```
pktcNcsEndPntConfigMax1QEnable TruthValue,
```

```

pktcNcsEndPntConfigMax2QEnable      TruthValue,
pktcNcsEndPntConfigMWD              Unsigned32,
pktcNcsEndPntConfigTdinit           Unsigned32,
pktcNcsEndPntConfigTdmin            Unsigned32,
pktcNcsEndPntConfigTdmax            Unsigned32,
pktcNcsEndPntConfigRtoMax           Unsigned32,
pktcNcsEndPntConfigRtoInit          Unsigned32,
pktcNcsEndPntConfigLongDurationKeepAlive Unsigned32,
pktcNcsEndPntConfigThist            Unsigned32,
pktcNcsEndPntConfigStatus           RowStatus,
pktcNcsEndPntConfigCallWaitingMaxRep Unsigned32,
pktcNcsEndPntConfigCallWaitingDelay Unsigned32,
pktcNcsEndPntStatusCallIpAddressType InetAddressType,
pktcNcsEndPntStatusCallIpAddress   InetAddress,
pktcNcsEndPntStatusError            INTEGER,
pktcNcsEndPntConfigMinHookFlash     Unsigned32,
pktcNcsEndPntConfigMaxHookFlash     Unsigned32,
pktcNcsEndPntConfigPulseDialInterdigitTime Unsigned32,
pktcNcsEndPntConfigPulseDialMinMakeTime Unsigned32,
pktcNcsEndPntConfigPulseDialMaxMakeTime Unsigned32,
pktcNcsEndPntConfigPulseDialMinBreakTime Unsigned32,
pktcNcsEndPntConfigPulseDialMaxBreakTime Unsigned32
}

```

```
pktcNcsEndPntConfigCallAgentId      OBJECT-TYPE
```

```
SYNTAX      SnmpAdminString(SIZE (3..255))
```

```
MAX-ACCESS  read-create
```

```
STATUS      current
```

```
DESCRIPTION
```

```

" This object contains a string indicating the call agent
name (e.g.: ca@example.com). The call agent name, after
the character '@', MUST be a fully qualified domain name
(FQDN) and MUST have a corresponding pktcMtaDevCmsFqdn
entry in the pktcMtaDevCmsTable. The object
pktcMtaDevCmsFqdn is defined in the PacketCable MIBMTA
Specification. For each particular endpoint, the MTA MUST
use the current value of this object to communicate with
the corresponding CMS. The MTA MUST update this object
with the value of the 'Notified Entity' parameter of the
NCS message. Because of the high importance of this object
to the ability of the MTA to maintain reliable NCS
communication with the CMS, it is highly recommended not
to change this object's value using SNMP during normal
operation."

```

```
::= { pktcNcsEndPntConfigEntry 1 }
```

```
pktcNcsEndPntConfigCallAgentUdpPort OBJECT-TYPE
```

```
SYNTAX      InetPortNumber (1025..65535)
```

```
MAX-ACCESS  read-create
```

```
STATUS      current
```

```
DESCRIPTION
```

```

" This object contains the current value of the User
Datagram Protocol (UDP) receive port on which the
call agent will receive NCS signaling from the endpoint.
For each particular endpoint, the MTA MUST use the current
value of this object to communicate with the corresponding
CMS. The MTA MUST update this object with the value of the
'Notified Entity' parameter of the NCS message. If the
Notified Entity parameter does not contain a CallAgent
port, the MTA MUST update this object with the default
value of 2727. Because of the high importance of this
object to the ability of the MTA to maintain reliable NCS
communication with the CMS, it is highly recommended not

```

to change this object's value using SNMP during normal operation."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 2727 }

::= { pktcNcsEndPntConfigEntry 2 }

pktcNcsEndPntConfigPartialDialTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This object contains the value of the partial dial time out."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 16 }

::= { pktcNcsEndPntConfigEntry 3 }

pktcNcsEndPntConfigCriticalDialTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This object contains the value of the critical dial time out."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 4 }

::= { pktcNcsEndPntConfigEntry 4 }

pktcNcsEndPntConfigBusyToneTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for busy tone. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 30 }

::= { pktcNcsEndPntConfigEntry 5 }

pktcNcsEndPntConfigDialToneTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for dial tone. The MTA MUST NOT update this object with the

value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only

for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 16 }

::= { pktcNcsEndPntConfigEntry 6 }

pktcNcsEndPntConfigMessageWaitingTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for message waiting indicator. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 16 }

::= { pktcNcsEndPntConfigEntry 7 }

pktcNcsEndPntConfigOffHookWarnToneTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for the off hook Warning tone. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 0 }

::= { pktcNcsEndPntConfigEntry 8 }

pktcNcsEndPntConfigRingingTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for ringing. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 180 }

::= { pktcNcsEndPntConfigEntry 9 }

pktcNcsEndPntConfigRingBackTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for ring back. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 180 }

::= { pktcNcsEndPntConfigEntry 10 }

pktcNcsEndPntConfigReorderToneTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for reorder tone. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 30 }

::= { pktcNcsEndPntConfigEntry 11 }

pktcNcsEndPntConfigStutterDialToneTO OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

" This object contains the default timeout value for stutter dial tone. The MTA MUST NOT update this object with the value provided in the NCS message (if present). If the value of the object is modified by the SNMP Management Station, the MTA MUST use the new value as a default only for a new signal requested by the NCS message."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 16 }

::= { pktcNcsEndPntConfigEntry 12 }

pktcNcsEndPntConfigTSMMax OBJECT-TYPE

SYNTAX Unsigned32

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This MIB object is used as part of an NCS retransmission algorithm. Prior to any retransmission, the MTA must check to make sure that the time elapsed since the sending of the initial datagram does not

exceed

the value specified by this MIB Object. If more than Tsmax time has elapsed, then the retransmissions MUST cease.

Refer to the MIB Object pktcNcsEndPntConfigThist for Information on when the endpoint becomes disconnected."

```

REFERENCE
  "PacketCable NCS Specification"
DEFVAL { 20 }
 ::= { pktcNcsEndPntConfigEntry 13 }

pktcNcsEndPntConfigMax1      OBJECT-TYPE
SYNTAX      Unsigned32
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "This object contains the suspicious error threshold for
  signaling messages. The pktcNcsEndPntConfigMax1 object
  indicates the retransmission threshold at which the MTA MAY
  actively query the domain name server (DNS) in order to
  detect the possible change of call agent interfaces."
REFERENCE
  "PacketCable NCS Specification"
DEFVAL { 5 }

 ::= { pktcNcsEndPntConfigEntry 14 }

pktcNcsEndPntConfigMax2      OBJECT-TYPE
SYNTAX      Unsigned32
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "This object contains the disconnect error threshold for
  signaling messages. The pktcNcsEndPntConfigMax2 object
  indicates the retransmission threshold at which the MTA
  SHOULD contact the DNS one more time to see if any other
  interfaces to the call agent have become available."
REFERENCE
  "PacketCable NCS Specification"
DEFVAL { 7 }
 ::= { pktcNcsEndPntConfigEntry 15 }

pktcNcsEndPntConfigMax1QEnable  OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "This object enables/disables the Max1 domain name server
  (DNS) query operation when the pktcNcsEndPntConfigMax1
  threshold has been reached."
DEFVAL { true }
 ::= { pktcNcsEndPntConfigEntry 16 }

pktcNcsEndPntConfigMax2QEnable  OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "This object enables/disables the Max2 domain name server
  (DNS) query operation when the pktcNcsEndPntConfigMax2
  threshold has been reached."
DEFVAL { true }
 ::= { pktcNcsEndPntConfigEntry 17 }

pktcNcsEndPntConfigMWD          OBJECT-TYPE
SYNTAX      Unsigned32
UNITS       "seconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION

```

"Maximum Waiting Delay (MWD) contains the maximum number of seconds an MTA waits after powering on, before initiating the restart procedure with the call agent."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 600 }

::= { pktcNcsEndPntConfigEntry 18 }

pktcNcsEndPntConfigTdinit OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This MIB object represents the 'disconnected' initial waiting delay within the context of an MTA's 'disconnected procedure'. The 'disconnected procedure' is initiated when an endpoint becomes 'disconnected' while attempting to communicate with a Call Agent.

The 'disconnected timer' associated with the 'disconnected Procedure' is initialized to a random value, uniformly distributed between zero and the value contained in this MIB Object.

For more information on the usage of this timer, please refer to the PacketCable NCS Specification."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 15 }

::= { pktcNcsEndPntConfigEntry 19 }

pktcNcsEndPntConfigTdmin OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This MIB object represents the 'disconnected' minimum waiting delay within the context of an MTA's

'disconnected

procedure', specifically when local user activity is detected.

The 'disconnected procedure' is initiated when an endpoint becomes 'disconnected' while attempting to communicate with a Call Agent.

For more information on the usage of this timer, please refer to the PacketCable NCS Specification."

REFERENCE

"PacketCable NCS Specification"

DEFVAL { 15 }

::= { pktcNcsEndPntConfigEntry 20 }

pktcNcsEndPntConfigTdmax OBJECT-TYPE

SYNTAX Unsigned32

UNITS "seconds"

MAX-ACCESS read-create

STATUS current

```

DESCRIPTION
    " This object contains the maximum number of seconds the MTA
      waits after a disconnect, before initiating the
      disconnected procedure with the call agent.
    "
REFERENCE
    "PacketCable NCS Specification"
DEFVAL { 600 }
::= { pktcNcsEndPntConfigEntry 21 }

pktcNcsEndPntConfigRtoMax      OBJECT-TYPE
SYNTAX      Unsigned32
UNITS       "seconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "This object specifies the maximum number of seconds the MTA
      waits for a response to an NCS message before initiating
      a retransmission."
REFERENCE
    "PacketCable NCS Specification"
DEFVAL { 4 }
::= { pktcNcsEndPntConfigEntry 22 }

pktcNcsEndPntConfigRtoInit    OBJECT-TYPE
SYNTAX      Unsigned32
UNITS       "milliseconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    " This object contains the initial number of seconds for the
      retransmission timer."
REFERENCE
    "PacketCable NCS Specification"
DEFVAL { 200 }
::= { pktcNcsEndPntConfigEntry 23 }

pktcNcsEndPntConfigLongDurationKeepAlive    OBJECT-TYPE
SYNTAX      Unsigned32
UNITS       "minutes"
MAX-ACCESS  read-create

STATUS      current
DESCRIPTION
    " Specifies a timeout value in minutes for sending long
      duration call notification message."
REFERENCE
    "PacketCable NCS Specification"
DEFVAL { 60 }
::= { pktcNcsEndPntConfigEntry 24 }

pktcNcsEndPntConfigThist      OBJECT-TYPE
SYNTAX      Unsigned32
UNITS       "seconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    " Timeout period in seconds before no response is declared."
REFERENCE
    "PacketCable NCS Specification"
DEFVAL { 30 }
::= { pktcNcsEndPntConfigEntry 25 }

pktcNcsEndPntConfigStatus     OBJECT-TYPE

```



```

SYNTAX      RowStatus
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    " This object contains the Row Status associated with the
      pktcNcsEndPntConfigTable. There are no restrictions or
      dependencies amidst the columnar objects before this
      row can be activated or for modifications of the
      columnar objects when this object is set to active(1). "
 ::= { pktcNcsEndPntConfigEntry 26 }

pktcNcsEndPntConfigCallWaitingMaxRep      OBJECT-TYPE
SYNTAX      Unsigned32 (0..10)
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    " This object contains the default value of the maximum
      number of repetitions of the call waiting tone that the
      MTA will play from a single CMS request. The MTA MUST NOT
      update this object with the information provided in the
      NCS message (if present). If the value of the object is
      modified by the SNMP Management Station, the MTA MUST use
      the new value as a default only for a new signal
      requested by the NCS message."
DEFVAL      { 1 }
 ::= { pktcNcsEndPntConfigEntry 27 }

pktcNcsEndPntConfigCallWaitingDelay      OBJECT-TYPE
SYNTAX      Unsigned32 (1..100)
UNITS       "seconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    " This object contains the delay between repetitions of the
      call waiting tone that the MTA will play from a single CMS
      request."
DEFVAL      { 10 }
 ::= { pktcNcsEndPntConfigEntry 28 }

pktcNcsEndPntStatusCallIpAddressType    OBJECT-TYPE
SYNTAX      InetAddressType
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This object contains the type of Internet address of the
      CMS currently being used for this endpoint."
 ::= { pktcNcsEndPntConfigEntry 29 }

pktcNcsEndPntStatusCallIpAddress        OBJECT-TYPE
SYNTAX      InetAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This object contains the Internet address of the CMS
      currently being used for this endpoint. This Internet
      address is used to create the appropriate security
      association. The type of this IP address is determined by
      the value of the pktcNcsEndPntStatusCallIpAddressType
      object."
 ::= { pktcNcsEndPntConfigEntry 30 }

pktcNcsEndPntStatusError                 OBJECT-TYPE

```

```

SYNTAX INTEGER {
    operational (1),
    noSecurityAssociation (2),
    disconnected (3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    " This object contains the error status for this interface.
    The operational status indicates that all operations
    necessary to put the line in service have occurred, and the
    CMS has acknowledged the Restart In Progress (RSIP)
    message successfully. If pktcMtaDevCmsIpssecCtrl is enabled

    for the associated Call Agent, the noSecurityAssociation
    status indicates that no Security Association (SA) yet
    exists for this endpoint. If pktcMtaDevCmsIpssecCtrl is
    disabled for the associated Call Agent, the
    noSecurityAssociation status is not applicable and should
    not be used by the MTA. The disconnected status indicates
    one of the following two:
    If pktcMtaDevCmsIpssecCtrl is disabled, then no security
    association is involved with this endpoint. The NCS
    signaling software is in process of establishing the NCS
    signaling link via an RSIP exchange.
    Otherwise, when pktcMtaDevCmsIpssecCtrl is enabled,
    security Association has been established, and the NCS
    signaling software is in process of establishing the NCS
    signaling link via an RSIP exchange."
 ::= { pktcNcsEndPntConfigEntry 31 }

```

```

pktcNcsEndPntConfigMinHookFlash OBJECT-TYPE
SYNTAX Unsigned32 (20..1550)
UNITS "Milliseconds"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    " This is the minimum time a line needs to be on hook for a
    valid hook flash. The value of this object MUST be
    greater than the value of
    pktcNcsEndPntConfigPulseDialMaxBreakTime. The value of
    pktcNcsEndPntConfigMinHookFlash MUST be less than
    pktcNcsEndPntConfigMaxHookFlash. This object MUST only be
    set via the configuration file during the provisioning
    process.
    Furthermore, given the possibility for the 'pulse dial'
    and 'hook flash' to overlap, the value of this object
MUST
    be greater than the value contained by the MIB Object
    pktcNcsEndPntConfigPulseDialMaxMakeTime."
DEFVAL { 300 }
 ::= { pktcNcsEndPntConfigEntry 32 }

```

```

pktcNcsEndPntConfigMaxHookFlash OBJECT-TYPE
SYNTAX Unsigned32 (20..1550)
UNITS "Milliseconds"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    " This is the maximum time a line needs to be on hook for a
    valid hook flash. The value of
    pktcNcsEndPntConfigMaxHookFlash MUST be greater than
    pktcNcsEndPntConfigMinHookFlash. This object MUST only be

```

```

        set via the configuration file during the provisioning
        process."
DEFVAL { 800 }
 ::= { pktcNcsEndPntConfigEntry 33 }

pktcNcsEndPntConfigPulseDialInterdigitTime      OBJECT-TYPE
SYNTAX      Unsigned32 (100..1500)
UNITS       "Milliseconds"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This is the pulse dial inter-digit timeout. This object
      MUST only be set via the configuration file during the
      provisioning process."
DEFVAL { 100 }
 ::= { pktcNcsEndPntConfigEntry 34 }

pktcNcsEndPntConfigPulseDialMinMakeTime         OBJECT-TYPE
SYNTAX      Unsigned32 (20..200)
UNITS       "Milliseconds"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This is the minimum make pulse width for the dial pulse.
      The value of pktcNcsEndPntConfigPulseDialMinMakeTime MUST
      be less than pktcNcsEndPntConfigPulseDialMaxMakeTime. This
      object MUST only be set via the configuration file during
      the provisioning process."
DEFVAL { 25 }
 ::= { pktcNcsEndPntConfigEntry 35 }

pktcNcsEndPntConfigPulseDialMaxMakeTime         OBJECT-TYPE
SYNTAX      Unsigned32 (20..200)
UNITS       "Milliseconds"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This is the maximum make pulse width for the dial pulse.
      The value of pktcNcsEndPntConfigPulseDialMaxMakeTime MUST
      be greater than pktcNcsEndPntConfigPulseDialMinMakeTime.
      This object MUST only be provided via the configuration
      file during the provisioning process.
      Furthermore, given the possibility for the 'pulse dial'
      and 'hook flash' to overlap, the value of this object MUST
      be less than the value contained by the MIB Object
      pktcNcsEndPntConfigMinHookFlash."
DEFVAL { 55 }
 ::= { pktcNcsEndPntConfigEntry 36 }

pktcNcsEndPntConfigPulseDialMinBreakTime        OBJECT-TYPE
SYNTAX      Unsigned32 (20..200)
UNITS       "Milliseconds"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    " This is the minimum break pulse width for the dial pulse.
      The value of pktcNcsEndPntConfigPulseDialMinBreakTime MUST
      be less than pktcNcsEndPntConfigPulseDialMaxBreakTime.
      This object must only be provided via the configuration
      file during the provisioning process."
DEFVAL { 45 }
 ::= { pktcNcsEndPntConfigEntry 37 }

```

```

pktcNcsEndPntConfigPulseDialMaxBreakTime    OBJECT-TYPE
    SYNTAX      Unsigned32 (20..200)
    UNITS        "Milliseconds"
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        " This is the maximum break pulse width for the dial pulse.
          The value of pktcNcsEndPntConfigPulseDialMaxBreakTime MUST
          be greater than pktcNcsEndPntConfigPulseDialMinBreakTime.
          This object MUST only be provided via the configuration
          file during the provisioning process."
    DEFVAL { 75 }
    ::= { pktcNcsEndPntConfigEntry 38 }

--
-- notification group is for future extension.
--
pktcSigNotification    OBJECT IDENTIFIER ::= { pktcExcentisSigMib 0 }
pktcSigConformance     OBJECT IDENTIFIER ::= { pktcExcentisSigMib 2 }
pktcSigCompliances     OBJECT IDENTIFIER ::= { pktcSigConformance 1 }
pktcSigGroups          OBJECT IDENTIFIER ::= { pktcSigConformance 2 }

--
-- compliance statements
--

pktcSigBasicCompliance  MODULE-COMPLIANCE
    STATUS       current
    DESCRIPTION
        " The compliance statement for devices that implement
          Signaling on the MTA."

MODULE -- pktcExcentisSigMib

--
-- unconditionally mandatory groups
--

MANDATORY-GROUPS {
    pktcSigGroup
}

GROUP pktcNcsGroup
    DESCRIPTION
        " This group is mandatory for any MTA implementing NCS
          signaling"

GROUP pktcInternationalGroup
    DESCRIPTION
        " This group is mandatory for any MTA implementing
          international telephony features. In such cases, it is
          left to manufacturers to determine whether to support both
          PacketCable and IPCablecom objects in the same MTA."
    ::= { pktcSigCompliances 1 }

--
-- units of conformance
--

pktcSigGroup    OBJECT-GROUP

```

```
OBJECTS {
pktcSigDevCodecMax,
pktcSigDevEchoCancellation,
pktcSigDevSilenceSuppression,
pktcSigDevR0Cadence,
pktcSigDevR1Cadence,
pktcSigDevR2Cadence,
pktcSigDevR3Cadence,
pktcSigDevR4Cadence,
pktcSigDevR5Cadence,
pktcSigDevR6Cadence,
pktcSigDevR7Cadence,
pktcSigDevRgCadence,
pktcSigDevRsCadence,
pktcSigDefCallSigDscp,
pktcSigDefMediaStreamDscp,
pktcSigDevVmwMode,
pktcSignalingType,
pktcSignalingVersion,
pktcSignalingVendorExtension,
pktcSigDefNcsReceiveUdpPort
}
```

STATUS current

DESCRIPTION

"Group of objects for the common portion of the
PacketCable Signaling MIB."

::= { pktcSigGroups 1 }

pktcNcsGroup OBJECT-GROUP

```
OBJECTS {
pktcNcsEndPntConfigCallAgentId,
pktcNcsEndPntConfigCallAgentUdpPort,
pktcNcsEndPntConfigPartialDialTO,
pktcNcsEndPntConfigCriticalDialTO,
pktcNcsEndPntConfigBusyToneTO,
pktcNcsEndPntConfigDialToneTO,
pktcNcsEndPntConfigMessageWaitingTO,
pktcNcsEndPntConfigOffHookWarnToneTO,
pktcNcsEndPntConfigRingingTO,
pktcNcsEndPntConfigRingBackTO,
pktcNcsEndPntConfigReorderToneTO,
pktcNcsEndPntConfigStutterDialToneTO,
pktcNcsEndPntConfigTSMMax,
pktcNcsEndPntConfigMax1,
pktcNcsEndPntConfigMax2,
pktcNcsEndPntConfigMax1QEnable,
pktcNcsEndPntConfigMax2QEnable,
pktcNcsEndPntConfigMWD,
pktcNcsEndPntConfigTdinit,
pktcNcsEndPntConfigTdmin,
pktcNcsEndPntConfigTdmax,
pktcNcsEndPntConfigRtoMax,
pktcNcsEndPntConfigRtoInit,
pktcNcsEndPntConfigLongDurationKeepAlive,
pktcNcsEndPntConfigThist,
pktcNcsEndPntConfigStatus,
pktcNcsEndPntConfigCallWaitingMaxRep,
pktcNcsEndPntConfigCallWaitingDelay,
pktcNcsEndPntStatusCallIpAddressType,
pktcNcsEndPntStatusCallIpAddress,
pktcNcsEndPntStatusError
}
```

STATUS current

DESCRIPTION

"Group of objects for the NCS portion of the PacketCable Signaling MIB. This is mandatory for NCS signaling."

::= { pktcSigGroups 2 }

pktcInternationalGroup OBJECT-GROUP

OBJECTS {

pktcNcsEndPntConfigMinHookFlash,

pktcNcsEndPntConfigMaxHookFlash,

pktcNcsEndPntConfigPulseDialInterdigitTime,

pktcNcsEndPntConfigPulseDialMinMakeTime,

pktcNcsEndPntConfigPulseDialMaxMakeTime,

pktcNcsEndPntConfigPulseDialMinBreakTime,

pktcNcsEndPntConfigPulseDialMaxBreakTime,

pktcSigDevRingCadence,

pktcSigDevCallerIdSigProtocol,

pktcSigDevCIDMode,

pktcSigDevCIDFskAfterRing,

pktcSigDevCIDFskAfterDTAS,

pktcSigDevCIDFskAfterRPAS,

pktcSigDevCIDRingAfterFSK,

pktcSigDevCIDDTASAfterLR,

pktcSigDevVmwifskAfterDTAS,

pktcSigDevVmwifskAfterRPAS,

pktcSigDevVmwidTASAfterLR,

pktcSigPowerRingFrequency,

pktcSigPulseSignalFrequency,

pktcSigPulseSignalDbLevel,

pktcSigPulseSignalDuration,

pktcSigPulseSignalPulseInterval,

pktcSigPulseSignalRepeatCount,

pktcSigDevToneDbLevel,

pktcSigDevToneWholeToneRepeatCount,

pktcSigDevToneSteady,

pktcSigDevToneFirstFreqValue,

pktcSigDevToneSecondFreqValue,

pktcSigDevToneThirdFreqValue,

pktcSigDevToneFourthFreqValue,

pktcSigDevToneFreqMode,

pktcSigDevToneFreqAmpModePrtg,

pktcSigDevToneFreqOnDuration,

pktcSigDevToneFreqOffDuration,

pktcSigDevToneFreqRepeatCount

}

STATUS current

DESCRIPTION

" Group of objects that extend the behavior of existing objects to support operations in the widest possible set of international marketplaces. Note that many of these objects represent a superset of behaviors described in other objects within this MIB Module."

::= { pktcSigGroups 3 }

END