

# Superseded

## PacketCable™ Signaling MIB Specification

**PKT-SP-MIB-SIG-I04-021018**

**ISSUED**

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**Key to Document Status Codes:**

- Work in Progress**    An incomplete document, designed to guide discussion and generate feedback, that may include several alternative requirements for consideration.
- Draft**                    A document in specification format considered largely complete, but lacking review by Members and vendors. Drafts are susceptible to substantial change during the review process.
- Issued**                    A stable document, which has undergone rigorous member and vendor review and is suitable for product design and development, cross-vendor interoperability, and for certification testing.
- Closed**                    A static document, reviewed, tested, validated, and closed to further engineering change requests to the specification through CableLabs.

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## 1 SCOPE

This specification describes the PacketCable Signaling (SIG) MIB requirements.

**Superseded**

The following standards and other references contain provisions which through reference in this text, constitute the whole or parts of a document to which it is necessary to conform in order to claim compliance to this specification. At the time of publication, the editions indicated were valid. All references are subject to revisions; users of this specification are therefore encouraged to investigate the possibility of applying the most recent edition of the standards and other references listed below.

### 2.1 Normative References

- [1] "PacketCable MIB Framework," PKT-SP-MIBS-I04-021018, October 18, 2002, Cable Television Laboratories, Inc., <http://www.PacketCable.com/>
- [2] "PacketCable Network-Based Call Signaling Protocol Specification," PKT-SP-EC-MGCP-I05-021018, October 18, 2002, Cable Television Laboratories, Inc., <http://www.PacketCable.com/>
- [3] "PacketCable MTA Device Provisioning Specification," PKT-SP-PROV-I04-021018, October 18, 2002, Cable Television Laboratories, Inc., <http://www.PacketCable.com/>

### 2.2 Informative References

- [4] PKT-TR-ARCH-V01-991201, PacketCable 1.0 Architecture Framework Technical Report, December 01, 1999

## 3 ABBREVIATIONS

There are no abbreviations used in this document.

## 4 REQUIREMENTS

The PacketCable™ NCS MIB MUST be implemented as defined below.

```

PKTC-SIG-MIB DEFINITIONS ::= BEGIN

IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
        Integer32,
        BITS
    FROM SNMPv2-SMI
        TEXTUAL-CONVENTION,
            RowStatus,
            DisplayString,
            TruthValue
    FROM SNMPv2-TC
        OBJECT-GROUP,
        MODULE-COMPLIANCE
    FROM SNMPv2-CONF
        SnmpAdminString
    FROM SNMP-FRAMEWORK-MIB
        clabProjPacketCable
    FROM CLAB-DEF-MIB
        ifIndex
    FROM IF-MIB;

pktcSigMib MODULE-IDENTITY
    LAST-UPDATED      "200210170000Z" - October 17, 2002
    ORGANIZATION      "CableLabs - PacketCable OSS Group"
    CONTACT-INFO
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DESCRIPTION
    "This MIB module supplies the basic management
    object for the PacketCable Signaling
    protocols. This version of the MIB includes
    common signaling and Network Call Signaling
    (NCS) related signaling objects.

        Acknowledgements:
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        Klaus Hermanns        Cisco Systems
        Eugene Nechamkin      Broadcom Corp."
 ::= { clabProjPacketCable 2 }

-- Textual Conventions

```

```
PktcCodecType ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION "Textual Convention defines various types of CODECs that MAY be
supported. The list of CODECs MUST be consistent with the CODEC
specification PKT-SP-CODEC-I03-011221 "
```

```
SYNTAX INTEGER {
    other (1),
    unknown (2),
    G729 (3),
    reserved(4), -- reserved for future use
    G729E (5),
    PCMU (6), -- G.711 u-law
    G726-32 (7), -- G.726 at 32 Khz
    G728 (8),
    PCMA (9), -- G.711 a-law
    G726-16 (10), -- G.726 at 16 Khz
    G726-24 (11), -- G.726 at 24 Khz
    G726-40 (12) -- G.726 at 40 Khz
}
```

```
PktcRingCadence ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION "This object represents a ring cadence in bit string format. The
ring cadence representation starts with the first 1 in the pattern (the
leading 0s in the MSB are padding and are to be ignored). Each bit
represents 100ms of tone; 1 is tone, 0 is no tone. 60 bits are used for
cadence representation, LSB 4 bits are used for representing repeatable
characteristics. 0000 means repeatable, and 1000 means non repeatable As an
example, the hex representation of a ring cadence of 0.5 secs on; 4 secs off;
repeatable would be: 0x1F0000000000."
```

```
SYNTAX BITS {
    interval1 (0),
    interval2 (1),
    interval3 (2),
    interval4 (3),
    interval5 (4),
    interval6 (5),
    interval7 (6),
    interval8 (7),
    interval9 (8),
    interval10 (9),
    interval11 (10),
    interval12 (11),
    interval13 (12),
    interval14 (13),
    interval15 (14),
    interval16 (15),
    interval17 (16),
    interval18 (17),
    interval19 (18),
    interval20 (19),
    interval21 (20),
    interval22 (21),
    interval23 (22),
    interval24 (23),
    interval25 (24),
    interval26 (25),
    interval27 (26),
    interval28 (27),
    interval29 (28),
    interval30 (29),
```

```

interval31 (30),
interval32 (31),
interval33 (32),
interval34 (33),
interval35 (34),
interval36 (35),
interval37 (36),
interval38 (37),
interval39 (38),
interval40 (39),
interval41 (40),
interval42 (41),
interval43 (42),
interval44 (43),
interval45 (44),
interval46 (45),
interval47 (46),
interval48 (47),
interval49 (48),
interval50 (49),
interval51 (50),
interval52 (51),
interval53 (52),
interval54 (53),
interval55 (54),
interval56 (55),
interval57 (56),
interval58 (57),
interval59 (58),
interval60 (59),
interval61 (60),
interval62 (61),
interval63 (62),
interval64 (63)

```

```

}.

```

```

PktcSigType ::= TEXTUAL-CONVENTION
  STATUS current
  DESCRIPTION "These are the various types of signaling that
    may be supported.

    ncs - network call signaling a derivation of
      MGCP (Media Gateway Control Protocol)
      version 1.0

    dcs - distributed call signaling a derivation
      of SIP (Session Initiation Protocol)
      RFC 2543"
  SYNTAX INTEGER {
    other(1),
    unknown(2),
    ncs(3),
    dcs(4)
  }

```

```

pktcSigMibObjects OBJECT IDENTIFIER ::= { pktcSigMib 1 }
pktcSigDevConfigObjects OBJECT IDENTIFIER ::= { pktcSigMibObjects 1 }
pktcNcsEndPntConfigObjects OBJECT IDENTIFIER ::= { pktcSigMibObjects 2 }
pktcSigEndPntConfigObjects OBJECT IDENTIFIER ::= { pktcSigMibObjects 3 }
pktcDcsEndPntConfigObjects OBJECT IDENTIFIER ::= { pktcSigMibObjects 4 }

```

```
--
--           The pktcSigDevCodecTable defines the codecs supported by this
--           Media Terminal Adapter (MTA).  There is one entry for each
--           codecs supported.
--
--
pktcSigDevCodecTable    OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcSigDevCodecEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table describes the MTA supported codec types."
    ::= { pktcSigDevConfigObjects 1 }
pktcSigDevCodecEntry  OBJECT-TYPE
    SYNTAX      PktcSigDevCodecEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "List of supported codecs types for the MTA."
    INDEX { pktcSigDevCodecIndex }
    ::= { pktcSigDevCodecTable 1 }

PktcSigDevCodecEntry ::= SEQUENCE {
    pktcSigDevCodecIndex    INTEGER,
    pktcSigDevCodecType     PktcCodecType
    pktcSigDevCodecMax      INTEGER
}

pktcSigDevCodecIndex  OBJECT-TYPE
    SYNTAX      INTEGER (1..16383)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The index value which uniquely identifies an entry
        in the pktcSigDevCodecTable."
    ::= { pktcSigDevCodecEntry 1 }

pktcSigDevCodecType   OBJECT-TYPE
    SYNTAX      PktcCodecType
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A codec type supported by this MTA."
    ::= { pktcSigDevCodecEntry 2 }

pktcSigDevCodecMax    OBJECT-TYPE
    SYNTAX      INTEGER(1..16383)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The maximum number of simultaneous sessions of the
        specific codec that the MTA can support"
    ::= { pktcSigDevCodecEntry 3 }

--
--           These are the common signaling related definitions that affect the
--           entire MTA device.
--
--
pktcSigDevEchoCancellation  OBJECT-TYPE
```







```

pktcSigTosFormatSelector OBJECT-TYPE
    SYNTAX      INTEGER {
        ipv4TOSOctet(1),
        dscpCodepoint(2)
    }
    MAX-ACCESS   read-write
    STATUS       current
    DESCRIPTION
        " The format of the default signaling and media
          Type of Service (TOS) values. "
    DEFVAL { ipv4TOSOctet }
    ::= { pktcSigDevConfigObjects 10 }

--
--      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 by this MTA."
    ::= { pktcSigDevConfigObjects 11 }

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      INTEGER,
    pktcSignalingType       PktcSigType,
    pktcSignalingVersion    SnmpAdminString,
    pktcSignalingVendorExtension SnmpAdminString
}

pktcSignalingIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..16383)
    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
        " The Type identifies the type of signaling
          used, this can be NCS, DCS, etc. This value
          has to be associated with a single signaling
          version - reference pktcMtaDevSignalingVersion."

```

```

 ::= { 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      INTEGER (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   "Refer to PKT-SP-EC-MGCP-I02-991201 NCS specification"
    DEFVAL { 2427 }
 ::= { pktcSigDevConfigObjects 12 }

pktcSigServiceClassNameUS      OBJECT-TYPE
    SYNTAX      DisplayString (SIZE 2..16)
    MAX-ACCESS   read-write
    STATUS      current
    DESCRIPTION "This object contains a string indicating the Service Class name
                  to create an Upstream Service Flow for NCS. If the object has an
                  empty string value then the NCS SF is not created and the best
                  effort primary SF is used for NCS data. Setting this object to
                  a different value does not cause the US SF to be re-created.
                  The string MUST be created such that it MUST be of length
                  2 to 16 characters with Zero-terminated string. The
                  length includes the terminating zero."
    DEFVAL { "" }
 ::= { pktcSigDevConfigObjects 13 }

pktcSigServiceClassNameDS      OBJECT-TYPE
    SYNTAX      DisplayString (SIZE 2..16)
    MAX-ACCESS   read-write
    STATUS      current
    DESCRIPTION "This object contains a string indicating the Service Class Name
                  to create a Downstream Service Flow for NCS. If the object has an
                  empty string value then the NCS SF is not created and the best effort
                  primary SF is used for NCS data. Setting this object to a different
                  value does not cause the DS SF to be re-created. The string
                  MUST be created such that it MUST be of length 2 to 16

```

```

        characters with Zero-terminated string. The length
        includes the terminating zero."
    DEFVAL { "" }
    ::= { pktcSigDevConfigObjects 14 }
pktcSigServiceClassNameMask OBJECT-TYPE
    SYNTAX Integer32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This object contains a value for the Call Signaling Network Mask.
        The value is used as the NCS Call Signaling classifier mask. The object
        is used to delete the NCS SF when set to zero. When the object is set
        to a non-zero value by the SNMP Manager, the NCS SF are to be created"
    DEFVAL { 0 }
    ::= { pktcSigDevConfigObjects 15 }

pktcSigNcsServiceFlowState OBJECT-TYPE
    SYNTAX INTEGER {
        not active (1),
        active (2),
        error (3)
    }
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object contains a status value of the Call Signaling
        Service Flow.
        - 'not-active' indicates that the NCS SF is not
          being used, and has not tried to be created,
        - 'active' indicates that the NCS SF is in use,
        - 'error' indicates that the NCS SF creation resulted in an
          error and the best effort channel is used for NCS Signaling"
    ::= { pktcSigDevConfigObjects 16 }

--
-- The following Table will provide endpoint configuration
-- information that is common to all signaling Protocols.
-- Currently only the signaling index is present in an effort
-- not to deprecate any MIB objects.
--

pktcSigEndPntConfigTable OBJECT-TYPE
    SYNTAX SEQUENCE OF PkctcSigEndPntConfigEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        " This table describes the PacketCable EndPoint selected
        signaling type. The number of entries in this table represents
        the number of provisioned end points.

        For each conceptual row of pktcSigEndPntConfigTable defined,
        an associated row MUST be defined in one on the specific
        signaling tables such as pktcNcsEndPntConfigTable."
    ::= { pktcSigEndPntConfigObjects 1 }

pktcSigEndPntConfigEntry OBJECT-TYPE
    SYNTAX PkctcSigEndPntConfigEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        " Entries in pktcSigEndPntConfigTable - Each entry describes
        what signaling type a particular endpoint uses."
    INDEX { ifIndex }

```

```

 ::= { pktcSigEndPntConfigTable 1 }

PktcSigEndPntConfigEntry ::= SEQUENCE {
    pktcSigEndPntCapabilityIndex      INTEGER
}

pktcSigEndPntCapabilityIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..16383)
    MAX-ACCESS   read-create
    STATUS       current
    DESCRIPTION
        " The associated index value in the pktcSigCapablityTable."
 ::= { pktcSigEndPntConfigEntry 1 }
--
-- The NCS End Point 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 PacketCable EndPoint selected
        signaling type. The number of entries in this table represents
        the number of provisioned end points.

        For each conceptual row of pktcSigEndPntConfigTable defined,
        an associated row MUST be defined in one on the specific
        signaling tables such as pktcNcsEndPntConfigTable."
 ::= { pktcNcsEndPntConfigObjects 1 }

pktcNcsEndPntConfigEntry OBJECT-TYPE
    SYNTAX      PktcSigEndPntConfigEntry
    MAX-ACCESS   not-accessible
    STATUS       current
    DESCRIPTION
        " Entries in pktcSigEndPntConfigTable - Each entry describes
        what signaling type a particular endpoint uses."
    INDEX { ifIndex }
 ::= { pktcNcsEndPntConfigTable 1 }

```

```

PktcNcsEndPntConfigEntry ::= SEQUENCE {
    pktcNcsEndPntConfigCallAgentId      DisplayString,
    pktcNcsEndPntConfigCallAgentUdpPort INTEGER,
    pktcNcsEndPntConfigPartialDialTO    INTEGER,
    pktcNcsEndPntConfigCriticalDialTO   INTEGER,
    pktcNcsEndPntConfigBusyToneTO       INTEGER,
    pktcNcsEndPntConfigDialToneTO       INTEGER,
    pktcNcsEndPntConfigMessageWaitingTO INTEGER,
    pktcNcsEndPntConfigOffHookWarnToneTO INTEGER,
    pktcNcsEndPntConfigRingingTO        INTEGER,
    pktcNcsEndPntConfigRingBackTO       INTEGER,
    pktcNcsEndPntConfigReorderToneTO    INTEGER,
    pktcNcsEndPntConfigStutterDialToneTO INTEGER,
    pktcNcsEndPntConfigTSMMax           INTEGER,
    pktcNcsEndPntConfigMax1             INTEGER,
    pktcNcsEndPntConfigMax2             INTEGER,
    pktcNcsEndPntConfigMax1QEnable      TruthValue,
    pktcNcsEndPntConfigMax2QEnable      TruthValue,
    pktcNcsEndPntConfigMWD              INTEGER,
    pktcNcsEndPntConfigTdinit           INTEGER,
    pktcNcsEndPntConfigTdmin            INTEGER,
    pktcNcsEndPntConfigTdmax            INTEGER,
    pktcNcsEndPntConfigRtoMax           INTEGER,
    pktcNcsEndPntConfigRtoInit          INTEGER,
    pktcNcsEndPntConfigLongDurationKeepAlive INTEGER,
    pktcNcsEndPntConfigThist            INTEGER,
    pktcNcsEndPntConfigStatus           RowStatus,
    pktcNcsEndPntConfigCallWaitingMaxRep INTEGER,
    pktcNcsEndPntConfigCallWaitingDelay INTEGER,
    PktcNcsEndPntStatusCallIpAddress    IpAddress,
    PktcNcsEndPntStatusError            Integer
}

```

```

pktcNcsEndPntConfigCallAgentId      OBJECT-TYPE
    SYNTAX      DisplayString(SIZE (3..255))
    MAX-ACCESS   read-create
    STATUS      current
    DESCRIPTION
        "This object contains a string indicating the call agent name(ex:
        ca@abc.def.com). The call agent name after the character '@' MUST be a fully
        qualified domain name and MUST have a corresponding pktcMtaDevCmsFqdn entry in the
        pktcMtaDevCmsTable."

```

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

```

pktcNcsEndPntConfigCallAgentUdpPort OBJECT-TYPE
    SYNTAX      INTEGER (1025..65535)
    MAX-ACCESS   read-create
    STATUS      current
    DESCRIPTION
        "This object contains the call agent User Datagram Protocol
        (UDP) receive port that is being used for this instance of
        call signaling, i.e. the default port on which the call agent
        will receive NCS signaling from the gateway."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 4.2.1.3"
    DEFVAL      { 2727 }
    ::= { pktcNcsEndPntConfigEntry 2 }

```

```

pktcNcsEndPntConfigPartialDialTO      OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS      current
    DESCRIPTION
        "This object contains maximum value of the partial
        dial time out."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Appendix A.1"
    DEFVAL { 16 }
    ::= { pktcNcsEndPntConfigEntry 3 }

pktcNcsEndPntConfigCriticalDialTO      OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS      current
    DESCRIPTION
        "This object contains the maximum value of the critical
        dial time out."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Appendix A.1"
    DEFVAL { 4 }
    ::= { pktcNcsEndPntConfigEntry 4 }

pktcNcsEndPntConfigBusyToneTO         OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS      current
    DESCRIPTION
        "This object contains the timeout value for busy tone."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Appendix A.1"
    DEFVAL { 30 }
    ::= { pktcNcsEndPntConfigEntry 5 }

pktcNcsEndPntConfigDialToneTO         OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS      current
    DESCRIPTION
        "This object contains the timeout value for dial tone."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Appendix A.1"
    DEFVAL { 16 }
    ::= { pktcNcsEndPntConfigEntry 6 }

```

```
pktcNcsEndPntConfigMessageWaitingTO      OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS       current
    DESCRIPTION  "This object contains the timeout value for message
                 waiting indicator."
    REFERENCE   "Refer to PKT-SP-EC-MGCP-I04-011221 specification
                 Appendix A.1"
    DEFVAL      { 16 }
    ::= { pktcNcsEndPntConfigEntry 7 }

pktcNcsEndPntConfigOffHookWarnToneTO     OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS       current
    DESCRIPTION  "This object contains the timeout value for
                 the off hook Warning tone."
    REFERENCE   "Refer to PKT-SP-EC-MGCP-I04-011221 specification
                 Appendix A.1"
    DEFVAL      { 0 }
    ::= { pktcNcsEndPntConfigEntry 8 }

pktcNcsEndPntConfigRingingTO             OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS       current
    DESCRIPTION  "This object contains the timeout value for ringing."
    REFERENCE   "Refer to PKT-SP-EC-MGCP-I04-011221 specification
                 Appendix A.1"
    DEFVAL      { 180 }
    ::= { pktcNcsEndPntConfigEntry 9 }

pktcNcsEndPntConfigRingBackTO            OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS        "seconds"
    MAX-ACCESS   read-create
    STATUS       current
    DESCRIPTION  "This object contains the timeout value for ring back."
    REFERENCE   "Refer to PKT-SP-EC-MGCP-I04-011221specification
                 Appendix A.1"
    DEFVAL      { 180 }
    ::= { pktcNcsEndPntConfigEntry 10 }
```

```

pktcNcsEndPntConfigReorderToneTO      OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS       "seconds"
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the timeout value for reorder tone."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Appendix A.1"
    DEFVAL     { 30 }
    ::= { pktcNcsEndPntConfigEntry 11 }

pktcNcsEndPntConfigStutterDialToneTO  OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS       "seconds"
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the timeout value for stutter dial tone."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Appendix A.1"
    DEFVAL     { 16 }
    ::= { pktcNcsEndPntConfigEntry 12 }

pktcNcsEndPntConfigTSMMax              OBJECT-TYPE
    SYNTAX      INTEGER
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the max time in seconds since the
        sending of the initial datagram."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.2"
    DEFVAL     { 20 }
    ::= { pktcNcsEndPntConfigEntry 13 }

pktcNcsEndPntConfigMax1                OBJECT-TYPE
    SYNTAX      INTEGER
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the suspicious error threshold
        for signaling messages."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.2"
    DEFVAL     { 5 }
    ::= { pktcNcsEndPntConfigEntry 14 }

```

```
pktcNcsEndPntConfigMax2      OBJECT-TYPE
    SYNTAX      INTEGER
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the disconnect error
        threshold for signaling messages."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.2"
    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 Max1 expires."
    DEFVAL { true }
    ::= { pktcNcsEndPntConfigEntry 16 }

pktcNcsEndPntConfigMax2QEnable  OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object enables/disables the Max2 DNS query
        operation when Max2 expires."
    DEFVAL { true }
    ::= { pktcNcsEndPntConfigEntry 17 }

pktcNcsEndPntConfigMWD      OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS      "seconds"
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Maximum Waiting Delay (MWD) contains the maximum
        number of seconds a MTA waits after a restart."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.3.4"
    DEFVAL { 600 }
    ::= { pktcNcsEndPntConfigEntry 18 }

pktcNcsEndPntConfigTdinit      OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS      "seconds"
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the initial number of seconds
        a MTA waits after a disconnect."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.3.5"
    DEFVAL { 15 }
    ::= { pktcNcsEndPntConfigEntry 19 }
```

```

pktcNcsEndPntConfigTadmin      OBJECT-TYPE
    SYNTAX          INTEGER
    UNITS           "seconds"
    MAX-ACCESS      read-create
    STATUS          current
    DESCRIPTION
        "This object contains the minimum number of seconds a
        MTA waits after a disconnect."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.3.5"
    DEFVAL { 15 }
    ::= { pktcNcsEndPntConfigEntry 20 }

pktcNcsEndPntConfigTdmax      OBJECT-TYPE
    SYNTAX          INTEGER
    UNITS           "seconds"
    MAX-ACCESS      read-create
    STATUS          current
    DESCRIPTION
        "This object contains the maximum number of seconds
        a MTA waits after a disconnect."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 3.4.3.5"
    DEFVAL { 600 }
    ::= { pktcNcsEndPntConfigEntry 21 }

pktcNcsEndPntConfigRtoMax     OBJECT-TYPE
    SYNTAX          INTEGER
    UNITS           "seconds"
    MAX-ACCESS      read-create
    STATUS          current
    DESCRIPTION
        "This object contains the maximum number of seconds
        for the retransmission timer."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 5.5.2"
    DEFVAL { 4 }
    ::= { pktcNcsEndPntConfigEntry 22 }

pktcNcsEndPntConfigRtoInit    OBJECT-TYPE
    SYNTAX          INTEGER
    UNITS           "milliseconds"
    MAX-ACCESS      read-create
    STATUS          current
    DESCRIPTION
        "This object contains the initial number of seconds
        for the retransmission timer."
    REFERENCE
        "Refer to PKT-SP-EC-MGCP-I04-011221 specification
        Section 5.5.2"
    DEFVAL { 200 }
    ::= { pktcNcsEndPntConfigEntry 23 }

```

```
pktcNcsEndPntConfigLongDurationKeepAlive      OBJECT-TYPE
SYNTAX      INTEGER
UNITS       "minutes"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "Specifies a timeout value in minutes for sending
     long duration call notification message."
REFERENCE
    "Refer to PKT-SP-EC-MGCP-I04-011221
     specification Appendix A.1.1"
DEFVAL     { 60 }
 ::= { pktcNcsEndPntConfigEntry 24 }

pktcNcsEndPntConfigThist      OBJECT-TYPE
SYNTAX      INTEGER
UNITS       "seconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "Timeout period in seconds before no response is declared."
REFERENCE
    "Refer to PKT-SP-EC-MGCP-I04-011221 specification
     Section 3.4.2"
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 pktsNcsEndPntTable."
 ::= { pktcNcsEndPntConfigEntry 26 }

pktcNcsEndPntConfigCallWaitingMaxRep      OBJECT-TYPE
SYNTAX      INTEGER (0..10)
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "This object contains the maximum number of repetitions
     of the call waiting tone that the MTA will play from a
     single CMS request. A value of zero (0) can be used if
     the CMS is to control the repetitions of the call
     waiting tone."
DEFVAL     { 1 }
 ::= { pktcNcsEndPntConfigEntry 27 }

pktcNcsEndPntConfigCallWaitingDelay      OBJECT-TYPE
SYNTAX      INTEGER (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 }
```

```

pktcNcsEndPntStatusCallIpAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"This object contains the IP address of the CMS currently being used for this
endpoint. This IP address is used to create the appropriate security association."

 ::= { pktcNcsEndPntConfigEntry 29 }

pktcNcsEndPntStatusError OBJECT-TYPE
SYNTAX INTEGER {operational (1), noSecurityAssociation (2), disconnected (3) }
MAX-ACCESS read-only
STATUS current
DESCRIPTION
This object contains the error status this interface. The operational state
indicates that all operations necessary to put the line in service have occurred.
The noSecurityAssociation status indicates that no security association yet exists
for this endpoint. The disconnected status indicates that the security Association
has been established and the NCS signaling Software is process of establishing the
NCS signaling Link via an RSIP exchange.

 ::= { pktcNcsEndPntConfigEntry 30 }
--
-- notification group is for future extension.
--
pktcSigNotification OBJECT IDENTIFIER ::= { pktcSigMib 2 0 }
pktcSigConformance OBJECT IDENTIFIER ::= { pktcSigMib 3 }
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 -- pktcSigMib

-- unconditionally mandatory groups

MANDATORY-GROUPS {
    pktcSigGroup
}
GROUP pktcNcsGroup
DESCRIPTION
"This group is mandatory for any MTA implementing NCS signaling"
::={ pktcSigCompliances 1 }

-- units of conformance

```

```
pktcSigGroup OBJECT-GROUP
  OBJECTS {
    pktcSigDevCodecType,
    pktcSigDevCodecMax,
    pktcSigDevEchoCancellation,
    pktcSigDevSilenceSuppression,
    pktcSigDevConnectionMode,
    pktcSigDevR0Cadence,
    pktcSigDevR6Cadence,
    pktcSigDevR7Cadence,
    pktcSigDefCallSigTos,
    pktcSigDefMediaStreamTos,
    pktcSigTosFormatSelector,
    pktcSignalingType,
    pktcSignalingVersion,
    pktcSignalingVendorExtension,
    pktcSigEndPntCapabilityIndex,
    pktcSigDefNcsReceiveUdpPort,
    pktcSigServiceClassNameUS,
    pktcSigServiceClassNameDS,
    pktcSigServiceClassNameMask,
    pktcSigNcsServiceFlowState,
    pktcSigDevR1Cadence,
    pktcSigDevR2Cadence,
    pktcSigDevR3Cadence,
    pktcSigDevR4Cadence,
    pktcSigDevR5Cadence,
    pktcSigDevRgCadence,
    pktcSigDevRsCadence,
    pktcSigDevRtCadence
  }
  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,
    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 }

END
```

## Appendix A. Revision History (Informative)

The following Engineering Change Notices have been incorporated into PK-SP-MIB-SIG-I03-011221.

ECN	Date Ratified	Summary
mib-n-01187	12/3/01	Correct MIB error in sec-n-1029, and complete deletion of the mean deviation objects. These are MIB corrections that were driven by the security team.
prov-n-01039	5/7/01	In the Provisioning specification (PKT-SP-PROV-I02-010323), it is not clear that the config file <b>MUST</b> be rejected if the required info is not there. Also, the CMS table in the MTA MIB does not contain the realm name, but an index into the realm table. This should be reflected in the config file table.

The following Engineering Change Notices have been incorporated into PK-SP-MIB-SIG-I04-021018:

ECN	Date Ratified	Summary
mib-n-02134	7/29/02	Specifies the string length for service class name used in Signaling MIB specifications.
mibmta-n-02083	6/24/02	This ECR makes I03 MIB specification and I05 security specification consistent.
mibsig-n-02043	6/24/02	Correcting references to Security Spec; R0,R6 and R7 Cadence parameters are made mandatory
mib-n-02118	7/15/02	The list of the CODECs in the "PktcCodecType" TEXTUAL-CONVENTION in the Signaling MIB is not consistent with the CODEC list in CODEC spec (codec-n-01228).