

-- extracted from rfc2515.txt
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ATM-MIB DEFINITIONS ::= BEGIN

IMPORTS

MODULE-IDENTITY,
OBJECT-TYPE,
Counter32,
Integer32,
IpAddress,
mib-2
 FROM SNMPv2-SMI
DisplayString,
RowStatus,
TruthValue
 FROM SNMPv2-TC
MODULE-COMPLIANCE,
OBJECT-GROUP
 FROM SNMPv2-CONF
InterfaceIndex,
ifIndex
 FROM IF-MIB
AtmAddr,
AtmConnKind,
AtmConnCastType,
AtmServiceCategory,
AtmTrafficDescrParamIndex,
AtmVpIdentifier,
AtmVcIdentifier,
AtmVorXAdminStatus,
AtmVorXLastChange,
AtmVorXOperStatus,
atmNoClpNoScr
 FROM ATM-TC-MIB;

atmMIB MODULE-IDENTITY

LAST-UPDATED "9810191200Z" -- Oct 19, 1998 12:00:00 PM
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DESCRIPTION

"This is the MIB Module for ATM and AAL5-related objects for managing ATM interfaces, ATM virtual links, ATM cross-connects, AAL5 entities, and and AAL5 connections."

REVISION "9810191200Z" -- Oct 19, 1998 12:00:00 PM

DESCRIPTION

"The initial revision of this module was published as RFC 1695. Key revisions include:

- o Textual Conventions and OBJECT IDENTITIES have been moved to a separate MIB module.
- o Applicability of objects to PVCs, SVCs and Soft PVCs has been clarified.
- o DEFVAL clauses have been added.
- o The relationship of ifIndex values with different layers and sublayers related to ATM has been clarified.
- o atmTrafficQosClass has been deprecated and replaced with atmServiceCategory.
- o atmInterfaceCurrentMaxVpiBits and atmInterfaceCurrentMaxVciBits have been added with

- a description on their relationship with other objects.
- o atmInterfaceAddressType and atmInterfaceAdminAddress have been deprecated and replaced by atmInterfaceSubscrAddress.
- o atmInterfaceTCAlarmState has been clarified.
- o atmTrafficDescrParamIndexNext has been introduced in order to provide a manager a free atmTrafficDescrParamIndex value.
- o The atmTrafficFrameDiscard capability has been added.
- o A connection topology type (atmVpl/VclCastType) and a call control type (atmVpl/VclConnKind) have been added.
- o aal2 has been added to atmVccAalType."

REVISION "9406072245Z" -- Jun 7, 1994 10:45:00 PM

DESCRIPTION

"The RFC1695 version of this MIB module."

-- 1.3.6.1.2.1.37 -- ::= { mib-2 37 }

atmMIBObjects OBJECT IDENTIFIER

-- 1.3.6.1.2.1.37.1 -- ::= { atmMIB 1 }
 -- {atmMIBObjects 1} has been moved to a separate
 -- specification [19].
 -- This ATM MIB Module consists of the following tables:
 -- (1) ATM Interface configuration table
 -- (2) ATM Interface DS3 PLCP table
 -- (3) ATM Interface TC Sublayer table
 -- (4) Atm Traffic Descriptor table
 -- (5) ATM Interface VPL configuration table
 -- (6) ATM Interface VCL configuration table
 -- (7) ATM VP Cross Connect table (for PVCs)
 -- (8) ATM VC Cross Connect table (for PVCs)
 -- (9) ATM Interface AAL5 VCC performance statistics
 -- table
 -- ATM Interface Configuration Parameters Table
 -- This table contains ATM specific
 -- configuration information associated with
 -- an ATM interface beyond those
 -- supported using the ifTable.

atmInterfaceConfTable OBJECT-TYPE

SYNTAX SEQUENCE OF AtmInterfaceConfEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table contains ATM local interface configuration parameters, one entry per ATM interface port."

-- 1.3.6.1.2.1.37.1.2 -- ::= { atmMIBObjects 2 }

atmInterfaceConfEntry OBJECT-TYPE

SYNTAX AtmInterfaceConfEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This list contains ATM interface configuration parameters and state variables and is indexed by ifIndex values of ATM interfaces."

INDEX {
 ifIndex
 }

-- 1.3.6.1.2.1.37.1.2.1 -- ::= { atmInterfaceConfTable 1 }

AtmInterfaceConfEntry ::= SEQUENCE {

atmInterfaceMaxVpcs INTEGER,
 atmInterfaceMaxVccs INTEGER,
 atmInterfaceConfVpcs INTEGER,
 atmInterfaceConfVccs INTEGER,

```

    atmInterfaceMaxActiveVpiBits    INTEGER,
    atmInterfaceMaxActiveVciBits    INTEGER,
    atmInterfaceIlmiVpi             AtmVpIdentifier,
    atmInterfaceIlmiVci             AtmVcIdentifier,
    atmInterfaceAddressType         INTEGER,
    atmInterfaceAdminAddress        AtmAddr,
    atmInterfaceMyNeighborIpAddress IpAddress,
    atmInterfaceMyNeighborIfName    DisplayString,
    atmInterfaceCurrentMaxVpiBits   INTEGER,
    atmInterfaceCurrentMaxVciBits   INTEGER,
    atmInterfaceSubscrAddress        AtmAddr
}

```

```

atmInterfaceMaxVpcs OBJECT-TYPE
  SYNTAX             INTEGER (0..4096)
  MAX-ACCESS         read-write
  STATUS             current
  DESCRIPTION
    "The maximum number of VPCs (PVPCs and SVPCs) supported at this ATM interface. At the ATM UNI, the maximum number of VPCs (PVPCs and SVPCs) ranges from 0 to 256 only."
  -- 1.3.6.1.2.1.37.1.2.1.1 -- ::= { atmInterfaceConfEntry 1 }

```

```

atmInterfaceMaxVccs OBJECT-TYPE
  SYNTAX             INTEGER (0..65536)
  MAX-ACCESS         read-write
  STATUS             current
  DESCRIPTION
    "The maximum number of VCCs (PVCCs and SVCCs) supported at this ATM interface."
  -- 1.3.6.1.2.1.37.1.2.1.2 -- ::= { atmInterfaceConfEntry 2 }

```

```

atmInterfaceConfVpcs OBJECT-TYPE
  SYNTAX             INTEGER (0..4096)
  MAX-ACCESS         read-only
  STATUS             current
  DESCRIPTION
    "The number of VPCs (PVPC, Soft PVPC and SVPC) currently in use at this ATM interface. It includes the number of PVPCs and Soft PVPCs that are configured at the interface, plus the number of SVPCs that are currently established at the interface.
  

At the ATM UNI, the configured number of VPCs (PVPCs and SVPCs) can range from 0 to 256 only."
  -- 1.3.6.1.2.1.37.1.2.1.3 -- ::= { atmInterfaceConfEntry 3 }

```

```

atmInterfaceConfVccs OBJECT-TYPE
  SYNTAX             INTEGER (0..65536)
  MAX-ACCESS         read-only
  STATUS             current
  DESCRIPTION
    "The number of VCCs (PVCC, Soft PVCC and SVCC) currently in use at this ATM interface. It includes the number of PVCCs and Soft PVCCs that are configured at the interface, plus the number of SVCCs that are currently established at the interface."
  -- 1.3.6.1.2.1.37.1.2.1.4 -- ::= { atmInterfaceConfEntry 4 }

```

```

atmInterfaceMaxActiveVpiBits OBJECT-TYPE
  SYNTAX             INTEGER (0..12)
  MAX-ACCESS         read-write
  STATUS             current
  DESCRIPTION

```

"The maximum number of active VPI bits configured for use at the ATM interface. At the ATM UNI, the maximum number of active VPI bits configured for use ranges from 0 to 8 only."

-- 1.3.6.1.2.1.37.1.2.1.5 -- ::= { atmInterfaceConfEntry 5 }

atmInterfaceMaxActiveVciBits OBJECT-TYPE

SYNTAX INTEGER (0..16)

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The maximum number of active VCI bits configured for use at this ATM interface."

-- 1.3.6.1.2.1.37.1.2.1.6 -- ::= { atmInterfaceConfEntry 6 }

atmInterfaceIlmiVpi OBJECT-TYPE

SYNTAX AtmVpIdentifier

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The VPI value of the VCC supporting the ILMI at this ATM interface. If the values of atmInterfaceIlmiVpi and atmInterfaceIlmiVci are both equal to zero then the ILMI is not supported at this ATM interface."

DEFVAL { 0 }

-- 1.3.6.1.2.1.37.1.2.1.7 -- ::= { atmInterfaceConfEntry 7 }

atmInterfaceIlmiVci OBJECT-TYPE

SYNTAX AtmVcIdentifier

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The VCI value of the VCC supporting the ILMI at this ATM interface. If the values of atmInterfaceIlmiVpi and atmInterfaceIlmiVci are both equal to zero then the ILMI is not supported at this ATM interface."

DEFVAL { 16 }

-- 1.3.6.1.2.1.37.1.2.1.8 -- ::= { atmInterfaceConfEntry 8 }

atmInterfaceAddressType OBJECT-TYPE

SYNTAX INTEGER {
private(1),
nsapE164(2),
nativeE164(3),
other(4) }

MAX-ACCESS read-only

STATUS deprecated

DESCRIPTION

"The type of primary ATM address configured for use at this ATM interface."

-- 1.3.6.1.2.1.37.1.2.1.9 -- ::= { atmInterfaceConfEntry 9 }

-- The atmInterfaceAdminAddress object has been replaced by
-- atmInterfaceSubscrAddress.

atmInterfaceAdminAddress OBJECT-TYPE

SYNTAX AtmAddr

MAX-ACCESS read-only

STATUS deprecated

DESCRIPTION

"The primary address assigned for administrative purposes, for example, an address associated with the service provider side of a public network UNI (thus, the value of this address corresponds with the value of ifPhysAddress at the host side). If this interface has no assigned administrative address, or when the address used for

administrative purposes is the same as that used for ifPhysAddress, then this is an octet string of zero length."

```
-- 1.3.6.1.2.1.37.1.2.1.10 -- ::= { atmInterfaceConfEntry 10 }
```

atmInterfaceMyNeighborIpAddress OBJECT-TYPE

SYNTAX IpAddress

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP address of the neighbor system connected to the far end of this interface, to which a Network Management Station can send SNMP messages, as IP datagrams sent to UDP port 161, in order to access network management information concerning the operation of that system. Note that the value of this object may be obtained in different ways, e.g., by manual configuration, or through ILMI interaction with the neighbor system."

```
-- 1.3.6.1.2.1.37.1.2.1.11 -- ::= { atmInterfaceConfEntry 11 }
```

atmInterfaceMyNeighborIfName OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The textual name of the interface on the neighbor system on the far end of this interface, and to which this interface connects. If the neighbor system is manageable through SNMP and supports the object ifName, the value of this object must be identical with that of ifName for the ifEntry of the lowest level physical interface for this port. If this interface does not have a textual name, the value of this object is a zero length string. Note that the value of this object may be obtained in different ways, e.g., by manual configuration, or through ILMI interaction with the neighbor system."

```
-- 1.3.6.1.2.1.37.1.2.1.12 -- ::= { atmInterfaceConfEntry 12 }
```

atmInterfaceCurrentMaxVpiBits OBJECT-TYPE

SYNTAX INTEGER (0..12)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The maximum number of VPI Bits that may currently be used at this ATM interface. The value is the minimum of atmInterfaceMaxActiveVpiBits, and the atmInterfaceMaxActiveVpiBits of the interface's UNI/NNI peer.

If the interface does not negotiate with its peer to determine the number of VPI Bits that can be used on the interface, then the value of this object must equal atmInterfaceMaxActiveVpiBits."

```
-- 1.3.6.1.2.1.37.1.2.1.13 -- ::= { atmInterfaceConfEntry 13 }
```

atmInterfaceCurrentMaxVciBits OBJECT-TYPE

SYNTAX INTEGER (0..16)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The maximum number of VCI Bits that may currently be used at this ATM interface. The value is the minimum of atmInterfaceMaxActiveVciBits, and the

atmInterfaceMaxActiveVciBits of the interface's UNI/NNI peer.

If the interface does not negotiate with its peer to determine the number of VCI Bits that can be used on the interface, then the value of this object must equal atmInterfaceMaxActiveVciBits."

```
-- 1.3.6.1.2.1.37.1.2.1.14 -- ::= { atmInterfaceConfEntry 14 }
```

atmInterfaceSubscrAddress OBJECT-TYPE

SYNTAX AtmAddr
MAX-ACCESS read-write
STATUS current
DESCRIPTION

"The identifier assigned by a service provider to the network side of a public network UNI. If this interface has no assigned service provider address, or for other interfaces this is an octet string of zero length."

```
-- 1.3.6.1.2.1.37.1.2.1.15 -- ::= { atmInterfaceConfEntry 15 }
```

```
-- The ATM Interface DS3 PLCP Table  
-- This table contains the DS3 PLCP configuration and  
-- state parameters of those ATM interfaces  
-- which use DS3 PLCP for carrying ATM cells over DS3.
```

atmInterfaceDs3PlcpTable OBJECT-TYPE

SYNTAX SEQUENCE OF AtmInterfaceDs3PlcpEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION

"This table contains ATM interface DS3 PLCP parameters and state variables, one entry per ATM interface port."

```
-- 1.3.6.1.2.1.37.1.3 -- ::= { atmMIBObjects 3 }
```

atmInterfaceDs3PlcpEntry OBJECT-TYPE

SYNTAX AtmInterfaceDs3PlcpEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION

"This list contains DS3 PLCP parameters and state variables at the ATM interface and is indexed by the ifIndex value of the ATM interface."

INDEX {
 ifIndex
}

```
-- 1.3.6.1.2.1.37.1.3.1 -- ::= { atmInterfaceDs3PlcpTable 1 }
```

```
AtmInterfaceDs3PlcpEntry ::= SEQUENCE {  
    atmInterfaceDs3PlcpSEFSs Counter32,  
    atmInterfaceDs3PlcpAlarmState INTEGER,  
    atmInterfaceDs3PlcpUASS Counter32  
}
```

atmInterfaceDs3PlcpSEFSs OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

"The number of DS3 PLCP Severely Errored Framing Seconds (SEFS). Each SEFS represents a one-second interval which contains one or more SEF events."

```
-- 1.3.6.1.2.1.37.1.3.1.1 -- ::= { atmInterfaceDs3PlcpEntry 1 }
```

atmInterfaceDs3PlcpAlarmState OBJECT-TYPE

SYNTAX INTEGER {

```

        noAlarm(1),
        receivedFarEndAlarm(2),
        incomingLOF(3) }
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This variable indicates if there is an
    alarm present for the DS3 PLCP. The value
    receivedFarEndAlarm means that the DS3 PLCP
    has received an incoming Yellow
    Signal, the value incomingLOF means that
    the DS3 PLCP has declared a loss of frame (LOF)
    failure condition, and the value noAlarm
    means that there are no alarms present.
    Transition from the failure to the no alarm state
    occurs when no defects (e.g., LOF) are received
    for more than 10 seconds."
-- 1.3.6.1.2.1.37.1.3.1.2 -- ::= { atmInterfaceDs3PlcpEntry 2 }

atmInterfaceDs3PlcpUASS OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The counter associated with the number of
        Unavailable Seconds encountered by the PLCP."
-- 1.3.6.1.2.1.37.1.3.1.3 -- ::= { atmInterfaceDs3PlcpEntry 3 }
-- The ATM Interface TC Sublayer Table
-- This table contains TC sublayer configuration and
-- state parameters of those ATM interfaces
-- which use TC sublayer for carrying ATM cells over
-- SONET/SDH or DS3.

atmInterfaceTCTable OBJECT-TYPE
    SYNTAX SEQUENCE OF AtmInterfaceTCEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table contains ATM interface TC
        Sublayer parameters and state variables,
        one entry per ATM interface port."
-- 1.3.6.1.2.1.37.1.4 -- ::= { atmMIBObjects 4 }

atmInterfaceTCEntry OBJECT-TYPE
    SYNTAX AtmInterfaceTCEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This list contains TC Sublayer parameters
        and state variables at the ATM interface and is
        indexed by the ifIndex value of the ATM interface."
    INDEX {
        ifIndex
    }
-- 1.3.6.1.2.1.37.1.4.1 -- ::= { atmInterfaceTCTable 1 }

AtmInterfaceTCEntry ::= SEQUENCE {
    atmInterfaceOCDEvents Counter32,
    atmInterfaceTCAlarmState INTEGER
}

atmInterfaceOCDEvents OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The number of times the Out of Cell
        Delineation (OCD) events occur. If seven

```

consecutive ATM cells have Header Error Control (HEC) violations, an OCD event occurs. A high number of OCD events may indicate a problem with the TC Sublayer."

-- 1.3.6.1.2.1.37.1.4.1.1 -- ::= { atmInterfaceTCEntry 1 }

atmInterfaceTCAlarmState OBJECT-TYPE

SYNTAX INTEGER {
noAlarm(1),
lcdFailure(2) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This variable indicates if there is an alarm present for the TC Sublayer. The value lcdFailure(2) indicates that the TC Sublayer is currently in the Loss of Cell Delineation (LCD) defect maintenance state. The value noAlarm(1) indicates that the TC Sublayer is currently not in the LCD defect maintenance state."

-- 1.3.6.1.2.1.37.1.4.1.2 -- ::= { atmInterfaceTCEntry 2 }

-- ATM Traffic Descriptor Parameter Table
-- This table contains a set of self-consistent
-- ATM traffic parameters including the
-- ATM traffic service category.
-- The ATM virtual link tables (i.e., VPL and VCL tables)
-- will use this ATM Traffic Descriptor table
-- to assign traffic parameters and service category
-- to the receive and transmit directions of
-- the ATM virtual links (i.e., VPLs and VCLs).
-- The ATM VPL or VCL table will indicate a row
-- in the atmTrafficDescrParamTable
-- using its atmTrafficDescrParamIndex value.
-- The management application can then compare a set of
-- ATM traffic parameters with a single value.
-- If no suitable row(s) in the atmTrafficDescrParamTable
-- exists, the manager must create a new row(s) in this
-- table. If such a row is created, agent checks the
-- sanity of that set of ATM traffic parameter values.
-- The manager may use atmTrafficDescrParamIndexNext
-- in order to obtain a free atmTrafficDescrParamIndex
-- value.
-- When creating a new row, the parameter values
-- will be checked for self-consistency.
-- Predefined/template rows may be supported.
-- A row in the atmTrafficDescrParamTable is deleted
-- by setting the atmTrafficDescrRowStatus to destroy(6).
-- The agent will check whether this row is still in use
-- by any entry of the atmVplTable or atmVclTable.
-- The agent denies the request if the row is still in
-- use.
-- The ATM Traffic Descriptor Parameter Table

atmTrafficDescrParamTable OBJECT-TYPE

SYNTAX SEQUENCE OF AtmTrafficDescrParamEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table contains information on ATM traffic descriptor type and the associated parameters."

-- 1.3.6.1.2.1.37.1.5 -- ::= { atmMIBObjects 5 }

atmTrafficDescrParamEntry OBJECT-TYPE

SYNTAX AtmTrafficDescrParamEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This list contains ATM traffic descriptor

```

    type and the associated parameters."
INDEX {
    atmTrafficDescrParamIndex
}
-- 1.3.6.1.2.1.37.1.5.1 -- ::= { atmTrafficDescrParamTable 1 }

AtmTrafficDescrParamEntry ::= SEQUENCE {
    atmTrafficDescrParamIndex AtmTrafficDescrParamIndex,
    atmTrafficDescrType       OBJECT IDENTIFIER,
    atmTrafficDescrParam1     Integer32,
    atmTrafficDescrParam2     Integer32,
    atmTrafficDescrParam3     Integer32,
    atmTrafficDescrParam4     Integer32,
    atmTrafficDescrParam5     Integer32,
    atmTrafficQoSClass        INTEGER,
    atmTrafficDescrRowStatus   RowStatus,
    atmServiceCategory        AtmServiceCategory,
    atmTrafficFrameDiscard     TruthValue
}

atmTrafficDescrParamIndex OBJECT-TYPE
    SYNTAX      AtmTrafficDescrParamIndex (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This object is used by the virtual link
        table (i.e., VPL or VCL table)
        to identify the row of this table.
        When creating a new row in the table
        the value of this index may be obtained
        by retrieving the value of
        atmTrafficDescrParamIndexNext."
-- 1.3.6.1.2.1.37.1.5.1.1 -- ::= { atmTrafficDescrParamEntry 1 }

atmTrafficDescrType OBJECT-TYPE
    SYNTAX      OBJECT IDENTIFIER
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The value of this object identifies the type
        of ATM traffic descriptor.
        The type may indicate no traffic descriptor or
        traffic descriptor with one or more parameters.
        These parameters are specified as a parameter
        vector, in the corresponding instances of the
        objects:
            atmTrafficDescrParam1
            atmTrafficDescrParam2
            atmTrafficDescrParam3
            atmTrafficDescrParam4
            atmTrafficDescrParam5."
    DEFVAL      { atmNoClpNoScr }
-- 1.3.6.1.2.1.37.1.5.1.2 -- ::= { atmTrafficDescrParamEntry 2 }

atmTrafficDescrParam1 OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The first parameter of the ATM traffic descriptor
        used according to the value of
        atmTrafficDescrType."
    DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.5.1.3 -- ::= { atmTrafficDescrParamEntry 3 }

atmTrafficDescrParam2 OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-create

```

```

STATUS      current
DESCRIPTION
    "The second parameter of the ATM traffic descriptor
    used according to the value of
    atmTrafficDescrType."
DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.5.1.4 -- ::= { atmTrafficDescrParamEntry 4 }

atmTrafficDescrParam3 OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "The third parameter of the ATM traffic descriptor
    used according to the value of
    atmTrafficDescrType."
DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.5.1.5 -- ::= { atmTrafficDescrParamEntry 5 }

atmTrafficDescrParam4 OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "The fourth parameter of the ATM traffic descriptor
    used according to the value of
    atmTrafficDescrType."
DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.5.1.6 -- ::= { atmTrafficDescrParamEntry 6 }

atmTrafficDescrParam5 OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "The fifth parameter of the ATM traffic descriptor
    used according to the value of
    atmTrafficDescrType."
DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.5.1.7 -- ::= { atmTrafficDescrParamEntry 7 }

atmTrafficQoSClass OBJECT-TYPE
SYNTAX      INTEGER (0..255)
MAX-ACCESS  read-create
STATUS      deprecated
DESCRIPTION
    "The value of this object identifies the QoS Class.
    Four Service classes have been
    specified in the ATM Forum UNI Specification:
    Service Class A: Constant bit rate video and
                    Circuit emulation
    Service Class B: Variable bit rate video/audio
    Service Class C: Connection-oriented data
    Service Class D: Connectionless data
    Four QoS classes numbered 1, 2, 3, and 4 have
    been specified with the aim to support service
    classes A, B, C, and D respectively.
    An unspecified QoS Class numbered `0' is used
    for best effort traffic."
DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.5.1.8 -- ::= { atmTrafficDescrParamEntry 8 }

atmTrafficDescrRowStatus OBJECT-TYPE
SYNTAX      RowStatus
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "This object is used to create
    a new row or modify or delete an

```


DESCRIPTION

"An entry in the VPL table. This entry is used to model a bi-directional VPL. To create a VPL at an ATM interface, either of the following procedures are used:

Negotiated VPL establishment

- (1) The management application creates a VPL entry in the atmVplTable by setting atmVplRowStatus to createAndWait(5). This may fail for the following reasons:
 - The selected VPI value is unavailable,
 - The selected VPI value is in use.Otherwise, the agent creates a row and reserves the VPI value on that port.
- (2) The manager selects an existing row(s) in the atmTrafficDescrParamTable, thereby, selecting a set of self-consistent ATM traffic parameters and the service category for receive and transmit directions of the VPL.
- (2a) If no suitable row(s) in the atmTrafficDescrParamTable exists, the manager must create a new row(s) in that table.
- (2b) The manager characterizes the VPL's traffic parameters through setting the atmVplReceiveTrafficDescrIndex and the atmVplTransmitTrafficDescrIndex values in the VPL table, which point to the rows containing desired ATM traffic parameter values in the atmTrafficDescrParamTable. The agent will check the availability of resources and may refuse the request. If the transmit and receive service categories are inconsistent, the agent should refuse the request.
- (3) The manager activates the VPL by setting the atmVplRowStatus to active(1). If this set is successful, the agent has reserved the resources to satisfy the requested traffic parameter values and the service category for that VPL.
- (4) If the VPL terminates a VPC in the ATM host or switch, the manager turns on the atmVplAdminStatus to up(1) to turn the VPL traffic flow on. Otherwise, the atmVpCrossConnectTable must be used to cross-connect the VPL to another VPL(s) in an ATM switch or network.

One-Shot VPL Establishment

A VPL may also be established in one step by a set-request with all necessary VPL parameter values and atmVplRowStatus set to createAndGo(4).

In contrast to the negotiated VPL establishment which allows for detailed error checking (i.e., set errors are explicitly linked to particular resource acquisition failures), the one-shot VPL establishment performs the setup on one operation but does not have the advantage of step-wise

error checking.

VPL Retirement

A VPL is released by setting atmVplRowStatus to destroy(6), and the agent may release all associated resources."

```
INDEX {
    ifIndex,
    atmVplVpi
}
```

```
-- 1.3.6.1.2.1.37.1.6.1 -- ::= { atmVplTable 1 }
```

```
AtmVplEntry ::= SEQUENCE {
    atmVplVpi                    AtmVpIdentifier,
    atmVplAdminStatus            AtmVorXAdminStatus,
    atmVplOperStatus             AtmVorXOperStatus,
    atmVplLastChange             AtmVorXLastChange,
    atmVplReceiveTrafficDescrIndex AtmTrafficDescrParamIndex,
    atmVplTransmitTrafficDescrIndex AtmTrafficDescrParamIndex,
    atmVplCrossConnectIdentifier INTEGER,
    atmVplRowStatus              RowStatus,
    atmVplCastType               AtmConnCastType,
    atmVplConnKind               AtmConnKind
}
```

atmVplVpi OBJECT-TYPE

```
SYNTAX      AtmVpIdentifier
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
```

"The VPI value of the VPL."

```
-- 1.3.6.1.2.1.37.1.6.1.1 -- ::= { atmVplEntry 1 }
```

atmVplAdminStatus OBJECT-TYPE

```
SYNTAX      AtmVorXAdminStatus
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
```

"This object is instantiated only for a VPL which terminates a VPC (i.e., one which is NOT cross-connected to other VPLs). Its value specifies the desired administrative state of the VPL."

```
DEFVAL      { down }
```

```
-- 1.3.6.1.2.1.37.1.6.1.2 -- ::= { atmVplEntry 2 }
```

atmVplOperStatus OBJECT-TYPE

```
SYNTAX      AtmVorXOperStatus
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
```

"The current operational status of the VPL."

```
-- 1.3.6.1.2.1.37.1.6.1.3 -- ::= { atmVplEntry 3 }
```

atmVplLastChange OBJECT-TYPE

```
SYNTAX      AtmVorXLastChange
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
```

"The value of sysUpTime at the time this VPL entered its current operational state."

```
-- 1.3.6.1.2.1.37.1.6.1.4 -- ::= { atmVplEntry 4 }
```

atmVplReceiveTrafficDescrIndex OBJECT-TYPE

```
SYNTAX      AtmTrafficDescrParamIndex
MAX-ACCESS  read-create
STATUS      current
```

DESCRIPTION

"The value of this object identifies the row in the atmTrafficDescrParamTable which applies to the receive direction of the VPL."

DEFVAL { 0 }

-- 1.3.6.1.2.1.37.1.6.1.5 -- ::= { atmVplEntry 5 }

atmVplTransmitTrafficDescrIndex OBJECT-TYPE

SYNTAX AtmTrafficDescrParamIndex

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The value of this object identifies the row in the atmTrafficDescrParamTable which applies to the transmit direction of the VPL."

DEFVAL { 0 }

-- 1.3.6.1.2.1.37.1.6.1.6 -- ::= { atmVplEntry 6 }

atmVplCrossConnectIdentifier OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This object is instantiated only for a VPL which is cross-connected to other VPLs that belong to the same VPC. All such associated VPLs have the same value of this object, and all their cross-connections are identified either by entries that are indexed by the same value of atmVpCrossConnectIndex in the atmVpCrossConnectTable of this MIB module or by the same value of the cross-connect index in the cross-connect table for SVCs and Soft PVCs (defined in a separate MIB module). At no time should entries in these respective cross-connect tables exist simultaneously with the same cross-connect index value. The value of this object is initialized by the agent after the associated entries in the atmVpCrossConnectTable have been created."

-- 1.3.6.1.2.1.37.1.6.1.7 -- ::= { atmVplEntry 7 }

atmVplRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION

*"This object is used to create, delete or modify a row in this table. To create a new VCL, this object is initially set to 'createAndWait' or 'createAndGo'. This object should not be set to 'active' unless the following columnar objects have been set to their desired value in this row:
atmVplReceiveTrafficDescrIndex and
atmVplTransmitTrafficDescrIndex.
The DESCRIPTION of atmVplEntry provides further guidance to row treatment in this table."*

DEFVAL { createAndWait }

-- 1.3.6.1.2.1.37.1.6.1.8 -- ::= { atmVplEntry 8 }

atmVplCastType OBJECT-TYPE

SYNTAX AtmConnCastType

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The connection topology type."

DEFVAL { p2p }

```

-- 1.3.6.1.2.1.37.1.6.1.9 -- ::= { atmVplEntry 9 }

atmVplConnKind OBJECT-TYPE
    SYNTAX      AtmConnKind
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The use of call control."
    DEFVAL      { pvc }
-- 1.3.6.1.2.1.37.1.6.1.10 -- ::= { atmVplEntry 10 }
-- ATM Interface Virtual Channel Link (VCL) Table
-- This table contains configuration and state
-- information of a bi-directional Virtual Channel
-- Link (VCL) at an ATM interface.
-- This table can be used to create, delete or modify
-- a VCL that is terminated in an ATM host or switch.
-- This table can also be
-- used to create, delete or modify a VCL that is
-- cross-connected to another VCL.
-- The ATM Interface VCL Table

atmVclTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF AtmVclEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The Virtual Channel Link (VCL) table. A
        bi-directional VCL is modeled as one entry
        in this table. This table can be used for
        PVCs, SVCs and Soft PVCs."
-- 1.3.6.1.2.1.37.1.7 -- ::= { atmMIBObjects 7 }

atmVclEntry OBJECT-TYPE
    SYNTAX      AtmVclEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry in the VCL table. This entry is
        used to model a bi-directional VCL.
        To create a VCL at an ATM interface,
        either of the following procedures are used:

        Negotiated VCL establishment

        (1) The management application creates
            a VCL entry in the atmVclTable
            by setting atmVclRowStatus to createAndWait(5).
            This may fail for the following reasons:
            - The selected VPI/VCI values are unavailable,
            - The selected VPI/VCI values are in use.
            Otherwise, the agent creates a row and
            reserves the VPI/VCI values on that port.

        (2) The manager selects an existing row(s) in the
            atmTrafficDescrParamTable,
            thereby, selecting a set of self-consistent
            ATM traffic parameters and the service category
            for receive and transmit directions of the VCL.

        (2a) If no suitable row(s) in the
            atmTrafficDescrParamTable exists,
            the manager must create a new row(s)
            in that table.

        (2b) The manager characterizes the VCL's traffic
            parameters through setting the
            atmVclReceiveTrafficDescrIndex and the
            atmVclTransmitTrafficDescrIndex values
            in the VCL table, which point to the rows

```

containing desired ATM traffic parameter values in the atmTrafficDescrParamTable. The agent will check the availability of resources and may refuse the request.

If the transmit and receive service categories are inconsistent, the agent should refuse the request.

- (3) The manager activates the VCL by setting the atmVclRowStatus to active(1) (for requirements on this activation see the description of atmVclRowStatus).
If this set is successful, the agent has reserved the resources to satisfy the requested traffic parameter values and the service category for that VCL.
- (4) If the VCL terminates a VCC in the ATM host or switch, the manager turns on the atmVclAdminStatus to up(1) to turn the VCL traffic flow on. Otherwise, the atmVcCrossConnectTable must be used to cross-connect the VCL to another VCL(s) in an ATM switch or network.

One-Shot VCL Establishment

A VCL may also be established in one step by a set-request with all necessary VCL parameter values and atmVclRowStatus set to createAndGo(4).

In contrast to the negotiated VCL establishment which allows for detailed error checking (i.e., set errors are explicitly linked to particular resource acquisition failures), the one-shot VCL establishment performs the setup on one operation but does not have the advantage of step-wise error checking.

VCL Retirement

A VCL is released by setting atmVclRowStatus to destroy(6), and the agent may release all associated resources."

INDEX {

ifIndex,
atmVclVpi,
atmVclVci

}

-- 1.3.6.1.2.1.37.1.7.1 -- ::= { atmVclTable 1 }

AtmVclEntry ::= SEQUENCE {

atmVclVpi	AtmVpIdentifier,
atmVclVci	AtmVcIdentifier,
atmVclAdminStatus	AtmVorXAdminStatus,
atmVclOperStatus	AtmVorXOperStatus,
atmVclLastChange	AtmVorXLastChange,
atmVclReceiveTrafficDescrIndex	AtmTrafficDescrParamIndex,
atmVclTransmitTrafficDescrIndex	AtmTrafficDescrParamIndex,
atmVccAalType	INTEGER,
atmVccAal5CpcsTransmitSduSize	INTEGER,
atmVccAal5CpcsReceiveSduSize	INTEGER,
atmVccAal5EncapsType	INTEGER,
atmVclCrossConnectIdentifier	INTEGER,
atmVclRowStatus	RowStatus,
atmVclCastType	AtmConnCastType,
atmVclConnKind	AtmConnKind

}

```

atmVclVpi OBJECT-TYPE
    SYNTAX      AtmVpIdentifier
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The VPI value of the VCL."
-- 1.3.6.1.2.1.37.1.7.1.1 -- ::= { atmVclEntry 1 }

atmVclVci OBJECT-TYPE
    SYNTAX      AtmVcIdentifier
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The VCI value of the VCL."
-- 1.3.6.1.2.1.37.1.7.1.2 -- ::= { atmVclEntry 2 }

atmVclAdminStatus OBJECT-TYPE
    SYNTAX      AtmVorXAdminStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object is instanciated only for a VCL which
        terminates a VCC (i.e., one which is NOT
        cross-connected to other VCLs). Its value
        specifies the desired administrative state of
        the VCL."
    DEFVAL      { down }
-- 1.3.6.1.2.1.37.1.7.1.3 -- ::= { atmVclEntry 3 }

atmVclOperStatus OBJECT-TYPE
    SYNTAX      AtmVorXOperStatus
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The current operational status of the VCL."
-- 1.3.6.1.2.1.37.1.7.1.4 -- ::= { atmVclEntry 4 }

atmVclLastChange OBJECT-TYPE
    SYNTAX      AtmVorXLastChange
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of sysUpTime at the time this VCL
        entered its current operational state."
-- 1.3.6.1.2.1.37.1.7.1.5 -- ::= { atmVclEntry 5 }

atmVclReceiveTrafficDescrIndex OBJECT-TYPE
    SYNTAX      AtmTrafficDescrParamIndex
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The value of this object identifies the row
        in the ATM Traffic Descriptor Table which
        applies to the receive direction of this VCL."
    DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.7.1.6 -- ::= { atmVclEntry 6 }

atmVclTransmitTrafficDescrIndex OBJECT-TYPE
    SYNTAX      AtmTrafficDescrParamIndex
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The value of this object identifies the row
        of the ATM Traffic Descriptor Table which applies
        to the transmit direction of this VCL."
    DEFVAL      { 0 }
-- 1.3.6.1.2.1.37.1.7.1.7 -- ::= { atmVclEntry 7 }

```

atmVccAalType OBJECT-TYPE

SYNTAX INTEGER {
 aal1(1),
 aal34(2),
 aal5(3),
 other(4),
 unknown(5),
 aal2(6) }

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"An instance of this object only exists when the local VCL end-point is also the VCC end-point, and AAL is in use.

The type of AAL used on this VCC.

The AAL type includes AAL1, AAL2, AAL3/4, and AAL5. The other(4) may be user-defined AAL type. The unknown type indicates that the AAL type cannot be determined."

DEFVAL { aal5 }

-- 1.3.6.1.2.1.37.1.7.1.8 -- ::= { atmVclEntry 8 }

atmVccAal5CpcsTransmitSduSize OBJECT-TYPE

SYNTAX INTEGER (1..65535)

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"An instance of this object only exists when the local VCL end-point is also the VCC end-point, and AAL5 is in use.

The maximum AAL5 CPCS SDU size in octets that is supported on the transmit direction of this VCC."

DEFVAL { 9188 }

-- 1.3.6.1.2.1.37.1.7.1.9 -- ::= { atmVclEntry 9 }

atmVccAal5CpcsReceiveSduSize OBJECT-TYPE

SYNTAX INTEGER (1..65535)

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"An instance of this object only exists when the local VCL end-point is also the VCC end-point, and AAL5 is in use.

The maximum AAL5 CPCS SDU size in octets that is supported on the receive direction of this VCC."

DEFVAL { 9188 }

-- 1.3.6.1.2.1.37.1.7.1.10 -- ::= { atmVclEntry 10 }

atmVccAal5EncapsType OBJECT-TYPE

SYNTAX INTEGER {
 vcMultiplexRoutedProtocol(1),
 vcMultiplexBridgedProtocol8023(2),
 vcMultiplexBridgedProtocol8025(3),
 vcMultiplexBridgedProtocol8026(4),
 vcMultiplexLANemulation8023(5),
 vcMultiplexLANemulation8025(6),
 llcEncapsulation(7),
 multiprotocolFrameRelaySscs(8),
 other(9),
 unknown(10) }

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"An instance of this object only exists when the local VCL end-point is also the VCC end-point, and AAL5 is in use.

The type of data encapsulation used over the AAL5 SSCS layer. The definitions reference

RFC 1483 Multiprotocol Encapsulation
over ATM AAL5 and to the ATM Forum
LAN Emulation specification."

DEFVAL { llcEncapsulation }
-- 1.3.6.1.2.1.37.1.7.1.11 -- ::= { atmVclEntry 11 }

atmVclCrossConnectIdentifier OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)
MAX-ACCESS read-only
STATUS current

DESCRIPTION

"This object is instantiated only for a VCL which is cross-connected to other VCLs that belong to the same VCC. All such associated VCLs have the same value of this object, and all their cross-connections are identified either by entries that are indexed by the same value of atmVcCrossConnectIndex in the atmVcCrossConnectTable of this MIB module or by the same value of the cross-connect index in the cross-connect table for SVCs and Soft PVCs (defined in a separate MIB module).

At no time should entries in these respective cross-connect tables exist simultaneously with the same cross-connect index value. The value of this object is initialized by the agent after the associated entries in the atmVcCrossConnectTable have been created."

-- 1.3.6.1.2.1.37.1.7.1.12 -- ::= { atmVclEntry 12 }

atmVclRowStatus OBJECT-TYPE

SYNTAX RowStatus
MAX-ACCESS read-create
STATUS current

DESCRIPTION

"This object is used to create, delete or modify a row in this table. To create a new VCL, this object is initially set to 'createAndWait' or 'createAndGo'. This object should not be set to 'active' unless the following columnar objects have been set to their desired value in this row:
atmVclReceiveTrafficDescrIndex,
atmVclTransmitTrafficDescrIndex.
In addition, if the local VCL end-point is also the VCC end-point:
atmVccAalType.
In addition, for AAL5 connections only:
atmVccAal5CpcsTransmitSduSize,
atmVccAal5CpcsReceiveSduSize, and
atmVccAal5EncapsType. (The existence of these objects imply the AAL connection type.).
The DESCRIPTION of atmVclEntry provides further guidance to row treatment in this table."

DEFVAL { createAndWait }
-- 1.3.6.1.2.1.37.1.7.1.13 -- ::= { atmVclEntry 13 }

atmVclCastType OBJECT-TYPE

SYNTAX AtmConnCastType
MAX-ACCESS read-create
STATUS current

DESCRIPTION

"The connection topology type."

DEFVAL { p2p }
-- 1.3.6.1.2.1.37.1.7.1.14 -- ::= { atmVclEntry 14 }

atmVclConnKind OBJECT-TYPE

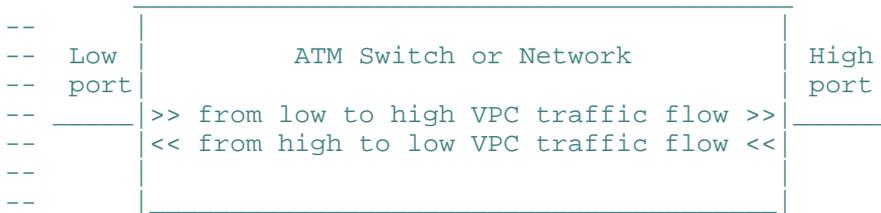
SYNTAX **AtmConnKind**
MAX-ACCESS read-create
STATUS current
DESCRIPTION

"The use of call control."

DEFVAL { pvc }

-- 1.3.6.1.2.1.37.1.7.1.15 -- ::= { atmVclEntry 15 }

-- ATM Virtual Path (VP) Cross Connect Table
-- This table contains configuration and state
-- information of point-to-point,
-- point-to-multipoint, or multipoint-to-multipoint
-- VP cross-connects for PVCs.
-- This table has read-create access and can be used
-- to cross-connect the VPLs together in an ATM switch
-- or network. The atmVpCrossConnectIndex
-- is used to associate the related
-- VPLs that are cross-connected together.
-- The ATM VP Cross Connect Table
-- models each bi-directional VPC
-- cross-connect as a set of entries in
-- the atmVpCrossConnectTable. A
-- point-to-point VPC cross-connect is modeled
-- as one entry; a point-to-multipoint (N leafs) VPC
-- cross-connect as N entries in this table; and
-- a multipoint-to-multipoint (N parties) VPC cross-
-- connect as N(N-1)/2 entries in this table.
-- In the latter cases, all the N (or N(N-1)/2) entries
-- are associated with a single VPC cross-connect by
-- having the same value of atmVpCrossConnectIndex.



-- The terms low and high are chosen to represent
-- numerical ordering of the two interfaces associated
-- with a VPC cross-connect. That is, the ATM interface
-- with the lower value of ifIndex is termed 'low',
-- while the other ATM interface associated with the
-- VPC cross-connect is termed 'high'. This terminology
-- is used to provide directional information; for
-- example, the atmVpCrossConnectL2HOperStatus applies
-- to the low->high direction, and
-- atmVpCrossConnectH2LOperStatus applies to the
-- high->low direction, as illustrated above.

atmVpCrossConnectIndexNext OBJECT-TYPE

SYNTAX **INTEGER** (0..2147483647)
MAX-ACCESS read-only
STATUS current
DESCRIPTION

*"This object contains an appropriate value to
be used for atmVpCrossConnectIndex when creating
entries in the atmVpCrossConnectTable. The value
0 indicates that no unassigned entries are
available. To obtain the atmVpCrossConnectIndex
value for a new entry, the manager issues a
management protocol retrieval operation to obtain
the current value of this object. After each
retrieval, the agent should modify the value to
the next unassigned index.
After a manager retrieves a value the agent will
determine through its local policy when this index
value will be made available for reuse."*

-- 1.3.6.1.2.1.37.1.8 -- ::= { atmMIBObjects 8 }

-- The ATM VP Cross Connect Table

atmVpCrossConnectTable OBJECT-TYPE

SYNTAX SEQUENCE OF AtmVpCrossConnectEntry
MAX-ACCESS not-accessible
STATUS current

DESCRIPTION

*"The ATM VP Cross Connect table for PVCs.
An entry in this table models two
cross-connected VPLs.
Each VPL must have its atmConnKind set
to pvc(1)."*

-- 1.3.6.1.2.1.37.1.9 -- ::= { atmMIBObjects 9 }

atmVpCrossConnectEntry OBJECT-TYPE

SYNTAX AtmVpCrossConnectEntry
MAX-ACCESS not-accessible
STATUS current

DESCRIPTION

*"An entry in the ATM VP Cross Connect table.
This entry is used to model a bi-directional
ATM VP cross-connect which cross-connects
two VPLs.*

Step-wise Procedures to set up a VP Cross-connect

*Once the entries in the atmVplTable are created,
the following procedures are used
to cross-connect the VPLs together.*

- (1) *The manager obtains a unique
atmVpCrossConnectIndex by reading the
atmVpCrossConnectIndexNext object.*
- (2) *Next, the manager creates a set of one
or more rows in the ATM VP Cross Connect
Table, one for each cross-connection between
two VPLs. Each row is indexed by the ATM
interface port numbers and VPI values of the
two ends of that cross-connection.
This set of rows specifies the topology of the
VPC cross-connect and is identified by a single
value of atmVpCrossConnectIndex.*

Negotiated VP Cross-Connect Establishment

- (2a) *The manager creates a row in this table by
setting atmVpCrossConnectRowStatus to
createAndWait(5). The agent checks the
requested topology and the mutual sanity of
the ATM traffic parameters and
service categories, i.e., the row creation
fails if:
- the requested topology is incompatible with
associated values of atmVplCastType,
- the requested topology is not supported
by the agent,
- the traffic/service category parameter values
associated with the requested row are
incompatible with those of already existing
rows for this VP cross-connect.
[For example, for setting up
a point-to-point VP cross-connect, the
ATM traffic parameters in the receive direction
of a VPL at the low end of the cross-connect
must equal to the traffic parameters in the
transmit direction of the other VPL at the
high end of the cross-connect,
otherwise, the row creation fails.]*

The agent also checks for internal errors in building the cross-connect.

The `atmVpCrossConnectIndex` values in the corresponding `atmVplTable` rows are filled in by the agent at this point.

- (2b) The manager promotes the row in the `atmVpCrossConnectTable` by setting `atmVpCrossConnectRowStatus` to `active(1)`. If this set is successful, the agent has reserved the resources specified by the ATM traffic parameter and Service category values for each direction of the VP cross-connect in an ATM switch or network.
- (3) The manager sets the `atmVpCrossConnectAdminStatus` to `up(1)` in all rows of this VP cross-connect to turn the traffic flow on.

One-Shot VP Cross-Connect Establishment

A VP cross-connect may also be established in one step by a set-request with all necessary parameter values and `atmVpCrossConnectRowStatus` set to `createAndGo(4)`.

In contrast to the negotiated VP cross-connect establishment which allows for detailed error checking (i.e., set errors are explicitly linked to particular resource acquisition failures), the one-shot VP cross-connect establishment performs the setup on one operation but does not have the advantage of step-wise error checking.

VP Cross-Connect Retirement

A VP cross-connect identified by a particular value of `atmVpCrossConnectIndex` is released by:

- (1) Setting `atmVpCrossConnectRowStatus` of all rows identified by this value of `atmVpCrossConnectIndex` to `destroy(6)`. The agent may release all associated resources, and the `atmVpCrossConnectIndex` values in the corresponding `atmVplTable` row are removed. Note that a situation when only a subset of the associated rows are deleted corresponds to a VP topology change.
- (2) After deletion of the appropriate `atmVpCrossConnectEntries`, the manager may set `atmVplRowStatus` to `destroy(6)` the associated VPLs. The agent releases the resources and removes the associated rows in the `atmVplTable`.

VP Cross-connect Reconfiguration

At the discretion of the agent, a VP cross-connect may be reconfigured by adding and/or deleting leafs to/from the VP topology as per the VP cross-connect establishment/retirement procedures. Reconfiguration of traffic/service category parameter values requires release of the VP cross-connect

*before those parameter values may be changed
for individual VPLs."*

```
INDEX {  
    atmVpCrossConnectIndex,  
    atmVpCrossConnectLowIfIndex,  
    atmVpCrossConnectLowVpi,  
    atmVpCrossConnectHighIfIndex,  
    atmVpCrossConnectHighVpi
```

```
}  
-- 1.3.6.1.2.1.37.1.9.1 -- ::= { atmVpCrossConnectTable 1 }
```

```
AtmVpCrossConnectEntry ::= SEQUENCE {  
    atmVpCrossConnectIndex          INTEGER,  
    atmVpCrossConnectLowIfIndex     InterfaceIndex,  
    atmVpCrossConnectLowVpi         AtmVpIdentifier,  
    atmVpCrossConnectHighIfIndex    InterfaceIndex,  
    atmVpCrossConnectHighVpi        AtmVpIdentifier,  
    atmVpCrossConnectAdminStatus    AtmVorXAdminStatus,  
    atmVpCrossConnectL2HOperStatus  AtmVorXOperStatus,  
    atmVpCrossConnectH2LOperStatus  AtmVorXOperStatus,  
    atmVpCrossConnectL2HLastChange  AtmVorXLastChange,  
    atmVpCrossConnectH2LLastChange  AtmVorXLastChange,  
    atmVpCrossConnectRowStatus      RowStatus  
}
```

atmVpCrossConnectIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

*"A unique value to identify this VP cross-connect.
For each VPL associated with this cross-connect,
the agent reports this cross-connect index value
in the atmVplCrossConnectIdentifier attribute of
the corresponding atmVplTable entries."*

```
-- 1.3.6.1.2.1.37.1.9.1.1 -- ::= { atmVpCrossConnectEntry 1 }
```

atmVpCrossConnectLowIfIndex OBJECT-TYPE

SYNTAX InterfaceIndex

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

*"The ifIndex value of the ATM interface for
this VP cross-connect. The term low implies
that this ATM interface has the numerically lower
ifIndex value than the other ATM interface
identified in the same atmVpCrossConnectEntry."*

```
-- 1.3.6.1.2.1.37.1.9.1.2 -- ::= { atmVpCrossConnectEntry 2 }
```

atmVpCrossConnectLowVpi OBJECT-TYPE

SYNTAX AtmVpIdentifier

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

*"The VPI value at the ATM interface
associated with the VP cross-connect that is
identified by atmVpCrossConnectLowIfIndex."*

```
-- 1.3.6.1.2.1.37.1.9.1.3 -- ::= { atmVpCrossConnectEntry 3 }
```

atmVpCrossConnectHighIfIndex OBJECT-TYPE

SYNTAX InterfaceIndex

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

*"The ifIndex value of the ATM interface for
this VP cross-connect. The term high implies that
this ATM interface has the numerically higher
ifIndex value than the other ATM interface*

```

        identified in the same atmVpCrossConnectEntry."
-- 1.3.6.1.2.1.37.1.9.1.4 -- ::= { atmVpCrossConnectEntry 4 }

atmVpCrossConnectHighVpi OBJECT-TYPE
    SYNTAX      AtmVpIdentifier
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The VPI value at the ATM interface
         associated with the VP cross-connect that is
         identified by atmVpCrossConnectHighIfIndex."
-- 1.3.6.1.2.1.37.1.9.1.5 -- ::= { atmVpCrossConnectEntry 5 }

atmVpCrossConnectAdminStatus OBJECT-TYPE
    SYNTAX      AtmVorXAdminStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The desired administrative status of this
         bi-directional VP cross-connect."
    DEFVAL     { down }
-- 1.3.6.1.2.1.37.1.9.1.6 -- ::= { atmVpCrossConnectEntry 6 }

atmVpCrossConnectL2HOperStatus OBJECT-TYPE
    SYNTAX      AtmVorXOperStatus
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The operational status of the VP cross-connect
         in one direction; (i.e., from the low to
         high direction)."
-- 1.3.6.1.2.1.37.1.9.1.7 -- ::= { atmVpCrossConnectEntry 7 }

atmVpCrossConnectH2LOperStatus OBJECT-TYPE
    SYNTAX      AtmVorXOperStatus
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The operational status of the VP cross-connect
         in one direction; (i.e., from the high to
         low direction)."
-- 1.3.6.1.2.1.37.1.9.1.8 -- ::= { atmVpCrossConnectEntry 8 }

atmVpCrossConnectL2HLastChange OBJECT-TYPE
    SYNTAX      AtmVorXLastChange
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of sysUpTime at the time this
         VP cross-connect entered its current operational
         state in the low to high direction."
-- 1.3.6.1.2.1.37.1.9.1.9 -- ::= { atmVpCrossConnectEntry 9 }

atmVpCrossConnectH2LLastChange OBJECT-TYPE
    SYNTAX      AtmVorXLastChange
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of sysUpTime at the time this
         VP cross-connect entered its current operational
         in the high to low direction."
-- 1.3.6.1.2.1.37.1.9.1.10 -- ::= { atmVpCrossConnectEntry 10 }

atmVpCrossConnectRowStatus OBJECT-TYPE
    SYNTAX      RowStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The status of this entry in the

```

atmVpCrossConnectTable. This object is used to create a cross-connect for cross-connecting VPLs which are created using the atmVplTable or to change or delete an existing cross-connect. This object must be initially set to 'createAndWait' or 'createAndGo'. To turn on a VP cross-connect, the atmVpCrossConnectAdminStatus is set to 'up'."

```

DEFVAL      { createAndWait }
-- 1.3.6.1.2.1.37.1.9.1.11 -- ::= { atmVpCrossConnectEntry 11 }
--   ATM Virtual Channel (VC) Cross Connect Table
-- This table contains configuration and state
-- information of point-to-point,
-- point-to-multipoint or multipoint-to-multipoint
-- VC cross-connects for PVCs.
-- This table has read-create access and is used
-- to cross-connect the VCLs together in an ATM switch
-- or network that belong to a VC connection.
-- The atmVcCrossConnectIndex is used to associate
-- the related VCLs that are cross-connected together.
-- The model using step-wise procedures described for setting
-- up a VP cross-connect is also used for setting up
-- a VC cross-connect.

```

atmVcCrossConnectIndexNext OBJECT-TYPE

```

SYNTAX      INTEGER (0..2147483647)
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION

```

"This object contains an appropriate value to be used for atmVcCrossConnectIndex when creating entries in the atmVcCrossConnectTable. The value 0 indicates that no unassigned entries are available. To obtain the atmVcCrossConnectIndex value for a new entry, the manager issues a management protocol retrieval operation to obtain the current value of this object. After each retrieval, the agent should modify the value to the next unassigned index. After a manager retrieves a value the agent will determine through its local policy when this index value will be made available for reuse."

```

-- 1.3.6.1.2.1.37.1.10 -- ::= { atmMIBObjects 10 }
-- The ATM VC Cross Connect Table

```

atmVcCrossConnectTable OBJECT-TYPE

```

SYNTAX      SEQUENCE OF AtmVcCrossConnectEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"The ATM VC Cross Connect table for PVCs. An entry in this table models two cross-connected VCLs. Each VCL must have its atmConnKind set to pvc(1)."

```

-- 1.3.6.1.2.1.37.1.11 -- ::= { atmMIBObjects 11 }

```

atmVcCrossConnectEntry OBJECT-TYPE

```

SYNTAX      AtmVcCrossConnectEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"An entry in the ATM VC Cross Connect table. This entry is used to model a bi-directional ATM VC cross-connect cross-connecting two end points. Step-wise Procedures to set up a VC Cross-connect Once the entries in the atmVclTable are created,

the following procedures are used to cross-connect the VCLs together to form a VCC segment.

- (1) The manager obtains a unique `atmVcCrossConnectIndex` by reading the `atmVcCrossConnectIndexNext` object.
- (2) Next, the manager creates a set of one or more rows in the ATM VC Cross Connect Table, one for each cross-connection between two VCLs. Each row is indexed by the ATM interface port numbers and VPI/VCI values of the two ends of that cross-connection. This set of rows specifies the topology of the VCC cross-connect and is identified by a single value of `atmVcCrossConnectIndex`.

Negotiated VC Cross-Connect Establishment

- (2a) The manager creates a row in this table by setting `atmVcCrossConnectRowStatus` to `createAndWait(5)`. The agent checks the requested topology and the mutual sanity of the ATM traffic parameters and service categories, i.e., the row creation fails if:
 - the requested topology is incompatible with associated values of `atmVclCastType`,
 - the requested topology is not supported by the agent,
 - the traffic/service category parameter values associated with the requested row are incompatible with those of already existing rows for this VC cross-connect.[For example, for setting up a point-to-point VC cross-connect, the ATM traffic parameters in the receive direction of a VCL at the low end of the cross-connect must equal to the traffic parameters in the transmit direction of the other VCL at the high end of the cross-connect, otherwise, the row creation fails.] The agent also checks for internal errors in building the cross-connect.

The `atmVcCrossConnectIndex` values in the corresponding `atmVclTable` rows are filled in by the agent at this point.

- (2b) The manager promotes the row in the `atmVcCrossConnectTable` by setting `atmVcCrossConnectRowStatus` to `active(1)`. If this set is successful, the agent has reserved the resources specified by the ATM traffic parameter and Service category values for each direction of the VC cross-connect in an ATM switch or network.
- (3) The manager sets the `atmVcCrossConnectAdminStatus` to `up(1)` in all rows of this VC cross-connect to turn the traffic flow on.

One-Shot VC Cross-Connect Establishment

A VC cross-connect may also be established in one step by a set-request with all necessary

parameter values and atmVcCrossConnectRowStatus set to createAndGo(4).

In contrast to the negotiated VC cross-connect establishment which allows for detailed error checking i.e., set errors are explicitly linked to particular resource acquisition failures), the one-shot VC cross-connect establishment performs the setup on one operation but does not have the advantage of step-wise error checking.

VC Cross-Connect Retirement

A VC cross-connect identified by a particular value of atmVcCrossConnectIndex is released by:

- (1) Setting atmVcCrossConnectRowStatus of all rows identified by this value of atmVcCrossConnectIndex to destroy(6). The agent may release all associated resources, and the atmVcCrossConnectIndex values in the corresponding atmVclTable row are removed. Note that a situation when only a subset of the associated rows are deleted corresponds to a VC topology change.
- (2) After deletion of the appropriate atmVcCrossConnectEntries, the manager may set atmVclRowStatus to destroy(6) the associated VCLs. The agent releases the resources and removes the associated rows in the atmVclTable.

VC Cross-Connect Reconfiguration

At the discretion of the agent, a VC cross-connect may be reconfigured by adding and/or deleting leafs to/from the VC topology as per the VC cross-connect establishment/retirement procedures. Reconfiguration of traffic/service category parameter values requires release of the VC cross-connect before those parameter values may be changed for individual VCLs."

INDEX {

atmVcCrossConnectIndex,
atmVcCrossConnectLowIfIndex,
atmVcCrossConnectLowVpi,
atmVcCrossConnectLowVci,
atmVcCrossConnectHighIfIndex,
atmVcCrossConnectHighVpi,
atmVcCrossConnectHighVci

}

-- 1.3.6.1.2.1.37.1.11.1 -- ::= { atmVcCrossConnectTable 1 }

AtmVcCrossConnectEntry ::= SEQUENCE {
atmVcCrossConnectIndex INTEGER,
atmVcCrossConnectLowIfIndex InterfaceIndex,
atmVcCrossConnectLowVpi AtmVpIdentifier,
atmVcCrossConnectLowVci AtmVcIdentifier,
atmVcCrossConnectHighIfIndex InterfaceIndex,
atmVcCrossConnectHighVpi AtmVpIdentifier,
atmVcCrossConnectHighVci AtmVcIdentifier,
atmVcCrossConnectAdminStatus AtmVorXAdminStatus,
atmVcCrossConnectL2HOperStatus AtmVorXOperStatus,
atmVcCrossConnectH2LOperStatus AtmVorXOperStatus,
atmVcCrossConnectL2HLastChange AtmVorXLastChange,

```

        atmVcCrossConnectH2LLastChange AtmVorXLastChange ,
        atmVcCrossConnectRowStatus RowStatus
    }

```

atmVcCrossConnectIndex OBJECT-TYPE

```

SYNTAX      INTEGER (1..2147483647)
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"A unique value to identify this VC cross-connect. For each VCL associated with this cross-connect, the agent reports this cross-connect index value in the atmVclCrossConnectIdentifier attribute of the corresponding atmVclTable entries."

```
-- 1.3.6.1.2.1.37.1.11.1.1 -- ::= { atmVcCrossConnectEntry 1 }
```

atmVcCrossConnectLowIfIndex OBJECT-TYPE

```

SYNTAX      InterfaceIndex
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"The ifIndex value of the ATM interface for this VC cross-connect. The term low implies that this ATM interface has the numerically lower ifIndex value than the other ATM interface identified in the same atmVcCrossConnectEntry."

```
-- 1.3.6.1.2.1.37.1.11.1.2 -- ::= { atmVcCrossConnectEntry 2 }
```

atmVcCrossConnectLowVpi OBJECT-TYPE

```

SYNTAX      AtmVpIdentifier
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"The VPI value at the ATM interface associated with the VC cross-connect that is identified by atmVcCrossConnectLowIfIndex."

```
-- 1.3.6.1.2.1.37.1.11.1.3 -- ::= { atmVcCrossConnectEntry 3 }
```

atmVcCrossConnectLowVci OBJECT-TYPE

```

SYNTAX      AtmVcIdentifier
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"The VCI value at the ATM interface associated with this VC cross-connect that is identified by atmVcCrossConnectLowIfIndex."

```
-- 1.3.6.1.2.1.37.1.11.1.4 -- ::= { atmVcCrossConnectEntry 4 }
```

atmVcCrossConnectHighIfIndex OBJECT-TYPE

```

SYNTAX      InterfaceIndex
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"The ifIndex value for the ATM interface for this VC cross-connect. The term high implies that this ATM interface has the numerically higher ifIndex value than the other ATM interface identified in the same atmVcCrossConnectEntry."

```
-- 1.3.6.1.2.1.37.1.11.1.5 -- ::= { atmVcCrossConnectEntry 5 }
```

atmVcCrossConnectHighVpi OBJECT-TYPE

```

SYNTAX      AtmVpIdentifier
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION

```

"The VPI value at the ATM interface associated with the VC cross-connect that is identified by atmVcCrossConnectHighIfIndex."

```

-- 1.3.6.1.2.1.37.1.11.1.6 -- ::= { atmVcCrossConnectEntry 6 }

atmVcCrossConnectHighVci OBJECT-TYPE
    SYNTAX      AtmVcIdentifier
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The VCI value at the ATM interface
        associated with the VC cross-connect that is
        identified by atmVcCrossConnectHighIfIndex."
-- 1.3.6.1.2.1.37.1.11.1.7 -- ::= { atmVcCrossConnectEntry 7 }

atmVcCrossConnectAdminStatus OBJECT-TYPE
    SYNTAX      AtmVorXAdminStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The desired administrative status of this
        bi-directional VC cross-connect."
    DEFVAL     { down }
-- 1.3.6.1.2.1.37.1.11.1.8 -- ::= { atmVcCrossConnectEntry 8 }

atmVcCrossConnectL2HOperStatus OBJECT-TYPE
    SYNTAX      AtmVorXOperStatus
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The current operational status of the
        VC cross-connect in one direction; (i.e.,
        from the low to high direction)."
-- 1.3.6.1.2.1.37.1.11.1.9 -- ::= { atmVcCrossConnectEntry 9 }

atmVcCrossConnectH2LOperStatus OBJECT-TYPE
    SYNTAX      AtmVorXOperStatus
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The current operational status of the
        VC cross-connect in one direction; (i.e.,
        from the high to low direction)."
-- 1.3.6.1.2.1.37.1.11.1.10 -- ::= { atmVcCrossConnectEntry 10 }

atmVcCrossConnectL2HLastChange OBJECT-TYPE
    SYNTAX      AtmVorXLastChange
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of sysUpTime at the time this
        VC cross-connect entered its current
        operational state in low to high direction."
-- 1.3.6.1.2.1.37.1.11.1.11 -- ::= { atmVcCrossConnectEntry 11 }

atmVcCrossConnectH2LLastChange OBJECT-TYPE
    SYNTAX      AtmVorXLastChange
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of sysUpTime at the time this
        VC cross-connect entered its current
        operational state in high to low direction."
-- 1.3.6.1.2.1.37.1.11.1.12 -- ::= { atmVcCrossConnectEntry 12 }

atmVcCrossConnectRowStatus OBJECT-TYPE
    SYNTAX      RowStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The status of this entry in the
        atmVcCrossConnectTable. This object is used to

```

create a new cross-connect for cross-connecting VCLs which are created using the atmVclTable or to change or delete existing cross-connect. This object must be initially set to `createAndWait` or `createAndGo`. To turn on a VC cross-connect, the atmVcCrossConnectAdminStatus is set to `up`."

```

DEFVAL      { createAndWait }
-- 1.3.6.1.2.1.37.1.11.1.13 -- ::= { atmVcCrossConnectEntry 13 }
-- AAL5 Virtual Channel Connection Performance Statistics
-- Table
-- This table contains the AAL5
-- performance statistics of a VCC at the
-- interface associated with an AAL5 entity in an ATM
-- host or ATM switch.

```

aal5VccTable OBJECT-TYPE

```

SYNTAX      SEQUENCE OF Aal5VccEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "This table contains AAL5 VCC performance
    parameters."

```

```

-- 1.3.6.1.2.1.37.1.12 -- ::= { atmMIBObjects 12 }

```

aal5VccEntry OBJECT-TYPE

```

SYNTAX      Aal5VccEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "This list contains the AAL5 VCC
    performance parameters and is indexed
    by ifIndex values of AAL5 interfaces
    and the associated VPI/VCI values."

```

```

INDEX {
    ifIndex,
    aal5VccVpi,
    aal5VccVci
}

```

```

-- 1.3.6.1.2.1.37.1.12.1 -- ::= { aal5VccTable 1 }

```

```

Aal5VccEntry ::= SEQUENCE {
    aal5VccVpi      AtmVpIdentifier,
    aal5VccVci      AtmVcIdentifier,
    aal5VccCrcErrors Counter32,
    aal5VccSarTimeOuts Counter32,
    aal5VccOverSizedSDUs Counter32
}

```

aal5VccVpi OBJECT-TYPE

```

SYNTAX      AtmVpIdentifier
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "The VPI value of the AAL5 VCC at the
    interface identified by the ifIndex."

```

```

-- 1.3.6.1.2.1.37.1.12.1.1 -- ::= { aal5VccEntry 1 }

```

aal5VccVci OBJECT-TYPE

```

SYNTAX      AtmVcIdentifier
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "The VCI value of the AAL5 VCC at the
    interface identified by the ifIndex."

```

```

-- 1.3.6.1.2.1.37.1.12.1.2 -- ::= { aal5VccEntry 2 }

```

aal5VccCrcErrors OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 *"The number of AAL5 CPCS PDUs received with
 CRC-32 errors on this AAL5 VCC at the
 interface associated with an AAL5 entity."*
-- 1.3.6.1.2.1.37.1.12.1.3 -- ::= { aal5VccEntry 3 }

aal5VccSarTimeOuts OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 *"The number of partially re-assembled AAL5
 CPCS PDUs which were discarded
 on this AAL5 VCC at the interface associated
 with an AAL5 entity because they
 were not fully re-assembled within the
 required time period. If the re-assembly
 timer is not supported, then this object
 contains a zero value."*
-- 1.3.6.1.2.1.37.1.12.1.4 -- ::= { aal5VccEntry 4 }

aal5VccOverSizedSDUs OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 *"The number of AAL5 CPCS PDUs discarded
 on this AAL5 VCC at the interface
 associated with an AAL5 entity because the
 AAL5 SDUs were too large."*
-- 1.3.6.1.2.1.37.1.12.1.5 -- ::= { aal5VccEntry 5 }

--
-- The following object may be used in conjunction with
-- the atmTrafficDescrParamTable for the creation of
-- new table entries.
--

atmTrafficDescrParamIndexNext OBJECT-TYPE
SYNTAX INTEGER (0..2147483647)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 *"This object contains an appropriate value to
 be used for atmTrafficDescrParamIndex when
 creating entries in the
 atmTrafficDescrParamTable.
 The value 0 indicates that no unassigned
 entries are available. To obtain the
 atmTrafficDescrParamIndex value for a new
 entry, the manager issues a management
 protocol retrieval operation to obtain the
 current value of this object. After each
 retrieval, the agent should modify the value
 to the next unassigned index.
 After a manager retrieves a value the agent will
 determine through its local policy when this index
 value will be made available for reuse."*

-- 1.3.6.1.2.1.37.1.13 -- ::= { atmMIBObjects 13 }
-- Conformance Information

atmMIBConformance OBJECT IDENTIFIER
-- 1.3.6.1.2.1.37.2 -- ::= { atmMIB 2 }

atmMIBGroups OBJECT IDENTIFIER

```
-- 1.3.6.1.2.1.37.2.1 -- ::= { atmMIBConformance 1 }

atmMIBCompliances OBJECT IDENTIFIER
-- 1.3.6.1.2.1.37.2.2 -- ::= { atmMIBConformance 2 }
-- Compliance Statements
```

atmMIBCompliance2 MODULE-COMPLIANCE

```
STATUS current
DESCRIPTION
    "The compliance statement for SNMP entities
    including networks which have ATM and
    AAL5 interfaces."

MODULE
MANDATORY-GROUPS {
    atmInterfaceConfGroup2,
    atmTrafficDescrGroup2
}

OBJECT atmInterfaceMaxVpcs
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmInterfaceMaxVccs
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmInterfaceMaxActiveVpiBits
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required.
        At the ATM UNI the maximum number of
        active VPI bits configured for use ranges
        from 0 to 8 only.
        Implementations may support smaller ranges."

OBJECT atmInterfaceMaxActiveVciBits
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required.
        Implementations may support smaller ranges."

OBJECT atmInterfaceIlmiVpi
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmInterfaceIlmiVci
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmInterfaceMyNeighborIpAddress
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmInterfaceMyNeighborIfName
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmInterfaceSubscrAddress
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmTrafficDescrParamIndexNext
    DESCRIPTION
        "This object is only required for systems
        that support the creation of entries in
        the atmTrafficDescrParamTable."

OBJECT atmTrafficDescrType
    MIN-ACCESS read-only
    DESCRIPTION
        "Write access is not required."

OBJECT atmTrafficDescrParam1
    MIN-ACCESS read-only
```

DESCRIPTION
"Write access is not required."

OBJECT atmTrafficDescrParam2
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmTrafficDescrParam3
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmTrafficDescrParam4
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmTrafficDescrParam5
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmServiceCategory
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmTrafficDescrRowStatus
SYNTAX INTEGER {
active(1) }
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required, and only one of the six enumerated values for the RowStatus textual convention need be supported, specifically: active(1)."

OBJECT atmTrafficFrameDiscard
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

VARIATION atmInterfaceDs3PlcpGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement the DS3 PLCP layer."

VARIATION atmInterfaceTCGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement the TC Sublayer."

VARIATION atmVpcTerminationGroup2
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VPLs that terminate VPCs (i.e., ones which are NOT cross-connected to other VPLs)."

VARIATION atmVplCrossConnectGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VPLs that are not associated with VCLs and are cross-connected to other VPLs for VPCs."

VARIATION atmVpPvcCrossConnectGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VPLs that are not associated with VCLs and are cross-connected to other VPLs for permanent VPCs (i.e., PVCs). This group is not used to crossconnect a PVC with an SVC to form a Soft PVC."

OBJECT atmVplAdminStatus
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVplReceiveTrafficDescrIndex
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVplTransmitTrafficDescrIndex
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVplRowStatus
SYNTAX INTEGER {
active(1) }
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required, and only one of the six enumerated values for the RowStatus textual convention need be supported, specifically: active(1)."

OBJECT atmVplCastType
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVplConnKind
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVpCrossConnectAdminStatus
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVpCrossConnectRowStatus
SYNTAX INTEGER {
active(1) }
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required, and only one of the six enumerated values for the RowStatus textual convention need be supported, specifically: active(1)."

VARIATION atmVccTerminationGroup2
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VCLs that terminate VCCs (i.e., ones which are NOT cross-connected to other VCLs)."

VARIATION atmVclCrossConnectGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VCLs that are cross-connected to other VCLs for VCCs."

VARIATION atmVcPvcCrossConnectGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VCLs that are cross-connected to other VCLs for permanent VCCs (i.e., PVCs). This group is not used to crossconnect a PVC with an SVC to form a Soft PVC."

OBJECT atmVclAdminStatus
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVclReceiveTrafficDescrIndex
MIN-ACCESS read-only

DESCRIPTION
"Write access is not required."

OBJECT atmVclTransmitTrafficDescrIndex

```

    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVccAalType
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVclRowStatus
    SYNTAX        INTEGER {
                    active(1) }
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required, and only one
of the six enumerated values for the
RowStatus textual convention need be
supported, specifically: active(1)."
OBJECT          atmVclCastType
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVclConnKind
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVcCrossConnectAdminStatus
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVcCrossConnectRowStatus
    SYNTAX        INTEGER {
                    active(1) }
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required, and only one
of the six enumerated values for the
RowStatus textual convention need be
supported, specifically: active(1)."
VARIATION      aal5VccGroup
    DESCRIPTION
        "This group is mandatory for the
AAL5 virtual connections only."
OBJECT          atmVccAal5CpcsTransmitSduSize
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVccAal5CpcsReceiveSduSize
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
OBJECT          atmVccAal5EncapsType
    MIN-ACCESS    read-only
    DESCRIPTION
        "Write access is not required."
-- 1.3.6.1.2.1.37.2.2.2 -- ::= { atmMIBCompliances 2 }
-- Units of Conformance

atmInterfaceDs3PlcpGroup OBJECT-GROUP
    OBJECTS {
        atmInterfaceDs3PlcpSEFSs,
        atmInterfaceDs3PlcpAlarmState,
        atmInterfaceDs3PlcpUASS
    }
    STATUS        current
    DESCRIPTION
        "A collection of objects providing information
about DS3 PLCP layer at an ATM interface."
-- 1.3.6.1.2.1.37.2.1.3 -- ::= { atmMIBGroups 3 }

atmInterfaceTCGroup OBJECT-GROUP

```

```

OBJECTS {
    atmInterfaceOCDEvents,
    atmInterfaceTCAlarmState
}
STATUS current
DESCRIPTION
    "A collection of objects providing information
    about TC sublayer at an ATM interface."
-- 1.3.6.1.2.1.37.2.1.4 -- ::= { atmMIBGroups 4 }

aal5VccGroup OBJECT-GROUP
OBJECTS {
    atmVccAal5CpcsTransmitSduSize,
    atmVccAal5CpcsReceiveSduSize,
    atmVccAal5EncapsType,
    aal5VccCrcErrors,
    aal5VccSarTimeOuts,
    aal5VccOverSizedSDUs
}
STATUS current
DESCRIPTION
    "A collection of objects providing
    AAL5 configuration and performance statistics
    of a VCC."
-- 1.3.6.1.2.1.37.2.1.9 -- ::= { atmMIBGroups 9 }

atmInterfaceConfGroup2 OBJECT-GROUP
OBJECTS {
    atmInterfaceMaxVpcs,
    atmInterfaceMaxVccs,
    atmInterfaceConfVpcs,
    atmInterfaceConfVccs,
    atmInterfaceMaxActiveVpiBits,
    atmInterfaceMaxActiveVciBits,
    atmInterfaceIlmiVpi,
    atmInterfaceIlmiVci,
    atmInterfaceMyNeighborIpAddress,
    atmInterfaceMyNeighborIfName,
    atmInterfaceCurrentMaxVpiBits,
    atmInterfaceCurrentMaxVciBits,
    atmInterfaceSubscrAddress
}
STATUS current
DESCRIPTION
    "A collection of objects providing configuration
    information about an ATM interface."
-- 1.3.6.1.2.1.37.2.1.10 -- ::= { atmMIBGroups 10 }

atmTrafficDescrGroup2 OBJECT-GROUP
OBJECTS {
    atmTrafficDescrType,
    atmTrafficDescrParam1,
    atmTrafficDescrParam2,
    atmTrafficDescrParam3,
    atmTrafficDescrParam4,
    atmTrafficDescrParam5,
    atmTrafficDescrRowStatus,
    atmServiceCategory,
    atmTrafficFrameDiscard,
    atmTrafficDescrParamIndexNext
}
STATUS current
DESCRIPTION
    "A collection of objects providing information
    about ATM traffic descriptor type and
    the associated parameters."
-- 1.3.6.1.2.1.37.2.1.11 -- ::= { atmMIBGroups 11 }

atmVpcTerminationGroup2 OBJECT-GROUP

```

```

OBJECTS {
    atmVplOperStatus,
    atmVplAdminStatus,
    atmVplLastChange,
    atmVplReceiveTrafficDescrIndex,
    atmVplTransmitTrafficDescrIndex,
    atmVplRowStatus,
    atmVplCastType,
    atmVplConnKind
}
STATUS          current
DESCRIPTION
    "A collection of objects providing information
    about a VPL at an ATM interface which
    terminates a VPC (i.e., one which is NOT
    cross-connected to other VPLs)."
-- 1.3.6.1.2.1.37.2.1.12 -- ::= { atmMIBGroups 12 }

atmVccTerminationGroup2 OBJECT-GROUP
OBJECTS {
    atmVclOperStatus,
    atmVclAdminStatus,
    atmVclLastChange,
    atmVclReceiveTrafficDescrIndex,
    atmVclTransmitTrafficDescrIndex,
    atmVccAalType,
    atmVclRowStatus,
    atmVclCastType,
    atmVclConnKind
}
STATUS          current
DESCRIPTION
    "A collection of objects providing information
    about a VCL at an ATM interface
    which terminates a VCC (i.e., one which is
    NOT cross-connected to other VCLs)."
-- 1.3.6.1.2.1.37.2.1.13 -- ::= { atmMIBGroups 13 }

atmVplCrossConnectGroup OBJECT-GROUP
OBJECTS {
    atmVplReceiveTrafficDescrIndex,
    atmVplTransmitTrafficDescrIndex,
    atmVplOperStatus,
    atmVplLastChange,
    atmVplRowStatus,
    atmVplCastType,
    atmVplConnKind
}
STATUS          current
DESCRIPTION
    "A collection of objects providing
    information about the VPLs that
    are cross-connected together."
-- 1.3.6.1.2.1.37.2.1.14 -- ::= { atmMIBGroups 14 }

atmVpPvcCrossConnectGroup OBJECT-GROUP
OBJECTS {
    atmVpCrossConnectAdminStatus,
    atmVpCrossConnectL2HOperStatus,
    atmVpCrossConnectH2LOperStatus,
    atmVpCrossConnectL2HLastChange,
    atmVpCrossConnectH2LLastChange,
    atmVpCrossConnectRowStatus,
    atmVplCrossConnectIdentifier,
    atmVpCrossConnectIndexNext
}
STATUS          current
DESCRIPTION
    "A collection of objects providing

```

```

        information about a VP cross-connect
        for PVCs. These objects are not used
        for Soft PVCs or SVCs."
-- 1.3.6.1.2.1.37.2.1.15 -- ::= { atmMIBGroups 15 }

atmVclCrossConnectGroup OBJECT-GROUP
    OBJECTS {
        atmVclReceiveTrafficDescrIndex,
        atmVclTransmitTrafficDescrIndex,
        atmVclOperStatus,
        atmVclLastChange,
        atmVclRowStatus,
        atmVclCastType,
        atmVclConnKind
    }
    STATUS current
    DESCRIPTION
        "A collection of objects providing
        information about the VCLs that
        are cross-connected together."
-- 1.3.6.1.2.1.37.2.1.16 -- ::= { atmMIBGroups 16 }

atmVcPvcCrossConnectGroup OBJECT-GROUP
    OBJECTS {
        atmVcCrossConnectAdminStatus,
        atmVcCrossConnectL2HOperStatus,
        atmVcCrossConnectH2LOperStatus,
        atmVcCrossConnectL2HLastChange,
        atmVcCrossConnectH2LLastChange,
        atmVcCrossConnectRowStatus,
        atmVclCrossConnectIdentifier,
        atmVcCrossConnectIndexNext
    }
    STATUS current
    DESCRIPTION
        "A collection of objects providing
        information about a VC cross-connect
        for PVCs. These objects are not used
        for Soft PVCs or SVCs."
-- 1.3.6.1.2.1.37.2.1.17 -- ::= { atmMIBGroups 17 }
-- Deprecated Definitions - Objects
-- atmInterfaceAddressType
-- atmTrafficQoSClass
-- Deprecated Definitions - Compliance

atmMIBCompliance MODULE-COMPLIANCE
    STATUS deprecated
    DESCRIPTION
        "The compliance statement for SNMP entities
        including networks which have ATM and
        AAL5 interfaces."
    MODULE
    MANDATORY-GROUPS {
        atmInterfaceConfGroup,
        atmTrafficDescrGroup
    }
    OBJECT atmInterfaceMaxVpcs
        MIN-ACCESS read-only
        DESCRIPTION
            "Write access is not required."
    OBJECT atmInterfaceMaxVccs
        MIN-ACCESS read-only
        DESCRIPTION
            "Write access is not required."
    OBJECT atmInterfaceMaxActiveVpiBits
        MIN-ACCESS read-only
        DESCRIPTION
            "Write access is not required."
    OBJECT atmInterfaceMaxActiveVciBits

```

```

MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmInterfaceIlniVpi
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmInterfaceIlniVci
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmInterfaceMyNeighborIpAddress
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmInterfaceMyNeighborIfName
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrType
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrParam1
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrParam2
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrParam3
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrParam4
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrParam5
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficQoSClass
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."
OBJECT atmTrafficDescrRowStatus
SYNTAX INTEGER {
    active(1) }
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required, and only one
    of the six enumerated values for the
    RowStatus textual convention need be
    supported, specifically: active(1)."
```

VARIATION atmInterfaceDs3PlcpGroup

```

DESCRIPTION
    "This group is mandatory only for those
    ATM interfaces which implement the
    DS3 PLCP layer."
```

VARIATION atmInterfaceTCGroup

```

DESCRIPTION
    "This group is mandatory only for those
    ATM interfaces which implement the
    TC Sublayer."
```

VARIATION atmVpcTerminationGroup

```

DESCRIPTION
    "This group is mandatory only for those
```

ATM interfaces which implement ATM VPLs that terminate VPCs (i.e., ones which are NOT cross-connected to other VPLs)."

VARIATION atmVpCrossConnectGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VPLs that are not associated with VCLs and are cross-connected to other VPLs."

OBJECT atmVplAdminStatus
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVplReceiveTrafficDescrIndex
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVplTransmitTrafficDescrIndex
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVplRowStatus
SYNTAX INTEGER {
 active(1) }
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required, and only one of the six enumerated values for the RowStatus textual convention need be supported, specifically: active(1)."

OBJECT atmVpCrossConnectAdminStatus
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVpCrossConnectRowStatus
SYNTAX INTEGER {
 active(1) }
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required, and only one of the six enumerated values for the RowStatus textual convention need be supported, specifically: active(1)."

VARIATION atmVccTerminationGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VCLs that terminate VCCs (i.e., ones which are NOT cross-connected to other VCLs)."

VARIATION atmVcCrossConnectGroup
DESCRIPTION
"This group is mandatory only for those ATM interfaces which implement ATM VCLs that are cross-connected to other VCLs."

OBJECT atmVclAdminStatus
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVclReceiveTrafficDescrIndex
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVclTransmitTrafficDescrIndex
MIN-ACCESS read-only
DESCRIPTION
"Write access is not required."

OBJECT atmVccAalType
MIN-ACCESS read-only

```

    DESCRIPTION
        "Write access is not required."
OBJECT      atmVclRowStatus
SYNTAX      INTEGER {
            active(1) }
MIN-ACCESS  read-only
DESCRIPTION
    "Write access is not required, and only one
    of the six enumerated values for the
    RowStatus textual convention need be
    supported, specifically: active(1)."
OBJECT      atmVcCrossConnectAdminStatus
MIN-ACCESS  read-only
DESCRIPTION
    "Write access is not required."
OBJECT      atmVcCrossConnectRowStatus
SYNTAX      INTEGER {
            active(1) }
MIN-ACCESS  read-only
DESCRIPTION
    "Write access is not required, and only one
    of the six enumerated values for the
    RowStatus textual convention need be
    supported, specifically: active(1)."
VARIATION   aal5VccGroup
DESCRIPTION
    "This group is mandatory for the
    AAL5 virtual connections only."
OBJECT      atmVccAal5CpcsTransmitSduSize
MIN-ACCESS  read-only
DESCRIPTION
    "Write access is not required."
OBJECT      atmVccAal5CpcsReceiveSduSize
MIN-ACCESS  read-only
DESCRIPTION
    "Write access is not required."
OBJECT      atmVccAal5EncapsType
MIN-ACCESS  read-only
DESCRIPTION
    "Write access is not required."
-- 1.3.6.1.2.1.37.2.2.1 -- ::= { atmMIBCompliances 1 }
-- Deprecated Definitions - Groups

atmInterfaceConfGroup OBJECT-GROUP
OBJECTS {
    atmInterfaceMaxVpcs,
    atmInterfaceMaxVccs,
    atmInterfaceConfVpcs,
    atmInterfaceConfVccs,
    atmInterfaceMaxActiveVpiBits,
    atmInterfaceMaxActiveVciBits,
    atmInterfaceIlmiVpi,
    atmInterfaceIlmiVci,
    atmInterfaceAddressType,
    atmInterfaceAdminAddress,
    atmInterfaceMyNeighborIpAddress,
    atmInterfaceMyNeighborIfName
}
STATUS      deprecated
DESCRIPTION
    "A collection of objects providing configuration
    information about an ATM interface."
-- 1.3.6.1.2.1.37.2.1.1 -- ::= { atmMIBGroups 1 }

atmTrafficDescrGroup OBJECT-GROUP
OBJECTS {
    atmTrafficDescrType,
    atmTrafficDescrParam1,
    atmTrafficDescrParam2,

```

```

        atmTrafficDescrParam3,
        atmTrafficDescrParam4,
        atmTrafficDescrParam5,
        atmTrafficQoSClass,
        atmTrafficDescrRowStatus
    }
    STATUS      deprecated
    DESCRIPTION
        "A collection of objects providing information
        about ATM traffic descriptor type and
        the associated parameters."
-- 1.3.6.1.2.1.37.2.1.2 -- ::= { atmMIBGroups 2 }

atmVpcTerminationGroup OBJECT-GROUP
    OBJECTS {
        atmVplOperStatus,
        atmVplAdminStatus,
        atmVplLastChange,
        atmVplReceiveTrafficDescrIndex,
        atmVplTransmitTrafficDescrIndex,
        atmVplRowStatus
    }
    STATUS      deprecated
    DESCRIPTION
        "A collection of objects providing
        information about a VPL at an ATM interface
        which terminates a VPC
        (i.e., one which is NOT cross-connected
        to other VPLs)."
-- 1.3.6.1.2.1.37.2.1.5 -- ::= { atmMIBGroups 5 }

atmVccTerminationGroup OBJECT-GROUP
    OBJECTS {
        atmVclOperStatus,
        atmVclAdminStatus,
        atmVclLastChange,
        atmVclReceiveTrafficDescrIndex,
        atmVclTransmitTrafficDescrIndex,
        atmVccAalType,
        atmVclRowStatus
    }
    STATUS      deprecated
    DESCRIPTION
        "A collection of objects providing information
        about a VCL at an ATM interface
        which terminates a VCC (i.e., one which is
        NOT cross-connected to other VCLs)."
-- 1.3.6.1.2.1.37.2.1.6 -- ::= { atmMIBGroups 6 }

atmVpCrossConnectGroup OBJECT-GROUP
    OBJECTS {
        atmVplReceiveTrafficDescrIndex,
        atmVplTransmitTrafficDescrIndex,
        atmVplOperStatus,
        atmVplRowStatus,
        atmVpCrossConnectAdminStatus,
        atmVpCrossConnectL2HOperStatus,
        atmVpCrossConnectH2LOperStatus,
        atmVpCrossConnectL2HLastChange,
        atmVpCrossConnectH2LLastChange,
        atmVpCrossConnectRowStatus,
        atmVplCrossConnectIdentifier,
        atmVpCrossConnectIndexNext
    }
    STATUS      deprecated
    DESCRIPTION
        "A collection of objects providing
        information about a VP cross-connect
        and the associated VPLs that are

```

```
        cross-connected together."
-- 1.3.6.1.2.1.37.2.1.7 -- ::= { atmMIBGroups 7 }
```

atmVcCrossConnectGroup OBJECT-GROUP

```
    OBJECTS {
        atmVclReceiveTrafficDescrIndex,
        atmVclTransmitTrafficDescrIndex,
        atmVclOperStatus,
        atmVclRowStatus,
        atmVcCrossConnectAdminStatus,
        atmVcCrossConnectL2HOperStatus,
        atmVcCrossConnectH2LOperStatus,
        atmVcCrossConnectL2HLastChange,
        atmVcCrossConnectH2LLastChange,
        atmVcCrossConnectRowStatus,
        atmVclCrossConnectIdentifier,
        atmVcCrossConnectIndexNext
    }
    STATUS deprecated
    DESCRIPTION
        "A collection of objects providing
        information about a VC cross-connect
        and the associated VCLs that are
        cross-connected together."
```

```
-- 1.3.6.1.2.1.37.2.1.8 -- ::= { atmMIBGroups 8 }
```

END

```
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