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Proxy Mobile IPv6 Management Information Base
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Status of this Memo

Abstract

This memo defines a portion of the Management Information Base (MIB), the Proxy Mobile-IPv6 MIB, for use with network management protocols in the Internet community. In particular, the Proxy Mobile-IPv6 MIB can be used to monitor and control the mobile access gateway (MAG) and the local mobility anchor (LMA) functions of a Proxy Mobile IPv6 (PMIPv6) entity.

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1. The Internet-Standard Management Framework

For a detailed overview of the documents that describe the current Internet-Standard Management Framework, please refer to section 7 of RFC 3410 [RFC3410].

Managed objects are accessed via a virtual information store, termed the Management Information Base or MIB. MIB objects are generally accessed through the Simple Network Management Protocol (SNMP).

Objects in the MIB are defined using the mechanisms defined in the Structure of Management Information (SMI). This memo specifies a MIB module that is compliant to the SMIv2, which is described in STD 58, RFC 2578 [RFC2578], STD 58, RFC 2579 [RFC2579] and STD 58, RFC 2580 [RFC2580].

2. Overview

2.1. The Proxy Mobile IPv6 Protocol Entities

Proxy Mobile IPv6 (PMIPv6) [RFC5213] is an extension to the Mobile IPv6 (MIPv6) protocol which facilitates network-based localized mobility management (NETLMM) for IPv6 nodes in a PMIPv6 domain. There are three types of entities envisaged by the PMIPv6 protocol.

mobile node (MN): In the PMIPv6 context the term mobile node is used to refer to an IP host or router whose mobility is managed by the network.

local mobility anchor (LMA): Local Mobility Anchor is the home agent for the mobile node in a Proxy Mobile IPv6 domain. It is the topological anchor point for the mobile node's home network prefix(es) and is the entity that manages the mobile node's binding state. The local mobility anchor has the functional capabilities of a home agent as defined in Mobile IPv6 base specification [RFC3775] with the additional capabilities required for supporting Proxy Mobile IPv6 protocol as defined in the PMIPv6 specification [RFC5213].

mobile access gateway (MAG): Mobile Access Gateway is the entity on an access router that manages the mobility-related signaling for a mobile node that is attached to its access link. It is responsible for tracking the mobile node's movements to and from the access link and for signaling the mobile node's local mobility anchor.

This document defines a set of managed objects (MOs) that can be used to monitor and control PMIPv6 entities.

2.2. Terminology

The terminology used in this document is consistent with the definitions used in the Mobile IPv6 protocol specification [RFC3775] and in NETLMM Goals document [RFC4831].

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14, RFC 2119 [RFC2119].

3. Proxy Mobile IPv6 Monitoring and Control Requirements

For managing a PMIPv6 entity it is necessary to monitor the following:

- o capabilities of PMIPv6 entities
- o signaling traffic due to PMIPv6 signaling
- o binding related details (at LMA and MAG)
- o binding related statistics (at LMA and MAG)

4. MIB Design

The basic principle has been to keep the MIB as simple as possible and at the same time to make it effective enough so that the essential needs of monitoring and control are met.

The Proxy Mobile IPv6 Management Information Base(PMIPV6-MIB) extends the Mobile IPv6 Management Information Base(MIPV6-MIB). [RFC4295]. It is assumed that PMIPV6-MIB will always be implemented in conjunction with the MOBILEIPV6-MIB [RFC4295]. The PMIPV6-MIB uses the textual conventions defined in the INET-ADDRESS-MIB [RFC4001] and IP-MIB [RFC4293].

The PMIPV6-MIB is composed of the following groups of definitions:

- pmip6Core: a generic group containing objects that are common to all the Proxy Mobile IPv6 entities. Objects belonging to this group will be implemented on the corresponding Proxy Mobile IPv6 entity. pmip6BindingCacheTable belongs to this group.
- pmip6Mag: this group models the mobile access gateway service. Objects belonging to this group have the "pmip6Mag"

prefix and will be implemented on the corresponding MAG.
- pmip6Lma: this group models the local mobility anchor service. Objects belonging to this group have the "pmip6Lma" prefix and will be implemented on the corresponding LMA.
- pmip6Notifications: defines the set of notifications that will be used to asynchronously monitor the Proxy Mobile IPv6 entities.

The tables contained in the above groups are as follows:
- pmip6BindingCacheTable: models the Binding Cache on the local mobility anchor.
- pmip6MagProxyCOATable: models the Proxy Care-of Addresses configured on the egress interfaces of the mobile access gateway.
- pmip6MagMnIdentifierTable: provides a mapping from the MAG-internal pmip6MagMnIndex to the mobile node identifier.
- pmip6MagMnLLIdentifierTable: provides a mapping from the MAG-internal pmip6MagMnLLIndex to the corresponding interface of the mobile node link layer identifier.
- pmip6MagHomeNetworkPrefixTable : contains the Home Network Prefixes assigned to interfaces of all mobile nodes attached to the MAG. Each interface is distinguished by the attached mobile node's identifier (MN-Identifier) and the link layer identifier (MN-LL-Identifier).
- pmip6MagBLTable: models the Binding Update List (BL) that includes Proxy MIPv6 related information and is maintained by the mobile access gateway.
- pmip6MagMnProfileTable: contains the mobile node's policy profile that includes the essential operational parameters that are required by the network entities for managing the mobile node's mobility service.
- pmip6LmaLMAATable: contains the LMA Addresses that are configured on the local mobility anchor. Each LMA Address acts as a transport endpoint of the tunnel between the local mobility anchor and the mobile access gateway.
- pmip6LmaMnIdentifierTable: provides a mapping from the LMA-internal pmip6BindingMnIndex to the mobile node identifier.
- pmip6LmaMnLLIdentifierTable: provides a mapping from the LMA-internal pmip6BindingMnLLIndex to the corresponding interface of the mobile node link layer identifier.
- pmip6LmaHomeNetworkPrefixTable : contains the list of Home Network Prefixes assigned to the connected interfaces of the mobile nodes anchored on an LMA.

4.1 Textual Conventions

A Proxy Mobile IPv6 Textual Conventions MIB module containing Textual Conventions to represent commonly used Proxy Mobile-IPv6 management information is defined. The intent is that these TEXTUAL CONVENTIONS (TCs) will be imported and used in PMIPv6 related MIB modules that would otherwise define their own representation(s).

5. MIB Definitions

5.1 Proxy Mobile IPv6 Textual Conventions MIB

```
    PMIPV6-TC-MIB DEFINITIONS ::= BEGIN
       IMPORTS
         MODULE-IDENTITY, mib-2, Unsigned32
                   FROM SNMPv2-SMI                   -- [RFC2578]
         TEXTUAL-CONVENTION
                   FROM SNMPv2-TC;                   -- [RFC2579]

       pmip6TCMIB  MODULE-IDENTITY
          LAST-UPDATED "201109250000Z"     --  25th September, 2011
          ORGANIZATION "IETF NETLMM Working Group"
          CONTACT-INFO
          "                Glenn Mansfield Keeni
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```

```
           Support Group E-mail: netlmm@ietf.org
           "

        DESCRIPTION
            "This MIB module provides textual conventions for
             Proxy Mobile IPv6 Management information.

             Copyright (C) The IETF Trust (2011). This version of
             this MIB module is part of RFC XXXX; see the RFC itself for
             full legal notices.
            "
       -- RFC Ed.: replace XXXX with the actual RFC number & remove this
       -- note


        REVISION "201109250000Z"     --  25th September, 2011
        DESCRIPTION
            "The initial version, published as RFC XXXX."

       -- RFC Ed.: replace XXXX with the actual RFC number & remove this
       -- note


        ::= { mib-2 YYY1 }     -- Will be assigned by IANA

       -- IANA Reg.: Please assign a value for "YYY1" under the
       -- 'mib-2' subtree and record the assignment in the SMI
       -- Numbers registry.

       -- RFC Ed.: When the above assignment has been made, please
       --     remove the above note
       --     replace "YYY1" here with the assigned value and
       --     remove this note.



    -- ---------------------------------------------------------
    -- Textual Conventions
    -- ---------------------------------------------------------
```

```
    Pmip6TimeStamp64  ::=  TEXTUAL-CONVENTION
        DISPLAY-HINT "6d:2d"
        STATUS  current
        DESCRIPTION
            "A 64-bit unsigned integer field containing a timestamp.
             The value indicates the elapsed time since January 1,
             1970, 00:00 UTC, by using a fixed point format.  In this
             format, the integer number of seconds is contained in
             the first 48 bits of the field, and the remaining 16
             bits indicate the number of 1/65536 fractions of a
             second.
            "
        REFERENCE
            "RFC 5213: Section 8.8"
        SYNTAX  OCTET STRING (SIZE (8))

    Pmip6MnIdentifier  ::=  TEXTUAL-CONVENTION
        DISPLAY-HINT "255a"
        STATUS  current
        DESCRIPTION
            "The identity of a mobile node in the Proxy Mobile IPv6
             domain. This is the stable identifier of a mobile node
             that the mobility entities in a Proxy Mobile IPv6 domain
             can always acquire and use for predictably identifying
             a mobile node. Various forms of identifiers can be used
             to identify a mobile node (MN).  Two examples are a
             Network Access Identifier (NAI) and an opaque
             identifier applicable to a particular application.
            "
        REFERENCE
            "RFC 4283: Section 3"
        SYNTAX  OCTET STRING (SIZE (0..255))
```

```
    Pmip6MnLLIdentifier ::=  TEXTUAL-CONVENTION
        DISPLAY-HINT "255a"
        STATUS  current
        DESCRIPTION
            "An identifier that identifies the attached interface of
             a mobile node.
            "
        REFERENCE
            "RFC 5213: Section 8.6"
        SYNTAX  OCTET STRING (SIZE (0..255))

    Pmip6MnIndex ::= TEXTUAL-CONVENTION
        DISPLAY-HINT "d"
        STATUS       current
        DESCRIPTION
            "A unique integer value, greater than zero, assigned to
             each mobile node that is currently attached to the
             Proxy Mobile IPv6 domain by the management system.
             It is recommended that the values are assigned in a
             monotonically increasing order starting from 1. It may
             wrap after reaching its maximum value. The value for
             each mobile node must remain constant at least from one
             re-initialization of the entity's network management
             system to the next re-initialization.
            "
        SYNTAX       Unsigned32 (1..4294967295)
    Pmip6MnLLIndex ::= TEXTUAL-CONVENTION
        DISPLAY-HINT "d"
        STATUS       current
        DESCRIPTION
            "A unique integer value, greater than zero, assigned to
             each interface of a mobile node that is currently
             attached to the Proxy Mobile IPv6 domain by the
             management system.
             It is recommended that the values are assigned in a
             monotonically increasing order starting from 1. It may
             wrap after reaching its maximum value. The value for
             each interface of a mobile node must remain constant at
             least from one re-initialization of the entity's network
             management system to the next re-initialization.
            "
        SYNTAX       Unsigned32 (1..4294967295)
```

```
    Pmip6MnInterfaceATT ::=  TEXTUAL-CONVENTION
        STATUS  current
        DESCRIPTION
            "The object specifies the access technology which
             connects the mobile node to the access link on the
             mobile access gateway.
             The enumerated values and the corresponding access
             technology are as follows:
              reserved               (0): Reserved (Not used)
              logicalNetworkInterface (1): Logical network interface
              pointToPointInterface   (2): Point to point interface
              ethernet                (3): Ethernet interface
              wirelessLan             (4): Wireless LAN interface
              wimax                   (5): Wimax interface
              threeGPPGERAN           (6): 3GPP GERAN
              threeGPPUTRAN           (7): 3GPP UTRAN
              threeGPPETRAN           (8): 3GPP ETRAN
              threeGPP2eHRPD          (9): 3GPP2 eHRPD
              threeGPP2HRPD          (10): 3GPP2 HRPD
              threeGPP21xRTT         (11): 3GPP2 1xRTT
              threeGPP2UMB           (12): 3GPP2 UMB
            "
        REFERENCE
            "RFC 5213: Section 8.5,
             http://www.iana.org/assignments/mobility-parameters/
             mobility-parameters.txt"

        SYNTAX INTEGER
        {
             reserved               (0),
             logicalNetworkInterface(1),
             pointToPointInterface  (2),
             ethernet               (3),
             wirelessLan            (4),
             wimax                  (5),
             threeGPPGERAN          (6),
             threeGPPUTRAN          (7),
             threeGPPETRAN          (8),
             threeGPP2eHRPD         (9),
             threeGPP2HRPD          (10),
             threeGPP21xRTT         (11),
             threeGPP2UMB           (12)
        }
    END
```

5.2 The Proxy Mobile-IPv6 MIB

```
 PMIPV6-MIB DEFINITIONS ::= BEGIN
    IMPORTS
      MODULE-IDENTITY,  mib-2, Integer32, Counter32, Gauge32,
      Unsigned32, OBJECT-TYPE, NOTIFICATION-TYPE
                FROM SNMPv2-SMI                    -- RFC 2578
      PhysAddress, TimeStamp,
      TruthValue
                FROM SNMPv2-TC                     -- RFC 2579
      MODULE-COMPLIANCE, OBJECT-GROUP, NOTIFICATION-GROUP
                FROM SNMPv2-CONF                   -- RFC 2580
      InetAddressType, InetAddress, InetAddressPrefixLength
                FROM INET-ADDRESS-MIB              -- RFC 4001
      Ipv6AddressIfIdentifierTC
                FROM IP-MIB                        -- RFC 4293
      mip6MnBLEntry, mip6BindingCacheEntry
                FROM MOBILEIPV6-MIB                -- RFC 4295
      Pmip6TimeStamp64,    Pmip6MnIdentifier,
      Pmip6MnLLIdentifier, Pmip6MnIndex, Pmip6MnLLIndex,
      Pmip6MnInterfaceATT
                FROM PMIPV6-TC-MIB                 -- RFC XXXX
      ;


    pmip6MIB MODULE-IDENTITY
       LAST-UPDATED "201109250000Z"        --  25th September, 2011
       ORGANIZATION "IETF NETLMM Working Group"
       CONTACT-INFO
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```
        Support Group E-mail: netlmm@ietf.org"


        DESCRIPTION
         "The MIB module for monitoring and controlling PMIPv6
          entities.
         "

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


         REVISION    "201109250000Z"      -- 25th September 2011
         DESCRIPTION "Initial version, published as RFC XXXX."


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


        ::= { mib-2  YYY2 } -- will be assigned by IANA


    -- IANA Reg.: Please assign a value for "YYY2" under the 'mib-2'
    -- subtree and record the assignment in the SMI Numbers
    -- registry.
    --
    -- RFC Ed.: When the above assignment has been made, please
```

```
       --     remove the above note
       --     replace "YYY" here with the assigned value and
       --     remove this note.


       -- The PMIPv6 MIB has the following 5 primary groups


       pmip6Notifications     OBJECT IDENTIFIER ::= { pmip6MIB 0 }
       pmip6Objects           OBJECT IDENTIFIER ::= { pmip6MIB 1 }
       pmip6Conformance       OBJECT IDENTIFIER ::= { pmip6MIB 2 }
       pmip6Core              OBJECT IDENTIFIER ::= { pmip6Objects 1 }
       pmip6Mag               OBJECT IDENTIFIER ::= { pmip6Objects 2 }
       pmip6Lma               OBJECT IDENTIFIER ::= { pmip6Objects 3 }

        -- The sub groups

       pmip6System            OBJECT IDENTIFIER ::= { pmip6Core 1 }
       pmip6Bindings          OBJECT IDENTIFIER ::= { pmip6Core 2 }
       pmip6Conf              OBJECT IDENTIFIER ::= { pmip6Core 3 }
       pmip6Stats             OBJECT IDENTIFIER ::= { pmip6Core 4 }


       pmip6MagSystem         OBJECT IDENTIFIER ::= { pmip6Mag 1 }
       pmip6MagConf           OBJECT IDENTIFIER ::= { pmip6Mag 2 }
       pmip6MagRegistration   OBJECT IDENTIFIER ::= { pmip6Mag 3 }

       pmip6LmaSystem         OBJECT IDENTIFIER ::= { pmip6Lma 1 }
       pmip6LmaConf           OBJECT IDENTIFIER ::= { pmip6Lma 2 }



       -- The pmip6Stats group has the following sub groups


       pmip6BindingRegCounters OBJECT IDENTIFIER ::= { pmip6Stats 1 }

       --
       --
       -- pmip6System group
       --
```

```
--
pmip6Capabilities OBJECT-TYPE
    SYNTAX      BITS {
         mobilityAccessGateway  (0),
         localMobilityAnchor    (1)
                }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This object indicates the PMIPv6 functions that
         are supported by this managed entity.  Multiple
         Proxy Mobile IPv6 functions may be supported by
         a single entity.
         mobilityAccessGateway(0) indicates the availability
         of the mobility access gateway function.
         localMobilityAnchor(1) indicates the availability
         of the local mobility anchor function.
        "
    REFERENCE
            "RFC 3775 : Section 3.2, 4.1"
    ::= { pmip6System 1 }

pmip6MobileNodeGeneratedTimestampInUse OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This flag indicates whether or not the mobile node
         generated timestamp mechanism is in use in that
         Proxy Mobile IPv6 domain.
         true(1) if the local mobility anchors and mobile
         access gateways in that Proxy Mobile IPv6 domain
         apply the mobile node generated timestamp
         considerations.
         false(0) indicates that the mobile node generated
         timestamp mechanism is not in use in that Proxy
         Mobile IPv6 domain.
         The default value for this flag is set to 'false'.
        "
    REFERENCE
        "RFC 5213: Section 5.5, 9.3"
    DEFVAL { false }
    ::= { pmip6Conf 1 }
```

```
    pmip6FixedMagLinkLocalAddressOnAllAccessLinksType OBJECT-TYPE
        SYNTAX      InetAddressType
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "The InetAddressType of the
             pmip6FixedMagLinkLocalAddressOnAllAccessLinks
             that follows.
            "
           ::= { pmip6Conf 2 }

    pmip6FixedMagLinkLocalAddressOnAllAccessLinks OBJECT-TYPE
        SYNTAX      InetAddress
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This variable indicates the link-local address value
             that all the mobile access gateways should use on
             any of the access links shared with any of the
             mobile nodes in that Proxy Mobile IPv6 domain.  If
             this variable is initialized with all zeroes, it
             implies that the use of fixed link-local address mode
             is not enabled for that Proxy Mobile IPv6 domain."
        REFERENCE
            "RFC 5213: Section 2.2, 6.8, 6.9.1.1, 6.9.3, 9.3"
        ::= { pmip6Conf 3 }

    pmip6FixedMagLinkLayerAddressOnAllAccessLinks OBJECT-TYPE
        SYNTAX      PhysAddress
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This variable indicates the link-layer address value
             that all the mobile access gateways should use on
             any of the access links shared with any of the mobile
             nodes in that Proxy Mobile IPv6 domain. For access
             technologies where there is no link-layer address,
             this variable MUST be initialized with all zeroes.
            "
        REFERENCE
            "RFC 5213: Section 6.9.3, 9.3"
        ::= { pmip6Conf 4 }
```

```
    pmip6MagStatus OBJECT-TYPE
        SYNTAX      INTEGER { enabled(1), disabled(2) }
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This object indicates whether the PMIPv6 mobile
             access gateway function is enabled for the managed
             entity.

             Changing the status from enabled(1) to disabled(2)
             will terminate the PMIPv6 mobile access gateway
             function.  On the other hand, changing the status
             from disabled(2) to enabled(1) will start the PMIPv6
             mobile access gateway function.

             The value of this object MUST remain unchanged
             across reboots of the managed entity.
            "
        DEFVAL { disabled }
        ::= { pmip6MagSystem 1 }


    pmip6MagProxyCOATable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Pmip6MagProxyCOAEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table models the Proxy Care-of Addresses
             configured on the egress interfaces of the mobile access
             gateway. This address is the transport endpoint of the
             tunnel between the local mobility anchor and the mobile
             access gateway.

             Entries in this table are not required to survive
             a reboot of the managed entity.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 6.10"
        ::= { pmip6MagSystem 2 }
```

```
    pmip6MagProxyCOAEntry OBJECT-TYPE
        SYNTAX      Pmip6MagProxyCOAEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This entry represents a conceptual row in the
             Proxy-CoA table. It represents a Proxy Care-of
             address on the mobile access gateway.

             Implementers need to be aware that if the total
             number of octets in pmip6MagProxyCOA
             exceeds 113 then OIDs of column
             instances in this row will have more than 128
             sub-identifiers and cannot be accessed using
             SNMPv1, SNMPv2c, or SNMPv3.
            "
        INDEX  { pmip6MagProxyCOAType, pmip6MagProxyCOA }
        ::= { pmip6MagProxyCOATable 1 }

    Pmip6MagProxyCOAEntry ::=
        SEQUENCE {
         pmip6MagProxyCOAType   InetAddressType,
         pmip6MagProxyCOA       InetAddress,
         pmip6MagProxyCOAState  INTEGER
        }

    pmip6MagProxyCOAType OBJECT-TYPE
        SYNTAX      InetAddressType
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The InetAddressType of the pmip6MagProxyCOA
             that follows.
            "
        ::= { pmip6MagProxyCOAEntry 1 }
```

```
    pmip6MagProxyCOA OBJECT-TYPE
        SYNTAX      InetAddress
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The Proxy-CoA configured on the egress interface of the
             mobile access gateway.

             The type of the address represented by this object
             is specified by the corresponding
             pmip6MagProxyCOAType object.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 6.10"
        ::= { pmip6MagProxyCOAEntry 2 }

    pmip6MagProxyCOAState  OBJECT-TYPE
        SYNTAX      INTEGER {
                                unknown(1),
                                activated(2),
                                tunneled(3)
                            }
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This object indicates the state of the Proxy-CoA:
                unknown     -- The state of the Proxy-CoA
                               cannot be determined.
                activated   -- The Proxy-CoA is ready to establish
                               a tunnel. This state SHOULD be
                               indicated when the MAG is up but has
                               no mobile node.
                tunneled    -- Bi-directional tunnel is established
                               using the Proxy-CoA.
            "
        ::= { pmip6MagProxyCOAEntry 3 }
```

```
    pmip6MagEnableMagLocalRouting OBJECT-TYPE
        SYNTAX      TruthValue
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This flag indicates whether or not the mobile access
             gateway is allowed to enable local routing of the
             traffic exchanged between a visiting mobile node and
             a correspondent node that is locally connected to one
             of the interfaces of the mobile access gateway.
             The correspondent node can be another visiting mobile
             node as well, or a local fixed node.
             true(1) indicates the mobile access gateway routes the
             traffic locally.
             false(0) indicates that the mobile access gateway
             reverse tunnels all the traffic to the mobile node's
             local mobility anchor.

             The default value for this flag is set to false."
        REFERENCE
            "RFC 5213: Section 9.2"           DEFVAL { false }
        ::= { pmip6MagConf 1 }


    pmip6MagMnIdentifierTable OBJECT-TYPE
         SYNTAX      SEQUENCE OF Pmip6MagMnIdentifierEntry
         MAX-ACCESS  not-accessible
         STATUS      current
         DESCRIPTION
             "A table containing the indentifiers of mobile nodes
              attached to the MAG.
              Entries in this table are not required to survive
              a reboot of the managed entity.
             "
         REFERENCE
             "RFC 5213: Section 2.2, 6.1"
         ::= { pmip6MagConf 2 }


    pmip6MagMnIdentifierEntry OBJECT-TYPE
         SYNTAX      Pmip6MagMnIdentifierEntry
         MAX-ACCESS  not-accessible
         STATUS      current
         DESCRIPTION
             "An entry in the mobile node identifier table.
```

```
            "
        INDEX  { pmip6MagBLMnIndex
               }
        ::= { pmip6MagMnIdentifierTable 1 }

    Pmip6MagMnIdentifierEntry ::=
        SEQUENCE {
         pmip6MagMnIdentifier      Pmip6MnIdentifier
        }


    pmip6MagMnIdentifier  OBJECT-TYPE
        SYNTAX      Pmip6MnIdentifier
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The identity of a mobile node in the Proxy Mobile IPv6
             domain.
            "
       REFERENCE
           "RFC 5213: Section 2.2, 6.1"
        ::= { pmip6MagMnIdentifierEntry 1 }


    pmip6MagMnLLIdentifierTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Pmip6MagMnLLIdentifierEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "A table containing the link layer indentifiers
             of the interfaces of the mobile nodes attached
             to the MAG.
             Entries in this table are not required to survive
             a reboot of the managed entity.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 6.1"
        ::= { pmip6MagConf 3 }


    pmip6MagMnLLIdentifierEntry OBJECT-TYPE
        SYNTAX      Pmip6MagMnLLIdentifierEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
```

```
            "An entry in the mobile node link layer identifier
             table.
            "
        INDEX  { pmip6MagBLMnIndex, pmip6MagBLMnLLIndex
               }
        ::= { pmip6MagMnLLIdentifierTable 1 }

    Pmip6MagMnLLIdentifierEntry ::=
        SEQUENCE {
         pmip6MagMnLLIdentifier      Pmip6MnLLIdentifier
        }

    pmip6MagMnLLIdentifier  OBJECT-TYPE
        SYNTAX      Pmip6MnLLIdentifier
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The link-layer identifier of the mobile node's
             connected interface on the access link.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 6.1"
        ::= { pmip6MagMnLLIdentifierEntry 1 }

    pmip6MagHomeNetworkPrefixTable   OBJECT-TYPE
        SYNTAX      SEQUENCE OF PMip6MagHomeNetworkPrefixEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "A table representing the Home Network Prefixes
             assigned to the connected interfaces of mobile nodes
             attached to the MAG.
            "
        REFERENCE
            "RFC 5213: Section 2, 6.1, 6.2"
        ::= { pmip6MagConf 4 }


    pmip6MagHomeNetworkPrefixEntry OBJECT-TYPE
        SYNTAX      PMip6MagHomeNetworkPrefixEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry in the Home Network Prefixes table.
```

```
                Implementers need to be aware that if the total
                number of octets in pmip6MagHomeNetworkPrefix
                exceeds 111 then OIDs of column instances in
                this row will have more than 128 sub-identifiers
                and cannot be accessed using SNMPv1, SNMPv2c, or
                SNMPv3.
               "
        INDEX  { pmip6MagBLMnIndex, pmip6MagBLMnLLIndex,
                 pmip6MagHomeNetworkPrefixType,
                 pmip6MagHomeNetworkPrefix }
        ::= { pmip6MagHomeNetworkPrefixTable 1 }


    PMip6MagHomeNetworkPrefixEntry ::=
        SEQUENCE {
         pmip6MagHomeNetworkPrefixType      InetAddressType,
         pmip6MagHomeNetworkPrefix          InetAddress,
         pmip6MagHomeNetworkPrefixLength    InetAddressPrefixLength,
         pmip6MagHomeNetworkPrefixLifeTime  Unsigned32
        }


    pmip6MagHomeNetworkPrefixType  OBJECT-TYPE
        SYNTAX      InetAddressType
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The InetAddressType of the pmip6MagHomeNetworkPrefix
             that follows.
            "
        ::= { pmip6MagHomeNetworkPrefixEntry 1 }


    pmip6MagHomeNetworkPrefix   OBJECT-TYPE
        SYNTAX      InetAddress
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The mobile network prefix that is delegated to the
             mobile node. The type of the address represented by
             this object is specified by the corresponding
             pmip6MagHomeNetworkPrefixType object.
            "
        REFERENCE
            "RFC 5213: Section 2"
```

```
        ::= { pmip6MagHomeNetworkPrefixEntry 2 }


    pmip6MagHomeNetworkPrefixLength   OBJECT-TYPE
         SYNTAX      InetAddressPrefixLength
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "The prefix length of the Home Network Prefix.
             "
         ::= { pmip6MagHomeNetworkPrefixEntry 3 }


    pmip6MagHomeNetworkPrefixLifeTime   OBJECT-TYPE
         SYNTAX      Unsigned32
         UNITS       "seconds"
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "The lifetime parameter (in seconds) that will be
              advertised in Router Advertisements by the MAG for
              this Home Network Prefix.
             "
         REFERENCE
             "RFC 5213: Section 6.2, 6.7"
         ::= { pmip6MagHomeNetworkPrefixEntry 4 }



    pmip6MagBLTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Pmip6MagBLEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table corresponds to the Binding Update List(BL)
             that includes Proxy MIPv6 related information and
             is maintained by the mobile access gateway.
             Entries from the table are deleted as
             the lifetime of the binding expires.
            "
        REFERENCE
            "RFC 3775: Section 4.5, 11.1,
             RFC 5213: Section 6.1"
        ::= { pmip6MagRegistration 1 }
```

```
    pmip6MagBLEntry  OBJECT-TYPE
        SYNTAX      Pmip6MagBLEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry containing additional information contained
             in a Binding Update sent by the mobile access gateway
             to the local mobility anchor.
            "
        AUGMENTS {mip6MnBLEntry}
        ::= { pmip6MagBLTable 1 }

    Pmip6MagBLEntry ::= SEQUENCE {
        pmip6MagBLFlag                    TruthValue,
        pmip6MagBLMnIndex                 Pmip6MnIndex,
        pmip6MagBLMnLLIndex               Pmip6MnLLIndex,
        pmip6MagBLMagLinkLocalAddressType InetAddressType,
        pmip6MagBLMagLinkLocalAddress     InetAddress,
        pmip6MagBLMagIfIdentifierToMn     Ipv6AddressIfIdentifierTC,
        pmip6MagBLTunnelIfIdentifier      Ipv6AddressIfIdentifierTC,
        pmip6MagBLMnInterfaceATT  Pmip6MnInterfaceATT,
        pmip6MagBLTimeRecentlyAccepted    Pmip6TimeStamp64
        }


    pmip6MagBLFlag OBJECT-TYPE
        SYNTAX      TruthValue
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "true(1) if the mobile access gateway sent the proxy
             binding update with Proxy Registration Flag that
             indicates to the local mobility anchor that the
             registration is the proxy binding update and is from
             a mobile access gateway.
             false(0) implies that the mobile access gateway is
             behaving as a simple mobile node.
            "
        REFERENCE
            "RFC 5213: Section 8.1"
        ::= { pmip6MagBLEntry 1 }

    pmip6MagBLMnIndex OBJECT-TYPE
        SYNTAX     Pmip6MnIndex
        MAX-ACCESS  read-only
```

```
            STATUS      current
            DESCRIPTION
                "The index to the Identifier of the attached mobile
                 node in the pmip6MagMnIdentifierTable.
                "
            REFERENCE
                "RFC 5213: Section 2.2, 6.1, 8.1"
            ::= { pmip6MagBLEntry 2 }

        pmip6MagBLMnLLIndex OBJECT-TYPE
            SYNTAX      Pmip6MnLLIndex
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The index to the link-layer identifier of the mobile
                 node's connected interface in the
                 pmip6MagMnLLIdentifierTable.
                "
            REFERENCE
                "RFC 5213: Section 2.2, 6.1, 8.1"
            ::= { pmip6MagBLEntry 3 }

        pmip6MagBLMagLinkLocalAddressType OBJECT-TYPE
            SYNTAX     InetAddressType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The InetAddressType of the pmip6MagBLMagLinkLocalAddress
                 that follows.
                "
            ::= { pmip6MagBLEntry 4 }

        pmip6MagBLMagLinkLocalAddress OBJECT-TYPE
            SYNTAX     InetAddress
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The Link-local address of the mobile access gateway on
                 the access link shared with the mobile node.
                 This is the address that is present in the Link-local
                 Address option of the corresponding Proxy Binding Update
                 message.
                "
            REFERENCE
                "RFC 3963 : Section 4.1, 5.1"
```

```
        ::= { pmip6MagBLEntry 5 }

    pmip6MagBLMagIfIdentifierToMn OBJECT-TYPE
        SYNTAX     Ipv6AddressIfIdentifierTC
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The interface identifier (if-id) of the point-to-point
             link between the mobile node and the mobile access
             gateway. This is internal to the mobile access gateway
             and is used to associate the Proxy Mobile IPv6 tunnel
             to the access link where the mobile node is attached.
            "
        REFERENCE
            "RFC 5213: Section 6.1, 8.1"
        ::= { pmip6MagBLEntry 6 }

    pmip6MagBLTunnelIfIdentifier OBJECT-TYPE
        SYNTAX     Ipv6AddressIfIdentifierTC
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The tunnel interface identifier (tunnel-if-id) of the
             bi-directional tunnel between the mobile node's local
             mobility anchor and the mobile access gateway.  This
             is internal to the mobile access gateway. The tunnel
             interface identifier is acquired during the tunnel
             creation.
            "
        REFERENCE
            "RFC 5213: Section 6.1, 8.1"
        ::= { pmip6MagBLEntry 7 }

     pmip6MagBLMnInterfaceATT OBJECT-TYPE
        SYNTAX      Pmip6MnInterfaceATT
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The type of the access technology by which the mobile
             node is currently attached to the mobile access gateway.
            "
        REFERENCE
            "RFC 5213: Section 6.9.1.1, 6.9.1.5, 8.1"
        ::= { pmip6MagBLEntry 8 }
```

```
        pmip6MagBLTimeRecentlyAccepted OBJECT-TYPE
           SYNTAX      Pmip6TimeStamp64
           MAX-ACCESS  read-only
           STATUS      current
           DESCRIPTION
               "The 64-bit timestamp value of the most recently
                accepted Proxy Binding Update message sent for this
                mobile node.  This is the time-of-day on the mobile
                access gateway, when the proxy binding acknowledgement
                message with the Status field set to 0
                was received.  If the Timestamp option is not present
                in the Proxy Binding Update message (i.e., when the
                sequence number based scheme is in use), the value MUST
                be initialized with all zeroes.
               "
           REFERENCE
               "RFC 5213: Section 5.1, 8.1"
           ::= { pmip6MagBLEntry 9 }

       pmip6MagMnProfileTable OBJECT-TYPE
           SYNTAX      SEQUENCE OF Pmip6MagMnProfileEntry
           MAX-ACCESS  not-accessible
           STATUS      current
           DESCRIPTION
               "This table corresponds to the mobile node's policy
                profile that includes the essential operational
                parameters that are required by the network entities
                for managing the mobile node's mobility service.
                It contains policy profiles of mobile nodes that are
                connected to the mobile access gateway.
                Entries in this table are not required to survive
                a reboot of the managed entity.
               "
           REFERENCE
               "RFC 5213: Section 6.2"
           ::= { pmip6MagRegistration 2 }


       pmip6MagMnProfileEntry  OBJECT-TYPE
           SYNTAX      Pmip6MagMnProfileEntry
           MAX-ACCESS  not-accessible
           STATUS      current
           DESCRIPTION
               "An entry containing information about the
                mobile node's policy profile.
```

```
            "
        INDEX { pmip6MagProfMnIndex }
        ::= { pmip6MagMnProfileTable 1 }

    Pmip6MagMnProfileEntry ::=
        SEQUENCE {
         pmip6MagProfMnIndex                     Pmip6MnIndex,
         pmip6MagProfMnIdentifier                Pmip6MnIdentifier,
         pmip6MagProfMnLocalMobilityAnchorAddressType
                                                 InetAddressType,
         pmip6MagProfMnLocalMobilityAnchorAddress InetAddress
        }

    pmip6MagProfMnIndex OBJECT-TYPE
        SYNTAX      Pmip6MnIndex
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The index for a mobile node in the Proxy Mobile IPv6
             domain.
            "
        ::= { pmip6MagMnProfileEntry 1 }

    pmip6MagProfMnIdentifier OBJECT-TYPE
        SYNTAX      Pmip6MnIdentifier
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The identity of a mobile node in the Proxy Mobile IPv6
             domain.
            "
        REFERENCE
            "RFC 5213: Section 2.2"
        ::= { pmip6MagMnProfileEntry 2 }

    pmip6MagProfMnLocalMobilityAnchorAddressType OBJECT-TYPE
        SYNTAX     InetAddressType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The InetAddressType of the
             pmip6MagMnLocalMobilityAnchorAddress that follows.
            "
        ::= { pmip6MagMnProfileEntry 3 }
```

```
    pmip6MagProfMnLocalMobilityAnchorAddress OBJECT-TYPE
        SYNTAX     InetAddress
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The global address that is configured on the interface
             of the local mobility anchor and is the transport
             endpoint of the bi-directional tunnel established
             between the local mobility anchor and the mobile access
             gateway.  This is the address to which the mobile
             access gateway sends the Proxy Binding Update messages.
            "
        REFERENCE
            "RFC 5213: Section 2.2"
        ::= { pmip6MagMnProfileEntry 4 }



    pmip6BindingCacheTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Pmip6BindingCacheEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table models the Binding Cache on the local
             mobility anchor.
             Entries from the table are deleted as
             the lifetime of the binding expires.

             Entries in this table are not required to survive
             a reboot of the managed entity.
            "
        REFERENCE
            "RFC 3775: Section 4.5, 9.1, 10.1,
             RFC 5213: Section 5.1"
        ::= { pmip6Bindings 1 }


    pmip6BindingCacheEntry  OBJECT-TYPE
        SYNTAX      Pmip6BindingCacheEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry containing additional information contained
             in the binding cache table
             of the local mobility anchor.
```

```
            "
        AUGMENTS {mip6BindingCacheEntry}
    ::= { pmip6BindingCacheTable 1 }

    Pmip6BindingCacheEntry ::= SEQUENCE {
         pmip6BindingPBUFlag                 TruthValue,
         pmip6BindingMnIndex                 Pmip6MnIndex,
         pmip6BindingMnLLIndex               Pmip6MnLLIndex,
         pmip6BindingMagLinkLocalAddressType InetAddressType,
         pmip6BindingMagLinkLocalAddress     InetAddress,
         pmip6BindingTunnelIfIdentifier    Ipv6AddressIfIdentifierTC,
         pmip6BindingMnInterfaceATT
                                       Pmip6MnInterfaceATT,
         pmip6BindingTimeRecentlyAccepted     Pmip6TimeStamp64
        }

    pmip6BindingPBUFlag OBJECT-TYPE
        SYNTAX      TruthValue
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "true(1) if the local mobility anchor accepted the
             binding update with Proxy Registration Flag from a
             mobile access gateway.
             false(0) implies that the binding cache is from a
             mobile node. In this case the remaining objects will
             not be accessible.
            "
        REFERENCE
            "RFC 5213: Section 5.1, 8.1"
        ::= { pmip6BindingCacheEntry 1 }

    pmip6BindingMnIndex OBJECT-TYPE
        SYNTAX      Pmip6MnIndex
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "An index to the identifier of the registered mobile
             node.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 5.1, 8.1
             RFC 4283: Section 3"
        ::= { pmip6BindingCacheEntry 2 }
```

```
    pmip6BindingMnLLIndex OBJECT-TYPE
        SYNTAX      Pmip6MnLLIndex
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The index to the link-layer identifier of the mobile
             node's connected interface on the access link.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 5.1, 8.1"
        ::= { pmip6BindingCacheEntry 3 }


    pmip6BindingMagLinkLocalAddressType OBJECT-TYPE
        SYNTAX      InetAddressType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The InetAddressType of the
             pmip6BindingMagLinkLocalAddress that follows.
            "
        ::= { pmip6BindingCacheEntry 4 }

    pmip6BindingMagLinkLocalAddress OBJECT-TYPE
        SYNTAX      InetAddress
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The link-local address of the mobile access gateway on
             the point-to-point link shared with the mobile node.
             This is generated by the local mobility anchor after
             accepting the initial Proxy Binding Update message.
             This is the address that is present in the Link-local
             Address option of the corresponding Proxy Binding
             Acknowledgement message.
            "
        REFERENCE
            "RFC 5213: Section 5.1, 6.9.1.2, 8.2"
        ::= { pmip6BindingCacheEntry 5 }

    pmip6BindingTunnelIfIdentifier OBJECT-TYPE
        SYNTAX      Ipv6AddressIfIdentifierTC
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
```

```
            "The tunnel interface identifier (tunnel-if-id) of the
             bi-directional tunnel between the local mobility anchor
             and the mobile access gateway where the mobile node is
             currently anchored. This is internal to the local
             mobility anchor.  The tunnel interface identifier is
             acquired during the tunnel creation.
            "
        REFERENCE
            "RFC 5213: Section 5.1, 8.1"
        ::= { pmip6BindingCacheEntry 6 }

    pmip6BindingMnInterfaceATT OBJECT-TYPE
        SYNTAX      Pmip6MnInterfaceATT
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The access technology type, by which the mobile node
             is currently attached.  This is obtained from the
             Access Technology Type option, present in the Proxy
             Binding Update message.
            "
        REFERENCE
            "RFC 5213: Section 5.1, 8.1"
        ::= { pmip6BindingCacheEntry 7 }

    pmip6BindingTimeRecentlyAccepted OBJECT-TYPE
        SYNTAX      Pmip6TimeStamp64
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The 64-bit timestamp value of the most recently
             accepted Proxy Binding Update message sent for this
             mobile node.  This is the time-of-day on the local
             mobility anchor, when the message was received.  If
             the Timestamp option is not present in the Proxy
             Binding Update message (i.e., when the sequence number
             based scheme is in use), the value MUST be initialized
             with all zeroes.
            "
        REFERENCE
            "RFC 5213: Section 5.1, 8.1"
        ::= { pmip6BindingCacheEntry 8 }

    ---
    ---
```

```
       --- pmip6Stats group
       ---
       ---



       --
       -- pmip6Stats:pmip6BindingRegCounters
       --


       pmip6MissingMnIdentifierOption  OBJECT-TYPE
           SYNTAX      Counter32
           MAX-ACCESS  read-only
           STATUS      current
           DESCRIPTION
               "Total number of Proxy Binding Update messages
                rejected by the local mobility anchor with status
                code in the Binding Acknowledgement message indicating
                'Missing mobile node identifier option' (Code 160).

                Discontinuities in the value of this counter can
                occur at re-initialization of the mobile router,
                and at other times as indicated by the value of
                pmip6CounterDiscontinuityTime.
               "
           REFERENCE
               "RFC 5213: Section 5.3.1, 8.9"
               ::= { pmip6BindingRegCounters 1 }

       pmip6MagNotAuthorizedForProxyReg OBJECT-TYPE
           SYNTAX      Counter32
           MAX-ACCESS  read-only
           STATUS      current
           DESCRIPTION
               "Total number of Proxy Binding Update messages
                rejected by the local mobility anchor with status
                code in the Binding Acknowledgement message indicating
                'Not authorized to send proxy binding updates'
                (Code 154).

                Discontinuities in the value of this counter can
                occur at re-initialization of the mobile router,
                and at other times as indicated by the value of
                pmip6CounterDiscontinuityTime.
```

```
                "
            REFERENCE
                "RFC 5213: Section 5.3.1, 8.9"
                ::= { pmip6BindingRegCounters 2 }

        pmip6NotLMAForThisMobileNode  OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages rejected
                 by the local mobility anchor with status code in the
                 Binding Acknowledgement message indicating
                 'Not local mobility anchor for this mobile node'
                 (Code 153).

                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
                "
            REFERENCE
                "RFC 5213: Section 5.3.1, 8.9"
                ::= { pmip6BindingRegCounters 3 }


        pmip6ProxyRegNotEnabled  OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages rejected
                 by the local mobility anchor with status code in the
                 Binding Acknowledgement message indicating
                 'Proxy Registration not enabled' (Code 152).
                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
                "
            REFERENCE
                "RFC 5213: Section 5.3.1, 6.9.1.2, 8.9"
                ::= { pmip6BindingRegCounters 4 }
```

```
    pmip6MissingHomeNetworkPrefixOption  OBJECT-TYPE
        SYNTAX      Counter32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "Total number of Proxy Binding Update messages rejected
             by the local mobility anchor with status code in the
             Binding Acknowledgement message indicating
             'Missing home network prefix option' (Code 158).
             Discontinuities in the value of this counter can
             occur at re-initialization of the management system,
             and at other times as indicated by the value of
             pmip6CounterDiscontinuityTime.
            "
        REFERENCE
            "RFC 5213: Section 5.3.1, 8.9"
            ::= { pmip6BindingRegCounters 5 }

    pmip6MissingHandOffIndicatorOption OBJECT-TYPE
        SYNTAX      Counter32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "Total number of Proxy Binding Update messages rejected
             by the local mobility anchor with status code in the
             Binding Acknowledgement message indicating
             'Missing handoff indicator option' (Code 161).
             Discontinuities in the value of this counter can
             occur at re-initialization of the management system,
             and at other times as indicated by the value of
             pmip6CounterDiscontinuityTime.
            "
        REFERENCE
            "RFC 5213: Section 5.3.1, 8.9"
            ::= { pmip6BindingRegCounters 6 }

    pmip6MissingAccessTechTypeOption OBJECT-TYPE
        SYNTAX      Counter32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "Total number of Proxy Binding Update messages rejected
             by the local mobility anchor with status code in the
             Binding Acknowledgement message indicating
             'Missing access technology type option' (Code 162).
```

```
                Discontinuities in the value of this counter can
                occur at re-initialization of the management system,
                and at other times as indicated by the value of
                pmip6CounterDiscontinuityTime.
               "
            REFERENCE
                "RFC 5213: Section 5.3.1, 8.9"
                ::= { pmip6BindingRegCounters 7 }

        pmip6NotAuthorizedForHomeNetworkPrefix OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages rejected
                by the local mobility anchor with status code in the
                Binding Acknowledgement message indicating
                'Mobile node not authorized for one or more of the
                requesting home network prefixes' (Code 155).

                Discontinuities in the value of this counter can
                occur at re-initialization of the management system,
                and at other times as indicated by the value of
                pmip6CounterDiscontinuityTime.
               "
            REFERENCE
                "RFC 5213: Section 5.3.2, 6.9.1.2, 8.9"
                ::= { pmip6BindingRegCounters 8 }

        pmip6TimestampMismatch OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages rejected
                by the local mobility anchor with status code in the
                Binding Acknowledgement message indicating
                'Invalid timestamp value (the clocks are out of sync)'
                (Code 156)
                Discontinuities in the value of this counter can
                occur at re-initialization of the management system,
                and at other times as indicated by the value of
                pmip6CounterDiscontinuityTime.
               "
            REFERENCE
```

```
            "RFC 5213: Section 5.5, 6.9.1.2, 8.9"
            ::= { pmip6BindingRegCounters 9 }

        pmip6TimestampLowerThanPrevAccepted OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages rejected
                 by the local mobility anchor with status code in the
                 Binding Acknowledgement message indicating
                 'The timestamp value is lower than the previously
                 accepted value' (Code 157).
                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
                "
            REFERENCE
                "RFC 5213: Section 5.5, 6.9.1.2, 8.9"
                ::= { pmip6BindingRegCounters 10 }

        pmip6BcePbuPrefixSetDoNotMatch OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages rejected
                 by the local mobility anchor with status code in the
                 Binding Acknowledgement message indicating
                 'All the home network prefixes listed in the Binding
                 Cache Entry do not match all the prefixes in the
                 received Proxy Binding Update' (Code 159).
                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
                "
            REFERENCE
                "RFC 5213: Section 5.4.1.1, 8.9"
                ::= { pmip6BindingRegCounters 11 }


        pmip6InitialBindingRegistrations OBJECT-TYPE
            SYNTAX      Counter32
```

```
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages that
                 newly creates the Binding Cache entry.
                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
                "
            REFERENCE
                "RFC 5213: Section 5.3.2"
                ::= { pmip6BindingRegCounters 12 }

        pmip6BindingLifeTimeExtensionNoHandOff OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages for
                 extending the binding lifetime, received from the
                 same mobile access gateway that last updated the
                 binding.
                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
                "
            REFERENCE
                "RFC 5213: Section 5.3.3"
                ::= { pmip6BindingRegCounters 13 }

        pmip6BindingLifeTimeExtensionAfterHandOff OBJECT-TYPE
            SYNTAX      Counter32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Total number of Proxy Binding Update messages for
                 extending the binding lifetime, received from a new
                 mobile access gateway where the mobile node's
                 mobility session is handed off.
                 Discontinuities in the value of this counter can
                 occur at re-initialization of the management system,
                 and at other times as indicated by the value of
                 pmip6CounterDiscontinuityTime.
```

```
            "
        REFERENCE
            "RFC 5213: Section 5.3.4"
            ::= { pmip6BindingRegCounters 14 }

    pmip6BindingDeRegistrations OBJECT-TYPE
        SYNTAX      Counter32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "Total number of Proxy Binding Update messages with
             the lifetime value of zero.
             Discontinuities in the value of this counter can
             occur at re-initialization of the management system,
             and at other times as indicated by the value of
             pmip6CounterDiscontinuityTime.
            "
        REFERENCE
            "RFC 5213: Section 5.3.5"
            ::= { pmip6BindingRegCounters 15 }

    pmip6BindingBindingAcks OBJECT-TYPE
        SYNTAX      Counter32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "Total number of Proxy Binding Acknowledgement
             messages.
             Discontinuities in the value of this counter can
             occur at re-initialization of the management system,
             and at other times as indicated by the value of
             pmip6CounterDiscontinuityTime.
            "
        REFERENCE
            "RFC 5213: Section 5.3.5"
            ::= { pmip6BindingRegCounters 16 }

    pmip6CounterDiscontinuityTime OBJECT-TYPE
        SYNTAX      TimeStamp
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The value of sysUpTime on the most recent occasion
             at which any one or more of this PMIPv6 entities
             global counters, viz., counters with OID prefix
```

```
                'pmip6BindingRegCounters' suffered a discontinuity.
                If no such discontinuities have occurred since the
                last re-initialization of the local management
                subsystem, then this object will have a zero value.
               "
               ::= { pmip6BindingRegCounters 17 }


       pmip6LmaStatus OBJECT-TYPE
           SYNTAX      INTEGER { enabled(1), disabled(2) }
           MAX-ACCESS  read-write
           STATUS      current
           DESCRIPTION
               "This object indicates whether the PMIPv6 local
                mobility anchor function is enabled for the managed
                entity.

                Changing the status from enabled(1) to disabled(2)
                will terminate the PMIPv6 local mobility anchor
                function.  On the other hand, changing the status
                from disabled(2) to enabled(1) will start the PMIPv6
                local mobility anchor function.

                The value of this object MUST remain unchanged
                across reboots of the managed entity.
               "
           DEFVAL { disabled }
           ::= { pmip6LmaSystem 1 }


       pmip6LmaLMAATable OBJECT-TYPE
           SYNTAX      SEQUENCE OF Pmip6LmaLMAAEntry
           MAX-ACCESS  not-accessible
           STATUS      current
           DESCRIPTION
               "This table models the LMA Addresses configured
                on the local mobility anchor. Each LMA Address acts as
                a transport endpoint of the tunnel between the local
                mobility anchor and the mobile access gateway and is
                the transport endpoint of the tunnel between the local
                mobility anchor and the mobile access gateway.

                Entries in this table are not required to survive
                a reboot of the managed entity.
               "
```

```
            REFERENCE
                "RFC 5213: Section 2.2, 5.6"
            ::= { pmip6LmaSystem 2 }

        pmip6LmaLMAAEntry OBJECT-TYPE
            SYNTAX      Pmip6LmaLMAAEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This entry represents a conceptual row in the
                 LMAA table. It represents each LMAA
                 on the local mobility anchor.

                 Implementers need to be aware that if the total
                 number of octets in pmip6LmaLMAA exceeds 113
                 then OIDs of column instances in this row will
                 have more than 128 sub-identifiers and cannot
                 be accessed using SNMPv1, SNMPv2c, or SNMPv3.
                "
            INDEX  { pmip6LmaLMAAType, pmip6LmaLMAA }
            ::= { pmip6LmaLMAATable 1 }


        Pmip6LmaLMAAEntry ::=
            SEQUENCE {
             pmip6LmaLMAAType   InetAddressType,
             pmip6LmaLMAA       InetAddress,
             pmip6LmaLMAAState  INTEGER
            }

        pmip6LmaLMAAType OBJECT-TYPE
            SYNTAX      InetAddressType
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                    "The InetAddressType of the pmip6LmaLMAA
                     that follows.
                    "
            ::= { pmip6LmaLMAAEntry 1 }

        pmip6LmaLMAA OBJECT-TYPE
            SYNTAX      InetAddress
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
```

```
            "The LMAA configured on the local mobility anchor.

             The type of the address represented by this object
             is specified by the corresponding
             pmip6LmaLMAAType object.
            "
        REFERENCE
            "RFC 5213: Section 2.2, 5.6"
        ::= { pmip6LmaLMAAEntry 2 }

    pmip6LmaLMAAState  OBJECT-TYPE
        SYNTAX      INTEGER {
                                unknown(1),
                                activated(2),
                                tunneled(3)
                            }
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This object indicates the state of the LMAA:
                unknown     -- The state of the LMAA
                               cannot be determined.
                activated   -- The LMAA is ready to establish
                               tunnel
                tunneled    -- The LMAA is used to set up the
                               bi-directional tunnel.
            "
        ::= { pmip6LmaLMAAEntry 3 }

    pmip6LmaMinDelayBeforeBCEDelete OBJECT-TYPE
        SYNTAX      Integer32 (1..65535)
        UNITS       "milliseconds"
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This variable specifies the length of time in
             milliseconds the local mobility anchor MUST wait before
             it deletes a Binding Cache entry of a mobile node, upon
             receiving a Proxy Binding Update message from a mobile
             access gateway with a lifetime value of 0.
             During this wait time, if the local mobility anchor
             receives a Proxy Binding Update for the same mobility
             binding, with a lifetime value greater than 0, then it
             must update the binding cache entry with the accepted
             binding values. By the end of this wait-time, if the
```

```
            local mobility anchor did not receive any valid Proxy
            Binding Update message for that mobility binding, it
            MUST delete the Binding Cache entry. This delay
            essentially ensures that a mobile node's Binding Cache
            entry is not deleted too quickly and allows some time
            for the new mobile access gateway to complete the
            signaling for the mobile node.
            The default value for this variable is 10000
            milliseconds.
           "
        REFERENCE
            "RFC 5213: Section 5.3.5, 9.1"
        DEFVAL { 10000 }
           ::= { pmip6LmaConf 1 }

    pmip6LmaMaxDelayBeforeNewBCEAssign OBJECT-TYPE
        SYNTAX      Integer32 (1..65535)
        UNITS       "milliseconds"
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This variable specifies the length of time in
            milliseconds the local mobility anchor MUST wait for
            the de-registration message for an existing mobility
            session before it decides to create a new mobility
            session.
            The default value for this variable is 1500
            milliseconds. Note that there is a dependency between
            this value and the values used in the retransmission
            algorithm for Proxy Binding Updates. The retransmissions
            need to happen before MaxDelayBeforeNewBCEAssign runs
            out, as otherwise there are situations where a
            de-registration from a previous mobile access gateway
            may be lost, and the local mobility anchor creates,
            needlessly, a new mobility session and new prefixes for
            the mobile node.  However, this affects situations where
            there is no information from the lower layers about the
            type of a handoff or other parameters that can be used
            for identifying the mobility session.
           "
        REFERENCE
            "RFC 5213: Section 5.4.1.2, 5.4.1.3, 9.1"
        DEFVAL { 1500 }
           ::= { pmip6LmaConf 2 }
```

```
    pmip6LmaTimestampValidityWindow OBJECT-TYPE
        SYNTAX      Integer32 (1..65535)
        UNITS       "milliseconds"
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "This variable specifies the maximum length of time
             difference in milliseconds between the timestamp in the
             received Proxy Binding Update message and the current
             time-of-day on the local mobility anchor, that is
             allowed by the local mobility anchor for the received
             message to be considered valid.
             The default value for this variable is 300 milliseconds.
             This variable must be adjusted to suit the deployments.
            "
        REFERENCE
            "RFC 5213: Section 5.5, 9.1"
        DEFVAL { 300 }
           ::= { pmip6LmaConf 3 }


    pmip6LmaMnIdentifierTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Pmip6LmaMnIdentifierEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "A table containing the indentifiers of mobile nodes
             served by the LMA.
             Entries in this table are not required to survive
             a reboot of the managed entity.
            "
        REFERENCE
            "RFC 5213: Section 2, 6.1"
        ::= { pmip6LmaConf 4 }


    pmip6LmaMnIdentifierEntry OBJECT-TYPE
        SYNTAX      Pmip6LmaMnIdentifierEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry in the mobile node identifier table.
            "
        INDEX  { pmip6BindingMnIndex
               }
```

```
        ::= { pmip6LmaMnIdentifierTable 1 }

    Pmip6LmaMnIdentifierEntry ::=
        SEQUENCE {
         pmip6LmaMnIdentifier      Pmip6MnIdentifier
        }


    pmip6LmaMnIdentifier  OBJECT-TYPE
        SYNTAX      Pmip6MnIdentifier
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The identity of a mobile node in the Proxy Mobile IPv6
             domain.
            "
        REFERENCE
            "RFC 5213: Section 2.2"
        ::= { pmip6LmaMnIdentifierEntry 1 }


    pmip6LmaMnLLIdentifierTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Pmip6LmaMnLLIdentifierEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "A table containing the link layer indentifiers
             of the interfaces of the mobile nodes served
             by the LMA.
             Entries in this table are not required to survive
             a reboot of the managed entity.
            "
        REFERENCE
            "RFC 5213: Section 2, 6.1"
        ::= { pmip6LmaConf 5 }


    pmip6LmaMnLLIdentifierEntry OBJECT-TYPE
        SYNTAX      Pmip6LmaMnLLIdentifierEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry in the mobile node link layer identifier
             table.
            "
```

```
            INDEX  { pmip6BindingMnIndex, pmip6BindingMnLLIndex
                   }
            ::= { pmip6LmaMnLLIdentifierTable 1 }

        Pmip6LmaMnLLIdentifierEntry ::=
            SEQUENCE {
             pmip6LmaMnLLIdentifier      Pmip6MnLLIdentifier
            }

        pmip6LmaMnLLIdentifier  OBJECT-TYPE
             SYNTAX      Pmip6MnLLIdentifier
             MAX-ACCESS  read-only
             STATUS      current
             DESCRIPTION
                 "The link-layer identifier of the mobile node's
                  connected interface on the access link.
                 "
             ::= { pmip6LmaMnLLIdentifierEntry 1 }

        pmip6LmaHomeNetworkPrefixTable   OBJECT-TYPE
             SYNTAX      SEQUENCE OF PMip6LmaHomeNetworkPrefixEntry
             MAX-ACCESS  not-accessible
             STATUS      current
             DESCRIPTION
                 "A table representing the Home Network Prefixes
                  assigned to the connected interfaces of all the
                  mobile nodes anchored at the LMA.
                 "
             REFERENCE
                 "RFC 5213: Section 2, 5.1, 5.2"
             ::= { pmip6LmaConf 6 }

        pmip6LmaHomeNetworkPrefixEntry OBJECT-TYPE
             SYNTAX      PMip6LmaHomeNetworkPrefixEntry
             MAX-ACCESS  not-accessible
             STATUS      current
             DESCRIPTION
                 "An entry in the Home Network Prefixes table.

                  Implementers need to be aware that if the total
                  number of octets in pmip6LmaHomeNetworkPrefix
                  exceeds 111 then OIDs of column instances in this
                  row will have more than 128 sub-identifiers and
                  cannot be accessed using SNMPv1, SNMPv2c, or
                  SNMPv3.
```

```
            "
        INDEX  { pmip6BindingMnIndex, pmip6BindingMnLLIndex,
                 pmip6LmaHomeNetworkPrefixType,
                 pmip6LmaHomeNetworkPrefix }
        ::= { pmip6LmaHomeNetworkPrefixTable 1 }


    PMip6LmaHomeNetworkPrefixEntry ::=
        SEQUENCE {
         pmip6LmaHomeNetworkPrefixType      InetAddressType,
         pmip6LmaHomeNetworkPrefix          InetAddress,
         pmip6LmaHomeNetworkPrefixLength    InetAddressPrefixLength,
         pmip6LmaHomeNetworkPrefixLifeTime  Gauge32
        }


    pmip6LmaHomeNetworkPrefixType  OBJECT-TYPE
        SYNTAX      InetAddressType
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The InetAddressType of the pmip6LmaHomeNetworkPrefix
             that follows.
            "
        ::= { pmip6LmaHomeNetworkPrefixEntry 1 }


    pmip6LmaHomeNetworkPrefix   OBJECT-TYPE
        SYNTAX      InetAddress
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The mobile network prefix that is delegated to the
             mobile node. The type of the address represented by
             this object is specified by the corresponding
             pmip6LmaHomeNetworkPrefixType object.
            "
        REFERENCE
            "RFC 5213: Section 2"

        ::= { pmip6LmaHomeNetworkPrefixEntry 2 }


    pmip6LmaHomeNetworkPrefixLength   OBJECT-TYPE
        SYNTAX      InetAddressPrefixLength
```

```
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                    "The prefix length of the Home Network Prefix.
                    "
            ::= { pmip6LmaHomeNetworkPrefixEntry 3 }

        pmip6LmaHomeNetworkPrefixLifeTime   OBJECT-TYPE
            SYNTAX      Gauge32
            UNITS       "seconds"
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "The lifetime (in seconds) granted to the mobile
                 node for this registration.
                "
            REFERENCE
                "RFC 5213: Section 5.3"
            ::= { pmip6LmaHomeNetworkPrefixEntry 4 }


        --
        -- pmip6Notifications
        --
        --

        pmip6MagHomeTunnelEstablished NOTIFICATION-TYPE
            OBJECTS   {
                        pmip6MagBLTunnelIfIdentifier,
                        pmip6MagProxyCOAState
                      }
            STATUS    current
            DESCRIPTION
                "This notification is sent by the Proxy MobileIPv6
                 entities every time the tunnel is established between
                 the local mobility anchor and mobile access gateway.
                "
            REFERENCE
                "RFC 5213: Section 5.6.1"
                ::= { pmip6Notifications 1 }


        pmip6MagHomeTunnelReleased NOTIFICATION-TYPE
            OBJECTS {
                        pmip6MagBLTunnelIfIdentifier,
```

```
                pmip6MagProxyCOAState
              }
    STATUS    current
    DESCRIPTION
        "This notification is sent by the Proxy MobileIPv6
         entities every time the tunnel between the local
         mobility anchor and mobile access gateway is released.
        "
    REFERENCE
        "RFC 5213: Section 5.6.1"
        ::= { pmip6Notifications 2}

pmip6LmaHomeTunnelEstablished NOTIFICATION-TYPE
    OBJECTS   {
                pmip6BindingTunnelIfIdentifier,
                pmip6LmaLMAAState
              }
    STATUS    current
    DESCRIPTION
        "This notification is sent by the Proxy MobileIPv6
         entities every time the tunnel is established between
         the local mobility anchor and mobile access gateway.
        "
    REFERENCE
        "RFC 5213: Section 5.6.1"
        ::= { pmip6Notifications 3 }


pmip6LmaHomeTunnelReleased NOTIFICATION-TYPE
    OBJECTS {
                pmip6BindingTunnelIfIdentifier,
                pmip6LmaLMAAState
              }
    STATUS    current
    DESCRIPTION
        "This notification is sent by the Proxy MobileIPv6
         entities every time the tunnel between the local
         mobility anchor and mobile access gateway is released.
        "
    REFERENCE
        "RFC 5213: Section 5.6.1"
        ::= { pmip6Notifications 4}

 -- Conformance information
pmip6Groups      OBJECT IDENTIFIER ::= { pmip6Conformance 1 }
```

```
       pmip6Compliances OBJECT IDENTIFIER ::= { pmip6Conformance 2 }


        -- Units of conformance
       pmip6SystemGroup    OBJECT-GROUP
            OBJECTS {
                pmip6Capabilities,
                pmip6MobileNodeGeneratedTimestampInUse,
                pmip6FixedMagLinkLocalAddressOnAllAccessLinksType,
                pmip6FixedMagLinkLocalAddressOnAllAccessLinks,
                pmip6FixedMagLinkLayerAddressOnAllAccessLinks

           }
            STATUS  current
            DESCRIPTION
                " A collection of objects for basic PMIPv6
                  monitoring."
            ::= { pmip6Groups 1 }

       pmip6BindingCacheGroup    OBJECT-GROUP
            OBJECTS {
                pmip6BindingPBUFlag,
                pmip6BindingMnIndex,
                pmip6BindingMnLLIndex,
                pmip6BindingMagLinkLocalAddressType,
                pmip6BindingMagLinkLocalAddress,
                pmip6BindingTunnelIfIdentifier,
                pmip6BindingMnInterfaceATT,
                pmip6BindingTimeRecentlyAccepted,
                pmip6LmaMnIdentifier,
                pmip6LmaMnLLIdentifier
           }
            STATUS  current
            DESCRIPTION
                " A collection of objects for monitoring the
                  PMIPv6 extensions of the Binding Cache."
            ::= { pmip6Groups 2 }

       pmip6StatsGroup    OBJECT-GROUP
            OBJECTS {
                pmip6MissingMnIdentifierOption,
                pmip6MagNotAuthorizedForProxyReg,
                pmip6NotLMAForThisMobileNode,
                pmip6ProxyRegNotEnabled,
                pmip6MissingHomeNetworkPrefixOption,
```

```
            pmip6MissingHandOffIndicatorOption,
            pmip6MissingAccessTechTypeOption,
            pmip6NotAuthorizedForHomeNetworkPrefix,
            pmip6TimestampMismatch,
            pmip6TimestampLowerThanPrevAccepted,
            pmip6BcePbuPrefixSetDoNotMatch,
            pmip6InitialBindingRegistrations,
            pmip6BindingLifeTimeExtensionNoHandOff,
            pmip6BindingLifeTimeExtensionAfterHandOff,
            pmip6BindingDeRegistrations,
            pmip6BindingBindingAcks,
            pmip6CounterDiscontinuityTime
        }
         STATUS  current
         DESCRIPTION
             " A collection of objects for basic PMIPv6
               statistics monitoring.
             "
         ::= { pmip6Groups 3 }

    pmip6MagSystemGroup    OBJECT-GROUP
         OBJECTS {
           pmip6MagStatus,
           pmip6MagProxyCOAState
        }
         STATUS  current
         DESCRIPTION
             " A collection of objects for monitoring the
               PMIPv6 system related objects on a mobile router."
         ::= { pmip6Groups 4 }

    pmip6MagConfigurationGroup    OBJECT-GROUP
         OBJECTS {
             pmip6MagHomeNetworkPrefixLength,
             pmip6MagHomeNetworkPrefixLifeTime,
             pmip6MagEnableMagLocalRouting
        }
         STATUS  current
         DESCRIPTION
             " A collection of objects for monitoring the
               configuration related objects on a mobile access
               gateway.
             "
         ::= { pmip6Groups 5 }
```

```
       pmip6MagRegistrationGroup    OBJECT-GROUP
            OBJECTS {
                pmip6MagBLFlag,
                pmip6MagBLMnIndex,
                pmip6MagBLMnLLIndex,
                pmip6MagBLMagLinkLocalAddressType,
                pmip6MagBLMagLinkLocalAddress,
                pmip6MagBLMagIfIdentifierToMn,
                pmip6MagBLTunnelIfIdentifier,
                pmip6MagBLMnInterfaceATT,
                pmip6MagBLTimeRecentlyAccepted,
                pmip6MagMnIdentifier,
                pmip6MagMnLLIdentifier,
                pmip6MagProfMnIdentifier,
                pmip6MagProfMnLocalMobilityAnchorAddressType,
                pmip6MagProfMnLocalMobilityAnchorAddress
            }
            STATUS  current
            DESCRIPTION
                " A collection of objects for monitoring the
                  registration related objects on a mobile access
                  gateway.
                "
            ::= { pmip6Groups 6 }

       pmip6LmaSystemGroup    OBJECT-GROUP
            OBJECTS {
                pmip6LmaStatus,
                pmip6LmaLMAAState
            }
            STATUS  current
            DESCRIPTION
                " A collection of objects for monitoring the
                  system related objects on an LMA."
            ::= { pmip6Groups 7 }

       pmip6LmaConfigurationGroup    OBJECT-GROUP
            OBJECTS {
                pmip6LmaMinDelayBeforeBCEDelete,
                pmip6LmaMaxDelayBeforeNewBCEAssign,
                pmip6LmaTimestampValidityWindow,
                pmip6LmaHomeNetworkPrefixLength,
                pmip6LmaHomeNetworkPrefixLifeTime
            }
            STATUS  current
```

```
            DESCRIPTION
                " A collection of objects for Monitoring the
                  configuration related objects on an LMA."
            ::= { pmip6Groups 8 }

        pmip6MagNotificationGroup   NOTIFICATION-GROUP
            NOTIFICATIONS {
                     pmip6MagHomeTunnelEstablished,
                     pmip6MagHomeTunnelReleased
            }
            STATUS  current
            DESCRIPTION
                "A collection of notifications from a home agent
                 or correspondent node to the Manager about the
                 tunnel status of the mobile router.
                "
            ::= { pmip6Groups 9 }

        pmip6LmaNotificationGroup   NOTIFICATION-GROUP
            NOTIFICATIONS {
                     pmip6LmaHomeTunnelEstablished,
                     pmip6LmaHomeTunnelReleased
            }
            STATUS  current
            DESCRIPTION
                "A collection of notifications from a home agent
                 or correspondent node to the Manager about the
                 tunnel status of the mobile router.
                "
            ::= { pmip6Groups 10 }



        -- Compliance statements
        pmip6CoreCompliance MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities
                 which implement the PMIPV6-MIB.
                 There are a number of INDEX objects that cannot be
                 represented in the form of OBJECT clauses in
                 SMIv2, but for which there are compliance
                 requirements, expressed in OBJECT clause form in
                 this description:
                 -- OBJECT      pmip6BindingHomeAddressType
```

```
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --   This MIB module requires support for global
                --   ipv6 addresses for the pmip6BindingHomeAddress
                --   object.
                --
                "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6SystemGroup
                                 }
            ::= { pmip6Compliances 1 }

        pmip6Compliance2 MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities
                 which implement the PMIPV6-MIB.
                 "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6SystemGroup,
                                   pmip6BindingCacheGroup,
                                   pmip6StatsGroup
                                 }
            ::= { pmip6Compliances 2 }

        pmip6CoreReadOnlyCompliance MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities
                 that implement the PMIPV6-MIB without support
                 for read-write (i.e., in read-only mode).
                 "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6SystemGroup
                                 }
            OBJECT  pmip6MobileNodeGeneratedTimestampInUse
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT  pmip6FixedMagLinkLocalAddressOnAllAccessLinksType
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT  pmip6FixedMagLinkLocalAddressOnAllAccessLinks
            MIN-ACCESS  read-only
```

```
            DESCRIPTION
                   "Write access is not required."
            OBJECT  pmip6FixedMagLinkLayerAddressOnAllAccessLinks
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."

            ::= { pmip6Compliances 3 }

       pmip6ReadOnlyCompliance2 MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities
                 that implement the PMIPV6-MIB without support
                 for read-write (i.e., in read-only mode).
                 "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6SystemGroup,
                                   pmip6BindingCacheGroup,
                                   pmip6StatsGroup
                                 }
            OBJECT  pmip6MobileNodeGeneratedTimestampInUse
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT  pmip6FixedMagLinkLocalAddressOnAllAccessLinksType
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT  pmip6FixedMagLinkLocalAddressOnAllAccessLinks
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT  pmip6FixedMagLinkLayerAddressOnAllAccessLinks
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."

            ::= { pmip6Compliances 4 }

       pmip6MagCoreCompliance MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities
                 which implement the PMIPV6-MIB.
```

```
                There are a number of INDEX objects that cannot be
                represented in the form of OBJECT clauses in
                SMIv2, but for which there are compliance
                requirements, expressed in OBJECT clause form in
                this description:
                 -- OBJECT      pmip6MagProxyCOAType
                 -- SYNTAX      InetAddressType { ipv6(2) }
                 -- DESCRIPTION
                 --     This MIB module requires support for global
                 --     IPv6 addresses for the pmip6MagProxyCOAType
                 --     object.
                 --
                 -- OBJECT      pmip6MagProxyCOA
                 -- SYNTAX      InetAddress (SIZE(16))
                 -- DESCRIPTION
                 --     This MIB module requires support for global
                 --     IPv6 addresses for the pmip6MagProxyCOA
                 --     object.
                 --
                "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6MagSystemGroup
                                 }
            ::= { pmip6Compliances 5 }



       pmip6MagCompliance2 MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities that
                 implement the PMIPV6-MIB for monitoring configuration
                 related information, registration details, and
                 statistics on a mobile access gateway.

                 There are a number of INDEX objects that cannot be
                 represented in the form of OBJECT clauses in
                 SMIv2, but for which there are compliance
                 requirements, expressed in OBJECT clause form in
                 this description:

                 -- OBJECT      pmip6MagProxyCOAType
                 -- SYNTAX      InetAddressType { ipv6(2) }
                 -- DESCRIPTION
                 --     This MIB module requires support for global
```

```
                --     IPv6 addresses for the pmip6MagProxyCOA
                --     object.
                --
                -- OBJECT      pmip6MagProxyCOA
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6MagProxyCOAType
                --     object.
                --
                -- OBJECT      pmip6MagHomeNetworkPrefixType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6MagHomeNetworkPrefix object.
                --
                -- OBJECT      pmip6MagHomeNetworkPrefix
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6MagHomeNetworkPrefix object.
                --
               "
          MODULE  -- this module
              MANDATORY-GROUPS { pmip6MagSystemGroup,
                                 pmip6MagConfigurationGroup,
                                 pmip6MagRegistrationGroup
                               }
          ::= { pmip6Compliances 6 }


     pmip6MagCoreReadOnlyCompliance MODULE-COMPLIANCE
          STATUS  current
          DESCRIPTION
              "The compliance statement for SNMP entities
               which implement the PMIPV6-MIB without support
               for read-write (i.e., in read-only mode).
               There are a number of INDEX objects that cannot be
               represented in the form of OBJECT clauses in
               SMIv2, but for which there are compliance
               requirements, expressed in OBJECT clause form in
               this description:
                -- OBJECT      pmip6MagProxyCOAType
```

```
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6MagProxyCOA
                --     object.
                --
                -- OBJECT      pmip6MagProxyCOA
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6MagProxyCOAType
                --     object.
                --
                -- OBJECT      pmip6MagHomeNetworkPrefixType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6MagHomeNetworkPrefix object.
                --
               "
          MODULE  -- this module
              MANDATORY-GROUPS { pmip6MagSystemGroup
                               }
          OBJECT  pmip6MagStatus
          MIN-ACCESS  read-only
          DESCRIPTION
                 "Write access is not required."
          ::= { pmip6Compliances 7 }

     pmip6MagReadOnlyCompliance2 MODULE-COMPLIANCE
          STATUS  current
          DESCRIPTION
              "The compliance statement for SNMP entities that
               implement the PMIPV6-MIB without support for read-
               write (i.e., in read-only mode) and with support
               for monitoring configuration related information,
               registration details, and statistics on a mobile
               access gateway.

               There are a number of INDEX objects that cannot be
               represented in the form of OBJECT clauses in
               SMIv2, but for which there are compliance
               requirements, expressed in OBJECT clause form in
               this description:
```

```
                -- OBJECT      pmip6MagProxyCOAType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6MagProxyCOA
                --     object.
                --
                -- OBJECT      pmip6MagProxyCOA
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6MagProxyCOAType
                --     object.
                --
                -- OBJECT      pmip6MagHomeNetworkPrefixType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6MagHomeNetworkPrefix object.
                --
                -- OBJECT      pmip6MagHomeNetworkPrefix
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6MagHomeNetworkPrefix object.
                --
              "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6MagSystemGroup,
                                   pmip6MagConfigurationGroup,
                                   pmip6MagRegistrationGroup
                                 }
            OBJECT  pmip6MagStatus
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT      pmip6MagEnableMagLocalRouting
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."

            ::= { pmip6Compliances 8 }
```

```
       pmip6LmaCoreCompliance MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities
                 which implement the PMIPV6-MIB.
                 There are a number of INDEX objects that cannot be
                 represented in the form of OBJECT clauses in
                 SMIv2, but for which there are compliance
                 requirements, expressed in OBJECT clause form in
                 this description:
                  -- OBJECT      pmip6LmaLMAAType
                  -- SYNTAX      InetAddressType { ipv6(2) }
                  -- DESCRIPTION
                  --     This MIB module requires support for global
                  --     IPv6 addresses for the pmip6LmaLMAA
                  --     object.
                  --
                  -- OBJECT      pmip6LmaLMAA
                  -- SYNTAX      InetAddress (SIZE(16))
                  -- DESCRIPTION
                  --     This MIB module requires support for global
                  --     IPv6 addresses for the pmip6LmaLMAA
                  --     object.
                  --
                 "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6LmaSystemGroup
                                 }
            ::= { pmip6Compliances 9 }

       pmip6LmaCompliance2 MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                "The compliance statement for SNMP entities that
                 implement the PMIPV6-MIB for monitoring configuration
                 related information, registration details, and
                 statistics on a mobile access gateway.

                 There are a number of INDEX objects that cannot be
                 represented in the form of OBJECT clauses in
                 SMIv2, but for which there are compliance
                 requirements, expressed in OBJECT clause form in
                 this description:

                  -- OBJECT      pmip6LmaLMAAType
```

```
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6LmaLMAA
                --     object.
                --
                -- OBJECT      pmip6LmaLMAA
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6LmaLMAA
                --     object.
                --
                -- OBJECT      pmip6LmaHomeNetworkPrefixType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6LmaHomeNetworkPrefix object.
                --
                -- OBJECT      pmip6LmaHomeNetworkPrefix
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6LmaHomeNetworkPrefix object.
                --
              "
        MODULE  -- this module
            MANDATORY-GROUPS { pmip6LmaSystemGroup,
                               pmip6LmaConfigurationGroup
                             }
        ::= { pmip6Compliances 10 }

    pmip6LmaReadOnlyCompliance MODULE-COMPLIANCE
        STATUS  current
        DESCRIPTION
            "The compliance statement for SNMP entities
             which implement the PMIPV6-MIB.
             There are a number of INDEX objects that cannot be
             represented in the form of OBJECT clauses in
             SMIv2, but for which there are compliance
             requirements, expressed in OBJECT clause form in
             this description:
              -- OBJECT      pmip6LmaLMAAType
```

```
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6LmaLMAA
                --     object.
                --
                -- OBJECT      pmip6LmaLMAA
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6LmaLMAA
                --     object.
                --
               "
          MODULE  -- this module
              MANDATORY-GROUPS { pmip6LmaSystemGroup
                               }
          OBJECT  pmip6LmaStatus
          MIN-ACCESS  read-only
          DESCRIPTION
                 "Write access is not required."
          ::= { pmip6Compliances 11 }

     pmip6LmaReadOnlyCompliance2 MODULE-COMPLIANCE
          STATUS  current
          DESCRIPTION
              "The compliance statement for SNMP entities that
               implement the PMIPV6-MIB without support
               for read-write (i.e., in read-only mode) and for
               monitoring configuration related information,
               registration details, and statistics on a mobile
               access gateway.

               There are a number of INDEX objects that cannot be
               represented in the form of OBJECT clauses in
               SMIv2, but for which there are compliance
               requirements, expressed in OBJECT clause form in
               this description:

                -- OBJECT      pmip6LmaLMAAType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6LmaLMAA
                --     object.
```

```
                --
                -- OBJECT      pmip6LmaLMAA
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the pmip6LmaLMAA
                --     object.
                --
                -- OBJECT      pmip6LmaHomeNetworkPrefixType
                -- SYNTAX      InetAddressType { ipv6(2) }
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6LmaHomeNetworkPrefix object.
                --
                -- OBJECT      pmip6LmaHomeNetworkPrefix
                -- SYNTAX      InetAddress (SIZE(16))
                -- DESCRIPTION
                --     This MIB module requires support for global
                --     IPv6 addresses for the
                --     pmip6LmaHomeNetworkPrefix object.
                --
              "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6LmaSystemGroup,
                                   pmip6LmaConfigurationGroup
                                 }
            OBJECT  pmip6LmaStatus
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT      pmip6LmaMinDelayBeforeBCEDelete
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT      pmip6LmaMaxDelayBeforeNewBCEAssign
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT      pmip6LmaTimestampValidityWindow
            MIN-ACCESS  read-only
            DESCRIPTION
                   "Write access is not required."
            OBJECT      pmip6LmaHomeNetworkPrefixLifeTime
            MIN-ACCESS  read-only
```

```
            DESCRIPTION
                   "Write access is not required."

            ::= { pmip6Compliances 12 }

       pmip6MagNotificationCompliance MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                   "The compliance statement for SNMP entities that
                    implement the PMIPV6-MIB and support Notification
                    from the mobile access gateway.
                    "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6MagNotificationGroup
                                 }
            ::= { pmip6Compliances 13 }

       pmip6LmaNotificationCompliance MODULE-COMPLIANCE
            STATUS  current
            DESCRIPTION
                   "The compliance statement for SNMP entities that
                    implement the PMIPV6-MIB and support Notification
                    from the LMA.
                    "
            MODULE  -- this module
                MANDATORY-GROUPS { pmip6LmaNotificationGroup
                                 }
            ::= { pmip6Compliances 14 }

       END
```

6. Security Considerations

There are a number of management objects defined in this MIB module with a MAX-ACCESS clause of read-write. Such objects may be considered sensitive or vulnerable in some network environments. The support for SET operations in a non-secure environment without proper protection can have a negative effect on network operations. These are the tables and objects and the corresponding sensitivity/vulnerability:

pmip6MagStatus:
pmip6LmaStatus:
The value of these objects is used to enable or disable the PMIPv6 functionality on the corresponding PMIPv6 entity. Access to these MOs may be abused to disrupt the communication that depends on the PMIPv6 functionality.
pmip6MobileNodeGeneratedTimestampInUse:
pmip6FixedMagLinkLocalAddressOnAllAccessLinksType:
pmip6FixedMagLinkLocalAddressOnAllAccessLinks:
pmip6FixedMagLinkLayerAddressOnAllAccessLinks:
pmip6MagEnableMagLocalRouting:
pmip6MagHomeNetworkPrefixLifeTime:
pmip6LmaMinDelayBeforeBCEDelete:
pmip6LmaMaxDelayBeforeNewBCEAssign:
pmip6LmaTimestampValidityWindow:
pmip6LmaHomeNetworkPrefixLifeTime:
Access to the above MOs may be abused to misconfigure PMIPv6 entities and disrupt communications.

Some of the readable objects in this MIB module (i.e., objects with a MAX-ACCESS other than not-accessible) may be considered sensitive or vulnerable in some network environments. It is thus important to control even GET and/or NOTIFY access to these objects and possibly to even encrypt the values of these objects when sending them over the network via SNMP. These are the tables and objects and their sensitivity/vulnerability:

pmip6LmaHomeNetworkPrefixType:
pmip6LmaHomeNetworkPrefix:
pmip6LmaHomeNetworkPrefixLength:
The above address-related objects may be considered to be particularly sensitive and/or private.
pmip6MagMnIdentifier:
pmip6MagMnLLIdentifier:
pmip6LmaMnIdentifier:
pmip6LmaMnLLIdentifier:

pmip6MagProfMnIdentifier:
The above MN Identifier-related MOs may be used to identify users. These may be considered to be sensitive and/or private.

SNMP versions prior to SNMPv3 did not include adequate security. Even if the network itself is secure (for example by using IPsec), even then, there is no control as to who on the secure network is allowed to access and GET/SET (read/change/create/delete) the objects in this MIB module.

It is RECOMMENDED that implementers consider the security features as provided by the SNMPv3 framework (see [RFC3410], section 8), including full support for the SNMPv3 cryptographic mechanisms (for authentication and privacy).

Further, deployment of SNMP versions prior to SNMPv3 is NOT RECOMMENDED. Instead, it is RECOMMENDED to deploy SNMPv3 and to enable cryptographic security. It is then a customer/operator responsibility to ensure that the SNMP entity giving access to an instance of this MIB module is properly configured to give access to the objects only to those principals (users) that have legitimate rights to indeed GET or SET (change/create/delete) them.

7. IANA Considerations

IANA should assign

1. a base arc in the 'mib-2' (standards track) OID tree for the 'pmip6TCMIB' MODULE-IDENTITY defined in the PMIPV6-TC-MIB.
2. a base arc in the 'mib-2' (standards track) OID tree for the 'pmip6MIB' MODULE-IDENTITY defined in the PMIPV6-MIB.

8. References

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