

Appendiks/Appendix 1.

```
SNMPv2-SMI DEFINITIONS ::= BEGIN
```

```
org          OBJECT IDENTIFIER ::= { iso 3 } -- "iso" = 1
dod          OBJECT IDENTIFIER ::= { org 6 }
internet    OBJECT IDENTIFIER ::= { dod 1 }
directory   OBJECT IDENTIFIER ::= { internet 1 }
mgmt        OBJECT IDENTIFIER ::= { internet 2 }
mib-2       OBJECT IDENTIFIER ::= { mgmt 1 }
transmission OBJECT IDENTIFIER ::= { mib-2 10 }
experimental OBJECT IDENTIFIER ::= { internet 3 }
private     OBJECT IDENTIFIER ::= { internet 4 }
enterprises OBJECT IDENTIFIER ::= { private 1 }
security    OBJECT IDENTIFIER ::= { internet 5 }
snmpV2      OBJECT IDENTIFIER ::= { internet 6 }
```

```
MODULE-IDENTITY MACRO ::=
```

```
BEGIN
```

```
    TYPE NOTATION ::=
```

```
        "LAST-UPDATED" value(Update ExtUTCTime)
        "ORGANIZATION" Text
        "CONTACT-INFO" Text
        "DESCRIPTION" Text
        RevisionPart
```

```
    VALUE NOTATION ::=
```

```
        value(VALUE OBJECT IDENTIFIER)
```

```
    RevisionPart ::=
```

```
        Revisions
```

```
        | empty
```

```
    Revisions ::=
```

```
        Revision
```

```
        | Revisions Revision
```

```
    Revision ::=
```

```
        "REVISION" value(Update ExtUTCTime)
```

```
        "DESCRIPTION" Text
```

```
    -- a character string as defined in section 3.1.1
```

```
    Text ::= value(IA5String)
```

```
END
```

```
OBJECT-IDENTITY MACRO ::=
```

```
BEGIN
```

```
    TYPE NOTATION ::=
```

```
        "STATUS" Status
```

```
        "DESCRIPTION" Text
```

```
        ReferPart
```

```
    VALUE NOTATION ::=
```

```
        value(VALUE OBJECT IDENTIFIER)
```

```
    Status ::=
```

```
        "current"
```

```
        | "deprecated"
```

```
        | "obsolete"
```

```
    ReferPart ::=
```

```
        "REFERENCE" Text
```

```
        | empty
```

```
    Text ::= value(IA5String)
```

```
END
```

```

ObjectName ::=
    OBJECT IDENTIFIER
NotificationName ::=
    OBJECT IDENTIFIER

ObjectSyntax ::=
    CHOICE {
        simple
            SimpleSyntax,
            -- note that SEQUENCES for conceptual tables and
            -- rows are not mentioned here...

        application-wide
            ApplicationSyntax
    }

SimpleSyntax ::=
    CHOICE {
        -- INTEGERS with a more restrictive range
        -- may also be used
        integer-value          -- includes Integer32
            INTEGER (-2147483648..2147483647),

        -- OCTET STRINGS with a more restrictive size may also be used
        string-value
            OCTET STRING (SIZE (0..65535)),
        objectID-value
            OBJECT IDENTIFIER
    }

Integer32 ::=
    INTEGER (-2147483648..2147483647)

ApplicationSyntax ::=
    CHOICE {
        ipAddress-value      IPAddress,
        counter-value        Counter32,
        timeticks-value      TimeTicks,
        arbitrary-value      Opaque,
        big-counter-value    Counter64,
        unsigned-integer-value -- includes Gauge32
            Unsigned32
    }

IPAddress ::=
    [APPLICATION 0]    IMPLICIT OCTET STRING (SIZE (4))
Counter32 ::=
    [APPLICATION 1]    IMPLICIT INTEGER (0..4294967295)
Gauge32 ::=
    [APPLICATION 2]    IMPLICIT INTEGER (0..4294967295)
TimeTicks ::=
    [APPLICATION 3]    IMPLICIT INTEGER (0..4294967295)
-- for backward-compatibility only
Opaque ::=
    [APPLICATION 4]    IMPLICIT OCTET STRING
-- for counters that wrap in less than one hour with only 32 bits
Counter64 ::=
    [APPLICATION 6]    IMPLICIT INTEGER (0..18446744073709551615)

```

```

OBJECT-TYPE MACRO ::=
BEGIN
    TYPE NOTATION ::=
        "SYNTAX" Syntax
        "MAX-ACCESS" Access
        "STATUS" Status
        "DESCRIPTION" Text
        ReferPart
    VALUE NOTATION ::=
        value(VALUE ObjectName)
    Syntax ::=
        type
    Access ::=
        "not-accessible"
        | "accessible-for-notify"
        | "read-only"
        | "read-write"
        | "read-create"
    Status ::=
        "current"
        | "deprecated"
        | "obsolete"
    ReferPart ::=
        "REFERENCE" Text
        | empty
    Text ::= value(IA5String)
END

NOTIFICATION-TYPE MACRO ::=
BEGIN
    TYPE NOTATION ::=
        ObjectsPart
        "STATUS" Status
        "DESCRIPTION" Text
        ReferPart

    VALUE NOTATION ::=
        value(VALUE NotificationName)
    ObjectsPart ::=
        "OBJECTS" "{" Objects "}"
        | empty
    Objects ::=
        Object
        | Objects "," Object
    Object ::=
        value(ObjectName)
    Status ::=
        "current"
        | "deprecated"
        | "obsolete"

    ReferPart ::=
        "REFERENCE" Text
        | empty

    Text ::= value(IA5String)
END
END

```