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Technical Specification

Digital Video Broadcasting (DVB);
SNMP MIB for test and measurement applications
in DVB systems

European Broadcasting Union   Union Européenne de Radio-Télévision

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Foreword

This Technical Specification (TS) has been produced by Joint Technical Committee (JTC) of the European Broadcasting Union (EBU), Comité Européen de Normalisation ELECtrotechnique (CENELEC) and the European Telecommunications Standards Institute (ETSI).

NOTE: The EBU/ETSI JTC Broadcast was established in 1990 to co-ordinate the drafting of standards in the specific field of broadcasting and related fields. Since 1995 the JTC Broadcast became a tripartite body by including in the Memorandum of Understanding also CENELEC, which is responsible for the standardization of radio and television receivers. The EBU is a professional association of broadcasting organizations whose work includes the co-ordination of its members' activities in the technical, legal, programme-making and programme-exchange domains. The EBU has active members in about 60 countries in the European broadcasting area; its headquarters is in Geneva.

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Founded in September 1993, the DVB Project is a market-led consortium of public and private sector organizations in the television industry. Its aim is to establish the framework for the introduction of MPEG-2 based digital television services. Now comprising over 200 organizations from more than 25 countries around the world, DVB fosters market-led systems, which meet the real needs, and economic circumstances, of the consumer electronics and the broadcast industry.

1 Scope

The present document contains a recommendation for the SNMP MIB (Simple Network Management Protocol Management Information Base) that addresses the relevant issues of the DVB Measurement Guidelines [1].

The intention of this recommendation was to create a MIB that can be used in all test and measurement instruments which provide information on parameters defined in the DVB Measurement Guidelines [1]. It can also be implemented in other equipment that provides, besides its main functionalities, information on parameters as defined in the DVB Measurement Guidelines, and which is strictly speaking not a test and measurement instrument.

This MG MIB is self-sufficient in the sense that it does not require any other MIB for proper operation. It contains all administrative information necessary for its operation, and it provides a description of the data base for all parameters in TR 101 290 [1] that are suitable for network management; i.e. it does not address out-of-service measurements or similar issues.

Although this MIB is comprehensive in this sense for the time being, the plan is to update it whenever the DVB Measurement Guidelines should be updated.

The lower layers of the SNMP protocol stack were not addressed for the purpose of the present document. It was understood that there is a variety of existing standards which are applicable for different application scenarios. The selection of such a standard e.g. for the physical layer will most likely be determined by the existing network management systems and their communications means. Neither the speed of the links in the management network is considered, nor are the security aspects addressed.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

[1]   ETSI TR 101 290: "Digital Video Broadcasting (DVB); Measurement guidelines for DVB systems".

[2]   IETF RFC 2579 (1999) Textual Conventions for SMIv2".

[3]   IETF RFC 2578 (1999) Structure of Management Information Version 2 (SMIv2)".

[4]   IETF RFC 2576 (2000) Coexistence between Version 1, Version 2, and Version 3 of the Internet standard Network Management Framework".

[5]   ISO/IEC 13818-1: "Information Technology - Generic coding of moving pictures and associated audio: Systems, Recommendation H.222.0".

[6]   ETSI EN 300 421: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for 11/12 GHz satellite services".

[7]   ETSI EN 300 429: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for cable systems".

[8]   ETSI EN 300 468: "Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB systems".

[9]   ETSI EN 300 744: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for digital terrestrial television".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

MPEG-2: Refers to the ISO/IEC 13818 series. Systems coding is defined in part 1. Video coding is defined in part 2. Audio coding is defined in part 3.

multiplex: stream of all the digital data carrying one or more services within a single physical channel

Service Information (SI): Digital data describing the delivery system, content and scheduling/timing of broadcast data streams, etc. It includes MPEG-2 Program Specific Information (PSI) together with independently defined extensions.

Transport Stream (TS): A TS is a data structure defined in ISO/IEC 13818-1 [5]. It is the basis of the Digital Video Broadcasting (DVB) related standards.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

BAT	Bouquet Association Table
BER	Bit Error Rate
CA	Conditional Access
DVB-T	Digital Video Broadcasting baseline system for digital Terrestrial television (see EN 300 744 [9])
ECM	Entitlement Control Message
EIT	Event Information Table
EMM	Entitlement Management Message
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
MER	Modulation Error Ratio
MIB	Management Information Base
MIP	Mega-frame Initialization Packet
MPEG	Moving Picture Experts Group
NIT	Network Information Table
OID	Object IDentifier
PAT	Program Association Table
PCR	Program Clock Reference
PID	Packet IDentifier
PMT	Program Map Table
PSI	MPEG-2 Program Specific Information (as defined in ISO/IEC 13818-1 [5])
RF	Radio Frequency
RST	Running Status Table (see EN 300 468 [8])
SDT	Service Description Table
SFN	Single Frequency Network
SI	Service Information
SNMP	Simple Network Management Protocol
TDT	Time and Date Table
TOT	Time Offset Table
TS	Transport Stream
TV	TeleVision
UTC	Universal Time Co-ordinated

4   General

4.1   Introduction

The management of complex networks is an important task, especially today when content in different formats is supposed to be passed through different networks in an almost transparent way. The timely information on irregularity, disruptions, or even only significant changes in the networks, is an important and indispensable tool for the maintenance of a certain Quality-of-Service (QoS). It also is a necessary tool for optimizing the performance of these networks.

For the collection of this information, its processing and provision to a central point for decision making, i.e. the "manager", different approaches have been developed for different types of networks. Procedures for network management have long been standardized in the telecommunications world, and virtually all network equipment supports these standards. This also holds for the Internet which is largely based on telecommunications networks.

For analogue TV broadcast networks, the history gives us a very different picture. Although test signals were standardized at a rather early stage, the actual network management information relied very much on proprietary standards developed typically by national broadcasters over the last five decades. These proprietary solutions still dominate most analogue TV networks. They have grown and have been amended in the past to fulfil ever new requirements.

With the introduction of digital television, there is now a new chance to work towards a standardized approach for the management of such networks. Within the DVB world, the Measurement Guidelines recommendation has developed into a quasi-standard in which most of the important tests and measurements have been defined. This creates a unique opportunity for a standardized solution for most network management tasks in DVB networks. The experience of network management in the telecommunications world is available and can be used. Open software platforms for the network managers which can utilize the Management Information resident in the test equipment, are also available. Another great advantages could be the easy exchange of information between different network managers for different networks, especially in a scenario dominated by the convergence between the telecommunications world and the broadcast world.

The final aim is that whatever equipment is used, the measurements and tests will be directly comparable to those with another equipment.

4.2   The DVB Measurement Guidelines

The recommendations for test and measurements in DVB systems were developed by the DVB Measurement Group. The first version was published by ETSI in 1997 as ETR 290 "Measurement Guidelines for DVB sytems". A revised and amended version 1.2.1 was published by ETSI as TR 101 290 [1] in May 2001 under the same title. Here the experience with the implementation of tests and measurements in the first generation of instruments could be built on. In addition, further inputs came from the results of several European research projects as well as from the usage of T&M instruments for the set-up and operation of the new extended DVB networks.

The Measurement Guidelines contain definitions for tests and measurement procedures. Various sections address the tests and measurements in the MPEG-2 Transport Stream domain, and the different types of DVB networks, i.e. satellite, cable, terrestrial, and discuss their particularities. The Guidelines also contain a number of annexes which provide theoretical background information, and describe and display typical test set-ups for the parameters.

Numerical values for specific quality levels cannot be found in the Measurement Guidelines. It was understood that these definitions fall into the responsibility of the service providers and network operators who need to agree on economically feasible quality parameters.

The result from any implementation of a test or a measurement in an instrument that follows the definitions in the DVB Measurement Guidelines, will be directly comparable with the result of an equivalent instrument of entirely different make.

To achieve this, it was sometimes necessary to include rather detailed descriptions of auxiliary parameters in the Guidelines. A typical example could be the various parameters for PCR measurements. This proved to be unavoidable to obtain comparability of results and has worked out well so far.

The best proof is the vast number of different manufacturers that offer test and measurement equipment for DVB systems and provide compatibility with TR 101 290 [1].

5 Requirements for the SNMP Management Information Base (MIB)

The SNMP (Simple Network Management Protocol) that was selected as the protocol best suited for the application in question, is widely used in the telecommunications world and in many other areas. Tools are easily available and a large number of software platforms support this protocol.

Although it has its limitations, SNMP can serve all purposes defined in the present document. The expertise for the usage of SNMP exists in many organizations, and experience has been gained over many years.

For the Management Information Base (MIB), several requirements were identified:

1) The Measurement Guidelines MIB should be allocated under the DVB MG OID and should consist of initially three MIB modules: mgSystem {2696.3.1}, tr101290 {2696.3.2}, and mgSignalCharacteristics {2696.3.3}. The MIB module labelled mgSignalCharacteristics {2696.3.3} should include modules describing the structure of the respective MPEG-2 Transport Stream(s): mgTSStructure {1}, and the signal characteristics of the respective RF signal: mgRFCharacteristics {2}.

2) The module mgSystem should contain the administrative information which is needed to provide a self-sufficient MG MIB.

3) The MG MIB should accommodate information for single input devices as well as for multiple input devices with simultaneous analysis e.g. by implementing tables indexed by input number. No facilities are provided for the situation where one input scans multiple signals.

4) The specification should describe how the information is provided by the agent. It will not specify how the manager makes use of it.

5) The MG MIB should only support those parameters of TR 101 290 [1] which are suitable for network monitoring applications. This excludes e.g. out-of-service measurements.

6) Parameters that are needed for the management of a specific measurement should be supported, the management of the instrument itself is outside the scope of the MG MIB.

7) The MIB module mgSignalCharacteristics should provide information on the structure of the TS and/or the RF signal characteristics which are helpful to the manager in interpreting results.

8) The MG MIB as a whole should be completely independent and self-contained.

9) Traps should be included in a reasonable method so as not to overflow the management network.

10) No constraints should be applied for the implementation of other MIB modules (e.g. MIB-II, proprietary MIBs).

11) It should be recommended that network equipment manufacturers should mirror in their proprietary MIBs the principle structure of the MG MIB.

12) The specification of the MG MIB should be limited to the SNMP protocol layer, no lower layers should be addressed (standard solutions for IP or other layers should be preferred).

13) A table should be included in the MG MIB that provides the information which TR 101 290 [1] parameters are available on a specific instrument.

14) The validity of measurement values should be indicated.

15) Control functions should be included in the MG MIB, e.g. for control of thresholds for alarms.

16) A recommendation should be given to manufacturers to provide mechanisms for the setting of the time base of an instrument according to the locally available reference time.

17) The information on the time when a measurement value was requested from the measurement equipment should be provided.

18) All definitions should be hardware and software platform independent.

19) SNMP version 2 should be used for the definitions, incompatibilities with other versions should be avoided in the definitions.

20) The structure of the MG MIB should follow as far as possible the structure of TR 101 290 [1].

Figure 1 visualises the principle structure of the MG MIB:
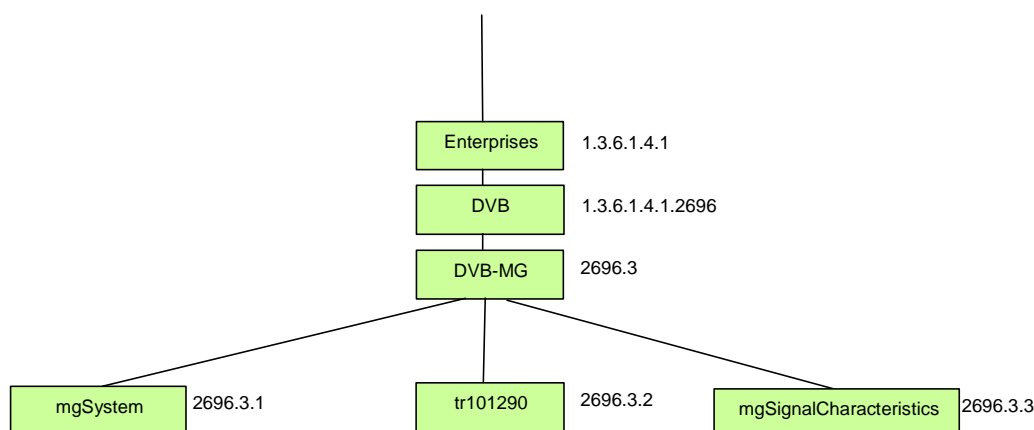
Figure 1: OID tree

The text files of the three MIB modules mgSystem, TR 101 290 [1] and mgSignalCharacteristics can be found in separate clauses of the present document.

6   Detailed TR 101 290 MIB structure

6.1   Multiple Transport Stream/RF inputs

DVB monitoring equipment and other equipment to which the MIBs apply, can often handle more than one input. The TR 101 290 MIB and the Signal Characteristics MIB handle this by defining a table for each measurement or test. Each row in the table represents the values for one input.

The tables are indexed by an object of type `InputNumber`. The values run from one up to the number of inputs on the equipment. On a single input monitoring/measuring device, `InputNumber` objects always have the value one.

If the monitoring equipment is used within a DVB-T system supporting hierarchical operation, one RF input will give rise to two separate Transport Streams. Such equipment shall allocate two `InputNumber` values per RF input so that the tests on the high and low priority Transport Streams can be accessed separately.

6.2   Standard information structure

The TR 101 290 MIB provides more information than just the measurement value or test state. Throughout the MIB, this additional information is structured using the in a standard way. Table 1 shows the basis for a standard table row. Certain measurements and tests extend this for their own purposes.

The first column is called "Name suffix" because SNMP requires all names within a MIB to be unique. For example the Transport Stream tests are in a different table from the SFN MIP tests. In these tables, the full names for the first variable are tsTestsSummary**InputNumber** and mipSyntax**InputNumber** respectively.

Several tables in the MIB have additional index objects, for example to select a specific PID or to select a specific test from among a closely related set. These objects are inserted directly after the `InputNumber`.

The first nine objects (`...InputNumber` to `...ActiveTime`) in the table apply to both tests and measurements. This is because all measurements in the MIB have associated limit value(s). If the measured value is outside these limits the MIB treats this as a test failure for that measurement.

The final two objects (`...MeasurementState` and `...Value`) apply only to measurements.

The necessary parameters and limit values for a measurement or test are defined in the related "Preferences" branch of the MIB tree, not in the standard table row.

6.3 ...Counter objects

The `...Counter` objects in the standard table row are associated with the `...CounterReset` and `...CounterDiscontinuity` objects. This complies with RFC 2578 [3] clause 7.1.6 regarding the use of counters.

In a system where more than one SNMP manager accesses a `...Counter` object, it is difficult to coordinate resetting of the counter. In these circumstances, the managers can cooperate best by:

1) never using `...CounterReset`;

2) reading the `...Counter` value at the start and end of a measurement period, then subtracting the values to find the number of errors in that period.

6.4 ...ActiveTime

This is a monotonically increasing value in units of seconds that represents the total amount of time for which the instrument has been able to perform a particular test or measurement. The existence of this attribute allows a management system to calculate a realistic errors per second value for any test.

"Able to perform the test" corresponds to the `...State` objects having the value 'pass' or 'fail'.

Here are some reasons which might prevent the measuring equipment from performing the test:

1) because some more serious error condition (for example loss of input signal) means that the measuring equipment does not have the information it needs to perform the test;

2) because the measuring equipment is designed to operate in a polled mode where it looks at one input at a time for certain measurements;

3) because the measuring equipment has been placed in an inactive state by an operator.

6.5 Status error and Event error

The TR 101 290 MIB classifies test failures into two categories, "Status error" and "Event error".

A "Status error" is one whose pass/fail state is well defined at any point in time. For example, Transport Stream test 1.1, TS_sync_loss is is a "Status error" because there are well defined transitions into and out of the loss of synchronization state. When the Transport Stream is synchronized, the test passes, when the Transport Stream is not synchronized the test fails.

An "Event error" is defined as the occurrence of a discrete event. For example, Transport Stream test 1.2, Sync_byte_error is an "Event error" because an incorrect sync. byte arrives at a discrete time. For this class of error, there is no obvious way to derive a continuous pass/fail status and TR 101 290 [1] gives no guidance on this. However, for monitoring purposes, it is highly desirable to have a continuous pass/fail status available for all tests. The solution used here is to define a persistence timer for "Event error". Passing the test is then defined as "no error events of this type have occurred in the period PT immediately previous to now, where PT is the duration defined by the persistence timer." The duration of the persistence timer can be set and read via the object `controlEventPersistence` in the `tr101290Control` branch of the MIB.

Certain TR 101 290 tests are composites of "Status errors" and "Event errors". Here is the text for PAT_error_2 divided into its three components:

1) Sections with table_id 0x00 do not occur at least every 0,5 s on PID 0x0000. This is a "Status error" as can be seen by rewording it as "Passes if a section with table_id 0x00 has occurred on PID 0x0000 during the last 0,5 s".

2) Section with table_id other than 0x00 found on PID 0x0000. This is an "Event error".

3) Scrambling_control_field is not 00 for PID 0x0000. This is an "Event error".

These components have to be combined into a single error status. To do this, the status of each component is evaluated separately, applying the persistence timer separately to each "Event error" component. Then the components are combined according to the following algorithm:

if the status of any component is "fail"

result is "fail"

else if the status of any component is "unknown"

result is "unknown"

else

result is "pass"

Table 1

Name suffix	Syntax location of definition	Access	Description
`...InputNumber`	`InputNumber` TR 101 290 MIB	not-accessible	Identifies the input number on the equipment.
`...RowStatus` (optional)	`RowStatus` RFC 2579	read-create	This object is only present if it makes sense for the SNMP manager to create and/or delete table rows, for example to enable the bit rate limit test on an individual PID. See RFC 2579 [2] for details of using this object.
`...State`	`TestState` TR 101 290 MIB	read-only	This is the overall state of the test (not the measurement).
`...Enable`	`Enable` TR 101 290 MIB	read-create	Determines whether the test and its associated traps are enabled.
`...Counter`	`Counter32` RFC 2578	read-only	Count of the number of times this error has occurred. For Status errors this is the number of times the TestState has entered the fail state from some other state. For Error events this is the total number of events; the persistence timer is not taken into account.
`...CounterDiscontinuity`	`DateAndTime` RFC 2579	read-only	Indicates the last time at which there was a discontinuity in the `...Counter` variable.
`...CounterReset`	`TruthValue` RFC 2579	read-create	`...Counter` is reset to zero and `...CounterDiscontinuity` is set to the current time if 'true' is written to this variable.
`...LatestError`	`DateAndTime` RFC 2579	read-only	The timestamp at the most recent occurrence of the error. For Status errors this is the most recent time the TestState entered the fail state from some other state. For Error events this is the most recent occurrence; the persistence timer is not taken into account.
`...ActiveTime`	`ActiveTime` TR 101 290 MIB	read-only	This is a monotonically increasing value in units of seconds that represents the total amount of time for which the instrument has been able to perform a particular test or measurement.
`...MeasurementState` (measurements only)	`MeasurementState` TR 101 290 MIB	read-only	This indicates the validity of the measurement.
`...Value` (measurements only)	`FloatingPoint` TR 101 290 MIB	read-only	This indicates the measured value.

6.6 Test and Measurement status

If a specific test or measurement is not implemented at all in the measurement equipment, the appropriate response at the SNMP protocol layer is used. This response is formatted according to the rules for the SNMP version being used (return ErrorStatus=noSuchName for version 1, return value of noSuchObject or noSuchInstance for version 2).

If a test or measurement is implemented, the ...State and ...MeasurementState objects provide further information on its state.

The `TestState` textual convention is used to represent the state of a single test and can have the following values:

Value	Meaning
`disabled`	The test has been disabled by setting the `testEnable` bit of its `...Enable` variable to zero.
`unknown`	The equipment cannot provide a value because of temporary circumstances (for example some other error makes this test impossible to evaluate).
`pass`	The test is enabled, can be evaluated and is not failing.
`fail`	For a "Status error", means that the state of the input is currently in error. For an "Event error", 'fail' means that an error event has occurred within the most recent persistence interval as defined by the `controlEventPersistence` object.

The MeasurementState textual convention represents the state of a measurement in a similar way:

Value	Meaning
`disabled`	The test has been disabled by setting the `testEnable` bit of its `...Enable` variable to zero.
`unknown`	The equipment cannot provide a value because of temporary circumstances, for example some other signal condition makes this measurement impossible.
`abnormal`	The measurement value is incorrect for reasons connected with that measurement itself. For example the measurement may be out of range. A measurement value is still provided and users or managers with knowledge of the behaviour of this specific measuring equipment may be able to interpret the value.
`normal`	The measurement is enabled and has been evaluated.

6.7   Traps

Both the TR 101 290 MIB and the Signal Characteristics MIB specify traps as a mechanism to inform the manager of significant events.

6.7.1   TR 101 290 MIB

The TR 101 290 MIB specifies 3 traps which cover all the measurements and tests in the MIB:

Trap name	Description
`testFailTrap`	This trap is sent when a test which is not associated with a measurement fails. This trap is triggered by the transition of the `...State` object associated with the test to the `fail` state from any other state.
`measurementFailTrap`	Trap which is sent when a test which is associated with a measurement fails. This trap is triggered by the transition of the `...State` object associated with the test to the `fail` state from any other state.
`measurementUnknownTrap`	Trap which is sent when a measurement value becomes unavailable. This trap is triggered by the transition of the `...MeasurementState` object associated with the measurement to the `unknown` state from any other state.

To identify which test or measurement triggered the trap, the object identifier (OID) of the test/measurement is included in the trap message to the manager. Also included is the time at which the trap was generated, a simplified summary of all the current error conditions and the input number which caused the trap. The `measurementFailTrap` also includes the measurement value which caused the failure.

The summary of the current error conditions is contained in the object `trapControlFailureSummary`. This bit string contains a summary of all the test failures. If the bit for the test is set to one, that test is in a fail state. After it has been informed of an error condition via the trap, the manager can poll this object to monitor progress in clearing the error.

A very simple management application can be created by polling `trapControlFailureSummary` and displaying this information to the operator.

Transmission of these three traps is subject to rate control through the object `trapControlRateStatus`.

6.7.2   Signal Characteristics MIB

The Signal Characteristics MIB specifies 2 traps:

Trap name	Description
tsStructureChangeTrap	Trap which is sent when any value within the mgTSStructure branch of this MIB changes. Transmission of the trap is subject to rate control through the object structureTrapControlRateStatus.
rfCharacteristicsChangeTrap	Trap which is sent when a value in the mgRFCharacteristics branch of the MIB changes substantially. Transmission of the trap is subject to rate control through the object rfCharacteristicsTrapControlRateStatus.

To identify the trigger for the trap, the object identifier (OID) of the object that changed is included in the trap message to the manager. Also included is the time at which the trap was generated and the input number which caused the trap.

6.7.3   Rate control

The TR 101 290 MIB and the Signal Characteristics MIB use similar methods of trap rate control. Without trap rate control, the situation can arise where a single event creates many errors at each of the monitoring points on a network. This could create too many traps for the manager to handle.

Trap rate control is applied separately to each input of a multi-input measuring equipment.

The rate control is based on a minimum inter-trap time period and a status object. In the case of the TR 101 290 MIB, an additional failure summary object is provided to help the manager to efficiently deal with error conditions. The generation of traps by individual tests can be controlled via bits in their ...Enable objects.

In the case of the TR 101 290 MIB, the status object is called trapControlRateStatus. The value disabled means that traps are never sent. A manager can set this value to disable all traps. The value enabled means that a trap will be sent when triggered.

When a trap is sent, the agent changes the value of trapControlRateStatus to enabledThrottled. In this state the agent will not transmit any more traps. The agent automatically changes the value back to enabled when the time specified by trapControlPeriod expires. A management application may set the value from enabledThrottled to enabled at any time if it is prepared to receive traps faster, but it must not attempt to set the value to enabledThrottled.

This single status applies to all the trap types, so for example if an agent sends a testFailTrap it will not send a measurementFailTrap until the trapControlPeriod expires.

6.8   Conformance and feature availability

6.8.1   Use of SMI V2 conformance statements

The TR 101 290 and Signal Characteristics MIBs contain MODULE-COMPLIANCE and OBJECT-GROUP sections, as required by RFC 2576 [4]. These sections are at a broad level. For example in the Signal Characteristics MIB, there is a MODULE-COMPLIANCE for the complete set of Transport Stream information and another for the complete set of RF information.

6.8.2   Capabilities

In a monitoring network consisting of heterogeneous equipment, static MODULE-COMPLIANCE and even AGENT-CAPABILITIES statements are too inflexible. They also do not give the information in an application-oriented form.

The TR 101 290 MIB therefore incorporates a tr101290Capability branch which enables a management application to dynamically query which features are available on the measurement equipment.

We define test and measurement availability as follows:

> "A test or measurement is *available* on an instrument if the instrument is equipped (in terms of hardware, software and necessary licenses) to perform that test or measurement under normal operating conditions."

Test availability is therefore a static parameter; the MIB will always report the same availability (unless a new option is installed in the instrument). This is in contrast to the `MeasurementStatus` objects in the MIB, where the validity of the measurement depends on dynamic conditions, for example has the instrument had enough time to make the measurement yet.

7   DVB-MGSYSTEM-MIB

```
--
-- DVB-MGSYSTEM-MIB.my
-- MIB generated by MG-SOFT Visual MIB Builder Version 2.5 Build 225
-- Friday, November 09, 2001 at 15:04:43
--

    DVB-MGSYSTEM-MIB DEFINITIONS ::= BEGIN

        IMPORTS
            enterprises, TimeTicks, OBJECT-TYPE, MODULE-IDENTITY
                FROM SNMPv2-SMI
            DisplayString
                FROM SNMPv2-TC;


        mgSystem MODULE-IDENTITY
            LAST-UPDATED "200105181600Z"
            ORGANIZATION
                "DVB"
            CONTACT-INFO
                "DVB project
                European Broadcasting Union
                CH-1218 GRAND SACONNEX (Geneva)
                Switzerland
                Tel: +41 22 717 21 11
                Fax: +41 22 717 24 81"
            DESCRIPTION
                "DVB Measurement Group MIB to support TR 101 290.
                This mgSystem module contains general system information, similar to that provided
by MIB-II."
            ::= { mg 1 }



--
-- Node definitions
--

        dvb OBJECT IDENTIFIER ::= { enterprises 2696 }

        mg OBJECT IDENTIFIER ::= { dvb 3 }

        mgSysDescr OBJECT-TYPE
            SYNTAX DisplayString
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "A textual description of the entity. This value
                should include the full name and version
                identification of the system's hardware type,
                software operating-system, and networking
                software. It is mandatory that this only contain
                printable ASCII characters."
            ::= { mgSystem 1 }

        mgSysObjectID OBJECT-TYPE
            SYNTAX OBJECT IDENTIFIER
            MAX-ACCESS read-only
            STATUS current
```

```
DESCRIPTION
    "The vendor's authoritative identification of the
    network management subsystem contained in the
    entity. This value is allocated within the SMI
    enterprises subtree (1.3.6.1.4.1) and provides an
    easy and unambiguous means for determining 'what
    kind of box' is being managed. For example, if
    vendor 'Flintstones, Inc.' was assigned the
    subtree 1.3.6.1.4.1.4242, it could assign the
    identifier 1.3.6.1.4.1.4242.1.1 to its 'Fred
    Router'."
::= { mgSystem 2 }

mgSysUpTime OBJECT-TYPE
    SYNTAX TimeTicks
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The time (in hundredths of a second) since the
        network management portion of the system was last
        re-initialized."
    ::= { mgSystem 3 }

mgSysContact OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The textual identification of the contact person
        for this managed node, together with information
        on how to contact this person."
    ::= { mgSystem 4 }

mgSysName OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "An administratively-assigned name for this
        managed node. By convention, this is the node's
        fully-qualified domain name."
    ::= { mgSystem 5 }

mgSysLocation OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The physical location of this node (e.g.,
        'telephone closet, 3rd floor')."
    ::= { mgSystem 6 }

mgSysServices OBJECT-TYPE
    SYNTAX INTEGER (0..127)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "A value which indicates the set of services that
        this entity primarily offers.

        The value is a sum. This sum initially takes the
        value zero, Then, for each layer, L, in the range
        1 through 7, that this node performs transactions
        for, 2 raised to (L - 1) is added to the sum. For
        example, a node which performs primarily routing
        functions would have a value of 4 (2^(3-1)). In
        contrast, a node which is a host offering
        application services would have a value of 72
        (2^(4-1) + 2^(7-1)). Note that in the context of
        the Internet suite of protocols, values should be
        calculated accordingly:

            layer  functionality
                1 physical (e.g., repeaters)
                2 datalink/subnetwork (e.g., bridges)
                3 internet (e.g., IP gateways)
```

```
                        4 end-to-end  (e.g., IP hosts)
                        7 applications (e.g., mail relays)

                For systems including OSI protocols, layers 5 and
                6 may also be counted."
            ::= { mgSystem 7 }

        mgSysSerialNumber OBJECT-TYPE
            SYNTAX DisplayString (SIZE (0..100))
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Manufacturer Serial Number"
            ::= { mgSystem 8 }

        mgSysVersion OBJECT-TYPE
            SYNTAX DisplayString (SIZE (0..100))
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Manufacturer Version Number (hardware and software)"
            ::= { mgSystem 9 }


    END

--
-- DVB-MGSYSTEM-MIB.my
--
```

8 DVB-MGSIGNALCHARACTERISTICS-MIB

```
--
-- DVB-MGSIGNALCHARACTERISTICS-MIB.my
-- MIB generated by MG-SOFT Visual MIB Builder Version 2.5 Build 225
-- Friday, November 09, 2001 at 15:02:25
--

    DVB-MGSIGNALCHARACTERISTICS-MIB DEFINITIONS ::= BEGIN

        IMPORTS
            PIDPlusOne, FloatingPoint, ServiceId, InputNumber, RateStatus,
            DeliverySystemType, Modulation
                FROM DVB-MGTR101290-MIB
            OBJECT-GROUP, MODULE-COMPLIANCE, NOTIFICATION-GROUP
                FROM SNMPv2-CONF
            enterprises, Unsigned32, OBJECT-TYPE, MODULE-IDENTITY, NOTIFICATION-TYPE
                FROM SNMPv2-SMI
            DateAndTime, TruthValue, TEXTUAL-CONVENTION
                FROM SNMPv2-TC;


        mgSignalCharacteristics MODULE-IDENTITY
            LAST-UPDATED "200111071400Z"
            ORGANIZATION
                "DVB"
            CONTACT-INFO
                "DVB project
                European Broadcasting Union
                CH-1218 GRAND SACONNEX (Geneva)
                Switzerland
                Tel: +41 22 717 21 11
                Fax: +41 22 717 24 81"
            DESCRIPTION
                "DVB Measurement Group Signal Characteristics MIB module.

                This mgSignalCharacteristics module contains Transport Stream structure information
                and RF characteristics information to assist in interpreting measurements and tests,
                in particular those specified in TR 101 290."
            ::= { mg 3 }


--
```

```
-- Textual conventions
--

        CASystemID ::= TEXTUAL-CONVENTION
            DISPLAY-HINT
                "x"
            STATUS current
            DESCRIPTION
                "Representation of CA_system_ID as found in a CA_descriptor.
                A value of -1 means that the CA_system_ID is unknown."
            SYNTAX INTEGER (-1..65535)

        EncryptionState ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "Used to indicate whether a service or PID is encrypted or unencrypted.
                The value unknown means that the information is not available, for
                example because the instrument does not gather this information."
            SYNTAX INTEGER
                {
                unencrypted(1),
                encrypted(2),
                unknown(3)
                }

        GuardInterval ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "Guard interval used in the DVB-T modulation scheme."
            SYNTAX INTEGER
                {
                guard1over32(1),
                guard1over16(2),
                guard1over8(3),
                guard1over4(4)
                }

        InnerCodeRate ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "This is used to specify the inner (Viterbi) code rate of
                a transmission."
            SYNTAX INTEGER
                {
                rateNone(1),
                rate1over2(2),
                rate2over3(3),
                rate3over4(4),
                rate5over6(5),
                rate7over8(6)
                }

        NetworkID ::= TEXTUAL-CONVENTION
            DISPLAY-HINT
                "x"
            STATUS current
            DESCRIPTION
                "This represents a network_id or original_network_id
                as used in the SI tables. A value of -1 indicates that
                value is unknown."
            SYNTAX INTEGER (-1..65535)

        PID ::= TEXTUAL-CONVENTION
            DISPLAY-HINT
                "x"
            STATUS current
            DESCRIPTION
                "An object of type PID directly represents an MPEG-2 PID number"
            REFERENCE
                "ISO 13818-1 2.1.32"
            SYNTAX INTEGER (0..8191)

        ReadableString ::= TEXTUAL-CONVENTION
            DISPLAY-HINT
                "255t"
            STATUS current
```

```
    DESCRIPTION
        "An octet string containing a human-readable string. This
        string may have originally been encoded as specified
        in EN 300 468 annex A, but this is not a requirement.

        To maintain generality, the information is represented
        using the ISO/IEC IS 10646-1 character set, encoded as an
        octet string using the UTF-8 transformation format
        described in RFC2279.

        Control codes are interpreted as specified in EN 300 468
        Annex A, clause A.1. The interpretation of other control
        codes is undefined.

        For information encoded in 7-bit US-ASCII, the UTF-8
        encoding is identical to the US-ASCII encoding.

        UTF-8 may require multiple bytes to represent a single
        character/code point; thus the length of this object in
        octets may be different from the number of characters
        encoded. Similarly, size constraints refer to the number
        of encoded octets, not the number of characters represented
        by an encoding."
    REFERENCE
        "RFC 2279"
    SYNTAX OCTET STRING (SIZE (0..255))

TerrestrialTransmissionMode ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Used to inform whether a DVB-T transmission uses 2k or 8k mode."
    SYNTAX INTEGER
        {
        carriers2k(1),
        carriers8k(2)
        }


--
-- Node definitions
--

    dvb OBJECT IDENTIFIER ::= { enterprises 2696 }

    mg OBJECT IDENTIFIER ::= { dvb 3 }

    mgSignalCharacteristicsObjects OBJECT IDENTIFIER ::= { mgSignalCharacteristics 1 }

-- mgTSStructure provides information about the structure of
-- the Transport Stream. It reports the structure as defined
-- by the PSI and SI tables in the Transport Stream. For
-- example the mgPIDType object reports the type as defined
-- by the PMT; the measuring instrument is not expected to
-- check the actual contents of the PID.
    mgTSStructure OBJECT IDENTIFIER ::= { mgSignalCharacteristicsObjects 1 }

    mgTSStructureTrap OBJECT IDENTIFIER ::= { mgTSStructure 1 }

-- This prefix is necessary to satisfy the requirement of RFC 2578
-- clause 8.5 that 'the next to last sub-identifier in the name of
-- any newly-defined notification must have the value zero'.
    structureTrapPrefix OBJECT IDENTIFIER ::= { mgTSStructureTrap 0 }

    tsStructureChangeTrap NOTIFICATION-TYPE
        OBJECTS { structureTrapInput, structureTrapControlOID, structureTrapControlChangeTime }
        STATUS current
        DESCRIPTION
            "Trap which is sent when any value within the mgTSStructure branch of
            this MIB changes. Transmission of the trap is subject to rate control
            through the structureTrapControlRateStatus object."
        ::= { structureTrapPrefix 1 }

    structureTrapControlTable OBJECT-TYPE
        SYNTAX SEQUENCE OF StructureTrapControlEntry
        MAX-ACCESS not-accessible
        STATUS current
```

```
    DESCRIPTION
        "Per-input table of values which control the generation of
        tsStructureChangeTrap traps."
    ::= { mgTSStructureTrap 1 }

structureTrapControlEntry OBJECT-TYPE
    SYNTAX StructureTrapControlEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { structureTrapControlInputNumber }
    ::= { structureTrapControlTable 1 }

StructureTrapControlEntry ::=
    SEQUENCE {
        structureTrapControlInputNumber
            InputNumber,
        structureTrapControlOID
            OBJECT IDENTIFIER,
        structureTrapControlChangeTime
            DateAndTime,
        structureTrapControlRateStatus
            RateStatus,
        structureTrapControlPeriod
            Unsigned32
     }

structureTrapControlInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the trap control objects apply."
    ::= { structureTrapControlEntry 1 }

structureTrapControlOID OBJECT-TYPE
    SYNTAX OBJECT IDENTIFIER
    MAX-ACCESS accessible-for-notify
    STATUS current
    DESCRIPTION
        "This object holds the OID of the object within the mgTSStructure
        branch of the MIB whose change triggered the trap. It is present
        for the formal purpose of defining the variable bindings returned
        with the tsStructureChangeTrap. It is not accessible for normal
        reading."
    ::= { structureTrapControlEntry 2 }

structureTrapControlChangeTime OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS accessible-for-notify
    STATUS current
    DESCRIPTION
        "This indicates the time when the change which triggered the trap
        occurred. It is present for the formal purpose of defining the
        variable bindings returned with the tsStructureChangeTrap. It
        is not accessible for normal reading."
    ::= { structureTrapControlEntry 3 }

structureTrapControlRateStatus OBJECT-TYPE
    SYNTAX RateStatus
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This object is used for rate control of traps, preventing
        overload of the management network by transmission of an
        excessive number of traps. The value 'disabled' means that
        traps are never sent. The value 'enabled' means that a
        trap will be sent when triggered.

        When a trap is sent, the agent changes the value of this
        object to 'enabledThrottled'. In this state the agent will
        not send any more traps. The agent automatically changes
        the value back to 'enabled' when the time specified by
        trapControlPeriod expires. A management application may
        set the value to 'enabled' at any time, but must never set
        the value to 'enabledThrottled'."
```

```
    ::= { structureTrapControlEntry 4 }

structureTrapControlPeriod OBJECT-TYPE
    SYNTAX Unsigned32 (0..3600000)
    UNITS "millisecond"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The agent will ensure that the interval between sending traps is
        no shorter than this time period (unless overridden by the manager)."
    ::= { structureTrapControlEntry 5 }

structureTrapInput OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS accessible-for-notify
    STATUS current
    DESCRIPTION
        "The Transport Stream input whose change triggered the current
        trap. This information can also be obtained by analysing the
        structureTrapControlOID, but structureTrapInput provides the
        information directly.

        This object is present for the formal purpose of defining the
        variable bindings returned with the tsStructureChangeTrap.
        It is not accessible for normal reading."
    ::= { mgTSStructureTrap 2 }

mgTSTable OBJECT-TYPE
    SYNTAX SEQUENCE OF MgTSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PSI/SI information relating to the whole Transport Stream"
    ::= { mgTSStructure 2 }

mgTSEntry OBJECT-TYPE
    SYNTAX MgTSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { mgTSInputNumber }
    ::= { mgTSTable 1 }

MgTSEntry ::=
    SEQUENCE {
        mgTSInputNumber
            InputNumber,
        mgTSId
            INTEGER,
        mgTSOriginalNetworkID
            NetworkID,
        mgTSNetworkID
            NetworkID,
        mgTSNetworkName
            ReadableString
     }

mgTSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The physical input on which this Transport Stream appears"
    ::= { mgTSEntry 1 }

mgTSId OBJECT-TYPE
    SYNTAX INTEGER (-1..65535)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The transport_stream_id for this Transport Stream as read
        from the PAT. If the transport_stream_id is unknown, this
        object has the value -1."
    REFERENCE
        "ISO/IEC 13818-1 2.4.4.3"
    ::= { mgTSEntry 2 }
```

```
mgTSOriginalNetworkID OBJECT-TYPE
    SYNTAX NetworkID
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The original_network_id for this Transport Stream.

        This is found by reading the transport_stream_id from the PAT.
        This transport_stream_id is then located in the
        transport_stream_loop of the NIT (actual transport stream).
        The value of mgTSOriginalNetworkID is the original_network_id
        found in this instance of the loop."
    REFERENCE
        "ISO/IEC 13818-1 5.2.1"
    ::= { mgTSEntry 3 }

mgTSNetworkID OBJECT-TYPE
    SYNTAX NetworkID
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The network_id for this Transport Stream as read from the
        NIT. This is found by reading the network_id in the NIT
        (actual_network)"
    REFERENCE
        "ISO/IEC 13818-1 5.2.1"
    ::= { mgTSEntry 4 }

mgTSNetworkName OBJECT-TYPE
    SYNTAX ReadableString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "network_name for this Transport Stream as read from the NIT.
        This is found by reading the network name descriptor in the
        NIT (actual_network).

        If the network_name is unknown, the value of this object is
        a zero length string."
    REFERENCE
        "EN 300 468 6.2.24 and 6.2.21"
    ::= { mgTSEntry 5 }

mgServiceTable OBJECT-TYPE
    SYNTAX SEQUENCE OF MgServiceEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PSI/SI information relating to each service within the Transport
        Stream. A service is included in the table if it is found in both
        the PAT and the PMT."
    ::= { mgTSStructure 3 }

mgServiceEntry OBJECT-TYPE
    SYNTAX MgServiceEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { mgServiceNumber, mgServiceInputNumber }
    ::= { mgServiceTable 1 }

MgServiceEntry ::=
    SEQUENCE {
        mgServiceInputNumber
            InputNumber,
        mgServiceNumber
            ServiceId,
        mgServiceType
            INTEGER,
        mgServiceName
            ReadableString,
        mgServiceProviderName
            ReadableString,
        mgServicePMTPID
            PID,
        mgServicePCRPID
            PID,
```

```
        mgServiceCondAccess
            EncryptionState,
        mgServiceEITComponentDescriptor
            ReadableString
     }


mgServiceInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The physical input on which this Transport Stream appears"
    ::= { mgServiceEntry 1 }

mgServiceNumber OBJECT-TYPE
    SYNTAX ServiceId
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The program_number/service_id to which the information
        in the rest of the row applies."
    ::= { mgServiceEntry 2 }

mgServiceType OBJECT-TYPE
    SYNTAX INTEGER (-1..255)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The service_type from the service_descriptor field in the SDT.
        A value of -1 indicates that the service_type is unknown."
    REFERENCE
        "EN 300 468 6.2.30"
    ::= { mgServiceEntry 3 }

mgServiceName OBJECT-TYPE
    SYNTAX ReadableString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The service_name from the service_descriptor in the SDT.
        If this information is not available, the value of this
        object will be a zero length string."
    REFERENCE
        "EN 300 468 6.2.22 and 6.2.30"
    ::= { mgServiceEntry 4 }

mgServiceProviderName OBJECT-TYPE
    SYNTAX ReadableString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The service_provider_name from the service_descriptor in the SDT.
        If this information is not available, the value of this object
        will be a zero length string."
    REFERENCE
        "EN 300 468 6.2.22 and 6.2.30"
    ::= { mgServiceEntry 5 }

mgServicePMTPID OBJECT-TYPE
    SYNTAX PID
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The PMT PID for this service as read from the PAT"
    REFERENCE
        "ISO/IEC 13838-1 2.4.4.3"
    ::= { mgServiceEntry 6 }

mgServicePCRPID OBJECT-TYPE
    SYNTAX PID
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The PCR PID for this service as read from the PMT"
    REFERENCE
        "ISO/IEC 13838-1 2.4.4.8"
    ::= { mgServiceEntry 7 }
```

```
mgServiceCondAccess OBJECT-TYPE
    SYNTAX EncryptionState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The encryption state of the service, derived from the
        free_CA_mode bit in the SDT"
    REFERENCE
        "EN 300 468 5.2.3"
    ::= { mgServiceEntry 8 }

mgServiceEITComponentDescriptor OBJECT-TYPE
    SYNTAX ReadableString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is a text description of the main elementary stream
        in the service as read from the component_descriptor
        in the EIT. If this information is not available, the
        value of this object will be a zero length string."
    REFERENCE
        "EN 300 468 6.2.7"
    ::= { mgServiceEntry 9 }

mgPIDTable OBJECT-TYPE
    SYNTAX SEQUENCE OF MgPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PSI/SI information relating to each PID in each service in
        the Transport Stream. A PID is included in the table if it
        listed as an elementary_PID in the PMT for the service."
    ::= { mgTSStructure 4 }

mgPIDEntry OBJECT-TYPE
    SYNTAX MgPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { mgPIDServiceNumber, mgPIDNumber, mgPIDInputNumber }
    ::= { mgPIDTable 1 }

MgPIDEntry ::=
    SEQUENCE {
        mgPIDInputNumber
            InputNumber,
        mgPIDServiceNumber
            ServiceId,
        mgPIDNumber
            PIDPlusOne,
        mgPIDType
            INTEGER,
        mgPIDCondAccess
            EncryptionState
     }

mgPIDInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The physical input on which this Transport Stream appears"
    ::= { mgPIDEntry 1 }

mgPIDServiceNumber OBJECT-TYPE
    SYNTAX ServiceId
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The program_number/service_id to which the row information applies."
    ::= { mgPIDEntry 2 }

mgPIDNumber OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
```

```
     DESCRIPTION
         "The PID, included in the service identified by
         mgPIDServiceNumber, to which the information in the
         row applies."
     ::= { mgPIDEntry 3 }

mgPIDType OBJECT-TYPE
     SYNTAX INTEGER (0..255)
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
         "The stream_type read from the PMT"
     REFERENCE
         "ISO/IEC 13818-1 table 2-29"
     ::= { mgPIDEntry 4 }

mgPIDCondAccess OBJECT-TYPE
     SYNTAX EncryptionState
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
         "The encryption state of the PID. This is deduced from the
         values of the transport_scrambling_control field in the
         Transport Stream packet headers for this PID."
     REFERENCE
         "ISO/IEC 13818-1 2.4.3.2"
     ::= { mgPIDEntry 5 }

mgEMMTable OBJECT-TYPE
     SYNTAX SEQUENCE OF MgEMMEntry
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
         "This table identifies the PIDs occupied by EMMs"
     ::= { mgTSStructure 5 }

mgEMMEntry OBJECT-TYPE
     SYNTAX MgEMMEntry
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
         "Row specification"
     INDEX { mgEMMInputNumber, mgEMMCaPID }
     ::= { mgEMMTable 1 }

MgEMMEntry ::=
     SEQUENCE {
         mgEMMInputNumber
             InputNumber,
         mgEMMCaPID
             PIDPlusOne,
         mgEMMCASystemID
             CASystemID
     }

mgEMMInputNumber OBJECT-TYPE
     SYNTAX InputNumber
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
         "The physical input on which this Transport Stream appears"
     ::= { mgEMMEntry 1 }

mgEMMCaPID OBJECT-TYPE
     SYNTAX PIDPlusOne
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
         "The CA_PID from the CA_descriptor in the CAT plus one.
         This indicates the PID on which the EMM is found."
     REFERENCE
         "ISO/IEC 13818-1 2.6.16"
     ::= { mgEMMEntry 2 }

mgEMMCASystemID OBJECT-TYPE
     SYNTAX CASystemID
     MAX-ACCESS read-only
     STATUS current
```

```
        DESCRIPTION
            "The CA_system_ID from the CA_descriptor in the CAT"
        REFERENCE
            "ISO/IEC 13818-1 2.6.16"
        ::= { mgEMMEntry 3 }

mgServiceECMTable OBJECT-TYPE
        SYNTAX SEQUENCE OF MgServiceECMEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "This table identifies the PIDs occupied by ECMs relating to
            a whole service. This information is found in the first
            descriptor loop of a TS_program_map_section."
        ::= { mgTSStructure 6 }

mgServiceECMEntry OBJECT-TYPE
        SYNTAX MgServiceECMEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { mgServiceECMInputNumber, mgServiceECMServiceNumber }
        ::= { mgServiceECMTable 1 }

MgServiceECMEntry ::=
        SEQUENCE {
            mgServiceECMInputNumber
                InputNumber,
            mgServiceECMServiceNumber
                ServiceId,
            mgServiceECMCaPID
                PIDPlusOne,
            mgServiceECMCASystemID
                CASystemID
         }

mgServiceECMInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "The physical input on which this Transport Stream appears"
        ::= { mgServiceECMEntry 1 }

mgServiceECMServiceNumber OBJECT-TYPE
        SYNTAX ServiceId
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "The program_number/service_id to which the information
            in the row applies."
        ::= { mgServiceECMEntry 2 }

mgServiceECMCaPID OBJECT-TYPE
        SYNTAX PIDPlusOne
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "The CA_PID from the CA_descriptor in the PMT plus one.
            This indicates the PID on which the ECM is found."
        REFERENCE
            "ISO/IEC 13818-1 2.6.16"
        ::= { mgServiceECMEntry 3 }

mgServiceECMCASystemID OBJECT-TYPE
        SYNTAX CASystemID
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The CA_system_ID from the CA_descriptor in the PMT"
        REFERENCE
            "ISO/IEC 13818-1 2.6.16"
        ::= { mgServiceECMEntry 4 }

mgPIDECMTable OBJECT-TYPE
        SYNTAX SEQUENCE OF MgPIDECMEntry
        MAX-ACCESS not-accessible
```

```
        STATUS current
        DESCRIPTION
            "This table identifies the PIDs occupied by ECMs related to
            a single elementary stream. This information is found in
            the elementary stream specific descriptor loop of a
            TS_program_map_section."
        ::= { mgTSStructure 7 }

mgPIDECMEntry OBJECT-TYPE
    SYNTAX MgPIDECMEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { mgPIDECMInputNumber, mgPIDECMServiceNumber, mgPIDECMPID }
    ::= { mgPIDECMTable 1 }

MgPIDECMEntry ::=
    SEQUENCE {
        mgPIDECMInputNumber
            InputNumber,
        mgPIDECMServiceNumber
            ServiceId,
        mgPIDECMPID
            PIDPlusOne,
        mgPIDECMCaPID
            PIDPlusOne,
        mgPIDECMCASystemID
            CASystemID
     }

mgPIDECMInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The physical input on which this Transport Stream appears"
    ::= { mgPIDECMEntry 1 }

mgPIDECMServiceNumber OBJECT-TYPE
    SYNTAX ServiceId
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The program_number/service_id to which the information
        in the row applies."
    ::= { mgPIDECMEntry 2 }

mgPIDECMPID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The elementary stream PID which is unscrambled by this ECM."
    ::= { mgPIDECMEntry 3 }

mgPIDECMCaPID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The CA_PID from the CA_descriptor in the PMT plus one.
        This indicates the PID on which the ECM is found."
    REFERENCE
        "ISO/IEC 13818-1 2.6.16"
    ::= { mgPIDECMEntry 4 }

mgPIDECMCASystemID OBJECT-TYPE
    SYNTAX CASystemID
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The CA_system_ID from the CA_descriptor in the PMT"
    REFERENCE
        "ISO/IEC 13818-1 2.6.16"
    ::= { mgPIDECMEntry 5 }

mgNITDeliverySystemTable OBJECT-TYPE
```

```
        SYNTAX SEQUENCE OF MgNITDeliverySystemEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Delivery system information for this Transport Stream read from
            the delivery system descriptors in the NIT.

            This information is found by reading the transport_stream_id
            from the PAT. This transport_stream_id is then located in the
            transport_stream_loop of the NIT (actual_network). The delivery
            system descriptor found in this instance of the loop is
            analysed to obtain the values in this table."
        REFERENCE
            "EN 300 468 clause 6.2.12"
        ::= { mgTSStructure 8 }

mgNITDeliverySystemEntry OBJECT-TYPE
        SYNTAX MgNITDeliverySystemEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { mgNITDSInputNumber }
        ::= { mgNITDeliverySystemTable 1 }

MgNITDeliverySystemEntry ::=
        SEQUENCE {
            mgNITDSInputNumber
                InputNumber,
            mgNITDSSystemType
                DeliverySystemType,
            mgNITDSFrequency
                FloatingPoint,
            mgNITDSFecOuter
                INTEGER,
            mgNITDSCableModulation
                INTEGER,
            mgNITDSSymbolRate
                Unsigned32,
            mgNITDSFecInner
                INTEGER,
            mgNITDSOrbitalPosition
                FloatingPoint,
            mgNITDSWestEastFlag
                INTEGER,
            mgNITDSPolarization
                INTEGER,
            mgNITDSSatelliteModulation
                INTEGER,
            mgNITDSBandwidth
                INTEGER,
            mgNITDSConstellation
                INTEGER,
            mgNITDSHierarchyInformation
                INTEGER,
            mgNITDSCodeRateHPStream
                INTEGER,
            mgNITDSCodeRateLPStream
                INTEGER,
            mgNITDSGuardInterval
                INTEGER,
            mgNITDSTransmissionMode
                INTEGER,
            mgNITDSOtherFrequencyFlag
                INTEGER
         }

mgNITDSInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "The physical input on which this Transport Stream appears"
        ::= { mgNITDeliverySystemEntry 1 }

mgNITDSSystemType OBJECT-TYPE
        SYNTAX DeliverySystemType
        MAX-ACCESS read-only
```

```
    STATUS current
    DESCRIPTION
        "Which delivery system is in use. The value of this object
        determines which other objects in this table row have
        valid values. If this object has the value 'unknown' none
        of the other objects in this table row have valid values."
    ::= { mgNITDeliverySystemEntry 2 }

mgNITDSFrequency OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "MHz"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The frequency or centre_frequency for the transmission
        expressed in MHz
        Valid for: cable, satellite, terrestrial"
    REFERENCE
        "EN 300 468 6.2.12"
    ::= { mgNITDeliverySystemEntry 3 }

mgNITDSFecOuter OBJECT-TYPE
    SYNTAX INTEGER (0..15)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The Outer Forward Error Correction Code, values as
        specified for the cable_delivery_system_descriptor.
        Valid for: cable"
    REFERENCE
        "EN 300 468 table 31"
    ::= { mgNITDeliverySystemEntry 4 }

mgNITDSCableModulation OBJECT-TYPE
    SYNTAX INTEGER (0..255)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Modulation scheme, values as specified for the
        cable_delivery_system_descriptor
        Valid for: cable"
    REFERENCE
        "EN 300 468 table 32"
    ::= { mgNITDeliverySystemEntry 5 }

mgNITDSSymbolRate OBJECT-TYPE
    SYNTAX Unsigned32
    UNITS "symbol/s"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The symbol rate in symbols per second
        Valid for: cable, satellite"
    REFERENCE
        "EN 300 468 6.2.12.1 and 6.2.12.2"
    ::= { mgNITDeliverySystemEntry 6 }

mgNITDSFecInner OBJECT-TYPE
    SYNTAX INTEGER (0..15)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The inner FEC scheme, values as specified for the
        cable_delivery_system_descriptor
        Valid for: cable, satellite"
    REFERENCE
        "EN 300 468 table 33"
    ::= { mgNITDeliverySystemEntry 7 }

mgNITDSOrbitalPosition OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "degree"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The orbital position in degrees
        Valid for: satellite"
```

```
    REFERENCE
        "EN 300 468 clause 6.2.12.2"
    ::= { mgNITDeliverySystemEntry 8 }


mgNITDSWestEastFlag OBJECT-TYPE
    SYNTAX INTEGER
        {
        west(0),
        east(1)
        }
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Orbital position direction: east (1) or west (0).
        Valid for: satellite"
    ::= { mgNITDeliverySystemEntry 9 }

mgNITDSPolarization OBJECT-TYPE
    SYNTAX INTEGER (0..3)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Polarization, values as specified for the
        satellite_delivery_system_descriptor
        Valid for: satellite"
    REFERENCE
        "EN 300 468 table 35"
    ::= { mgNITDeliverySystemEntry 10 }

mgNITDSSatelliteModulation OBJECT-TYPE
    SYNTAX INTEGER (0..31)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Modulation scheme, values as specified for the
        satellite_delivery_system_descriptor
        Valid for: satellite"
    REFERENCE
        "EN 300 468 table 36"
    ::= { mgNITDeliverySystemEntry 11 }

mgNITDSBandwidth OBJECT-TYPE
    SYNTAX INTEGER (0..7)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The bandwidth, values as specified for the
        terrestrial_delivery_system_descriptor
        Valid for: terrestrial"
    REFERENCE
        "EN 300 468 table 38"
    ::= { mgNITDeliverySystemEntry 12 }

mgNITDSConstellation OBJECT-TYPE
    SYNTAX INTEGER (0..3)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The modulation constellation: values as specified for
        the terrestrial_delivery_system_descriptor
        Valid for: terrestrial"
    REFERENCE
        "EN 300 468 table 39"
    ::= { mgNITDeliverySystemEntry 13 }

mgNITDSHierarchyInformation OBJECT-TYPE
    SYNTAX INTEGER (0..7)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Hierarchy Information: values as specified for the
        terrestrial_delivery_system_descriptor
        Valid for: terrestrial"
    REFERENCE
        "EN 300 468 table 40"
    ::= { mgNITDeliverySystemEntry 14 }
```

```
        mgNITDSCodeRateHPStream OBJECT-TYPE
            SYNTAX INTEGER (0..7)
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The code rate for the high priority stream: values as specified
                for the terrestrial_delivery_system_descriptor
                Valid for: terrestrial"
            REFERENCE
                "EN 300 468 table 41"
            ::= { mgNITDeliverySystemEntry 15 }


        mgNITDSCodeRateLPStream OBJECT-TYPE
            SYNTAX INTEGER (0..7)
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The code rate for low priority stream: values as specified
                for the terrestrial_delivery_system_descriptor
                Valid for: terrestrial"
            REFERENCE
                "EN 300 468 table 41"
            ::= { mgNITDeliverySystemEntry 16 }


        mgNITDSGuardInterval OBJECT-TYPE
            SYNTAX INTEGER (0..3)
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The guard_interval: values as specified for the
                terrestrial_delivery_system_descriptor
                Valid for: terrestrial"
            REFERENCE
                "EN 300 468 table 42"
            ::= { mgNITDeliverySystemEntry 17 }


        mgNITDSTransmissionMode OBJECT-TYPE
            SYNTAX INTEGER (0..3)
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The transmission_mode: values as specified for the
                terrestrial_delivery_system_descriptor
                Valid for: terrestrial"
            REFERENCE
                "EN 300 468 table 43"
            ::= { mgNITDeliverySystemEntry 18 }


        mgNITDSOtherFrequencyFlag OBJECT-TYPE
            SYNTAX INTEGER (0..1)
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "other_frequency_flag: values as specified for the
                terrestrial_delivery_system_descriptor
                Valid for: terrestrial"
            REFERENCE
                "EN 300 468 6.2.12.3"
            ::= { mgNITDeliverySystemEntry 19 }

-- mgRFCharacteristics provides information about the
-- RF input to the measuring instrument. This information
-- may have been derived by measurement or it may report
-- manual or automated settings on the instrument.
        mgRFCharacteristics OBJECT IDENTIFIER ::= { mgSignalCharacteristicsObjects 2 }

        mgRFCharacteristicsTrap OBJECT IDENTIFIER ::= { mgRFCharacteristics 1 }

-- This prefix is necessary to satisfy the requirement of RFC 2578
-- clause 8.5 that 'the next to last sub-identifier in the name of
-- any newly-defined notification must have the value zero'.
        rfTrapPrefix OBJECT IDENTIFIER ::= { mgRFCharacteristicsTrap 0 }

        rfCharacteristicsChangeTrap NOTIFICATION-TYPE
            OBJECTS { rfCharacteristicsTrapInput, rfCharacteristicsTrapControlOID,
rfCharacteristicsTrapControlChangeTime }
            STATUS current
```

```
      DESCRIPTION
          "Trap which is sent when a value in the mgRFCharacteristics
          part of the MIB changes substantially. Transmission of the
          trap is subject to rate control through the
          rfCharacteristicsTrapControlRateStatus object."
      ::= { rfTrapPrefix 1 }

rfCharacteristicsTrapControlTable OBJECT-TYPE
      SYNTAX SEQUENCE OF RfCharacteristicsTrapControlEntry
      MAX-ACCESS not-accessible
      STATUS current
      DESCRIPTION
          "Per-input table of values which control the generation of
          rfCharacteristicsChangeTrap traps."
      ::= { mgRFCharacteristicsTrap 1 }

rfCharacteristicsTrapControlEntry OBJECT-TYPE
      SYNTAX RfCharacteristicsTrapControlEntry
      MAX-ACCESS not-accessible
      STATUS current
      DESCRIPTION
          "Row specification"
      INDEX { rfCharacteristicsTrapControlInputNumber }
      ::= { rfCharacteristicsTrapControlTable 1 }

RfCharacteristicsTrapControlEntry ::=
      SEQUENCE {
          rfCharacteristicsTrapControlInputNumber
              InputNumber,
          rfCharacteristicsTrapControlOID
              OBJECT IDENTIFIER,
          rfCharacteristicsTrapControlChangeTime
              DateAndTime,
          rfCharacteristicsTrapControlRateStatus
              RateStatus,
          rfCharacteristicsTrapControlPeriod
              Unsigned32
      }

rfCharacteristicsTrapControlInputNumber OBJECT-TYPE
      SYNTAX InputNumber
      MAX-ACCESS not-accessible
      STATUS current
      DESCRIPTION
          "Transport Stream on which an RF value has changed, triggering the
          transmission of the trap."
      ::= { rfCharacteristicsTrapControlEntry 1 }

rfCharacteristicsTrapControlOID OBJECT-TYPE
      SYNTAX OBJECT IDENTIFIER
      MAX-ACCESS accessible-for-notify
      STATUS current
      DESCRIPTION
          "This object holds the OID of the object within the rfCharacteristics
          branch of the MIB whose change triggered the trap. It is present for
          the formal purpose of defining the variable bindings returned with
          the rfCharacteristicsChangeTrap. It is not accessible for normal
          reading. Note that this may not be the only value which has changed;
          managers need to poll to obtain all the new values that they need."
      ::= { rfCharacteristicsTrapControlEntry 2 }

rfCharacteristicsTrapControlChangeTime OBJECT-TYPE
      SYNTAX DateAndTime
      MAX-ACCESS accessible-for-notify
      STATUS current
      DESCRIPTION
          "This indicates the time when the change which triggered the
          trap occurred. It is present for the formal purpose of defining
          the variable bindings returned with the rfCharacteristicsChangeTrap.
          It is not accessible for normal reading."
      ::= { rfCharacteristicsTrapControlEntry 3 }

rfCharacteristicsTrapControlRateStatus OBJECT-TYPE
      SYNTAX RateStatus
      MAX-ACCESS read-write
      STATUS current
```

```
    DESCRIPTION
        "This object is used for rate control of traps, preventing
        overload of the management network by transmission of an
        excessive number of traps. The value 'disabled' means that
        traps are never sent. The value 'enabled' means that a
        trap will be sent when triggered.

        When a trap is sent, the agent changes the value of this
        object to 'enabledThrottled'. In this state the agent will
        not send any more traps. The agent automatically changes
        the value back to 'enabled' when the time specified by
        trapControlPeriod expires. A management application may
        set the value to 'enabled' at any time, but must never set
        the value to 'enabledThrottled'."
    ::= { rfCharacteristicsTrapControlEntry 4 }

rfCharacteristicsTrapControlPeriod OBJECT-TYPE
    SYNTAX Unsigned32 (0..3600000)
    UNITS "millisecond"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The agent will ensure that the interval between sending traps is
        no shorter than this time period (unless overridden by the manager)."
    ::= { rfCharacteristicsTrapControlEntry 5 }

rfCharacteristicsTrapInput OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS accessible-for-notify
    STATUS current
    DESCRIPTION
        "The Transport Stream input whose change triggered the current
        trap. This information can also be obtained by analysing the
        rfCharacteristicsTrapOID, but rfCharacteristicsTrapInput
        provides the information directly.

        This object is present for the formal purpose of defining
        the variable bindings returned with the traps. It is not
        accessible for normal reading."
    ::= { mgRFCharacteristicsTrap 2 }

mgRFCharacteristicsTable OBJECT-TYPE
    SYNTAX SEQUENCE OF MgRFCharacteristicsEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The RF characteristics of the input signal. These values represent
        the measuring instrument's 'best effort' to determine them."
    ::= { mgRFCharacteristics 2 }

mgRFCharacteristicsEntry OBJECT-TYPE
    SYNTAX MgRFCharacteristicsEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { mgRFInputNumber }
    ::= { mgRFCharacteristicsTable 1 }

MgRFCharacteristicsEntry ::=
    SEQUENCE {
        mgRFInputNumber
            InputNumber,
        mgRFSystemType
            DeliverySystemType,
        mgRFCentreFrequency
            FloatingPoint,
        mgRFModulation
            Modulation,
        mgRFFecInner
            InnerCodeRate,
        mgRFFecInnerLP
            InnerCodeRate,
        mgRFSymbolRate
            FloatingPoint,
        mgRFBandwidth
            FloatingPoint,
        mgRFTransmissionMode
```

```
            TerrestrialTransmissionMode,
        mgRFIsHierarchical
            TruthValue,
        mgRFGuardInterval
            GuardInterval
      }

mgRFInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The physical input on which these RF characteristics are found"
    ::= { mgRFCharacteristicsEntry 1 }

mgRFSystemType OBJECT-TYPE
    SYNTAX DeliverySystemType
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Which delivery system is in use: cable, satellite or
        terrestrial. The value of this object determines which
        other objects in this table have valid values."
    ::= { mgRFCharacteristicsEntry 2 }

mgRFCentreFrequency OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "MHz"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the centre frequency to which the measuring equipment is
        tuned. This frequency is the actual input frequency to the
        measuring equipment, which may be at an intermediate frequency
        (IF) rather than the final RF.
        Valid for: cable, satellite, terrestrial"
    ::= { mgRFCharacteristicsEntry 3 }

mgRFModulation OBJECT-TYPE
    SYNTAX Modulation
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The modulation scheme in use
        Valid for: cable, satellite, terrestrial"
    ::= { mgRFCharacteristicsEntry 4 }

mgRFFecInner OBJECT-TYPE
    SYNTAX InnerCodeRate
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Inner Forward Error Correction scheme (also referred to as code rate).
        In the case of a hierarchical terrestrial transmission, this is the
        inner code rate for the high priority stream.
        Valid for: satellite, terrestrial"
    ::= { mgRFCharacteristicsEntry 5 }

mgRFFecInnerLP OBJECT-TYPE
    SYNTAX InnerCodeRate
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Inner Forward Error Correction scheme (also referred to as code rate).
        This is the code rate for the low priority stream in a hierarchical
        terrestrial transmission.
        Valid for: terrestrial"
    ::= { mgRFCharacteristicsEntry 6 }

mgRFSymbolRate OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Msymbol/s"
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "Indicates the symbol rate of the transmission.
            Valid for: cable, satellite"
        ::= { mgRFCharacteristicsEntry 7 }

    mgRFBandwidth OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "MHz"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Bandwidth of the signal. Normally this will be equivalent to
            the channel spacing.
            Valid for: terrestrial"
        ::= { mgRFCharacteristicsEntry 8 }

    mgRFTransmissionMode OBJECT-TYPE
        SYNTAX TerrestrialTransmissionMode
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Whether there are 2k or 8k carriers in the OFDM modulation scheme.
            Valid for: terrestrial"
        ::= { mgRFCharacteristicsEntry 9 }

    mgRFIsHierarchical OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Whether the transmission is hierarchical
            Valid for: terrestrial"
        ::= { mgRFCharacteristicsEntry 10 }

    mgRFGuardInterval OBJECT-TYPE
        SYNTAX GuardInterval
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The guard interval in use
            Valid for: terrestrial"
        ::= { mgRFCharacteristicsEntry 11 }

    mgSignalCharacteristicsConformance OBJECT IDENTIFIER ::= { mgSignalCharacteristics 2 }

    mgSignalCharacteristicsCompliances OBJECT IDENTIFIER ::= {
mgSignalCharacteristicsConformance 1 }

    mgSCTransportStreamCompliance MODULE-COMPLIANCE
        STATUS current
        DESCRIPTION
            "An implementation which provides all the information in
            the mgTSStructure part of the MIB and implements the
            tsStructureChangeTrap can claim this conformance."
        MODULE -- this module
            MANDATORY-GROUPS { mgSCTransportStreamGroup, mgSCTransportStreamTrapGroup }
        ::= { mgSignalCharacteristicsCompliances 1 }

    mgSCRadioFrequencyCompliance MODULE-COMPLIANCE
        STATUS current
        DESCRIPTION
            "An implementation which provides all the information in
            the mgRFCharacteristics part of the MIB and implements the
            rfCharacteristicsChangeTrap can claim this conformance."
        MODULE -- this module
            MANDATORY-GROUPS { mgSCRadioFrequencyGroup, mgSCRadioFrequencyTrapGroup }
        ::= { mgSignalCharacteristicsCompliances 2 }

    mgSignalCharacteristicsGroups OBJECT IDENTIFIER ::= { mgSignalCharacteristicsConformance 3 }

    mgSCTransportStreamGroup OBJECT-GROUP
        OBJECTS { structureTrapControlOID, structureTrapControlChangeTime,
structureTrapControlRateStatus, structureTrapControlPeriod , structureTrapInput,
            mgTSId, mgTSOriginalNetworkID, mgTSNetworkID, mgTSNetworkName, mgServiceType,
            mgServiceName, mgServiceProviderName, mgServicePMTPID, mgServicePCRPID,
mgServiceCondAccess,
            mgServiceEITComponentDescriptor, mgPIDType, mgPIDCondAccess, mgEMMCASystemID,
mgServiceECMCASystemID,
```

```
              mgPIDECMCASystemID, mgNITDSSystemType, mgNITDSFrequency, mgNITDSFecOuter,
mgNITDSCableModulation,
              mgNITDSSymbolRate, mgNITDSFecInner, mgNITDSOrbitalPosition, mgNITDSWestEastFlag,
mgNITDSPolarization,
              mgNITDSSatelliteModulation, mgNITDSBandwidth, mgNITDSConstellation,
mgNITDSHierarchyInformation, mgNITDSCodeRateHPStream,
              mgNITDSCodeRateLPStream, mgNITDSGuardInterval, mgNITDSTransmissionMode,
mgNITDSOtherFrequencyFlag }
          STATUS current
          DESCRIPTION
              "This group contains all the objects in the
              mgTSStructure part of the MIB."
          ::= { mgSignalCharacteristicsGroups 1 }

      mgSCRadioFrequencyGroup OBJECT-GROUP
          OBJECTS { rfCharacteristicsTrapControlOID, rfCharacteristicsTrapControlChangeTime,
rfCharacteristicsTrapControlRateStatus, rfCharacteristicsTrapControlPeriod ,
rfCharacteristicsTrapInput,
              mgRFSystemType, mgRFCentreFrequency, mgRFModulation, mgRFFecInner, mgRFFecInnerLP,
              mgRFSymbolRate, mgRFBandwidth, mgRFTransmissionMode, mgRFIsHierarchical,
mgRFGuardInterval
                  }
          STATUS current
          DESCRIPTION
              "This group contains all the objects in the
              mgRFCharacteristics part of the MIB"
          ::= { mgSignalCharacteristicsGroups 2 }

      mgSCTransportStreamTrapGroup NOTIFICATION-GROUP
          NOTIFICATIONS { tsStructureChangeTrap }
          STATUS current
          DESCRIPTION
              "Contains tsStructureChangeTrap"
          ::= { mgSignalCharacteristicsGroups 3 }

      mgSCRadioFrequencyTrapGroup NOTIFICATION-GROUP
          NOTIFICATIONS { rfCharacteristicsChangeTrap }
          STATUS current
          DESCRIPTION
              "Contains rfCharacteristicsChangeTrap"
          ::= { mgSignalCharacteristicsGroups 4 }


    END

--
-- DVB-MGSIGNALCHARACTERISTICS-MIB.my
--
```

9   DVB-MGTR101290-MIB

```
--
-- DVB-MGTR101290-MIB.my
-- MIB generated by MG-SOFT Visual MIB Builder Version 2.5 Build 225
-- Friday, November 09, 2001 at 15:03:43
--

    DVB-MGTR101290-MIB DEFINITIONS ::= BEGIN

      IMPORTS
          OBJECT-GROUP, MODULE-COMPLIANCE, NOTIFICATION-GROUP
              FROM SNMPv2-CONF
          enterprises, Integer32, Unsigned32, Counter32, OBJECT-TYPE,
          MODULE-IDENTITY, NOTIFICATION-TYPE
              FROM SNMPv2-SMI
          TruthValue, DateAndTime, DisplayString, RowStatus, TEXTUAL-CONVENTION
              FROM SNMPv2-TC;


      tr101290 MODULE-IDENTITY
          LAST-UPDATED "200111071400Z"
          ORGANIZATION
              "DVB"
          CONTACT-INFO
              "DVB project
```

ETSI

```
                European Broadcasting Union
                CH-1218 GRAND SACONNEX (Geneva)
                Switzerland
                Tel: +41 22 717 21 11
                Fax: +41 22 717 24 81"
         DESCRIPTION
             "DVB Measurement Group MIB to support TR 101 290.
             This tr101290 module contains measurements defined in TR 101 290."
         ::= { mg 2 }


--
-- Textual conventions
--

         ActiveTime ::= TEXTUAL-CONVENTION
             DISPLAY-HINT
                 "d"
             STATUS current
             DESCRIPTION
                 "This is a monotonically increasing value in units of seconds
                 that represents the total amount of time for which the
                 instrument has been able to perform a particular test or
                 measurement. The instrument might not be performing the test
                 because some other error condition prevented it, because it
                 was operating in a polled mode where it looked at one input
                 at a time or because it had been placed in an inactive state
                 for a while. 'Able to perform the test' corresponds to the
                 TestState being either 'pass' or 'fail'.

                 The existence of this attribute allows a management system to
                 calculate a realistic errors per second value for any test."
             SYNTAX Unsigned32

         Availability ::= TEXTUAL-CONVENTION
             STATUS current
             DESCRIPTION
                 "Availability is used in the capabilities branch of the MIB
                 to indicate whether the instrument is equipped to provide a
                 specific test and/or measurement."
             SYNTAX INTEGER
                 {
                 notAvailable(1),
                 testAvailable(2),
                 measurementAvailable(3),
                 measurementAndTestAvailable(4)
                 }

         BERMeasurementMethod ::= TEXTUAL-CONVENTION
             STATUS current
             DESCRIPTION
                 "Indicates the method used for measuring BER before
                 Viterbi decoding"
             SYNTAX INTEGER
                 {
                 iqSeparate(1),
                 iqCombined(2)
                 }

         BitRateElement ::= TEXTUAL-CONVENTION
             STATUS current
             DESCRIPTION
                 "The fundamental data unit that is being counted by the bit
                 rate measurement algorithm."
             REFERENCE
                 "TR 101 290 5.3.3.1"
             SYNTAX INTEGER
                 {
                 bit(1),
                 byte(2),
                 packet(3),
                 other(4)
                 }

         DeliverySystemType ::= TEXTUAL-CONVENTION
             STATUS current
```

```
    DESCRIPTION
        "Specifies the physical delivery system used for a
        Transport Stream."
    SYNTAX INTEGER
        {
        unknown(1),
        cable(2),
        satellite(3),
        terrestrial(4)
        }

Enable ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "This type is used for the '...Enable' objects of tests and
        measurements. It determines whether the test is enabled and
        also which traps can be generated by this test/measurement.
        If the testEnable bit is zero, the test will not be performed
        and the failTrapEnable bit is ignored. If the testEnable bit
        is one, the test will be performed. Additionally, a
        testFailTrap or measurementFailTrap will be sent when the
        test state becomes 'fail'.
        The 'unknownTrapEnable' bit is only relevant to measurements.
        If it is set to one, a 'measurementUnknownTrap' will be sent
        when the '...MeasurementState' object becomes 'unknown'."
    SYNTAX BITS
        {
        testEnable(0),
        failTrapEnable(1),
        unknownTrapEnable(2)
        }

FloatingPoint ::= TEXTUAL-CONVENTION
    DISPLAY-HINT
        "63a"
    STATUS current
    DESCRIPTION
        "FloatingPoint provides a way of representing non-integer
        numbers in SNMP. Numbers are represented as a string of
        ASCII characters in the natural way. So for example, '3',
        '3.142' and '0.3142E1' are all valid numbers.

        The syntax for the string is as follows. [] enclose an
        optional element, | is the separator for a set of
        alternatives. () enclose syntax which is to be viewed
        as a unit.

        FloatingPoint  ::= [Sign]
                       (Float1 | Float2 | DigitSequence)
                       [ExponentPart]

        Float1         ::= DigitSequence '.' [DigitSequence]
        Float2         ::= '.' DigitSequence
        DigitSequence  ::= Digit [DigitSequence]

        ExponentPart   ::= ('e' | 'E') [Sign] DigitSequence

        Digit          ::= '0'..'9'
        Sign           ::= '+' | '-'"
    SYNTAX OCTET STRING (SIZE (1..63))

GroupAvailability ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "This is used in the tr101290Capability branch of the MIB to
        specify an agent's degree of support for a whole branch of
        the MIB. The individual values mean:

        noSupport          no objects in this branch are available
        selectiveSupport   some but not all objects are available,
                           refer to the test table for further details
        completeSupport    all objects defined in the stated revision
                           of the MIB are available"
    SYNTAX INTEGER
        {
        noSupport(1),
        selectiveSupport(2),
        completeSupport(3)
```

```
            }

GuardInterval ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Guard intervals as specified for DVB-T transmissions.
        interval1d4 means a guard interval of 1/4."
    REFERENCE
        "EN 300 744 clause 4.1"
    SYNTAX INTEGER
        {
        interval1d4(1),
        interval1d8(2),
        interval1d16(3),
        interval1d32(4)
        }

Hierarchy ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "In DVB-T systems this is used to specify whether the
        transmission is hierarchical, and if so, the value of
        alpha."
    SYNTAX INTEGER
        {
        nonHierarchical(1),
        hierarchicalAlphaOne(2),
        hierarchicalAphaTwo(3),
        hierarchicalAlphaFour(4)
        }

IndexConsistencyTest ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Index of consistency check tests"
    REFERENCE
        "TR 101 290 clause 5.3.4"
    SYNTAX INTEGER { tsIdCheck(1) }

IndexMIPSyntaxTest ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "This assigns numbers to the MIP syntax tests. These numbers
        are then used as indexes into the MIP syntax table."
    REFERENCE
        "TR 101 290 clause 9.20"
    SYNTAX INTEGER
        {
        mipTimingError(1),
        mipStructureError(2),
        mipPresenceError(3),
        mipPointerError(4),
        mipPeriodicityError(5),
        mipTsRateError(6)
        }

IndexPCRMeasurement ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "This assigns numbers to the PCR measurements. These numbers
        are then used as indexes into the PCR measurement table."
    REFERENCE
        "TR 101 290 clause 5.3.2"
    SYNTAX INTEGER
        {
        pcrFO(1),
        pcrDR(2),
        pcrOJ(3),
        pcrAC(4)
        }

IndexServicePerformance ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "This assigns numbers to the Service Performance measurements.
        These numbers are then used as indexes into the Service
        Performance measurement table."
```

```
    REFERENCE
        "TR 101 290 clause 5.5"
    SYNTAX INTEGER
        {
        serviceAvailability(1),
        serviceDegradation(2),
        serviceImpairments(3)
        }

IndexTransportStreamTest ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "IndexTransportStreamTest assigns a unique numerical
        value to each of the TR 101 290 Transport Stream tests
        in clause 5.2. The number allocated is:

         priority * 1000 + test number * 10 + subtest

        Subtest is zero if there is no subtest. Subtest 'a'
        is numbered 1, 'b' is numbered 2 etc. The enumeration
        names are derived directly from the test names in
        TR 101 290 taking into account the syntax requirements
        of the MIB."
    REFERENCE
        "TR 101 290 clause 5.2"
    SYNTAX INTEGER
        {
        tsSyncLoss(1010),
        syncByteError(1020),
        patError2(1031),
        continuityCountError(1040),
        pmtError2(1051),
        pidError(1060),
        transportError(2010),
        crcError(2020),
        pcrRepetitionError(2031),
        pcrDiscontinuityError(2032),
        pcrAccuracyError(2040),
        ptsError(2050),
        catError(2060),
        nitActualError(3011),
        nitOtherError(3012),
        siRepetitionError(3020),
        bufferError(3030),
        unreferencedPID(3041),
        sdtActualError(3051),
        sdtOtherError(3052),
        eitActualError(3061),
        eitOtherError(3062),
        eitPfError(3063),
        rstError(3070),
        tdtError(3080),
        emptyBufferError(3090),
        dataDelayError(3100)
        }

InputNumber ::= TEXTUAL-CONVENTION
    DISPLAY-HINT
        "d"
    STATUS current
    DESCRIPTION
        "InputNumber objects are used to select a specific Transport
        Stream input on a multi-input monitoring/measurement device.
        On a single input monitoring/measuring device, InputNumber
        objects will always have the value one."
    SYNTAX INTEGER (1..2147483647)

MeasurementState ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "MeasurementState is used to represent the state of a single
        measurement.

        'disabled' means that the measurement has been disabled by
        setting the 'testEnable' bit in its ...Enable object to zero.
```

```
        'unknown' means that the equipment cannot provide a value
        because of temporary circumstances, for example some other
        signal condition makes this measurement impossible.

        'abnormal' means that the measurement value is incorrect for
        reasons connected with that measurement itself. For example
        the measurement may be out of range. A measurement value is
        still provided and users or managers with knowledge of the
        behaviour of this specific measuring equipment may be able
        to interpret the value.

        'normal' means that the measurement is enabled and has been
        evaluated."
    SYNTAX INTEGER
        {
        disabled(1),
        unknown(2),
        normal(3),
        abnormal(4)
        }

Modulation ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Modulation systems used in RF transmissions"
    REFERENCE
        "TR 101 198 (BPSK)
        EN 300 421 (QPSK)
        EN 301 210 (8PSK, 16QAM)
        EN 300 429 (16QAM, 32QAM, 64QAM, 128QAM, 256QAM)
        EN 300 744 (QPSK, 16QAM, 64QAM, 16QAM/alpha=2, 64QAM/alpha=2,
                    16QAM/alpha=4, 64QAM/alpha=4)
        "
    SYNTAX INTEGER
        {
        bpsk(1),
        qpsk(2),
        psk8(3),
        qam16(4),
        qam32(5),
        qam64(6),
        qam128(7),
        qam256(8),
        qam16Alpha2(9),
        qam64Alpha2(10),
        qam16Alpha4(11),
        qam64Alpha4(12)
        }

PIDPlusOne ::= TEXTUAL-CONVENTION
    DISPLAY-HINT
        "x"
    STATUS current
    DESCRIPTION
        "An object of type PIDPlusOne represents an MPEG-2 PID number.
        The numeric value of the object is the PID + 1, to allow for
        its use as a table index."
    REFERENCE
        "ISO 13818-1 2.1.32"
    SYNTAX INTEGER (1..8192)

PollingInterval ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Objects of this type are used by the agent to indicate how
        often it internally updates the information related to a
        particular test or measurement. The manager can then adjust
        its polling behaviour accordingly. The polling interval
        should be interpreted by the manager as approximate. In
        practice the agent may update the information faster or
        slower than indicated depending on the circumstances.

        The meaning of the value is:
            positive - represents a normal value in milliseconds
            zero     - the value is updated continuously
            negative - unknown or not applicable "
    SYNTAX Integer32
```

```
RateStatus ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "RateStatus is used in trap control"
    SYNTAX INTEGER
        {
        disabled(1),
        enabled(2),
        enabledThrottled(3)
        }

ServiceId ::= TEXTUAL-CONVENTION
    DISPLAY-HINT
        "x"
    STATUS current
    DESCRIPTION
        "Allowed values of program_number/service_id. Note that zero
        is used in the PAT to represent the NIT PID and so will never
        occur as a service_id."
    SYNTAX INTEGER (1..65535)

TerrestrialTransmissionMode ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Transmission mode for DVB-T transmissions, specifies whether
        there are 2k or 8k carriers."
    REFERENCE
        "EN 300 744 clause 4.1"
    SYNTAX INTEGER
        {
        mode2k(1),
        mode8k(2)
        }

TestState ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "TestState is used to represent the state of a single test.

        'disabled' means that the test has been disabled by setting
        the 'testEnable' bit of its ...Enable variable to zero.

        'unknown' means that the equipment cannot provide a value
        for the state because of temporary circumstances (for example
        some other error makes this test impossible to evaluate).

        'pass' means that the test is enabled, can be evaluated and
        is not failing.

        For a 'Status error', 'fail' means that the state of the
        input is currently in error. For an 'Event error', 'fail'
        means that an error event has occurred within the most recent
        persistence interval as defined by the
        'controlEventPersistence' object."
    SYNTAX INTEGER
        {
        disabled(1),
        unknown(2),
        pass(3),
        fail(4)
        }

TestSummary ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
        "Bit String providing a status summary for all the tests
        defined in this MIB module. A bit is set to one if the
        state of that test is 'fail'.

        In several cases, a single bit summarizes the results of
        a set of tests. In that case, if the state of any of the
        tests is 'fail', the bit is set to one. An example of
        this is 'bitratePID' where the single bit summarizes
        whether all the PID bitrates are within range.
```

```
        To aid identification, the bits are numbered in the order
        in which the associated tests appear in the MIB. Other
        than this, there is no connection between the bit number
        and the OID of the test."
SYNTAX BITS
    {
    tsTsSyncLoss(0),
    tsSyncByteError(1),
    tsPatError2(2),
    tsContinuityCountError(3),
    tsPmtError2(4),
    tsPidError(5),
    tsTransportError(6),
    tsCrcError(7),
    tsPcrRepetitionError(8),
    tsPcrDiscontinuityError(9),
    tsPcrAccuracyError(10),
    tsPtsError(11),
    tsCatError(12),
    tsNitActualError(13),
    tsNitOtherError(14),
    tsSiRepetitionError(15),
    tsBufferError(16),
    tsUnreferencedPID(17),
    tsSdtActualError(18),
    tsSdtOtherError(19),
    tsEitActualError(20),
    tsEitOtherError(21),
    tsEitPfError(22),
    tsRstError(23),
    tsTdtError(24),
    tsEmptyBufferError(25),
    tsDataDelayError(26),
    pcrPcrFO(27),
    pcrPcrDR(28),
    pcrPcrOJ(29),
    pcrPcrAC(30),
    bitrateTransportStream(31),
    bitrateService(32),
    bitratePID(33),
    tsTsConsistency(34),
    performanceServiceAvailability(35),
    performanceServiceDegradation(36),
    performanceServiceImpairments(37),
    csSysAvailability(38),
    csLinkAvailability(39),
    csBerRS(40),
    csRFIFSignalPower(41),
    csNoisePower(42),
    csMer(43),
    csSteMean(44),
    csSteDeviation(45),
    csCS(46),
    csAI(47),
    csQE(48),
    csRTE(49),
    csCI(50),
    csPJ(51),
    csSNR(52),
    cNoiseMargin(53),
    cEstNoiseMargin(54),
    cSignQualMarT(55),
    cEND(56),
    cOutBandEmiss(57),
    sBerViterbi(58),
    sIfSpectrum(59),
    tRFAccuracy(60),
    tRFChannelWidth(61),
    tSymbolLength(62),
    tRFIFPower(63),
    tRFIFSpectrum(64),
    tEND(65),
    tENF(66),
    tENDLP(67),
    tENFLP(68),
    tLinearity(69),
    tBerViterbi(70),
    tBerViterbiLP(71),
```

```
                    tBerRS(72),
                    tBerRSLP(73),
                    tMER(74),
                    tSteMean(75),
                    tSteDeviation(76),
                    tCS(77),
                    tAI(78),
                    tQE(79),
                    tPJ(80),
                    tMipTimingError(81),
                    tMipStructureError(82),
                    tMipPresenceError(83),
                    tMipPointerError(84),
                    tMipPeriodicityError(85),
                    tMipTsRateError(86),
                    tSepEti(87),
                    tSepSeti(88)
                    }

        TransportStreamID ::= TEXTUAL-CONVENTION
            DISPLAY-HINT
                "x"
            STATUS current
            DESCRIPTION
                "Range of possible values for a transport_stream_id
                as found in the PAT."
            SYNTAX INTEGER (0..65535)

        UATMode ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "Method of determining the start and end of a period of
                Unavailable Time."
            REFERENCE
                "TR 101 290 clause 5.4.5"
            SYNTAX INTEGER
                {
                nConsecutive(1),
                rollingWindow(2)
                }


--
-- Node definitions
--

        dvb OBJECT IDENTIFIER ::= { enterprises 2696 }

        mg OBJECT IDENTIFIER ::= { dvb 3 }

        tr101290Objects OBJECT IDENTIFIER ::= { tr101290 1 }

-- The tr101290Control branch contains objects that provide
-- general control of and general information about the
-- measurements and tests in the rest of the MIB.
        tr101290Control OBJECT IDENTIFIER ::= { tr101290Objects 1 }

        controlNow OBJECT-TYPE
            SYNTAX DateAndTime
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "The current date and time at the location of the measurement
                equipment. It is highly desirable that the offset from UTC
                should be included.

                It is possible to set the time and date through this object,
                but it is expected that most systems will incorporate a more
                accurate method for doing this."
            ::= { tr101290Control 1 }

        controlEventPersistence OBJECT-TYPE
            SYNTAX FloatingPoint
            UNITS "second"
            MAX-ACCESS read-write
            STATUS current
```

```
        DESCRIPTION
            "The persistence timer used with Event errors. An Event error
            test remains in the 'fail' state for this length of time
            after the occurrence of the Event."
        DEFVAL { "2" }
        ::= { tr101290Control 2 }

controlRFSystemTable OBJECT-TYPE
        SYNTAX SEQUENCE OF ControlRFSystemEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Table which controls the RF modulation expected to
            be received on each input."
        ::= { tr101290Control 3 }

controlRFSystemEntry OBJECT-TYPE
        SYNTAX ControlRFSystemEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { rfSystemInputNumber }
        ::= { controlRFSystemTable 1 }

ControlRFSystemEntry ::=
        SEQUENCE {
            rfSystemInputNumber
                InputNumber,
            rfSystemDelivery
                DeliverySystemType
         }

rfSystemInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "RF input whose mode of operation is to be set"
        ::= { controlRFSystemEntry 1 }

rfSystemDelivery OBJECT-TYPE
        SYNTAX DeliverySystemType
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The type of signal the instrument should expect at its input."
        ::= { controlRFSystemEntry 2 }

controlSynchronizationTable OBJECT-TYPE
        SYNTAX SEQUENCE OF ControlSynchronizationEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Table reserved for future specification of synchronized
            timing."
        ::= { tr101290Control 4 }

controlSynchronizationEntry OBJECT-TYPE
        SYNTAX ControlSynchronizationEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { controlSynchronizationInputNumber }
        ::= { controlSynchronizationTable 1 }

ControlSynchronizationEntry ::=
        SEQUENCE {
            controlSynchronizationInputNumber
                InputNumber,
            controlSynchronizedTime
                FloatingPoint
         }

controlSynchronizationInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
```

```
               STATUS current
               DESCRIPTION
                   "Transport Stream number to which the objects in this row apply."
               ::= { controlSynchronizationEntry 1 }

          controlSynchronizedTime OBJECT-TYPE
               SYNTAX FloatingPoint
               MAX-ACCESS read-write
               STATUS current
               DESCRIPTION
                   "This object is reserved pending future standardization of
                   timestamping of Transport Streams. "
               ::= { controlSynchronizationEntry 2 }

-- This branch of the MIB contains all the traps and their
-- associated control information.
          tr101290Trap OBJECT IDENTIFIER ::= { tr101290Objects 2 }

-- This prefix is necessary to satisfy the requirement of RFC 2578
-- clause 8.5 that 'the next to last sub-identifier in the name of
-- any newly-defined notification must have the value zero'.
          trapPrefix OBJECT IDENTIFIER ::= { tr101290Trap 0 }

          testFailTrap NOTIFICATION-TYPE
               OBJECTS { trapControlOID, trapControlGenerationTime, trapControlFailureSummary,
trapInput }
               STATUS current
               DESCRIPTION
                   "This trap is sent when a test which is not associated with a
                   measurement fails. This trap is triggered by the transition of
                   the '...State' or '...TestState' object associated with the
                   test to the 'fail' state from any other state.

                   Transmission of the trap is subject to rate control and to the
                   enable status of each test."
               ::= { trapPrefix 1 }

          measurementFailTrap NOTIFICATION-TYPE
               OBJECTS { trapControlOID, trapControlGenerationTime, trapControlMeasurementValue,
trapControlFailureSummary, trapInput
                   }
               STATUS current
               DESCRIPTION
                   "Trap which is sent when a test which is associated with a
                   measurement fails. This trap is triggered by the transition
                   of the '...State' or '...TestState' object associated with
                   the test to the 'fail' state from any other state.

                   Transmission of the trap is subject to rate control and to
                   the enable status of each test."
               ::= { trapPrefix 2 }

          measurementUnknownTrap NOTIFICATION-TYPE
               OBJECTS { trapControlOID, trapControlGenerationTime, trapControlFailureSummary,
trapInput }
               STATUS current
               DESCRIPTION
                   "Trap which is sent when a measurement value becomes
                   unavailable. This trap is triggered by the transition of
                   the '...MeasurementState' object associated with the
                   measurement to the 'unknown' state from any other state.

                   Transmission of the trap is subject to rate control."
               ::= { trapPrefix 3 }

          trapControlTable OBJECT-TYPE
               SYNTAX SEQUENCE OF TrapControlEntry
               MAX-ACCESS not-accessible
               STATUS current
               DESCRIPTION
                   "Table of trap control information for each input"
               ::= { tr101290Trap 1 }

          trapControlEntry OBJECT-TYPE
               SYNTAX TrapControlEntry
               MAX-ACCESS not-accessible
               STATUS current
```

```
     DESCRIPTION
         "Row specification"
     INDEX { trapControlInputNumber }
     ::= { trapControlTable 1 }

TrapControlEntry ::=
     SEQUENCE {
         trapControlInputNumber
             InputNumber,
         trapControlOID
             OBJECT IDENTIFIER,
         trapControlGenerationTime
             DateAndTime,
         trapControlMeasurementValue
             FloatingPoint,
         trapControlRateStatus
             RateStatus,
         trapControlPeriod
             Unsigned32,
         trapControlFailureSummary
             TestSummary
      }

trapControlInputNumber OBJECT-TYPE
     SYNTAX InputNumber
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
         "Each Transport Stream input has separate trap control
         parameters. This object identifies the Transport Stream
         input to which the trap control parameters apply"
     ::= { trapControlEntry 1 }

trapControlOID OBJECT-TYPE
     SYNTAX OBJECT IDENTIFIER
     MAX-ACCESS accessible-for-notify
     STATUS current
     DESCRIPTION
         "In the case of a testFailTrap or a measurementFailTrap, this
         object holds the OID of the '...State' or '...TestState' object
         whose transition to 'fail' has triggered the trap.

         In the case of a measurementUnknownTrap, this object holds the
         OID of the '...MeasurementState' object whose transition to
         'unknown' has triggered the trap.

         This object is present for the formal purpose of defining the
         variable bindings returned with the traps. It is not accessible
         for normal reading."
     ::= { trapControlEntry 2 }

trapControlGenerationTime OBJECT-TYPE
     SYNTAX DateAndTime
     MAX-ACCESS accessible-for-notify
     STATUS current
     DESCRIPTION
         "In the case of a testFailTrap or a measurementFailTrap,
         at the moment when the trap is generated, the value of
         the '...LatestError' object associated with the test which
         caused the trap is copied here. In the case of a
         measurementUnknownTrap, the time at which the measurement
         became unknown is copied here.

         This object is present for the formal purpose of defining
         the variable bindings returned with the traps. It is not
         accessible for normal reading."
     ::= { trapControlEntry 3 }

trapControlMeasurementValue OBJECT-TYPE
     SYNTAX FloatingPoint
     MAX-ACCESS accessible-for-notify
     STATUS current
     DESCRIPTION
         "At the moment when a measurementFailTrap is generated,
         the value of this object is set from the '...Value' object
         associated with the measurement which caused the trap.
```

```
                  Where a measurement returns multiple values, the value
                  which is copied here is the one which is compared with the
                  threshold(s) to generate the test result. The measurement
                  units are the same as those of the source object.

                  This object is present for the formal purpose of defining
                  the variable bindings returned with the traps. It is not
                  accessible for normal reading."
              ::= { trapControlEntry 4 }

          trapControlRateStatus OBJECT-TYPE
              SYNTAX RateStatus
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "This object is used for rate control of traps, preventing
                  overload of the management network by transmission of an
                  excessive number of traps. The value 'disabled' means that
                  traps are never sent. The value 'enabled' means that a trap
                  will be sent when triggered.

                  When a trap is sent, the agent changes the value of this
                  object to 'enabledThrottled'. In this state the agent will
                  not send any more traps. The agent automatically changes
                  the value back to 'enabled' when the time specified by
                  trapControlPeriod expires. A management application may
                  set the value to 'enabled' at any time, but must never set
                  the value to 'enabledThrottled'.

                  This single status applies to all the trap types, so for
                  example if an agent sends a testFailTrap it will not send
                  a measurementFailTrap until the trapControlPeriod expires."
              ::= { trapControlEntry 5 }

          trapControlPeriod OBJECT-TYPE
              SYNTAX Unsigned32 (0..3600000)
              UNITS "millisecond"
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "An agent will ensure that the interval between sending traps is
                  no shorter than this time period. The management system can
                  override this by setting trapControlRateStatus back to 'enabled'
                  within the time period."
              ::= { trapControlEntry 6 }

          trapControlFailureSummary OBJECT-TYPE
              SYNTAX TestSummary
              MAX-ACCESS read-only
              STATUS current
              DESCRIPTION
                  "This bit string contains a summary of all the test failures.
                  If the bit for the test is set to one, that test is in a
                  fail state.

                  When a trap is being generated, the agent should ensure that
                  this information is as up to date as possible, without
                  causing undue delay in sending the trap."
              ::= { trapControlEntry 7 }

          trapInput OBJECT-TYPE
              SYNTAX InputNumber
              MAX-ACCESS accessible-for-notify
              STATUS current
              DESCRIPTION
                  "The Transport Stream input whose change triggered the
                  current trap. This information can also be obtained by
                  analysing the trapControlOID, but trapInput provides the
                  information directly.

                  This object is present for the formal purpose of defining
                  the variable bindings returned with the traps. It is not
                  accessible for normal reading."
              ::= { tr101290Trap 2 }

-- From this branch of the MIB, a manager can read the
-- capabilities of each agent. The capabilities say which tests
-- and measurements are supported by that agent.
```

```
--
-- The capabilities are defined relative to a specific revision
-- of this MIB module (defined by the capabilityMIBRevision
-- object).
--
-- For each group of capabilities, at least one of the following
-- must be true:
--
-- 1) the capabilityXXXGroup object has the value 'noSupport'
-- 2) the capabilityXXXGroup object has the value 'completeSupport'
-- 3) there is a row in the capabilityXXXTable for every object
--    defined in the supported revision of the MIB.
        tr101290Capability OBJECT IDENTIFIER ::= { tr101290Objects 3 }

        capabilityMIBRevision OBJECT-TYPE
            SYNTAX DateAndTime
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The capabilities of the agent are expressed in relation to a
                specific revision of the tr101290 MIB module. The date and time
                here must exactly match one of the revision dates in the
                MODULE-IDENTITY section of the MIB."
            ::= { tr101290Capability 1 }

-- Capabilities for the tr101290TS branch of the MIB
        capabilityTS OBJECT IDENTIFIER ::= { tr101290Capability 5 }

        capabilityTSGroup OBJECT-TYPE
            SYNTAX GroupAvailability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Specifies the overall availability of the Transport Stream
                group of tests and measurements, tr101290TS."
            ::= { capabilityTS 1 }

        capabilityTSTable OBJECT-TYPE
            SYNTAX SEQUENCE OF CapabilityTSEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Specifies the individual availability of the Transport Stream
                group of tests and measurements, tr101290TS."
            ::= { capabilityTS 2 }

        capabilityTSEntry OBJECT-TYPE
            SYNTAX CapabilityTSEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { capabilityTSOID }
            ::= { capabilityTSTable 1 }

        CapabilityTSEntry ::=
            SEQUENCE {
                capabilityTSOID
                    OBJECT IDENTIFIER,
                capabilityTSAvailability
                    Availability,
                capabilityTSPollInterval
                    PollingInterval
            }

        capabilityTSOID OBJECT-TYPE
            SYNTAX OBJECT IDENTIFIER
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "The object identifier of a specific test/measurement. The object
                identifier of the object within the table whose SYNTAX is
                'TestState' is used to identify the test/measurement. Table
                index components of the object identifier are set to zero,
                except for those which identify specific tests/measurements.
                Such index objects always have a syntax which begins 'Index...'
                in this MIB."
```

```
                    ::= { capabilityTSEntry 1 }

        capabilityTSAvailability OBJECT-TYPE
            SYNTAX Availability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The availability of a specific test or measurement"
            ::= { capabilityTSEntry 2 }

        capabilityTSPollInterval OBJECT-TYPE
            SYNTAX PollingInterval
            UNITS "millisecond"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Indicates the interval between updates of the information
                supplied by this object."
            ::= { capabilityTSEntry 3 }

-- Capabilities for the tr101290CableSat branch of the MIB
        capabilityCableSat OBJECT IDENTIFIER ::= { tr101290Capability 6 }

        capabilityCableSatGroup OBJECT-TYPE
            SYNTAX GroupAvailability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Specifies the overall availability of the cable and satellite
                group of tests and measurements, tr101290CableSat."
            ::= { capabilityCableSat 1 }

        capabilityCableSatTable OBJECT-TYPE
            SYNTAX SEQUENCE OF CapabilityCableSatEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Specifies the individual availability of the cable and satellite
                group of tests and measurements, tr101290CableSat."
            ::= { capabilityCableSat 2 }

        capabilityCableSatEntry OBJECT-TYPE
            SYNTAX CapabilityCableSatEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { capabilityCableSatOID }
            ::= { capabilityCableSatTable 1 }

        CapabilityCableSatEntry ::=
            SEQUENCE {
                capabilityCableSatOID
                    OBJECT IDENTIFIER,
                capabilityCableSatAvailability
                    Availability,
                capabilityCableSatPollInterval
                    PollingInterval
             }

        capabilityCableSatOID OBJECT-TYPE
            SYNTAX OBJECT IDENTIFIER
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "The object identifier of a specific test/measurement. The object
                identifier of the object within the table whose SYNTAX is
                'TestState' is used to identify the test/measurement. Table
                index components of the object identifier are set to zero,
                except for those which identify specific tests/measurements.
                Such index objects always have a syntax which begins 'Index...'
                in this MIB."
            ::= { capabilityCableSatEntry 1 }

        capabilityCableSatAvailability OBJECT-TYPE
            SYNTAX Availability
            MAX-ACCESS read-only
            STATUS current
```

```
                DESCRIPTION
                    "The availability of a specific test or measurement"
                ::= { capabilityCableSatEntry 2 }

            capabilityCableSatPollInterval OBJECT-TYPE
                SYNTAX PollingInterval
                UNITS "millisecond"
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "Indicates the interval between updates of the information
                    supplied by this object."
                ::= { capabilityCableSatEntry 3 }

    -- Capabilities for the tr101290Cable branch of the MIB
            capabilityCable OBJECT IDENTIFIER ::= { tr101290Capability 7 }

            capabilityCableGroup OBJECT-TYPE
                SYNTAX GroupAvailability
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "Specifies the overall availability of the cable group of
                    tests and measurements, tr101290Cable."
                ::= { capabilityCable 1 }

            capabilityCableTable OBJECT-TYPE
                SYNTAX SEQUENCE OF CapabilityCableEntry
                MAX-ACCESS not-accessible
                STATUS current
                DESCRIPTION
                    "Specifies the individual availability of the cable group of
                    tests and measurements, tr101290Cable."
                ::= { capabilityCable 2 }

            capabilityCableEntry OBJECT-TYPE
                SYNTAX CapabilityCableEntry
                MAX-ACCESS not-accessible
                STATUS current
                DESCRIPTION
                    "Row specification"
                INDEX { capabilityCableOID }
                ::= { capabilityCableTable 1 }

            CapabilityCableEntry ::=
                SEQUENCE {
                    capabilityCableOID
                        OBJECT IDENTIFIER,
                    capabilityCableAvailability
                        Availability,
                    capabilityCablePollInterval
                        PollingInterval
                 }

            capabilityCableOID OBJECT-TYPE
                SYNTAX OBJECT IDENTIFIER
                MAX-ACCESS not-accessible
                STATUS current
                DESCRIPTION
                    "The object identifier of a specific test/measurement. The object
                    identifier of the object within the table whose SYNTAX is
                    'TestState' is used to identify the test/measurement. Table
                    index components of the object identifier are set to zero,
                    except for those which identify specific tests/measurements.
                    Such index objects always have a syntax which begins 'Index...'
                    in this MIB."
                ::= { capabilityCableEntry 1 }

            capabilityCableAvailability OBJECT-TYPE
                SYNTAX Availability
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "The availability of a specific test or measurement"
                ::= { capabilityCableEntry 2 }

            capabilityCablePollInterval OBJECT-TYPE
                SYNTAX PollingInterval
```

```
            UNITS "millisecond"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Indicates the interval between updates of the information
                supplied by this object."
            ::= { capabilityCableEntry 3 }

-- Capabilities for the tr101290Satellite branch of the MIB
            capabilitySatellite OBJECT IDENTIFIER ::= { tr101290Capability 8 }

        capabilitySatelliteGroup OBJECT-TYPE
            SYNTAX GroupAvailability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Specifies the overall availability of the satellite group of
                tests and measurements, tr101290Satellite."
            ::= { capabilitySatellite 1 }

        capabilitySatelliteTable OBJECT-TYPE
            SYNTAX SEQUENCE OF CapabilitySatelliteEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Specifies the individual availability of the satellite group of
                tests and measurements, tr101290Satellite."
            ::= { capabilitySatellite 2 }

        capabilitySatelliteEntry OBJECT-TYPE
            SYNTAX CapabilitySatelliteEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { capabilitySatelliteOID }
            ::= { capabilitySatelliteTable 1 }

        CapabilitySatelliteEntry ::=
            SEQUENCE {
                capabilitySatelliteOID
                    OBJECT IDENTIFIER,
                capabilitySatelliteAvailability
                    Availability,
                capabilitySatellitePollInterval
                    PollingInterval
             }

        capabilitySatelliteOID OBJECT-TYPE
            SYNTAX OBJECT IDENTIFIER
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "The object identifier of a specific test/measurement. The object
                identifier of the object within the table whose SYNTAX is
                'TestState' is used to identify the test/measurement. Table
                index components of the object identifier are set to zero,
                except for those which identify specific tests/measurements.
                Such index objects always have a syntax which begins 'Index...'
                in this MIB."
            ::= { capabilitySatelliteEntry 1 }

        capabilitySatelliteAvailability OBJECT-TYPE
            SYNTAX Availability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The availability of a specific test or measurement"
            ::= { capabilitySatelliteEntry 2 }

        capabilitySatellitePollInterval OBJECT-TYPE
            SYNTAX PollingInterval
            UNITS "millisecond"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Indicates the interval between updates of the information
                supplied by this object."
```

```
                    ::= { capabilitySatelliteEntry 3 }

-- Capabilities for the tr101290Terrestrial branch of the MIB
        capabilityTerrestrial OBJECT IDENTIFIER ::= { tr101290Capability 9 }

        capabilityTerrestrialGroup OBJECT-TYPE
            SYNTAX GroupAvailability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Specifies the overall availability of the terrestrial
                group of tests and measurements, tr101290Terrestrial."
            ::= { capabilityTerrestrial 1 }

        capabilityTerrestrialTable OBJECT-TYPE
            SYNTAX SEQUENCE OF CapabilityTerrestrialEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Specifies the individual availability of the terrestrial
                group of tests and measurements, tr101290Terrestrial."
            ::= { capabilityTerrestrial 2 }

        capabilityTerrestrialEntry OBJECT-TYPE
            SYNTAX CapabilityTerrestrialEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { capabilityTerrestrialOID }
            ::= { capabilityTerrestrialTable 1 }

        CapabilityTerrestrialEntry ::=
            SEQUENCE {
                capabilityTerrestrialOID
                    OBJECT IDENTIFIER,
                capabilityTerrestrialAvailability
                    Availability,
                capabilityTerrestrialPollInterval
                    PollingInterval
             }

        capabilityTerrestrialOID OBJECT-TYPE
            SYNTAX OBJECT IDENTIFIER
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "The object identifier of a specific test/measurement. The object
                identifier of the object within the table whose SYNTAX is
                'TestState' is used to identify the test/measurement. Table
                index components of the object identifier are set to zero,
                except for those which identify specific tests/measurements.
                Such index objects always have a syntax which begins 'Index...'
                in this MIB."
            ::= { capabilityTerrestrialEntry 1 }

        capabilityTerrestrialAvailability OBJECT-TYPE
            SYNTAX Availability
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The availability of a specific test or measurement"
            ::= { capabilityTerrestrialEntry 2 }

        capabilityTerrestrialPollInterval OBJECT-TYPE
            SYNTAX PollingInterval
            UNITS "millisecond"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Indicates the interval between updates of the information
                supplied by this object."
            ::= { capabilityTerrestrialEntry 3 }

-- Transport Stream measurements and tests from
-- clause 5 of TR 101 290.
        tr101290TS OBJECT IDENTIFIER ::= { tr101290Objects 5 }
```

```
tsTests OBJECT IDENTIFIER ::= { tr101290TS 2 }

tsTestsSummaryTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsTestsSummaryEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The tsTestsSummaryTable provides access to the state of all of
        the Transport Stream tests enumerated in IndexTransportStreamTest.
        The status relates to the whole Transport Stream. In the case
        of tests which have a status per PID, the tsTestsSummaryTable
        gives the 'worst' status across all the PIDs and the status for
        each PID is available in tsTestsPIDTable."
    REFERENCE
        "TR 101 290 clause 5.2"
    ::= { tsTests 2 }

tsTestsSummaryEntry OBJECT-TYPE
    SYNTAX TsTestsSummaryEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsTestsSummaryTestNumber, tsTestsSummaryInputNumber }
    ::= { tsTestsSummaryTable 1 }

TsTestsSummaryEntry ::=
    SEQUENCE {
        tsTestsSummaryInputNumber
            InputNumber,
        tsTestsSummaryTestNumber
            IndexTransportStreamTest,
        tsTestsSummaryState
            TestState,
        tsTestsSummaryEnable
            Enable,
        tsTestsSummaryCounter
            Counter32,
        tsTestsSummaryCounterDiscontinuity
            DateAndTime,
        tsTestsSummaryCounterReset
            TruthValue,
        tsTestsSummaryLatestError
            DateAndTime,
        tsTestsSummaryActiveTime
            ActiveTime
    }

tsTestsSummaryInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the test is made"
    ::= { tsTestsSummaryEntry 1 }

tsTestsSummaryTestNumber OBJECT-TYPE
    SYNTAX IndexTransportStreamTest
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Specifies the test, see definition of IndexTransportStreamTest.

        Rows in the table exist only for tests which are actually
        implemented by the measuring equipment."
    ::= { tsTestsSummaryEntry 2 }

tsTestsSummaryState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This gives the overall pass/fail state of the test. For tests
        which have a state per PID, tsTestsSummaryState contains the
        highest numeric value of all the tsTestsPIDState objects for
        the test."
    ::= { tsTestsSummaryEntry 3 }
```

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```
tsTestsSummaryEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether this test and associated traps are enabled.

        Setting tsTestsSummaryEnable affects tsTestsPIDEnable in
        tsTestsPIDTable. When tsTestsSummaryEnable is set, all existing
        instances of tsTestsPIDEnable are set to the same value. Any
        new rows in tsTestsPIDTable which are created will also have
        this value for tsTestsPIDEnable (unless the row is created by
        explicitly setting the value of tsTestsPIDEnable)."
    DEFVAL { { testEnable } }
    ::= { tsTestsSummaryEntry 4 }

tsTestsSummaryCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times this error has occurred.
        For Status errors this is the number of times the
        TestState has entered the fail state from some other
        state. For Error events this is the total number of
        events; the persistence timer is not taken into
        account by the counter."
    ::= { tsTestsSummaryEntry 5 }

tsTestsSummaryCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsTestsSummaryCounter object."
    ::= { tsTestsSummaryEntry 6 }

tsTestsSummaryCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "tsTestsSummaryCounter is reset to zero and
        tsTestsSummaryCounterDiscontinuity is set to the current
        time if this object is set to 'true'.

        This object has no effect on the tsTestsPIDCounter objects."
    ::= { tsTestsSummaryEntry 7 }

tsTestsSummaryLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of the error.
        For Status errors this is the most recent time the
        TestState entered the fail state from some other state.
        For Error events this is the most recent occurrence;
        the persistence timer is not taken into account."
    ::= { tsTestsSummaryEntry 8 }

tsTestsSummaryActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to evaluate this test."
    ::= { tsTestsSummaryEntry 9 }

tsTestsPIDTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsTestsPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
```

```
    DESCRIPTION
        "The tsTestsPIDTable provides access to the state of those
        Transport Stream tests enumerated in IndexTransportStreamTest
        which relate to individual PIDs. These tests are:

        1.4      Continuity_count_error
        1.5.a    PMT_error_2
        1.6      PID_error
        2.3.a    PCR_repetition_error
        2.3.b    PCR_discontinuity_indicator_error
        2.4      PCR_accuracy_error
        2.5      PTS_error
        3.3      Buffer_error
        3.4.a    Unreferenced_PID"
    REFERENCE
        "TR 101 290 clause 5.2"
    ::= { tsTests 3 }

tsTestsPIDEntry OBJECT-TYPE
    SYNTAX TsTestsPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsTestsPIDPID, tsTestsPIDTestNumber, tsTestsPIDInputNumber }
    ::= { tsTestsPIDTable 1 }

TsTestsPIDEntry ::=
    SEQUENCE {
        tsTestsPIDInputNumber
            InputNumber,
        tsTestsPIDPID
            PIDPlusOne,
        tsTestsPIDTestNumber
            IndexTransportStreamTest,
        tsTestsPIDRowStatus
            RowStatus,
        tsTestsPIDState
            TestState,
        tsTestsPIDEnable
            Enable,
        tsTestsPIDCounter
            Counter32,
        tsTestsPIDCounterDiscontinuity
            DateAndTime,
        tsTestsPIDCounterReset
            TruthValue,
        tsTestsPIDLatestError
            DateAndTime,
        tsTestsPIDActiveTime
            ActiveTime
     }

tsTestsPIDInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the test is made"
    ::= { tsTestsPIDEntry 1 }

tsTestsPIDPID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PID (plus one) on which the test is made"
    ::= { tsTestsPIDEntry 2 }

tsTestsPIDTestNumber OBJECT-TYPE
    SYNTAX IndexTransportStreamTest
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Specifies the test, see definition of IndexTransportStreamTest.

        Rows in the table exist only for tests which are actually
        implemented by the measuring equipment."
```

```
    ::= { tsTestsPIDEntry 3 }

tsTestsPIDRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This is used by the manager to create and delete rows in
        tsTestsPIDTable. The agent automatically creates rows for
        PID/test combinations where there are errors to report."
    REFERENCE
        "RFC 2579"
    DEFVAL { active }
    ::= { tsTestsPIDEntry 4 }

tsTestsPIDState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This gives the overall pass/fail state of the test"
    ::= { tsTestsPIDEntry 5 }

tsTestsPIDEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "Determines whether this test and associated traps are enabled.

        When a trap triggering condition arises for a per PID test,
        this object alone is used to determine whether a trap will be
        generated, without any reference to tsTestsSummaryEnable."
    DEFVAL { { testEnable } }
    ::= { tsTestsPIDEntry 6 }

tsTestsPIDCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times this error has occurred.
        For Status errors this is the number of times the
        TestState has entered the fail state from some other
        state. For Error events this is the total number of
        events; the persistence timer is not taken into
        account by the counter."
    ::= { tsTestsPIDEntry 7 }

tsTestsPIDCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsTestsSummaryCounter object."
    ::= { tsTestsPIDEntry 8 }

tsTestsPIDCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "tsTestsPIDCounter is reset to zero and
        tsTestsPIDCounterDiscontinuity is set to the current
        time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { tsTestsPIDEntry 9 }

tsTestsPIDLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "The timestamp at the most recent occurrence of the error.
            For Status errors this is the most recent time the
            TestState entered the fail state from some other state.
            For Error events this is the most recent occurrence;
            the persistence timer is not taken into account."
        ::= { tsTestsPIDEntry 10 }

tsTestsPIDActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to evaluate this test."
    ::= { tsTestsPIDEntry 11 }

tsTestsPreferences OBJECT IDENTIFIER ::= { tsTests 100 }

tsTestsPreferencesTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsTestsPreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table contains measurement thresholds and other
        configuration information that is applied on a per
        Transport Stream basis."
    ::= { tsTestsPreferences 1 }

tsTestsPreferencesEntry OBJECT-TYPE
    SYNTAX TsTestsPreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsTestsPrefInputNumber }
    ::= { tsTestsPreferencesTable 1 }

TsTestsPreferencesEntry ::=
    SEQUENCE {
        tsTestsPrefInputNumber
            InputNumber,
        tsTestsPrefTransitionDuration
            FloatingPoint,
        tsTestsPrefPATSectionIntervalMax
            FloatingPoint,
        tsTestsPrefPMTSectionIntervalMax
            FloatingPoint,
        tsTestsPrefReferredIntervalMax
            FloatingPoint,
        tsTestsPrefPCRIntervalMax
            FloatingPoint,
        tsTestsPrefPCRDiscontinuityMax
            FloatingPoint,
        tsTestsPrefPCRInaccuracyMax
            FloatingPoint,
        tsTestsPrefPTSIntervalMax
            FloatingPoint,
        tsTestsPrefNITActualIntervalMax
            FloatingPoint,
        tsTestsPrefNITActualIntervalMin
            FloatingPoint,
        tsTestsPrefNITOtherIntervalMax
            FloatingPoint,
        tsTestsPrefSIGapMin
            FloatingPoint,
        tsTestsPrefNITTableIntervalMax
            FloatingPoint,
        tsTestsPrefBATTableIntervalMax
            FloatingPoint,
        tsTestsPrefSDTActualTableIntervalMax
            FloatingPoint,
        tsTestsPrefSDTOtherTableIntervalMax
            FloatingPoint,
        tsTestsPrefEITPFActualTableIntervalMax
            FloatingPoint,
        tsTestsPrefEITPFOtherTableIntervalMax
            FloatingPoint,
```

```
        tsTestsPrefEITSActualNearTableIntervalMax
            FloatingPoint,
        tsTestsPrefEITSActualFarTableIntervalMax
            FloatingPoint,
        tsTestsPrefEITSOtherNearTableIntervalMax
            FloatingPoint,
        tsTestsPrefEITSOtherFarTableIntervalMax
            FloatingPoint,
        tsTestsPrefTxTTableIntervalMax
            FloatingPoint,
        tsTestsPrefSDTActualIntervalMax
            FloatingPoint,
        tsTestsPrefSDTActualIntervalMin
            FloatingPoint,
        tsTestsPrefSDTOtherIntervalMax
            FloatingPoint,
        tsTestsPrefEITActualIntervalMax
            FloatingPoint,
        tsTestsPrefEITActualIntervalMin
            FloatingPoint,
        tsTestsPrefEITOtherIntervalMax
            FloatingPoint,
        tsTestsPrefRSTIntervalMin
            FloatingPoint,
        tsTestsPrefTDTIntervalMax
            FloatingPoint,
        tsTestsPrefTDTIntervalMin
            FloatingPoint
     }

tsTestsPrefInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { tsTestsPreferencesEntry 1 }

tsTestsPrefTransitionDuration OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Various tests, including CAT_error (2.6) and Unreferenced_PID
        (3.4) must take into account that short transition periods can
        exist where the state of the SI and PSI information is
        inconsistent with the state of the stream. These transitions
        should not cause error indications. This parameter specifies
        the period which must be allowed for transition states."
    REFERENCE
        "TR 101 290 clause 5.2.3 NOTE 1"
    DEFVAL { "0.5" }
    ::= { tsTestsPreferencesEntry 2 }

tsTestsPrefPATSectionIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum repetition interval for PAT sections."
    REFERENCE
        "TR 101 290 clause 5.2.1 (PAT_error_2 1.3.a)"
    DEFVAL { "0.5" }
    ::= { tsTestsPreferencesEntry 3 }

tsTestsPrefPMTSectionIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum repetition interval for PMT sections."
    REFERENCE
        "TR 101 290 clause 5.2.1 (PMT_error_2 1.5.a)"
```

```
    DEFVAL { "0.5" }
    ::= { tsTestsPreferencesEntry 4 }

tsTestsPrefReferredIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "s"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted interval between the arrival of consecutive
        packets for all PIDs. When the value of this object is set, the
        value of tsTestsPrefPIDReferredIntervalMax is changed for every PID.
        The value of this object is also used as a default for
        tsTestsPrefPIDReferredIntervalMax when a new row is created in
        tsTestsPreferencesPIDTable."
    REFERENCE
        "TR 101 290 clause 5.2.1 (PID_error 1.6)"
    DEFVAL { "5" }
    ::= { tsTestsPreferencesEntry 5 }

tsTestsPrefPCRIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted interval between PCR arrival times
        on each PCR PID."
    REFERENCE
        "TR 101 290 clause 5.2.2 (PCR_repetition_error 2.3.a)"
    DEFVAL { "0.04" }
    ::= { tsTestsPreferencesEntry 6 }

tsTestsPrefPCRDiscontinuityMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted difference between two consecutive
        PCR values."
    REFERENCE
        "TR 101 290 clause 5.2.2 (PCR_discontinuity_indication_error 2.3.b)"
    DEFVAL { "0.1" }
    ::= { tsTestsPreferencesEntry 7 }

tsTestsPrefPCRInaccuracyMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted PCR inaccuracy. An error is indicated
        if the PCR inaccuracy is outside the range:

        [-tsTestsPrefPCRInaccuracyMax .. +tsTestsPrefPCRInaccuracyMax]."
    REFERENCE
        "TR 101 290 clause 5.2.2 (PCR_accuracy_error 2.4)"
    DEFVAL { "500E-9" }
    ::= { tsTestsPreferencesEntry 8 }

tsTestsPrefPTSIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted PTS repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.2 (PTS_error 2.5)"
    DEFVAL { "0.7" }
    ::= { tsTestsPreferencesEntry 9 }

tsTestsPrefNITActualIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
```

```
    DESCRIPTION
        "Maximum permitted NIT_actual section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.1.a"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 10 }

tsTestsPrefNITActualIntervalMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Minimum permitted NIT_actual section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.1.a"
    DEFVAL { "0.025" }
    ::= { tsTestsPreferencesEntry 11 }

tsTestsPrefNITOtherIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted NIT_other section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.1.b"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 12 }

tsTestsPrefSIGapMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Minimum permitted gap between packets containing sections."
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.2
        EN 300 468 clause 5.1.4"
    DEFVAL { "0.025" }
    ::= { tsTestsPreferencesEntry 13 }

tsTestsPrefNITTableIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted NIT table repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.2
        TR 101 211 clause 4.4.1 a) and 4.4.2 a)"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 14 }

tsTestsPrefBATTableIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted BAT table repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.2
        TR 101 211 clause 4.4.1 b) and 4.4.2 b)"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 15 }

tsTestsPrefSDTActualTableIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted SDT actual transport stream table
        repetition interval"
```

```
        REFERENCE
            "TR 101 290 clause 5.2.3 test 3.2
            TR 101 211 clause 4.4.1 c) and 4.4.2 c)"
        DEFVAL { "2" }
        ::= { tsTestsPreferencesEntry 16 }

tsTestsPrefSDTOtherTableIntervalMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "second"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Maximum permitted SDT other transport stream table
            repetition interval"
        REFERENCE
            "TR 101 290 clause 5.2.3 test 3.2
            TR 101 211 clause 4.4.1 d) and 4.4.2 d)"
        DEFVAL { "10" }
        ::= { tsTestsPreferencesEntry 17 }

tsTestsPrefEITPFActualTableIntervalMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "second"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Maximum permitted EIT Present/Following actual transport
            stream table repetition interval"
        REFERENCE
            "TR 101 290 clause 5.2.3 test 3.2
            TR 101 211 clause 4.4.1 e) and 4.4.2 e:"
        DEFVAL { "2" }
        ::= { tsTestsPreferencesEntry 18 }

tsTestsPrefEITPFOtherTableIntervalMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "second"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Maximum permitted EIT Present/Following other transport
            stream table repetition interval"
        REFERENCE
            "TR 101 290 clause 5.2.3 test 3.2
            TR 101 211 clause 4.4.1 f) and 4.4.2 f)"
        DEFVAL { "10" }
        ::= { tsTestsPreferencesEntry 19 }

tsTestsPrefEITSActualNearTableIntervalMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "second"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Maximum permitted EIT Schedule actual transport stream table
            repetition interval for the near future (the next 8 days for
            satellite and cable, the next day for terrestrial)."
        REFERENCE
            "TR 101 290 clause 5.2.3 test 3.2
            TR 101 211 clause 4.4.1 g) and 4.4.2 second a)"
        DEFVAL { "10" }
        ::= { tsTestsPreferencesEntry 20 }

tsTestsPrefEITSActualFarTableIntervalMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "second"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Maximum permitted EIT Schedule actual transport stream table
            repetition interval for the far future (beyond the next 8 days
            for satellite and cable, beyond the next day for terrestrial)."
        REFERENCE
            "TR 101 290 clause 5.2.3 test 3.2
            TR 101 211 clause 4.4.1 h) and 4.4.2 second c)"
        DEFVAL { "10" }
        ::= { tsTestsPreferencesEntry 21 }
```

```
tsTestsPrefEITSOtherNearTableIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted EIT Schedule other transport stream table
        repetition interval for the near future (the next 8 days for
        satellite and cable, the next day for terrestrial)."
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.2
        TR 101 211 clause 4.4.1 g) and 4.4.2 second b)"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 22 }

tsTestsPrefEITSOtherFarTableIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted EIT Schedule other transport stream table
        repetition interval for the far future (beyond the next 8 days
        for satellite and cable, beyond the next day for terrestrial)."
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.2
        TR 101 211 clause 4.4.1 h) and 4.4.2 second d)"
    DEFVAL { "30" }
    ::= { tsTestsPreferencesEntry 23 }

tsTestsPrefTxTTableIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted TDT and TOT table repetition intervals"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.2
        TR 101 211 clause 4.4.1 i) and 4.4.2 second e)"
    DEFVAL { "30" }
    ::= { tsTestsPreferencesEntry 24 }

tsTestsPrefSDTActualIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted SDT_actual section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.5.a"
    DEFVAL { "2" }
    ::= { tsTestsPreferencesEntry 25 }

tsTestsPrefSDTActualIntervalMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Minimum permitted SDT_actual section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.5.a"
    DEFVAL { "0.025" }
    ::= { tsTestsPreferencesEntry 26 }

tsTestsPrefSDTOtherIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted SDT_other section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.5.b"
```

```
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 27 }

tsTestsPrefEITActualIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted EIT_actual section repetition interval (applies to
        both present and following clauses)."
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.6.a"
    DEFVAL { "2" }
    ::= { tsTestsPreferencesEntry 28 }

tsTestsPrefEITActualIntervalMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Minimum permitted EIT_actual section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.5.a"
    DEFVAL { "0.025" }
    ::= { tsTestsPreferencesEntry 29 }

tsTestsPrefEITOtherIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted EIT_other section repetition interval (applies to
        both present and following clauses)."
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.6.b"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 30 }

tsTestsPrefRSTIntervalMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Minimum permitted RST section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.7"
    DEFVAL { "0.025" }
    ::= { tsTestsPreferencesEntry 31 }

tsTestsPrefTDTIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted TDT section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.8"
    DEFVAL { "10" }
    ::= { tsTestsPreferencesEntry 32 }

tsTestsPrefTDTIntervalMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Minimum permitted TDT section repetition interval"
    REFERENCE
        "TR 101 290 clause 5.2.3 test 3.8"
    DEFVAL { "0.025" }
    ::= { tsTestsPreferencesEntry 33 }

tsTestsPreferencesPIDTable OBJECT-TYPE
```

```
    SYNTAX SEQUENCE OF TsTestsPreferencesPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table contains measurement thresholds and other
        configuration information that is applied on a per
        PID per Transport Stream basis."
    ::= { tsTestsPreferences 2 }

tsTestsPreferencesPIDEntry OBJECT-TYPE
    SYNTAX TsTestsPreferencesPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Description."
    INDEX { tsTestsPrefPIDInputNumber, tsTestsPrefPIDPID }
    ::= { tsTestsPreferencesPIDTable 1 }

TsTestsPreferencesPIDEntry ::=
    SEQUENCE {
        tsTestsPrefPIDInputNumber
            InputNumber,
        tsTestsPrefPIDPID
            PIDPlusOne,
        tsTestsPrefPIDRowStatus
            RowStatus,
        tsTestsPrefPIDReferredIntervalMax
            FloatingPoint
     }

tsTestsPrefPIDInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { tsTestsPreferencesPIDEntry 1 }

tsTestsPrefPIDPID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PID to which these preferences apply"
    ::= { tsTestsPreferencesPIDEntry 2 }

tsTestsPrefPIDRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This object is used to manage the rows in this table."
    ::= { tsTestsPreferencesPIDEntry 3 }

tsTestsPrefPIDReferredIntervalMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted interval between the arrival of consecutive
        packets of this PID.
        The default value for this object is the current value of
        tsTestsPrefReferredIntervalMax for the same input."
    REFERENCE
        "TR 101 290 clause 5.2.1 (PID_error 1.6)"
    ::= { tsTestsPreferencesPIDEntry 4 }

tsMeasurements OBJECT IDENTIFIER ::= { tr101290TS 4 }

tsPcrMeasurementTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsPcrMeasurementEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table makes available the PCR_FO, PCR_DR, PCR_OJ
        and PCR_AC measurements."
```

```
    REFERENCE
        "TR 101 290 clause 5.3.2"
    ::= { tsMeasurements 1 }


tsPcrMeasurementEntry OBJECT-TYPE
    SYNTAX TsPcrMeasurementEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsPcrMeasurementPID, tsPcrMeasurementNumber, tsPcrMeasurementInputNumber }
    ::= { tsPcrMeasurementTable 1 }


TsPcrMeasurementEntry ::=
    SEQUENCE {
        tsPcrMeasurementInputNumber
            InputNumber,
        tsPcrMeasurementPID
            PIDPlusOne,
        tsPcrMeasurementNumber
            IndexPCRMeasurement,
        tsPcrMeasurementRowStatus
            RowStatus,
        tsPcrMeasurementState
            TestState,
        tsPcrMeasurementEnable
            Enable,
        tsPcrMeasurementCounter
            Counter32,
        tsPcrMeasurementCounterDiscontinuity
            DateAndTime,
        tsPcrMeasurementCounterReset
            TruthValue,
        tsPcrMeasurementLatestError
            DateAndTime,
        tsPcrMeasurementActiveTime
            ActiveTime,
        tsPcrMeasurementMeasurementState
            MeasurementState,
        tsPcrMeasurementValue
            FloatingPoint
      }


tsPcrMeasurementInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Input on which the measurement is made"
    ::= { tsPcrMeasurementEntry 1 }


tsPcrMeasurementPID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PID (plus one) in the Transport Stream carrying (or expected
        to carry) PCRs."
    ::= { tsPcrMeasurementEntry 2 }


tsPcrMeasurementNumber OBJECT-TYPE
    SYNTAX IndexPCRMeasurement
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This selects one of the four PCR measurements"
    ::= { tsPcrMeasurementEntry 3 }


tsPcrMeasurementRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This object is used by the manager to create and delete
        rows in the table. The agent automatically creates rows
        for PIDs where it detects the presence of a PCR."
    REFERENCE
        "RFC 2579"
```

```
    DEFVAL { active }
    ::= { tsPcrMeasurementEntry 4 }

tsPcrMeasurementState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This gives the overall pass/fail state of the threshold
        test on this measurement"
    ::= { tsPcrMeasurementEntry 5 }

tsPcrMeasurementEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "Determines whether this test and associated traps are enabled."
    DEFVAL { { testEnable } }
    ::= { tsPcrMeasurementEntry 6 }

tsPcrMeasurementCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { tsPcrMeasurementEntry 7 }

tsPcrMeasurementCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsPcrMeasurementCounter object."
    ::= { tsPcrMeasurementEntry 8 }

tsPcrMeasurementCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "tsPcrMeasurementCounter is reset to zero and
        tsPcrMeasurementCounterDiscontinuity is set to the
        current time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { tsPcrMeasurementEntry 9 }

tsPcrMeasurementLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { tsPcrMeasurementEntry 10 }

tsPcrMeasurementActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to make this measurement"
    ::= { tsPcrMeasurementEntry 11 }

tsPcrMeasurementMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { tsPcrMeasurementEntry 12 }
```

```
tsPcrMeasurementValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The units for the measured value depend on the measurement:

        PCR_FO      Hz
        PCR_DR      Hz/s

        Values for PCR_OJ and PCR_AC are not provided as they occur
        too quickly to be usefully retrieved via SNMP. For these
        measurements, the MeasurementState is always 'unknown'.
        However, the threshold tests are expected to work correctly
        for these measurements."
    ::= { tsPcrMeasurementEntry 13 }

bitRate OBJECT IDENTIFIER ::= { tsMeasurements 2 }

tsTransportStreamBitRateTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsTransportStreamBitRateEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Bit rates for each complete Transport Stream"
    REFERENCE
        "TR 101 290 clause 5.3.3"
    ::= { bitRate 1 }

tsTransportStreamBitRateEntry OBJECT-TYPE
    SYNTAX TsTransportStreamBitRateEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsTransportStreamBitRateInputNumber }
    ::= { tsTransportStreamBitRateTable 1 }

TsTransportStreamBitRateEntry ::=
    SEQUENCE {
        tsTransportStreamBitRateInputNumber
            InputNumber,
        tsTransportStreamBitRateState
            TestState,
        tsTransportStreamBitRateEnable
            Enable,
        tsTransportStreamBitRateCounter
            Counter32,
        tsTransportStreamBitRateCounterDiscontinuity
            DateAndTime,
        tsTransportStreamBitRateCounterReset
            TruthValue,
        tsTransportStreamBitRateLatestError
            DateAndTime,
        tsTransportStreamBitRateActiveTime
            ActiveTime,
        tsTransportStreamBitRateMeasurementState
            MeasurementState,
        tsTransportStreamBitRateValue
            FloatingPoint,
        tsTransportStreamBitRateNomenclature
            DisplayString
    }

tsTransportStreamBitRateInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { tsTransportStreamBitRateEntry 1 }

tsTransportStreamBitRateState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "This gives the overall pass/fail state of the
            threshold test on this measurement"
        ::= { tsTransportStreamBitRateEntry 2 }


tsTransportStreamBitRateEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        ::= { tsTransportStreamBitRateEntry 3 }

tsTransportStreamBitRateCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Count of the number of times a threshold error has
            occurred for this measurement."
        ::= { tsTransportStreamBitRateEntry 4 }

tsTransportStreamBitRateCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a discontinuity
            in the tsTransportStreamBitRateCounterobject."
        ::= { tsTransportStreamBitRateEntry 5 }

tsTransportStreamBitRateCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "tsTransportStreamBitRateCounteris reset to zero and
            tsTransportStreamBitRateCounterDiscontinuity is set to
            the current time if 'true' is written to this variable.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { tsTransportStreamBitRateEntry 6 }

tsTransportStreamBitRateLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a threshold
            error on this measurement."
        ::= { tsTransportStreamBitRateEntry 7 }

tsTransportStreamBitRateActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { tsTransportStreamBitRateEntry 8 }

tsTransportStreamBitRateMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Indicates the validity of the measurement"
        ::= { tsTransportStreamBitRateEntry 9 }

tsTransportStreamBitRateValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "bit/s"
        MAX-ACCESS read-only
        STATUS current
```

```
    DESCRIPTION
        "The overall Transport Stream bit rate"
    ::= { tsTransportStreamBitRateEntry 10 }

tsTransportStreamBitRateNomenclature OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Standardized description of the method of measurement
        of the bitrate, for example 'bit/s @MGB2'"
    REFERENCE
        "TR 101 290 5.3.3.3"
    ::= { tsTransportStreamBitRateEntry 11 }

tsServiceBitRateTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsServiceBitRateEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Bit rates for each service/program within each Transport
        Stream. The table is sparse, in that only services
        mentioned in the PMT will be present.

        The bit rate of a service is the sum of the bit rates of
        the elementary_PID's in its PMT and the CA_PID's in any
        CA_descriptors in its PMT (ECMs). The bit rate of the
        PMT itself is excluded. The bit rate of the PCR_PID is
        excluded unless the PCR_PID is also one of the
        elementary_PID's in the PMT."
    REFERENCE
        "TR 101 290 clause 5.3.3"
    ::= { bitRate 2 }

tsServiceBitRateEntry OBJECT-TYPE
    SYNTAX TsServiceBitRateEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsServiceBitRateService, tsServiceBitRateInputNumber }
    ::= { tsServiceBitRateTable 1 }

TsServiceBitRateEntry ::=
    SEQUENCE {
        tsServiceBitRateInputNumber
            InputNumber,
        tsServiceBitRateService
            ServiceId,
        tsServiceBitRateRowStatus
            RowStatus,
        tsServiceBitRateState
            TestState,
        tsServiceBitRateEnable
            Enable,
        tsServiceBitRateCounter
            Counter32,
        tsServiceBitRateCounterDiscontinuity
            DateAndTime,
        tsServiceBitRateCounterReset
            TruthValue,
        tsServiceBitRateLatestError
            DateAndTime,
        tsServiceBitRateActiveTime
            ActiveTime,
        tsServiceBitRateMeasurementState
            MeasurementState,
        tsServiceBitRateValue
            FloatingPoint,
        tsServiceBitRateNomenclature
            DisplayString
     }

tsServiceBitRateInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
```

```
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { tsServiceBitRateEntry 1 }

tsServiceBitRateService OBJECT-TYPE
    SYNTAX ServiceId
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The program_number/service_id to which the information
        in the rest of the row applies."
    ::= { tsServiceBitRateEntry 2 }

tsServiceBitRateRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This is used by the manager to create and delete rows
        in the table. The agent will automatically create rows
        for services it finds in the PMT."
    REFERENCE
        "RFC 2579"
    DEFVAL { active }
    ::= { tsServiceBitRateEntry 3 }

tsServiceBitRateState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This gives the overall pass/fail state of the threshold
        test on this measurement"
    ::= { tsServiceBitRateEntry 4 }

tsServiceBitRateEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { tsServiceBitRateEntry 5 }

tsServiceBitRateCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { tsServiceBitRateEntry 6 }

tsServiceBitRateCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsServiceBitRateCounter object."
    ::= { tsServiceBitRateEntry 7 }

tsServiceBitRateCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "tsServiceBitRateCounter is reset to zero and
        tsServiceBitRateCounterDiscontinuity is set to the
        current time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { tsServiceBitRateEntry 8 }

tsServiceBitRateLatestError OBJECT-TYPE
    SYNTAX DateAndTime
```

```
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { tsServiceBitRateEntry 9 }

tsServiceBitRateActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { tsServiceBitRateEntry 10 }

tsServiceBitRateMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { tsServiceBitRateEntry 11 }

tsServiceBitRateValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Overall bit rate for the service"
    ::= { tsServiceBitRateEntry 12 }

tsServiceBitRateNomenclature OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Standardized description of the method of measurement
        of the bitrate, for example 'bit/s @MGB2'"
    REFERENCE
        "TR 101 290 5.3.3.3"
    ::= { tsServiceBitRateEntry 13 }

tsPIDBitRateTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsPIDBitRateEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Bit rates for each PID within each Transport Stream.
        The table is sparse, in that only PIDs whose bit rate
        is currently greater than zero will be present in the
        table. This allows for faster traversal of the table
        to build up a list of PID bit rates."
    REFERENCE
        "TR 101 290 clause 5.3.3"
    ::= { bitRate 3 }

tsPIDBitRateEntry OBJECT-TYPE
    SYNTAX TsPIDBitRateEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsPIDBitRateInputNumber, tsPIDBitRatePID }
    ::= { tsPIDBitRateTable 1 }

TsPIDBitRateEntry ::=
    SEQUENCE {
        tsPIDBitRateInputNumber
            InputNumber,
        tsPIDBitRatePID
            PIDPlusOne,
        tsPIDBitRateRowStatus
            RowStatus,
        tsPIDBitRateState
            TestState,
        tsPIDBitRateEnable
```

```
            Enable,
        tsPIDBitRateCounter
            Counter32,
        tsPIDBitRateCounterDiscontinuity
            DateAndTime,
        tsPIDBitRateCounterReset
            TruthValue,
        tsPIDBitRateLatestError
            DateAndTime,
        tsPIDBitRateActiveTime
            ActiveTime,
        tsPIDBitRateMeasurementState
            MeasurementState,
        tsPIDBitRateValue
            FloatingPoint,
        tsPIDBitRateNomenclature
            DisplayString
      }

tsPIDBitRateInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { tsPIDBitRateEntry 1 }

tsPIDBitRatePID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "PID whose bit rate is being measured (plus one)"
    ::= { tsPIDBitRateEntry 2 }

tsPIDBitRateRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This is used by the manager to create and delete rows
        in the table. The agent will automatically create rows
        for PIDs whose bit rate is non-zero."
    DEFVAL { active }
    ::= { tsPIDBitRateEntry 3 }

tsPIDBitRateState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This gives the overall pass/fail state of the threshold
        test on this measurement"
    ::= { tsPIDBitRateEntry 4 }

tsPIDBitRateEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { tsPIDBitRateEntry 5 }

tsPIDBitRateCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { tsPIDBitRateEntry 6 }

tsPIDBitRateCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
```

ETSI

```
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsPIDBitRateCounter object."
    ::= { tsPIDBitRateEntry 7 }

tsPIDBitRateCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "tsPIDBitRateCounter is reset to zero and
        tsPIDBitRateCounterDiscontinuity is set to the current
        time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { tsPIDBitRateEntry 8 }

tsPIDBitRateLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { tsPIDBitRateEntry 9 }

tsPIDBitRateActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform
        this measurement"
    ::= { tsPIDBitRateEntry 10 }

tsPIDBitRateMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { tsPIDBitRateEntry 11 }

tsPIDBitRateValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Bit rate for the PID."
    ::= { tsPIDBitRateEntry 12 }

tsPIDBitRateNomenclature OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Standardized description of the method of measurement
        of the bitrate, for example 'bit/s @MGB2'"
    REFERENCE
        "TR 101 290 5.3.3.3"
    ::= { tsPIDBitRateEntry 13 }

tsConsistencyTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsConsistencyEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table provides the result of the Transport Stream
        consistency test for each input."
    REFERENCE
        "TR 101 290 clause 5.3.4"
    ::= { tsMeasurements 3 }

tsConsistencyEntry OBJECT-TYPE
    SYNTAX TsConsistencyEntry
```

```
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsConsistencyInputNumber, tsConsistencyTestNumber }
    ::= { tsConsistencyTable 1 }

TsConsistencyEntry ::=
    SEQUENCE {
        tsConsistencyInputNumber
            InputNumber,
        tsConsistencyTestNumber
            IndexConsistencyTest,
        tsConsistencyState
            TestState,
        tsConsistencyEnable
            Enable,
        tsConsistencyCounter
            Counter32,
        tsConsistencyCounterDiscontinuity
            DateAndTime,
        tsConsistencyCounterReset
            TruthValue,
        tsConsistencyLatestError
            DateAndTime,
        tsConsistencyActiveTime
            ActiveTime
     }

tsConsistencyInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Input (Transport Stream) on which the consistency check is made."
    ::= { tsConsistencyEntry 1 }

tsConsistencyTestNumber OBJECT-TYPE
    SYNTAX IndexConsistencyTest
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Specifies the consistency check test"
    ::= { tsConsistencyEntry 2 }

tsConsistencyState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This gives the overall pass/fail state of the consistency check."
    ::= { tsConsistencyEntry 3 }

tsConsistencyEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether this test and associated traps are enabled."
    DEFVAL { { testEnable } }
    ::= { tsConsistencyEntry 4 }

tsConsistencyCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times the consistency check has failed."
    ::= { tsConsistencyEntry 5 }

tsConsistencyCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsConsistencyCounter object."
    ::= { tsConsistencyEntry 6 }

tsConsistencyCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "tsConsistencyCounter is reset to zero and
        tsConsistencyCounterDiscontinuity is set to the current
        time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    ::= { tsConsistencyEntry 7 }

tsConsistencyLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent failure of the consistency check."
    ::= { tsConsistencyEntry 8 }

tsConsistencyActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this test"
    ::= { tsConsistencyEntry 9 }

tsMeasurePreferences OBJECT IDENTIFIER ::= { tsMeasurements 100 }

tsMeasurePreferencesTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsMeasurePreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table contains configuration information for the
        tsMeasurements branch of the MIB. Configuration related
        to the whole Transport Stream is found here."
    ::= { tsMeasurePreferences 1 }

tsMeasurePreferencesEntry OBJECT-TYPE
    SYNTAX TsMeasurePreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsMeasurePrefInputNumber }
    ::= { tsMeasurePreferencesTable 1 }

TsMeasurePreferencesEntry ::=
    SEQUENCE {
        tsMeasurePrefInputNumber
            InputNumber,
        tsMeasurePrefPCRDemarcationFrequency
            FloatingPoint,
        tsMeasurePrefPCRFOMax
            FloatingPoint,
        tsMeasurePrefPCRDRMax
            FloatingPoint,
        tsMeasurePrefPCROJMax
            FloatingPoint,
        tsMeasurePrefTSBitRateTau
            FloatingPoint,
        tsMeasurePrefTSBitRateN
            Unsigned32,
        tsMeasurePrefTSBitRateElement
            BitRateElement,
        tsMeasurePrefTSBitRateMin
            FloatingPoint,
        tsMeasurePrefTSBitRateMax
            FloatingPoint,
        tsMeasurePrefAllServiceBitRateTau
```

```
                FloatingPoint,
            tsMeasurePrefAllServiceBitRateN
                Unsigned32,
            tsMeasurePrefAllServiceBitRateElement
                BitRateElement,
            tsMeasurePrefAllPIDBitRateTau
                FloatingPoint,
            tsMeasurePrefAllPIDBitRateN
                Unsigned32,
            tsMeasurePrefAllPIDBitRateElement
                BitRateElement,
            tsMeasurePrefExpectedTSID
                TransportStreamID
          }

tsMeasurePrefInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { tsMeasurePreferencesEntry 1 }

tsMeasurePrefPCRDemarcationFrequency OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the demarcation frequency used by the PCR measurement
        system to distinguish between inaccuracy/jitter and drift."
    REFERENCE
        "TR 101 290 clause 5.3.2.2"
    DEFVAL { "0.01" }
    ::= { tsMeasurePreferencesEntry 2 }

tsMeasurePrefPCRFOMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Hz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted PCR_FO (frequency offset). An error is
        indicated if the measured PCR_FO is outside the range

        [-tsMeasurePrefPCRFOMax .. +tsMeasurePrefPCRFOMax]."
    REFERENCE
        "ISO/IEC 13818-1 clause 2.4.2.1"
    DEFVAL { "810" }
    ::= { tsMeasurePreferencesEntry 3 }

tsMeasurePrefPCRDRMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Hz/s"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted PCR_DR (drift rate). An error is
        indicated if the measured PCR_DR is outside the range

        [-tsMeasurePrefPCRDRMax .. +tsMeasurePrefPCRDRMax]"
    REFERENCE
        "ISO/IEC 13818-1 clause 2.4.2.1"
    DEFVAL { "0.075" }
    ::= { tsMeasurePreferencesEntry 4 }

tsMeasurePrefPCROJMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Maximum permitted PCR_OJ (overall jitter). An error is
        indicated if the measured PCR_OJ is outside the range

        [-tsMeasurePrefPCROJMax .. +tsMeasurePrefPCROJMax]"
    REFERENCE
        "ISO/IEC 13818-9 clause 3.3"
```

```
                    DEFVAL { "25E-06" }
                    ::= { tsMeasurePreferencesEntry 5 }
--
-- The limit value for PCR_AC is defined by tsTestsPrefPCRInaccuracyMax.

          tsMeasurePrefTSBitRateTau OBJECT-TYPE
              SYNTAX FloatingPoint
              UNITS "second"
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "'tau' value for Transport Stream bit rate measurement.

                  The MIB provides very flexible ways of setting the bit rate
                  measurement parameters tau, N and element for the Transport
                  Stream, services, PIDs and for individual services and PIDs.
                  Real measurement equipment can be expected to provide much
                  less flexibility. Management software should anticipate this by
                  either being statically aware of the capabilities of the agent
                  or by checking that preference settings have been accepted by
                  reading them back after each attempt to set them."
              REFERENCE
                  "TR 101 290 clause 5.3.3.1"
              DEFVAL { "0.1" }
              ::= { tsMeasurePreferencesEntry 6 }

          tsMeasurePrefTSBitRateN OBJECT-TYPE
              SYNTAX Unsigned32
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "'N' value for Transport Stream bit rate measurement.

                  See note in description for tsMeasurePrefTSBitRateTau."
              REFERENCE
                  "TR 101 290 clause 5.3.3.1"
              DEFVAL { 10 }
              ::= { tsMeasurePreferencesEntry 7 }

          tsMeasurePrefTSBitRateElement OBJECT-TYPE
              SYNTAX BitRateElement
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "Data unit which is counted by the bit rate measurement algorithm.

                  See note in description for tsMeasurePrefTSBitRateTau."
              REFERENCE
                  "TR 101 290 clause 5.3.3.1"
              DEFVAL { packet }
              ::= { tsMeasurePreferencesEntry 8 }

          tsMeasurePrefTSBitRateMin OBJECT-TYPE
              SYNTAX FloatingPoint
              UNITS "bit/s"
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "An error is generated if the Transport Stream bit rate
                  is below this value."
              ::= { tsMeasurePreferencesEntry 9 }

          tsMeasurePrefTSBitRateMax OBJECT-TYPE
              SYNTAX FloatingPoint
              UNITS "bit/s"
              MAX-ACCESS read-write
              STATUS current
              DESCRIPTION
                  "An error is generated if the Transport Stream bit rate
                  exceeds this value."
              ::= { tsMeasurePreferencesEntry 10 }

          tsMeasurePrefAllServiceBitRateTau OBJECT-TYPE
              SYNTAX FloatingPoint
              UNITS "second"
              MAX-ACCESS read-write
              STATUS current
```

```
    DESCRIPTION
        "'tau' value for Service bit rate measurement. When a manager
        sets the value of this object, the values of the
        tsMeasurePrefServiceBitRateTau columns in all the rows of the
        tsMeasurePreferencesServiceTable are set to this same value.
        This also becomes the default value for any new rows created
        subsequently.

        See note in description for tsMeasurePrefTSBitRateTau."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { "0.1" }
    ::= { tsMeasurePreferencesEntry 11 }

tsMeasurePrefAllServiceBitRateN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "'N' value for Service bit rate measurement. When a
        manager sets the value of this object, the values of
        the tsMeasurePrefServiceBitRateN columns in all the
        rows of the tsMeasurePreferencesServiceTable are set
        to this same value. This also becomes the default value
        for any new rows created subsequently.

        See note in description for tsMeasurePrefTSBitRateTau."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { 10 }
    ::= { tsMeasurePreferencesEntry 12 }

tsMeasurePrefAllServiceBitRateElement OBJECT-TYPE
    SYNTAX BitRateElement
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Data unit which is counted by the bit rate measurement
        algorithm for services. When a manager sets the value
        of this object, the values of the
        tsMeasurePrefServiceBitRateElement columns in all the
        rows of the tsMeasurePreferencesServiceTable are set to
        this same value. This also becomes the default value
        for any new rows created subsequently.

        See note in description for tsMeasurePrefTSBitRateTau."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { packet }
    ::= { tsMeasurePreferencesEntry 13 }

tsMeasurePrefAllPIDBitRateTau OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "'tau' value for Service bit rate measurement. When a
        manager sets the value of this object, the values of
        the tsMeasurePrefPIDBitRateTau columns in all the rows
        of the tsMeasurePreferencesPIDTable are set to this
        same value. This also becomes the default value
        for any new rows created subsequently.

        See note in description for tsMeasurePrefTSBitRateTau."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { "0.1" }
    ::= { tsMeasurePreferencesEntry 14 }

tsMeasurePrefAllPIDBitRateN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
```

```
      DESCRIPTION
          "'N' value for PID bit rate measurement. When a
          manager sets the value of this object, the values of
          the tsMeasurePrefPIDBitRateN columns in all the rows
          of the tsMeasurePreferencesPIDTable are set to this
          same value. This also becomes the default value
          for any new rows created subsequently.

          See note in description for tsMeasurePrefTSBitRateTau."
      REFERENCE
          "TR 101 290 clause 5.3.3.1"
      DEFVAL { 10 }
      ::= { tsMeasurePreferencesEntry 15 }

  tsMeasurePrefAllPIDBitRateElement OBJECT-TYPE
      SYNTAX BitRateElement
      MAX-ACCESS read-write
      STATUS current
      DESCRIPTION
          "Data unit which is counted by the bit rate measurement
          algorithm for PIDs. When a manager sets the value of
          this object, the values of the tsMeasurePrefPIDBitRateElement
          columns in all the rows of the tsMeasurePreferencesPIDTable
          are set to this same value. This also becomes the default value
          for any new rows created subsequently.

          See note in description for tsMeasurePrefTSBitRateTau."
      REFERENCE
          "TR 101 290 clause 5.3.3.1"
      DEFVAL { packet }
      ::= { tsMeasurePreferencesEntry 16 }

  tsMeasurePrefExpectedTSID OBJECT-TYPE
      SYNTAX TransportStreamID
      MAX-ACCESS read-write
      STATUS current
      DESCRIPTION
          "This object defines the expected Transport Stream ID that
          is compared with the actual ID to perform the consistency
          of information check."
      REFERENCE
          "TR 101 290 5.3.4"
      ::= { tsMeasurePreferencesEntry 17 }

  tsMeasurePreferencesServiceTable OBJECT-TYPE
      SYNTAX SEQUENCE OF TsMeasurePreferencesServiceEntry
      MAX-ACCESS not-accessible
      STATUS current
      DESCRIPTION
          "This table contains configuration information for the
          tsMeasurements branch of the MIB. Configuration related
          to individual services is found here."
      ::= { tsMeasurePreferences 2 }

  tsMeasurePreferencesServiceEntry OBJECT-TYPE
      SYNTAX TsMeasurePreferencesServiceEntry
      MAX-ACCESS not-accessible
      STATUS current
      DESCRIPTION
          "Row specification"
      INDEX { tsMeasurePrefServiceInputNumber, tsMeasurePrefServiceService }
      ::= { tsMeasurePreferencesServiceTable 1 }

  TsMeasurePreferencesServiceEntry ::=
      SEQUENCE {
          tsMeasurePrefServiceInputNumber
              InputNumber,
          tsMeasurePrefServiceService
              ServiceId,
          tsMeasurePrefServiceRowStatus
              RowStatus,
          tsMeasurePrefServiceBitRateTau
              FloatingPoint,
          tsMeasurePrefServiceBitRateN
              Unsigned32,
          tsMeasurePrefServiceBitRateElement
              BitRateElement,
```

```
                tsMeasurePrefServiceBitRateMin
                    FloatingPoint,
                tsMeasurePrefServiceBitRateMax
                    FloatingPoint
            }

tsMeasurePrefServiceInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { tsMeasurePreferencesServiceEntry 1 }

tsMeasurePrefServiceService OBJECT-TYPE
    SYNTAX ServiceId
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Service to which the preferences apply."
    ::= { tsMeasurePreferencesServiceEntry 2 }

tsMeasurePrefServiceRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This is used by the manager to create and delete rows
        in the table. The agent will automatically create rows
        for services it finds in the PMT."
    DEFVAL { active }
    ::= { tsMeasurePreferencesServiceEntry 3 }

tsMeasurePrefServiceBitRateTau OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "'tau' value for bit rate measurement for this service.

        See note in description for tsMeasurePrefTSBitRateTau.

        If an agent does not support per service tau settings, it shall
        ignore attempts to change the setting by writing to this object."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { "0.1" }
    ::= { tsMeasurePreferencesServiceEntry 4 }

tsMeasurePrefServiceBitRateN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "'N' value for rate measurement for this service.

        See note in description for tsMeasurePrefTSBitRateTau.

        If an agent does not support per service 'N' settings, it shall
        ignore attempts to change the setting by writing to this object."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { 10 }
    ::= { tsMeasurePreferencesServiceEntry 5 }

tsMeasurePrefServiceBitRateElement OBJECT-TYPE
    SYNTAX BitRateElement
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "Data unit which is counted by the bit rate measurement
        algorithm for this service.

        See note in description for tsMeasurePrefTSBitRateTau.
```

```
        If an agent does not support per service element settings, it
        shall ignore attempts to change the setting by writing to this
        object."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { packet }
    ::= { tsMeasurePreferencesServiceEntry 6 }

tsMeasurePrefServiceBitRateMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "An error is generated if the Service bit rate
        is below this value."
    ::= { tsMeasurePreferencesServiceEntry 7 }

tsMeasurePrefServiceBitRateMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "An error is generated if the Transport Stream bit rate
        exceeds this value."
    ::= { tsMeasurePreferencesServiceEntry 8 }

tsMeasurePreferencesPIDTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsMeasurePreferencesPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table contains configuration information for the
        tsMeasurements branch of the MIB. Configuration related
        to individual PIDs is found here."
    ::= { tsMeasurePreferences 3 }

tsMeasurePreferencesPIDEntry OBJECT-TYPE
    SYNTAX TsMeasurePreferencesPIDEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsMeasurePrefPIDInputNumber, tsMeasurePrefPIDPID }
    ::= { tsMeasurePreferencesPIDTable 1 }

TsMeasurePreferencesPIDEntry ::=
    SEQUENCE {
        tsMeasurePrefPIDInputNumber
            InputNumber,
        tsMeasurePrefPIDPID
            PIDPlusOne,
        tsMeasurePrefPIDRowStatus
            RowStatus,
        tsMeasurePrefPIDBitRateTau
            FloatingPoint,
        tsMeasurePrefPIDBitRateN
            Unsigned32,
        tsMeasurePrefPIDBitRateElement
            BitRateElement,
        tsMeasurePrefPIDBitRateMin
            FloatingPoint,
        tsMeasurePrefPIDBitRateMax
            FloatingPoint
     }

tsMeasurePrefPIDInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { tsMeasurePreferencesPIDEntry 1 }

tsMeasurePrefPIDPID OBJECT-TYPE
    SYNTAX PIDPlusOne
    MAX-ACCESS not-accessible
```

```
    STATUS current
    DESCRIPTION
        "PID (plus one) to which the preferences apply."
    ::= { tsMeasurePreferencesPIDEntry 2 }


tsMeasurePrefPIDRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "This is used by the manager to create and delete rows
        in the table. The agent will automatically create rows
        for PIDs which have a non-zero bit rate."
    DEFVAL { active }
    ::= { tsMeasurePreferencesPIDEntry 3 }

tsMeasurePrefPIDBitRateTau OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "'tau' value for bit rate measurement for this PID.

        See note in description for tsMeasurePrefTSBitRateTau.

        If an agent does not support per PID tau settings, it shall
        ignore attempts to change the setting by writing to this object."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { "0.1" }
    ::= { tsMeasurePreferencesPIDEntry 4 }

tsMeasurePrefPIDBitRateN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "'N' value for bit rate measurement for this PID.

        See note in description for tsMeasurePrefTSBitRateTau.

        If an agent does not support per PID 'N' settings, it shall
        ignore attempts to change the setting by writing to this object."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { 10 }
    ::= { tsMeasurePreferencesPIDEntry 5 }

tsMeasurePrefPIDBitRateElement OBJECT-TYPE
    SYNTAX BitRateElement
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "Data unit which is counted by the bit rate measurement
        algorithm for this PID.

        See note in description for tsMeasurePrefTSBitRateTau.

        If an agent does not support per PID element settings, it shall
        ignore attempts to change the setting by writing to this object."
    REFERENCE
        "TR 101 290 clause 5.3.3.1"
    DEFVAL { packet }
    ::= { tsMeasurePreferencesPIDEntry 6 }

tsMeasurePrefPIDBitRateMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "An error is generated if the PID bit rate is below this value."
    ::= { tsMeasurePreferencesPIDEntry 7 }

tsMeasurePrefPIDBitRateMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
```

```
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "An error is generated if the PID bit rate exceeds this value."
    ::= { tsMeasurePreferencesPIDEntry 8 }

tsServicePerformance OBJECT IDENTIFIER ::= { tr101290TS 5 }

tsServicePerformanceTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsServicePerformanceEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table gives access to the Service Performance
        measurements and tests"
    REFERENCE
        "TR 101 290 clause 5.5"
    ::= { tsServicePerformance 2 }

tsServicePerformanceEntry OBJECT-TYPE
    SYNTAX TsServicePerformanceEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsServicePerformanceNumber, tsServicePerformanceInputNumber }
    ::= { tsServicePerformanceTable 1 }

TsServicePerformanceEntry ::=
    SEQUENCE {
        tsServicePerformanceInputNumber
            InputNumber,
        tsServicePerformanceNumber
            IndexServicePerformance,
        tsServicePerformanceState
            TestState,
        tsServicePerformanceEnable
            Enable,
        tsServicePerformanceCounter
            Counter32,
        tsServicePerformanceCounterDiscontinuity
            DateAndTime,
        tsServicePerformanceCounterReset
            TruthValue,
        tsServicePerformanceLatestError
            DateAndTime,
        tsServicePerformanceActiveTime
            ActiveTime,
        tsServicePerformanceMeasurementState
            MeasurementState,
        tsServicePerformanceError
            Unsigned32,
        tsServicePerformanceErrorRatio
            FloatingPoint
     }

tsServicePerformanceInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { tsServicePerformanceEntry 1 }

tsServicePerformanceNumber OBJECT-TYPE
    SYNTAX IndexServicePerformance
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The Service Performance measurement which this row
        applies to."
    ::= { tsServicePerformanceEntry 2 }

tsServicePerformanceState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "This gives the overall pass/fail state of the threshold
        test on this measurement. The threshold test fails if
        the value of tsServicePerformanceErrorRatio exceeds
        the value given in the preferences."
    ::= { tsServicePerformanceEntry 3 }

tsServicePerformanceEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { tsServicePerformanceEntry 4 }

tsServicePerformanceCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { tsServicePerformanceEntry 5 }

tsServicePerformanceCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the tsServicePerformanceCounter object."
    ::= { tsServicePerformanceEntry 6 }

tsServicePerformanceCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "tsServicePerformanceCounter is reset to zero and
        tsServicePerformanceCounterDiscontinuity is set to
        the current time if 'true' is written to this variable.

        The value read from this object is always 'false'."
    DEFVAL { false }
    ::= { tsServicePerformanceEntry 7 }

tsServicePerformanceLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a threshold
        error on this measurement."
    ::= { tsServicePerformanceEntry 8 }

tsServicePerformanceActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { tsServicePerformanceEntry 9 }

tsServicePerformanceMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { tsServicePerformanceEntry 10 }

tsServicePerformanceError OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "The calculated xxx_Error parameter as measured at the
            end of the most recently completed DeltaT period."
        ::= { tsServicePerformanceEntry 11 }


tsServicePerformanceErrorRatio OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the calculated xxx_Error_Ratio as a percentage
        (e.g. '1.32'). The value is for the most recently
        completed evaluation time (e.g. 10 minutes)."
    ::= { tsServicePerformanceEntry 12 }


tsServicePerformancePreferencesTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TsServicePerformancePreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Parameters controlling the Service Performance measurements"
    ::= { tsServicePerformance 100 }


tsServicePerformancePreferencesEntry OBJECT-TYPE
    SYNTAX TsServicePerformancePreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { tsSPPrefInputNumber, tsSPPrefNumber }
    ::= { tsServicePerformancePreferencesTable 1 }


TsServicePerformancePreferencesEntry ::=
    SEQUENCE {
        tsSPPrefInputNumber
            InputNumber,
        tsSPPrefNumber
            IndexServicePerformance,
        tsSPPrefDeltaT
            FloatingPoint,
        tsSPPrefEvaluationTime
            FloatingPoint,
        tsSPPrefThreshold
            FloatingPoint
     }


tsSPPrefInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { tsServicePerformancePreferencesEntry 1 }


tsSPPrefNumber OBJECT-TYPE
    SYNTAX IndexServicePerformance
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The service performance parameter to which these
        preferences apply."
    ::= { tsServicePerformancePreferencesEntry 2 }


tsSPPrefDeltaT OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The defined time interval over which errors are counted"
    REFERENCE
        "TR 101 290 clause 5.5"
    ::= { tsServicePerformancePreferencesEntry 3 }


tsSPPrefEvaluationTime OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
```

```
        STATUS current
        DESCRIPTION
            "The period over which the ...Error_Ratio is calculated"
        REFERENCE
            "TR 101 290 clause 5.5"
        ::= { tsServicePerformancePreferencesEntry 4 }

    tsSPPrefThreshold OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The threshold value used in calculating the ..._Error_Ratio."
        REFERENCE
            "TR 101 290 clause 5.5"
        ::= { tsServicePerformancePreferencesEntry 5 }

-- Measurements and tests from clause 6 of TR 101 290.
-- These apply to both cable and satellite systems.
        tr101290CableSat OBJECT IDENTIFIER ::= { tr101290Objects 6 }

    sysAvailabilityTable OBJECT-TYPE
        SYNTAX SEQUENCE OF SysAvailabilityEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "System availability measurement"
        REFERENCE
            "TR 101 290 clause 6.1
            TR 101 290 clause 5.4"
        ::= { tr101290CableSat 1 }

    sysAvailabilityEntry OBJECT-TYPE
        SYNTAX SysAvailabilityEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { sysAvailabilityInputNumber }
        ::= { sysAvailabilityTable 1 }

    SysAvailabilityEntry ::=
        SEQUENCE {
            sysAvailabilityInputNumber
                InputNumber,
            sysAvailabilityTestState
                TestState,
            sysAvailabilityEnable
                Enable,
            sysAvailabilityCounter
                Counter32,
            sysAvailabilityCounterDiscontinuity
                DateAndTime,
            sysAvailabilityCounterReset
                TruthValue,
            sysAvailabilityLatestError
                DateAndTime,
            sysAvailabilityActiveTime
                ActiveTime,
            sysAvailabilityMeasurementState
                MeasurementState,
            sysAvailabilityUnavailableTime
                Unsigned32,
            sysAvailabilityRatio
                FloatingPoint,
            sysAvailabilityInSETI
                TruthValue
         }

    sysAvailabilityInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { sysAvailabilityEntry 1 }
```

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```
sysAvailabilityTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "A 'fail' is an approximate indication that the system
        is in a period of unavailable time (UAT). 'fail' is
        indicated as soon as a trigger period for unavailable
        time completes. 'pass' is indicated as soon as a trigger
        period for available time completes. This necessarily
        differs from the strict definition of UAT because the
        measuring equipment is unable to look into the future."
    ::= { sysAvailabilityEntry 2 }

sysAvailabilityEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether system availability testing is
        performed and whether the associated traps are generated."
    DEFVAL { { testEnable } }
    ::= { sysAvailabilityEntry 3 }

sysAvailabilityCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times the system has become unavailable"
    ::= { sysAvailabilityEntry 4 }

sysAvailabilityCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the sysAvailabilityCounter object."
    ::= { sysAvailabilityEntry 5 }

sysAvailabilityCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "sysAvailabilityCounter is reset to zero and
        sysAvailabilityCounterDiscontinuity is set to the
        current time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    ::= { sysAvailabilityEntry 6 }

sysAvailabilityLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp when the system most recently became unavailable."
    ::= { sysAvailabilityEntry 7 }

sysAvailabilityActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is a monotonically increasing value in units of
        seconds that represents the total amount of time for
        which the instrument has been able to perform the
        test/measurement. It can be used to calculate the
        Total Time in the calculation of the availability."
    ::= { sysAvailabilityEntry 8 }

sysAvailabilityMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { sysAvailabilityEntry 9 }

sysAvailabilityUnavailableTime OBJECT-TYPE
    SYNTAX Unsigned32
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is a monotonically increasing time in seconds
        which measures the total Unavailable Time (UAT) since
        the measuring system was last restarted."
    ::= { sysAvailabilityEntry 10 }

sysAvailabilityRatio OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the System Availability ratio as a percentage
        (e.g. 99.643) measured over the previous 'Total Time'
        measurement period."
    ::= { sysAvailabilityEntry 11 }

sysAvailabilityInSETI OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object has the value 'true' if and only if the
        most recently completed Time Interval (TI) was a
        Severely Errored Time Interval (SETI)."
    ::= { sysAvailabilityEntry 12 }

linkAvailabilityTable OBJECT-TYPE
    SYNTAX SEQUENCE OF LinkAvailabilityEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Link availability measurement"
    REFERENCE
        "TR 101 290 clause 6.2
        TR 101 290 clause 5.4"
    ::= { tr101290CableSat 2 }

linkAvailabilityEntry OBJECT-TYPE
    SYNTAX LinkAvailabilityEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { linkAvailabilityInputNumber }
    ::= { linkAvailabilityTable 1 }

LinkAvailabilityEntry ::=
    SEQUENCE {
        linkAvailabilityInputNumber
            InputNumber,
        linkAvailabilityTestState
            TestState,
        linkAvailabilityEnable
            Enable,
        linkAvailabilityCounter
            Counter32,
        linkAvailabilityCounterDiscontinuity
            DateAndTime,
        linkAvailabilityCounterReset
            TruthValue,
        linkAvailabilityLatestError
            DateAndTime,
        linkAvailabilityActiveTime
            ActiveTime,
        linkAvailabilityMeasurementState
            MeasurementState,
        linkAvailabilityUnavailableTime
            Unsigned32,
        linkAvailabilityRatio
```

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```
          FloatingPoint,
       linkAvailabilityInSUTI
          TruthValue
    }

linkAvailabilityInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { linkAvailabilityEntry 1 }

linkAvailabilityTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "A 'fail' is an approximate indication that the system
        is in a period of link unavailable time (LUAT). 'fail'
        is indicated as soon as a trigger period for link
        unavailable time completes. 'pass' is indicated as soon
        as a trigger period for link available time completes.
        This necessarily differs from the strict definition of
        LUAT because the measuring equipment is unable to look
        into the future."
    ::= { linkAvailabilityEntry 2 }

linkAvailabilityEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether link availability testing is performed
        and whether the associated traps are generated."
    DEFVAL { { testEnable } }
    ::= { linkAvailabilityEntry 3 }

linkAvailabilityCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times the link has become unavailable."
    ::= { linkAvailabilityEntry 4 }

linkAvailabilityCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the linkAvailabilityCounter object."
    ::= { linkAvailabilityEntry 5 }

linkAvailabilityCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "linkAvailabilityCounter is reset to zero and
        linkAvailabilityCounterDiscontinuity is set to the
        current time if 'true' is written to this variable.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { linkAvailabilityEntry 6 }

linkAvailabilityLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp when the link most recently became unavailable."
    ::= { linkAvailabilityEntry 7 }

linkAvailabilityActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
```

```
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is a monotonically increasing value in units
        of seconds that represents the total amount of time
        for which the instrument has been able to perform
        the measurement. It can be used to calculate the
        Total Time in the calculation of the availability."
    ::= { linkAvailabilityEntry 8 }

linkAvailabilityMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { linkAvailabilityEntry 9 }

linkAvailabilityUnavailableTime OBJECT-TYPE
    SYNTAX Unsigned32
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is a monotonically increasing time in seconds which
        measures the total link unavailable time (LUAT) since the
        measuring system was last restarted."
    ::= { linkAvailabilityEntry 10 }

linkAvailabilityRatio OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the Link Availability ratio as a percentage
        (e.g. 99.643) measured over the previous 'Total Time'
        measurement period."
    ::= { linkAvailabilityEntry 11 }

linkAvailabilityInSUTI OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object has the value 'true' if and only if the
        most recently completed Time Interval (TI) was a
        Severely Uncorrectable Time Interval (SETI)."
    ::= { linkAvailabilityEntry 12 }

berRSinServiceTable OBJECT-TYPE
    SYNTAX SEQUENCE OF BerRSinServiceEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Measurement of BER before RS decoder"
    REFERENCE
        "TR 101 290 clause 6.3.2"
    ::= { tr101290CableSat 3 }

berRSinServiceEntry OBJECT-TYPE
    SYNTAX BerRSinServiceEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { berRSinServiceInputNumber }
    ::= { berRSinServiceTable 1 }

BerRSinServiceEntry ::=
    SEQUENCE {
        berRSinServiceInputNumber
            InputNumber,
        berRSinServiceTestState
            TestState,
        berRSinServiceEnable
            Enable,
        berRSinServiceCounter
```

```
                Counter32,
            berRSinServiceCounterDiscontinuity
                DateAndTime,
            berRSinServiceCounterReset
                TruthValue,
            berRSinServiceLatestError
                DateAndTime,
            berRSinServiceActiveTime
                ActiveTime,
            berRSinServiceMeasurementState
                MeasurementState,
            berRSinServiceValue
                FloatingPoint
        }

berRSinServiceInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { berRSinServiceEntry 1 }

berRSinServiceTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the berRSinServiceValue is
        below the maximum."
    ::= { berRSinServiceEntry 2 }

berRSinServiceEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { berRSinServiceEntry 3 }

berRSinServiceCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { berRSinServiceEntry 4 }

berRSinServiceCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the berRSinServiceCounter object."
    ::= { berRSinServiceEntry 5 }

berRSinServiceCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "berRSinServiceCounter is reset to zero and
        berRSinServiceCounterDiscontinuity is set to the current
        time if 'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { berRSinServiceEntry 6 }

berRSinServiceLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { berRSinServiceEntry 7 }

berRSinServiceActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { berRSinServiceEntry 8 }

berRSinServiceMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { berRSinServiceEntry 9 }

berRSinServiceValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the current BER as a numeric value, for
        example 0.0000023"
    REFERENCE
        "TR 101 290 clause 6.3.2"
    ::= { berRSinServiceEntry 10 }

rfIFsignalPowerTable OBJECT-TYPE
    SYNTAX SEQUENCE OF RfIFsignalPowerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "RF or IF signal power measurement"
    REFERENCE
        "TR 101 290 clause 6.6"
    ::= { tr101290CableSat 6 }

rfIFsignalPowerEntry OBJECT-TYPE
    SYNTAX RfIFsignalPowerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { rfIFsignalPowerInputNumber }
    ::= { rfIFsignalPowerTable 1 }

RfIFsignalPowerEntry ::=
    SEQUENCE {
        rfIFsignalPowerInputNumber
            InputNumber,
        rfIFsignalPowerTestState
            TestState,
        rfIFsignalPowerEnable
            Enable,
        rfIFsignalPowerCounter
            Counter32,
        rfIFsignalPowerCounterDiscontinuity
            DateAndTime,
        rfIFsignalPowerCounterReset
            TruthValue,
        rfIFsignalPowerLatestError
            DateAndTime,
        rfIFsignalPowerActiveTime
            ActiveTime,
        rfIFsignalPowerMeasurementState
            MeasurementState,
        rfIFsignalPowerValue
            FloatingPoint
    }

rfIFsignalPowerInputNumber OBJECT-TYPE
    SYNTAX InputNumber
```

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```
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { rfIFsignalPowerEntry 1 }

rfIFsignalPowerTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the rfIFsignalPowerValue is
        currently within the thresholds."
    ::= { rfIFsignalPowerEntry 2 }

rfIFsignalPowerEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { rfIFsignalPowerEntry 3 }

rfIFsignalPowerCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { rfIFsignalPowerEntry 4 }

rfIFsignalPowerCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the rfIFsignalPowerCounter object."
    ::= { rfIFsignalPowerEntry 5 }

rfIFsignalPowerCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "rfIFsignalPowerCounter is reset to zero and
        rfIFsignalPowerCounterDiscontinuity is set to the
        current time if 'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { rfIFsignalPowerEntry 6 }

rfIFsignalPowerLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { rfIFsignalPowerEntry 7 }

rfIFsignalPowerActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { rfIFsignalPowerEntry 8 }

rfIFsignalPowerMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { rfIFsignalPowerEntry 9 }

rfIFsignalPowerValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dBm"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current RF power expressed in dBm, which references
        0 dBm as the power of 1 mW. "
    ::= { rfIFsignalPowerEntry 10 }

noisePowerTable OBJECT-TYPE
    SYNTAX SEQUENCE OF NoisePowerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Noise power measurement"
    REFERENCE
        "TR 101 290 clause 6.7"
    ::= { tr101290CableSat 7 }

noisePowerEntry OBJECT-TYPE
    SYNTAX NoisePowerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { noisePowerInputNumber }
    ::= { noisePowerTable 1 }

NoisePowerEntry ::=
    SEQUENCE {
        noisePowerInputNumber
            InputNumber,
        noisePowerTestState
            TestState,
        noisePowerEnable
            Enable,
        noisePowerCounter
            Counter32,
        noisePowerCounterDiscontinuity
            DateAndTime,
        noisePowerCounterReset
            TruthValue,
        noisePowerLatestError
            DateAndTime,
        noisePowerActiveTime
            ActiveTime,
        noisePowerMeasurementState
            MeasurementState,
        noisePowerValue
            FloatingPoint
     }

noisePowerInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { noisePowerEntry 1 }

noisePowerTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the noisePowerValue is currently
        below the maximum limit."
    ::= { noisePowerEntry 2 }

noisePowerEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
```

```
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        DEFVAL { { testEnable } }
        ::= { noisePowerEntry 3 }

noisePowerCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Count of the number of times a threshold error has
            occurred for this measurement."
        ::= { noisePowerEntry 4 }

noisePowerCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a
            discontinuity in the noisePowerCounter object."
        ::= { noisePowerEntry 5 }

noisePowerCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "noisePowerCounter is reset to zero and
            noisePowerCounterDiscontinuity is set to the
            current time if 'true' is written to this object.

            When read, the value of this object is always 'false'."
        ::= { noisePowerEntry 6 }

noisePowerLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { noisePowerEntry 7 }

noisePowerActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { noisePowerEntry 8 }

noisePowerMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Indicates the validity of the measurement"
        ::= { noisePowerEntry 9 }

noisePowerValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dBm"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current RF noise power expressed in dBm, which
            references 0 dBm as the power of 1 mW."
        ::= { noisePowerEntry 10 }

iqAnalysisCS OBJECT IDENTIFIER ::= { tr101290CableSat 9 }

merCSTable OBJECT-TYPE
        SYNTAX SEQUENCE OF MerCSEntry
        MAX-ACCESS not-accessible
        STATUS current
```

```
    DESCRIPTION
        "Modulation Error Ratio (MER)"
    REFERENCE
        "TR 101 290 clause 6.9.2"
    ::= { iqAnalysisCS 2 }

merCSEntry OBJECT-TYPE
    SYNTAX MerCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { merCSInputNumber }
    ::= { merCSTable 1 }

MerCSEntry ::=
    SEQUENCE {
        merCSInputNumber
            InputNumber,
        merCSTestState
            TestState,
        merCSEnable
            Enable,
        merCSCounter
            Counter32,
        merCSCounterDiscontinuity
            DateAndTime,
        merCSCounterReset
            TruthValue,
        merCSLatestError
            DateAndTime,
        merCSActiveTime
            ActiveTime,
        merCSMeasurementState
            MeasurementState,
        merCSValue
            FloatingPoint
    }

merCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { merCSEntry 1 }

merCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the merCSValue is currently
        below the maximum limit."
    ::= { merCSEntry 2 }

merCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { merCSEntry 3 }

merCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { merCSEntry 4 }

merCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
```

```
                STATUS current
                DESCRIPTION
                    "Provides the last time at which there was a discontinuity
                    in the merCSCounter object."
                ::= { merCSEntry 5 }

        merCSCounterReset OBJECT-TYPE
                SYNTAX TruthValue
                MAX-ACCESS read-write
                STATUS current
                DESCRIPTION
                    "merCSCounter is reset to zero and merCSCounterDiscontinuity is
                    set to the current time if 'true' is written to this object.

                    When read, the value of this object is always 'false'."
                DEFVAL { false }
                ::= { merCSEntry 6 }

        merCSLatestError OBJECT-TYPE
                SYNTAX DateAndTime
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "The timestamp at the most recent occurrence of a
                    threshold error on this measurement."
                ::= { merCSEntry 7 }

        merCSActiveTime OBJECT-TYPE
                SYNTAX ActiveTime
                UNITS "second"
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "The total time when it has been possible to perform this measurement"
                ::= { merCSEntry 8 }

        merCSMeasurementState OBJECT-TYPE
                SYNTAX MeasurementState
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "Indicates the validity of the measurement"
                ::= { merCSEntry 9 }

        merCSValue OBJECT-TYPE
                SYNTAX FloatingPoint
                UNITS "dB"
                MAX-ACCESS read-only
                STATUS current
                DESCRIPTION
                    "The Modulation Error Ratio expressed in dB"
                ::= { merCSEntry 10 }

-- Separate tables are provided for System Target Error
-- Mean (STEM) and System Target Error Deviation (STED).
        steCS OBJECT IDENTIFIER ::= { iqAnalysisCS 3 }

        steMeanCSTable OBJECT-TYPE
                SYNTAX SEQUENCE OF SteMeanCSEntry
                MAX-ACCESS not-accessible
                STATUS current
                DESCRIPTION
                    "System Target Error (mean value)"
                REFERENCE
                    "TR 101 290 clause 6.9.3"
                ::= { steCS 1 }

        steMeanCSEntry OBJECT-TYPE
                SYNTAX SteMeanCSEntry
                MAX-ACCESS not-accessible
                STATUS current
                DESCRIPTION
                    "Row specification"
                INDEX { steMeanCSInputNumber }
                ::= { steMeanCSTable 1 }
```

```
SteMeanCSEntry ::=
    SEQUENCE {
        steMeanCSInputNumber
            InputNumber,
        steMeanCSTestState
            TestState,
        steMeanCSEnable
            Enable,
        steMeanCSCounter
            Counter32,
        steMeanCSCounterDiscontinuity
            DateAndTime,
        steMeanCSCounterReset
            TruthValue,
        steMeanCSLatestError
            DateAndTime,
        steMeanCSActiveTime
            ActiveTime,
        steMeanCSMeasurementState
            MeasurementState,
        steMeanCSValue
            FloatingPoint
      }

steMeanCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { steMeanCSEntry 1 }

steMeanCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the steMeanCSValue is currently
        within the thresholds."
    ::= { steMeanCSEntry 2 }

steMeanCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { steMeanCSEntry 3 }

steMeanCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { steMeanCSEntry 4 }

steMeanCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { steMeanCSEntry 5 }

steMeanCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.
```

```
        When read, the value of this object is always 'false'."
    ::= { steMeanCSEntry 6 }

steMeanCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a threshold
        error on this measurement."
    ::= { steMeanCSEntry 7 }

steMeanCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { steMeanCSEntry 8 }

steMeanCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { steMeanCSEntry 9 }

steMeanCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current System Target Error Mean as a numeric value"
    ::= { steMeanCSEntry 10 }

steDeviationCSTable OBJECT-TYPE
    SYNTAX SEQUENCE OF SteDeviationCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "System Target Error (deviation value)"
    REFERENCE
        "TR 101 290 clause 6.9.3"
    ::= { steCS 2 }

steDeviationCSEntry OBJECT-TYPE
    SYNTAX SteDeviationCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { steDeviationCSInputNumber }
    ::= { steDeviationCSTable 1 }

SteDeviationCSEntry ::=
    SEQUENCE {
        steDeviationCSInputNumber
            InputNumber,
        steDeviationCSTestState
            TestState,
        steDeviationCSEnable
            Enable,
        steDeviationCSCounter
            Counter32,
        steDeviationCSCounterDiscontinuity
            DateAndTime,
        steDeviationCSCounterReset
            TruthValue,
        steDeviationCSLatestError
            DateAndTime,
        steDeviationCSActiveTime
            ActiveTime,
        steDeviationCSMeasurementState
            MeasurementState,
        steDeviationCSValue
            FloatingPoint
```

```
        }

steDeviationCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { steDeviationCSEntry 1 }

steDeviationCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the steDeviationCSValue is currently
        within the thresholds."
    ::= { steDeviationCSEntry 2 }

steDeviationCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { steDeviationCSEntry 3 }

steDeviationCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { steDeviationCSEntry 4 }

steDeviationCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { steDeviationCSEntry 5 }

steDeviationCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { steDeviationCSEntry 6 }

steDeviationCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { steDeviationCSEntry 7 }

steDeviationCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "The total time when it has been possible to perform this measurement
        "
    ::= { steDeviationCSEntry 8 }

steDeviationCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { steDeviationCSEntry 9 }

steDeviationCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current System Target Error Deviation as a numeric value"
    ::= { steDeviationCSEntry 10 }

csCSTable OBJECT-TYPE
    SYNTAX SEQUENCE OF CsCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Carrier suppression measurement"
    REFERENCE
        "TR 101 290 clause 6.9.4"
    ::= { iqAnalysisCS 4 }

csCSEntry OBJECT-TYPE
    SYNTAX CsCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { csCSInputNumber }
    ::= { csCSTable 1 }

CsCSEntry ::=
    SEQUENCE {
        csCSInputNumber
            InputNumber,
        csCSTestState
            TestState,
        csCSEnable
            Enable,
        csCSCounter
            Counter32,
        csCSCounterDiscontinuity
            DateAndTime,
        csCSCounterReset
            TruthValue,
        csCSLatestError
            DateAndTime,
        csCSActiveTime
            ActiveTime,
        csCSMeasurementState
            MeasurementState,
        csCSValue
            FloatingPoint
      }

csCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { csCSEntry 1 }

csCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "This indicates whether the csCSValue is currently
        within the thresholds."
    ::= { csCSEntry 2 }

csCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { csCSEntry 3 }

csCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { csCSEntry 4 }

csCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { csCSEntry 5 }

csCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { csCSEntry 6 }

csCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { csCSEntry 7 }

csCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { csCSEntry 8 }

csCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { csCSEntry 9 }

csCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "The current Carrier Suppression value in dB."
        ::= { csCSEntry 10 }


aiCSTable OBJECT-TYPE
        SYNTAX SEQUENCE OF AiCSEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Amplitude Imbalance (AI) measurement"
        REFERENCE
            "TR 101 290 clause 6.9.5"
        ::= { iqAnalysisCS 5 }


aiCSEntry OBJECT-TYPE
        SYNTAX AiCSEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { aiCSInputNumber }
        ::= { aiCSTable 1 }


AiCSEntry ::=
        SEQUENCE {
            aiCSInputNumber
                InputNumber,
            aiCSTestState
                TestState,
            aiCSEnable
                Enable,
            aiCSCounter
                Counter32,
            aiCSCounterDiscontinuity
                DateAndTime,
            aiCSCounterReset
                TruthValue,
            aiCSLatestError
                DateAndTime,
            aiCSActiveTime
                ActiveTime,
            aiCSMeasurementState
                MeasurementState,
            aiCSValue
                FloatingPoint
         }


aiCSInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { aiCSEntry 1 }


aiCSTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This indicates whether the aiCSValue is currently
            within the thresholds."
        ::= { aiCSEntry 2 }


aiCSEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        DEFVAL { { testEnable } }
        ::= { aiCSEntry 3 }


aiCSCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
```

```
        DESCRIPTION
            "Count of the number of times a threshold error has
            occurred for this measurement."
        ::= { aiCSEntry 4 }

aiCSCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a discontinuity
            in the counter object."
        ::= { aiCSEntry 5 }

aiCSCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { aiCSEntry 6 }

aiCSLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { aiCSEntry 7 }

aiCSActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { aiCSEntry 8 }

aiCSMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Indicates the validity of the measurement"
        ::= { aiCSEntry 9 }

aiCSValue OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Amplitude Imbalance as a percentage"
        ::= { aiCSEntry 10 }

qeCSTable OBJECT-TYPE
        SYNTAX SEQUENCE OF QeCSEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Quadrature Error (QE) measurement"
        REFERENCE
            "TR 101 290 clause 6.9.6"
        ::= { iqAnalysisCS 6 }

qeCSEntry OBJECT-TYPE
        SYNTAX QeCSEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { qeCSInputNumber }
```

```
    ::= { qeCSTable 1 }

QeCSEntry ::=
    SEQUENCE {
        qeCSInputNumber
            InputNumber,
        qeCSTestState
            TestState,
        qeCSEnable
            Enable,
        qeCSCounter
            Counter32,
        qeCSCounterDiscontinuity
            DateAndTime,
        qeCSCounterReset
            TruthValue,
        qeCSLatestError
            DateAndTime,
        qeCSActiveTime
            ActiveTime,
        qeCSMeasurementState
            MeasurementState,
        qeCSValue
            FloatingPoint
      }

qeCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { qeCSEntry 1 }

qeCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the qeCSValue is currently
        within the thresholds."
    ::= { qeCSEntry 2 }

qeCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { qeCSEntry 3 }

qeCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { qeCSEntry 4 }

qeCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { qeCSEntry 5 }

qeCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
```

```
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { qeCSEntry 6 }

qeCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { qeCSEntry 7 }

qeCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { qeCSEntry 8 }

qeCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { qeCSEntry 9 }

qeCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "degree"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Quadrature Error value in degrees."
    ::= { qeCSEntry 10 }

rteCSTable OBJECT-TYPE
    SYNTAX SEQUENCE OF RteCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Residual Target Error (RTE) measurement"
    REFERENCE
        "TR 101 290 clause 6.9.7"
    ::= { iqAnalysisCS 7 }

rteCSEntry OBJECT-TYPE
    SYNTAX RteCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row description"
    INDEX { rteCSInputNumber }
    ::= { rteCSTable 1 }

RteCSEntry ::=
    SEQUENCE {
        rteCSInputNumber
            InputNumber,
        rteCSTestState
            TestState,
        rteCSEnable
            Enable,
        rteCSCounter
            Counter32,
        rteCSCounterDiscontinuity
            DateAndTime,
        rteCSCounterReset
            TruthValue,
        rteCSLatestError
```

```
                DateAndTime,
            rteCSActiveTime
                ActiveTime,
            rteCSMeasurementState
                MeasurementState,
            rteCSValue
                FloatingPoint
        }

rteCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { rteCSEntry 1 }

rteCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the rteCSValue is currently
        within the thresholds."
    ::= { rteCSEntry 2 }

rteCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { rteCSEntry 3 }

rteCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { rteCSEntry 4 }

rteCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { rteCSEntry 5 }

rteCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { rteCSEntry 6 }

rteCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { rteCSEntry 7 }
```

```
rteCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { rteCSEntry 8 }

rteCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { rteCSEntry 9 }

rteCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Residual Target Error value as a numeric value."
    ::= { rteCSEntry 10 }

ciCSTable OBJECT-TYPE
    SYNTAX SEQUENCE OF CiCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Coherent Interferer measurement"
    REFERENCE
        "TR 101 290 clause 6.9.8"
    ::= { iqAnalysisCS 8 }

ciCSEntry OBJECT-TYPE
    SYNTAX CiCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { ciCSInputNumber }
    ::= { ciCSTable 1 }

CiCSEntry ::=
    SEQUENCE {
        ciCSInputNumber
            InputNumber,
        ciCSTestState
            TestState,
        ciCSEnable
            Enable,
        ciCSCounter
            Counter32,
        ciCSCounterDiscontinuity
            DateAndTime,
        ciCSCounterReset
            TruthValue,
        ciCSLatestError
            DateAndTime,
        ciCSActiveTime
            ActiveTime,
        ciCSMeasurementState
            MeasurementState,
        ciCSValue
            FloatingPoint
    }

ciCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { ciCSEntry 1 }

ciCSTestState OBJECT-TYPE
    SYNTAX TestState
```

```
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the ciCSValue is currently
        within the thresholds."
    ::= { ciCSEntry 2 }

ciCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { ciCSEntry 3 }

ciCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { ciCSEntry 4 }

ciCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { ciCSEntry 5 }

ciCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { ciCSEntry 6 }

ciCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { ciCSEntry 7 }

ciCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { ciCSEntry 8 }

ciCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { ciCSEntry 9 }

ciCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
```

```
        STATUS current
        DESCRIPTION
            "The current Coherent Interferer value in dB."
        ::= { ciCSEntry 10 }


pjCSTable OBJECT-TYPE
        SYNTAX SEQUENCE OF PjCSEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Phase Jitter (PJ) measurement"
        REFERENCE
            "TR 101 290 clause 6.9.9"
        ::= { iqAnalysisCS 9 }


pjCSEntry OBJECT-TYPE
        SYNTAX PjCSEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { pjCSInputNumber }
        ::= { pjCSTable 1 }


PjCSEntry ::=
        SEQUENCE {
            pjCSInputNumber
                InputNumber,
            pjCSTestState
                TestState,
            pjCSEnable
                Enable,
            pjCSCounter
                Counter32,
            pjCSCounterDiscontinuity
                DateAndTime,
            pjCSCounterReset
                TruthValue,
            pjCSLatestError
                DateAndTime,
            pjCSActiveTime
                ActiveTime,
            pjCSMeasurementState
                MeasurementState,
            pjCSValue
                FloatingPoint
        }

pjCSInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { pjCSEntry 1 }


pjCSTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This indicates whether the pjCSValue is currently
            within the thresholds."
        ::= { pjCSEntry 2 }


pjCSEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        DEFVAL { { testEnable } }
        ::= { pjCSEntry 3 }


pjCSCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
```

```
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { pjCSEntry 4 }

pjCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { pjCSEntry 5 }

pjCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { pjCSEntry 6 }

pjCSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { pjCSEntry 7 }

pjCSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { pjCSEntry 8 }

pjCSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { pjCSEntry 9 }

pjCSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "degree"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Phase Jitter value in degrees."
    ::= { pjCSEntry 10 }

snrCSTable OBJECT-TYPE
    SYNTAX SEQUENCE OF SnrCSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Signal-to-Noise Ratio (SNR)"
    REFERENCE
        "TR 101 290 clause 6.9.10"
    ::= { iqAnalysisCS 10 }

snrCSEntry OBJECT-TYPE
    SYNTAX SnrCSEntry
    MAX-ACCESS not-accessible
    STATUS current
```

```
    DESCRIPTION
        "Row specification"
    INDEX { snrCSInputNumber }
    ::= { snrCSTable 1 }

SnrCSEntry ::=
    SEQUENCE {
        snrCSInputNumber
            InputNumber,
        snrCSTestState
            TestState,
        snrCSEnable
            Enable,
        snrCSCounter
            Counter32,
        snrCSCounterDiscontinuity
            DateAndTime,
        snrCSCounterReset
            TruthValue,
        snrCSLatestError
            DateAndTime,
        snrCSActiveTime
            ActiveTime,
        snrCSMeasurementState
            MeasurementState,
        snrCSValue
            FloatingPoint
     }

snrCSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { snrCSEntry 1 }

snrCSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the snrCSValue is currently
        within the thresholds."
    ::= { snrCSEntry 2 }

snrCSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated
        traps for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { snrCSEntry 3 }

snrCSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { snrCSEntry 4 }

snrCSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { snrCSEntry 5 }

snrCSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
```

```
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { snrCSEntry 6 }

snrCSLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { snrCSEntry 7 }

snrCSActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { snrCSEntry 8 }

snrCSMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Indicates the validity of the measurement"
        ::= { snrCSEntry 9 }

snrCSValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dB"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Signal-to-Noise value in dB."
        ::= { snrCSEntry 10 }

cableSatPreferencesTable OBJECT-TYPE
        SYNTAX SEQUENCE OF CableSatPreferencesEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Table containing per input configuration information
            for cable and satellite common measurements."
        ::= { tr101290CableSat 100 }

cableSatPreferencesEntry OBJECT-TYPE
        SYNTAX CableSatPreferencesEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { cableSatPrefInputNumber }
        ::= { cableSatPreferencesTable 1 }

CableSatPreferencesEntry ::=
        SEQUENCE {
            cableSatPrefInputNumber
                InputNumber,
            cableSatPrefCentreFrequency
                FloatingPoint,
            cableSatPrefModulation
                Modulation,
            cableSatPrefSysAvailUATMode
                UATMode,
            cableSatPrefSysAvailN
                Unsigned32,
            cableSatPrefSysAvailT
                FloatingPoint,
            cableSatPrefSysAvailM
                Unsigned32,
```

```
        cableSatPrefSysAvailTI
            FloatingPoint,
        cableSatPrefSysAvailEBPerCent
            FloatingPoint,
        cableSatPrefSysAvailTotalTime
            FloatingPoint,
        cableSatPrefLinkAvailUATMode
            UATMode,
        cableSatPrefLinkAvailN
            Unsigned32,
        cableSatPrefLinkAvailT
            FloatingPoint,
        cableSatPrefLinkAvailM
            Unsigned32,
        cableSatPrefLinkAvailTI
            FloatingPoint,
        cableSatPrefLinkAvailUPPerCent
            FloatingPoint,
        cableSatPrefLinkAvailTotalTime
            FloatingPoint,
        cableSatPrefBERMax
            FloatingPoint,
        cableSatPrefSignalPowerMin
            FloatingPoint,
        cableSatPrefSignalPowerMax
            FloatingPoint,
        cableSatPrefNoisePowerMax
            FloatingPoint,
        cableSatPrefMerCSMin
            FloatingPoint,
        cableSatPrefSteMeanCSMax
            FloatingPoint,
        cableSatPrefSteDeviationCSMax
            FloatingPoint,
        cableSatPrefCsCSMin
            FloatingPoint,
        cableSatPrefAiCSMax
            FloatingPoint,
        cableSatPrefQeCSMax
            FloatingPoint,
        cableSatPrefRteCSMax
            FloatingPoint,
        cableSatPrefCiCSMin
            FloatingPoint,
        cableSatPrefPjCSMax
            FloatingPoint,
        cableSatPrefSnrCSMin
            FloatingPoint
      }

cableSatPrefInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { cableSatPreferencesEntry 1 }

cableSatPrefCentreFrequency OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "MHz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the centre frequency to which the measuring equipment
        is tuned for making cable and satellite measurements. This
        frequency is the actual input frequency to the measuring
        equipment, which may be at an intermediate frequency (IF)
        rather than the final RF.

        This setting affects the objects in the 'tr101290Cable' and
        'tr101290Satellite' branches of the MIB as well as the
        'tr101290CableSat' branch."
    ::= { cableSatPreferencesEntry 2 }

cableSatPrefModulation OBJECT-TYPE
    SYNTAX Modulation
    MAX-ACCESS read-write
```

```
    STATUS current
    DESCRIPTION
        "This is the modulation which the measuring equipment expects to
        see and against which it makes modulation measurements. This
        applies to cable and satellite measurements.

        This setting affects the objects in the 'tr101290Cable' and
        'tr101290Satellite' branches of the MIB as well as the
        'tr101290CableSat' branch."
    ::= { cableSatPreferencesEntry 3 }

cableSatPrefSysAvailUATMode OBJECT-TYPE
    SYNTAX UATMode
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the 'N consecutive' or 'rolling window'
        mode of determining the start of a period of Unavailable
        Time (UAT) is used. If the 'N consecutive' mode is
        selected, the 'M' and 'T' preference parameters are
        ignored. Likewise, if the 'rolling window' mode is
        selected, the 'N' preference parameter is ignored."
    REFERENCE
        "TR 101 290 clause 5.4.5"
    ::= { cableSatPreferencesEntry 4 }

cableSatPrefSysAvailN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The N value used to identify the start and end of a
        period of unavailable time (UAT)."
    REFERENCE
        "TR 101 290 clause 5.4.5"
    ::= { cableSatPreferencesEntry 5 }

cableSatPrefSysAvailT OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The T value used to identify the start and end of a
        period of unavailable time (UAT)."
    REFERENCE
        "TR 101 290 clause 5.4.5"
    ::= { cableSatPreferencesEntry 6 }

cableSatPrefSysAvailM OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The M value used to identify the start and end of a
        period of unavailable time (UAT)."
    REFERENCE
        "TR 101 290 clause 5.4.5"
    ::= { cableSatPreferencesEntry 7 }

cableSatPrefSysAvailTI OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Each Time Interval of this length is assessed as to
        whether it is a Severely Errored Time Interval."
    REFERENCE
        "TR 101 290 clause 5.4.4"
    ::= { cableSatPreferencesEntry 8 }

cableSatPrefSysAvailEBPerCent OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
```

```
    DESCRIPTION
        "If more than this percentage of blocks within a Time Interval is
        an Errored Block, the Time Interval is a Severely Errored Time
        Interval (SETI). Example values are: '1.53', '10', '0.33'."
    REFERENCE
        "TR 101 290 clause 5.4.4"
    ::= { cableSatPreferencesEntry 9 }

cableSatPrefSysAvailTotalTime OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The Total Time over which the System Availability is calculated."
    REFERENCE
        "TR 101 290 clause 6.1"
    ::= { cableSatPreferencesEntry 10 }

cableSatPrefLinkAvailUATMode OBJECT-TYPE
    SYNTAX UATMode
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the 'N consecutive' or 'rolling window'
        mode of determining the start of a period of Link Unavailable
        Time (LUAT) is used. If the 'N consecutive' mode is selected,
        the 'M' and 'T' preference parameters are ignored. Likewise,
        if the 'rolling window' mode is selected, the 'N' preference
        parameter is ignored."
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 11 }

cableSatPrefLinkAvailN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The N value used to identify the start and end of a period of
        Link Unavailable Time (LUAT)."
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 12 }

cableSatPrefLinkAvailT OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The T value used to identify the start and end of a period of
        Link Unavailable Time (LUAT)."
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 13 }

cableSatPrefLinkAvailM OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The M value used to identify the start and end of a period of
        Link Unavailable Time (LUAT)."
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 14 }

cableSatPrefLinkAvailTI OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Each Time Interval of this length is assessed as to
        whether it is a Severely Uncorrectable Time Interval
        (SUTI)."
```

```
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 15 }

cableSatPrefLinkAvailUPPerCent OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If more than this percentage of packets within a Time
        Interval is an Uncorrectable Packet (UP), the Time
        Interval is a Severely Uncorrectable Time Interval (SUTI).
        Example values are: '1.53', '10', '0.33'."
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 16 }

cableSatPrefLinkAvailTotalTime OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The Total Time over which the Link Availability is calculated."
    REFERENCE
        "TR 101 290 clause 6.2"
    ::= { cableSatPreferencesEntry 17 }

cableSatPrefBERMax OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the berRSinServiceValue exceeds this value, the
        associated test fails."
    ::= { cableSatPreferencesEntry 18 }

cableSatPrefSignalPowerMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dBm"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the power measured by rfIFsignalPowerValue is less
        than this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 6.6"
    ::= { cableSatPreferencesEntry 19 }

cableSatPrefSignalPowerMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dBm"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the power measured by rfIFsignalPowerValue is
        greater than this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 6.6"
    ::= { cableSatPreferencesEntry 20 }

cableSatPrefNoisePowerMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dBm"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the noise power measured by noisePowerValue exceeds
         this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 6.7"
    ::= { cableSatPreferencesEntry 21 }

cableSatPrefMerCSMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
```

```
    DESCRIPTION
        "If the merCSValue is less than this value, the
        associated test fails."
    REFERENCE
        "TR 101 290 clause 6.9.2"
    ::= { cableSatPreferencesEntry 22 }

cableSatPrefSteMeanCSMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the steMeanCSValue exceeds this value, the
        associated test fails."
    REFERENCE
        "TR 101 290 clause 6.9.3"
    ::= { cableSatPreferencesEntry 23 }

cableSatPrefSteDeviationCSMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the steDeviationCSValue exceeds this value, the
        associated test fails."
    REFERENCE
        "TR 101 290 clause 6.9.3"
    ::= { cableSatPreferencesEntry 24 }

cableSatPrefCsCSMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the csCSValue is less than this value, the
        associated test fails"
    REFERENCE
        "TR 101 290 clause 6.9.4"
    ::= { cableSatPreferencesEntry 25 }

cableSatPrefAiCSMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If aiCSValue exceeds this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 6.9.5"
    ::= { cableSatPreferencesEntry 26 }

cableSatPrefQeCSMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If qeCSValue exceeds this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 6.9.6"
    ::= { cableSatPreferencesEntry 27 }

cableSatPrefRteCSMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If rteCSValue exceeds this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 6.9.7"
    ::= { cableSatPreferencesEntry 28 }

cableSatPrefCiCSMin OBJECT-TYPE
    SYNTAX FloatingPoint
```

```
            UNITS "dB"
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "If ciCSValue is less than this value, the associated test fails."
            REFERENCE
                "TR 101 290 clause 6.9.8"
            ::= { cableSatPreferencesEntry 29 }

        cableSatPrefPjCSMax OBJECT-TYPE
            SYNTAX FloatingPoint
            UNITS "dB"
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "If pjCSValue exceeds this value, the associated test fails."
            REFERENCE
                "TR 101 290 clause 6.9.9"
            ::= { cableSatPreferencesEntry 30 }

        cableSatPrefSnrCSMin OBJECT-TYPE
            SYNTAX FloatingPoint
            UNITS "dB"
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "If snrCSValue is less than this value, the associated test fails."
            REFERENCE
                "TR 101 290 clause 6.9.10"
            ::= { cableSatPreferencesEntry 31 }

-- Measurements and tests from clause 7 of TR 101 290.
-- These apply to cable systems.
        tr101290Cable OBJECT IDENTIFIER ::= { tr101290Objects 7 }

        noiseMarginTable OBJECT-TYPE
            SYNTAX SEQUENCE OF NoiseMarginEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Noise margin measurement"
            REFERENCE
                "TR 101 290 clause 7.1"
            ::= { tr101290Cable 1 }

        noiseMarginEntry OBJECT-TYPE
            SYNTAX NoiseMarginEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row description"
            INDEX { noiseMarginInputNumber }
            ::= { noiseMarginTable 1 }

        NoiseMarginEntry ::=
            SEQUENCE {
                noiseMarginInputNumber
                    InputNumber,
                noiseMarginTestState
                    TestState,
                noiseMarginEnable
                    Enable,
                noiseMarginCounter
                    Counter32,
                noiseMarginCounterDiscontinuity
                    DateAndTime,
                noiseMarginCounterReset
                    TruthValue,
                noiseMarginLatestError
                    DateAndTime,
                noiseMarginActiveTime
                    ActiveTime,
                noiseMarginMeasurementState
                    MeasurementState,
                noiseMarginValue
                    FloatingPoint
             }
```

```
noiseMarginInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { noiseMarginEntry 1 }

noiseMarginTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the noiseMarginValue is currently
        within the thresholds."
    ::= { noiseMarginEntry 2 }

noiseMarginEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { noiseMarginEntry 3 }

noiseMarginCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { noiseMarginEntry 4 }

noiseMarginCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a
        discontinuity in the counter object."
    ::= { noiseMarginEntry 5 }

noiseMarginCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { noiseMarginEntry 6 }

noiseMarginLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { noiseMarginEntry 7 }

noiseMarginActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement
        "
    ::= { noiseMarginEntry 8 }
```

```
noiseMarginMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { noiseMarginEntry 9 }

noiseMarginValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Noise Margin value in dB."
    ::= { noiseMarginEntry 10 }

estNoiseMarginTable OBJECT-TYPE
    SYNTAX SEQUENCE OF EstNoiseMarginEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Estimated noise margin measurement"
    REFERENCE
        "TR 101 290 clause 7.2"
    ::= { tr101290Cable 2 }

estNoiseMarginEntry OBJECT-TYPE
    SYNTAX EstNoiseMarginEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row description"
    INDEX { estNoiseMarginInputNumber }
    ::= { estNoiseMarginTable 1 }

EstNoiseMarginEntry ::=
    SEQUENCE {
        estNoiseMarginInputNumber
            InputNumber,
        estNoiseMarginTestState
            TestState,
        estNoiseMarginEnable
            Enable,
        estNoiseMarginCounter
            Counter32,
        estNoiseMarginCounterDiscontinuity
            DateAndTime,
        estNoiseMarginCounterReset
            TruthValue,
        estNoiseMarginLatestError
            DateAndTime,
        estNoiseMarginActiveTime
            ActiveTime,
        estNoiseMarginMeasurementState
            MeasurementState,
        estNoiseMarginValue
            FloatingPoint
     }

estNoiseMarginInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { estNoiseMarginEntry 1 }

estNoiseMarginTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the estNoiseMarginValue is currently
        within the thresholds."
    ::= { estNoiseMarginEntry 2 }
```

```
estNoiseMarginEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { estNoiseMarginEntry 3 }

estNoiseMarginCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { estNoiseMarginEntry 4 }

estNoiseMarginCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { estNoiseMarginEntry 5 }

estNoiseMarginCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { estNoiseMarginEntry 6 }

estNoiseMarginLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { estNoiseMarginEntry 7 }

estNoiseMarginActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { estNoiseMarginEntry 8 }

estNoiseMarginMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { estNoiseMarginEntry 9 }

estNoiseMarginValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Estimated Noise Margin value in dB."
    ::= { estNoiseMarginEntry 10 }

signQualMarTTable OBJECT-TYPE
    SYNTAX SEQUENCE OF SignQualMarTEntry
```

```
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Signal quality margin test"
    REFERENCE
        "TR 101 290 clause 7.3"
    ::= { tr101290Cable 3 }

signQualMarTEntry OBJECT-TYPE
    SYNTAX SignQualMarTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row description"
    INDEX { signQualMarTInputNumber }
    ::= { signQualMarTTable 1 }

SignQualMarTEntry ::=
    SEQUENCE {
        signQualMarTInputNumber
            InputNumber,
        signQualMarTTestState
            TestState,
        signQualMarTEnable
            Enable,
        signQualMarTCounter
            Counter32,
        signQualMarTCounterDiscontinuity
            DateAndTime,
        signQualMarTCounterReset
            TruthValue,
        signQualMarTLatestError
            DateAndTime,
        signQualMarTActiveTime
            ActiveTime
     }

signQualMarTInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the test is done"
    ::= { signQualMarTEntry 1 }

signQualMarTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates an error if the percentage of IQ points
        outside the threshold box exceeds cablePrefSignQualPercentMax."
    ::= { signQualMarTEntry 2 }

signQualMarTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { signQualMarTEntry 3 }

signQualMarTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times an error has occurred."
    ::= { signQualMarTEntry 4 }

signQualMarTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { signQualMarTEntry 5 }

signQualMarTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { signQualMarTEntry 6 }

signQualMarTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of an error."
    ::= { signQualMarTEntry 7 }

signQualMarTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { signQualMarTEntry 8 }

eNDCTable OBJECT-TYPE
    SYNTAX SEQUENCE OF ENDCEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Equivalent Noise Degradation (END) measurement"
    REFERENCE
        "TR 101 290 clause 7.4"
    ::= { tr101290Cable 4 }

eNDCEntry OBJECT-TYPE
    SYNTAX ENDCEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row description"
    INDEX { eNDCInputNumber }
    ::= { eNDCTable 1 }

ENDCEntry ::=
    SEQUENCE {
        eNDCInputNumber
            InputNumber,
        eNDCTestState
            TestState,
        eNDCEnable
            Enable,
        eNDCCounter
            Counter32,
        eNDCCounterDiscontinuity
            DateAndTime,
        eNDCCounterReset
            TruthValue,
        eNDCLatestError
            DateAndTime,
        eNDCActiveTime
            ActiveTime,
        eNDCMeasurementState
            MeasurementState,
        eNDCValue
            FloatingPoint
    }
```

```
eNDCInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { eNDCEntry 1 }

eNDCTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates an error when the eNDCValue exceeds
        the threshold."
    ::= { eNDCEntry 2 }

eNDCEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { eNDCEntry 3 }

eNDCCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { eNDCEntry 4 }

eNDCCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { eNDCEntry 5 }

eNDCCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { eNDCEntry 6 }

eNDCLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { eNDCEntry 7 }

eNDCActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { eNDCEntry 8 }

eNDCMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
```

```
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Indicates the validity of the measurement"
    ::= { eNDCEntry 9 }

eNDCValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Equivalent Noise Degradation value in dB."
    ::= { eNDCEntry 10 }

outBandEmissTable OBJECT-TYPE
    SYNTAX SEQUENCE OF OutBandEmissEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Out of band emissions test"
    REFERENCE
        "TR 101 290 clause 7.8"
    ::= { tr101290Cable 5 }

outBandEmissEntry OBJECT-TYPE
    SYNTAX OutBandEmissEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { outBandEmissInputNumber }
    ::= { outBandEmissTable 1 }

OutBandEmissEntry ::=
    SEQUENCE {
        outBandEmissInputNumber
            InputNumber,
        outBandEmissTestState
            TestState,
        outBandEmissEnable
            Enable,
        outBandEmissCounter
            Counter32,
        outBandEmissCounterDiscontinuity
            DateAndTime,
        outBandEmissCounterReset
            TruthValue,
        outBandEmissLatestError
            DateAndTime,
        outBandEmissActiveTime
            ActiveTime
     }

outBandEmissInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the test is made"
    ::= { outBandEmissEntry 1 }

outBandEmissTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the spectrum is within the
        spectrum mask. Note that the spectrum mask must be
        provided to the instrument by means outside the
        scope of this MIB."
    ::= { outBandEmissEntry 2 }

outBandEmissEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
```

```
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        DEFVAL { { testEnable } }
        ::= { outBandEmissEntry 3 }


outBandEmissCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Count of the number of times an error has occurred for this test."
        ::= { outBandEmissEntry 4 }


outBandEmissCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a discontinuity
            in the counter object."
        ::= { outBandEmissEntry 5 }


outBandEmissCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        ::= { outBandEmissEntry 6 }


outBandEmissLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of an
            error on this test."
        ::= { outBandEmissEntry 7 }


outBandEmissActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { outBandEmissEntry 8 }


cablePreferencesTable OBJECT-TYPE
        SYNTAX SEQUENCE OF CablePreferencesEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Table containing per input preferences for cable measurements."
        ::= { tr101290Cable 100 }


cablePreferencesEntry OBJECT-TYPE
        SYNTAX CablePreferencesEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { cablePrefInputNumber }
        ::= { cablePreferencesTable 1 }


CablePreferencesEntry ::=
        SEQUENCE {
            cablePrefInputNumber
                InputNumber,
            cablePrefNoiseMarginMin
                FloatingPoint,
            cablePrefEstNoiseMarginMin
                FloatingPoint,
```

```
            cablePrefSignQualBoxSize
                FloatingPoint,
            cablePrefSignQualPercentMax
                Integer32,
            cablePrefENDBER
                FloatingPoint,
            cablePrefENDCtoNSpecified
                TruthValue,
            cablePrefENDIdeal
                FloatingPoint,
            cablePrefENDMax
                FloatingPoint
        }

cablePrefInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { cablePreferencesEntry 1 }

cablePrefNoiseMarginMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the measured noiseMarginValue is less than this
        value the associated test fails."
    REFERENCE
        "TR 101 290 clause 7.1"
    ::= { cablePreferencesEntry 2 }

cablePrefEstNoiseMarginMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the measured estNoiseMarginValue is less than this
        value the associated test fails."
    REFERENCE
        "TR 101 290 clause 7.1"
    ::= { cablePreferencesEntry 3 }

cablePrefSignQualBoxSize OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This object determines the size of the quality threshold
        box for the signal quality margin test. The quality
        threshold box is assumed to be square. The value is the
        ratio of the length of one side of a threshold box to the
        length of one side of the IQ decision boundary box. An
        example value is '0,5'."
    REFERENCE
        "TR 101 290 clause 7.3"
    ::= { cablePreferencesEntry 4 }

cablePrefSignQualPercentMax OBJECT-TYPE
    SYNTAX Integer32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This object sets the limit on how many constellation
        points may fall outside the threshold box before the
        signal quality margin test fails. The value is
        expressed as a percentage, for example '7.5'."
    REFERENCE
        "TR 101 290 clause 7.3"
    ::= { cablePreferencesEntry 5 }

cablePrefENDBER OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
```

```
                    DESCRIPTION
                        "BER value which is to be used for the END measurement."
                    REFERENCE
                        "TR 101 290 clause 7.4"
                    DEFVAL { "1E-04" }
                    ::= { cablePreferencesEntry 6 }

            cablePrefENDCtoNSpecified OBJECT-TYPE
                    SYNTAX TruthValue
                    MAX-ACCESS read-write
                    STATUS current
                    DESCRIPTION
                        "This determines whether cablePrefENDIdeal is expressed
                        as a C/N ratio (value is true) or an Eb/No ratio
                        (value is false)."
                    REFERENCE
                        "TR 101 290 clause 7.4"
                    ::= { cablePreferencesEntry 7 }

            cablePrefENDIdeal OBJECT-TYPE
                    SYNTAX FloatingPoint
                    UNITS "dB"
                    MAX-ACCESS read-write
                    STATUS current
                    DESCRIPTION
                        "This is the 'ideal' value of C/N or Eb/No for the given BER."
                    REFERENCE
                        "TR 101 290 clause 7.4"
                    ::= { cablePreferencesEntry 8 }

            cablePrefENDMax OBJECT-TYPE
                    SYNTAX FloatingPoint
                    UNITS "dB"
                    MAX-ACCESS read-write
                    STATUS current
                    DESCRIPTION
                        "If the measured END exceeds this value the associated test fails."
                    REFERENCE
                        "TR 101 290 clause 7.4"
                    ::= { cablePreferencesEntry 9 }

-- Measurements and tests from clause 8 of TR 101 290.
-- These apply to satellite systems.
            tr101290Satellite OBJECT IDENTIFIER ::= { tr101290Objects 8 }

            berViterbiSTable OBJECT-TYPE
                    SYNTAX SEQUENCE OF BerViterbiSEntry
                    MAX-ACCESS not-accessible
                    STATUS current
                    DESCRIPTION
                        "BER before Viterbi decoding measurement"
                    REFERENCE
                        "TR 101 290 clause 8.1"
                    ::= { tr101290Satellite 1 }

            berViterbiSEntry OBJECT-TYPE
                    SYNTAX BerViterbiSEntry
                    MAX-ACCESS not-accessible
                    STATUS current
                    DESCRIPTION
                        "Row description"
                    INDEX { berViterbiSInputNumber }
                    ::= { berViterbiSTable 1 }

            BerViterbiSEntry ::=
                    SEQUENCE {
                        berViterbiSInputNumber
                            InputNumber,
                        berViterbiSTestState
                            TestState,
                        berViterbiSEnable
                            Enable,
                        berViterbiSCounter
                            Counter32,
                        berViterbiSCounterDiscontinuity
                            DateAndTime,
                        berViterbiSCounterReset
                            TruthValue,
```

```
        berViterbiSLatestError
            DateAndTime,
        berViterbiSActiveTime
            ActiveTime,
        berViterbiSMeasurementState
            MeasurementState,
        berViterbiSIValue
            FloatingPoint,
        berViterbiSQValue
            FloatingPoint,
        berViterbiSMeasurementMethod
            BERMeasurementMethod
    }

berViterbiSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { berViterbiSEntry 1 }

berViterbiSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This test fails if either berViterbiSIValue or
        berViterbiSQValue exceeds the threshold set by
        satellitePrefBERMax."
    ::= { berViterbiSEntry 2 }

berViterbiSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { berViterbiSEntry 3 }

berViterbiSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { berViterbiSEntry 4 }

berViterbiSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a
        discontinuity in the berViterbiSCounter object."
    ::= { berViterbiSEntry 5 }

berViterbiSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { berViterbiSEntry 6 }

berViterbiSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { berViterbiSEntry 7 }


berViterbiSActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { berViterbiSEntry 8 }


berViterbiSMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Indicates the validity of the measurement"
        ::= { berViterbiSEntry 9 }


berViterbiSIValue OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This is the pre-Viterbi I path BER value, for example 0.0000023"
        REFERENCE
            "TR 101 290 clause 8.1"
        ::= { berViterbiSEntry 10 }


berViterbiSQValue OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This is the pre-Viterbi Q path BER value, for example 0.0000023"
        REFERENCE
            "TR 101 290 clause 8.1"
        ::= { berViterbiSEntry 11 }


berViterbiSMeasurementMethod OBJECT-TYPE
        SYNTAX BERMeasurementMethod
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This indicates whether the measurement was made
            separately for the I and Q parts of the signal or
            by a measurement of I and Q combined."
        ::= { berViterbiSEntry 12 }


ifSpectrumTable OBJECT-TYPE
        SYNTAX SEQUENCE OF IfSpectrumEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "IF spectrum test"
        REFERENCE
            "TR 101 290 clause 8.3"
        ::= { tr101290Satellite 2 }


ifSpectrumEntry OBJECT-TYPE
        SYNTAX IfSpectrumEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { ifSpectrumInputNumber }
        ::= { ifSpectrumTable 1 }


IfSpectrumEntry ::=
        SEQUENCE {
            ifSpectrumInputNumber
                InputNumber,
            ifSpectrumTestState
                TestState,
            ifSpectrumEnable
```

```
                    Enable,
                ifSpectrumCounter
                    Counter32,
                ifSpectrumCounterDiscontinuity
                    DateAndTime,
                ifSpectrumCounterReset
                    TruthValue,
                ifSpectrumLatestError
                    DateAndTime,
                ifSpectrumActiveTime
                    ActiveTime
             }

ifSpectrumInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { ifSpectrumEntry 1 }

ifSpectrumTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This indicates whether the spectrum conforms to the
            template. Note that the spectrum mask must be provided
            to the instrument by means outside the scope of this MIB.
            The group delay is not tested."
        ::= { ifSpectrumEntry 2 }

ifSpectrumEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        DEFVAL { { testEnable } }
        ::= { ifSpectrumEntry 3 }

ifSpectrumCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Count of the number of times an error has occurred
            for this test."
        ::= { ifSpectrumEntry 4 }

ifSpectrumCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a
            discontinuity in the counter object."
        ::= { ifSpectrumEntry 5 }

ifSpectrumCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { ifSpectrumEntry 6 }

ifSpectrumLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
```

```
            DESCRIPTION
                "The timestamp at the most recent occurrence of an
                error on this test."
            ::= { ifSpectrumEntry 7 }

        ifSpectrumActiveTime OBJECT-TYPE
            SYNTAX ActiveTime
            UNITS "second"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The total time when it has been possible to perform this measurement"
            ::= { ifSpectrumEntry 8 }

        satellitePreferencesTable OBJECT-TYPE
            SYNTAX SEQUENCE OF SatellitePreferencesEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Table of satellite specific measurement preferences."
            ::= { tr101290Satellite 100 }

        satellitePreferencesEntry OBJECT-TYPE
            SYNTAX SatellitePreferencesEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { satellitePrefInputNumber }
            ::= { satellitePreferencesTable 1 }

        SatellitePreferencesEntry ::=
            SEQUENCE {
                satellitePrefInputNumber
                    InputNumber,
                satellitePrefBERMax
                    FloatingPoint
             }

        satellitePrefInputNumber OBJECT-TYPE
            SYNTAX InputNumber
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Transport Stream input to which the preferences apply"
            ::= { satellitePreferencesEntry 1 }

        satellitePrefBERMax OBJECT-TYPE
            SYNTAX FloatingPoint
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "This defines the upper limit on the BER before
                Viterbi measurement"
            REFERENCE
                "TR 101 290 clause 8.1"
            ::= { satellitePreferencesEntry 2 }

-- Measurements and tests from clause 9 of TR 101 290.
-- These apply to terrestrial systems.
        tr101290Terrestrial OBJECT IDENTIFIER ::= { tr101290Objects 9 }

        rfTerr OBJECT IDENTIFIER ::= { tr101290Terrestrial 1 }

        rfAccuracyTable OBJECT-TYPE
            SYNTAX SEQUENCE OF RfAccuracyEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "RF frequency accuracy (Precision)"
            REFERENCE
                "TR 101 290 clause 9.1.1"
            ::= { rfTerr 1 }

        rfAccuracyEntry OBJECT-TYPE
            SYNTAX RfAccuracyEntry
            MAX-ACCESS not-accessible
            STATUS current
```

```
    DESCRIPTION
        "Row specification"
    INDEX { rfAccuracyInputNumber }
    ::= { rfAccuracyTable 1 }

RfAccuracyEntry ::=
    SEQUENCE {
        rfAccuracyInputNumber
            InputNumber,
        rfAccuracyTestState
            TestState,
        rfAccuracyEnable
            Enable,
        rfAccuracyCounter
            Counter32,
        rfAccuracyCounterDiscontinuity
            DateAndTime,
        rfAccuracyCounterReset
            TruthValue,
        rfAccuracyLatestError
            DateAndTime,
        rfAccuracyActiveTime
            ActiveTime,
        rfAccuracyMeasurementState
            MeasurementState,
        rfAccuracyValue
            FloatingPoint
    }

rfAccuracyInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "RF input on which the measurement is made"
    ::= { rfAccuracyEntry 1 }

rfAccuracyTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the rfAccuracyValue is within
        the thresholds."
    ::= { rfAccuracyEntry 2 }

rfAccuracyEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { rfAccuracyEntry 3 }

rfAccuracyCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { rfAccuracyEntry 4 }

rfAccuracyCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { rfAccuracyEntry 5 }

rfAccuracyCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
```

```
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { rfAccuracyEntry 6 }

rfAccuracyLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { rfAccuracyEntry 7 }

rfAccuracyActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { rfAccuracyEntry 8 }

rfAccuracyMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Indicates the validity of the measurement"
        ::= { rfAccuracyEntry 9 }

rfAccuracyValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "Hz"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This is the RF carrier frequency in Hz."
        ::= { rfAccuracyEntry 10 }

rfChannelWidthTable OBJECT-TYPE
        SYNTAX SEQUENCE OF RfChannelWidthEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "RF channel width (Sampling Frequency Accuracy)"
        REFERENCE
            "TR 101 290 clause 9.1.2"
        ::= { rfTerr 2 }

rfChannelWidthEntry OBJECT-TYPE
        SYNTAX RfChannelWidthEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { rfChannelWidthInputNumber }
        ::= { rfChannelWidthTable 1 }

RfChannelWidthEntry ::=
        SEQUENCE {
            rfChannelWidthInputNumber
                InputNumber,
            rfChannelWidthTestState
                TestState,
            rfChannelWidthEnable
                Enable,
            rfChannelWidthCounter
                Counter32,
            rfChannelWidthCounterDiscontinuity
                DateAndTime,
            rfChannelWidthCounterReset
                TruthValue,
            rfChannelWidthLatestError
```

```
                DateAndTime,
            rfChannelWidthActiveTime
                ActiveTime,
            rfChannelWidthMeasurementState
                MeasurementState,
            rfChannelWidthValue
                FloatingPoint
         }

rfChannelWidthInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { rfChannelWidthEntry 1 }

rfChannelWidthTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the rfChannelWidthValue
        is within the thresholds."
    ::= { rfChannelWidthEntry 2 }

rfChannelWidthEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { rfChannelWidthEntry 3 }

rfChannelWidthCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { rfChannelWidthEntry 4 }

rfChannelWidthCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { rfChannelWidthEntry 5 }

rfChannelWidthCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { rfChannelWidthEntry 6 }

rfChannelWidthLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { rfChannelWidthEntry 7 }

rfChannelWidthActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
```

```
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { rfChannelWidthEntry 8 }

rfChannelWidthMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { rfChannelWidthEntry 9 }

rfChannelWidthValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Hz"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the RF channel width in Hz."
    ::= { rfChannelWidthEntry 10 }

symbolLengthTable OBJECT-TYPE
    SYNTAX SEQUENCE OF SymbolLengthEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Symbol Length measurement at RF (Guard Interval verification)"
    REFERENCE
        "TR 101 290 clause 9.1.3"
    ::= { rfTerr 3 }

symbolLengthEntry OBJECT-TYPE
    SYNTAX SymbolLengthEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { symbolLengthInputNumber }
    ::= { symbolLengthTable 1 }

SymbolLengthEntry ::=
    SEQUENCE {
        symbolLengthInputNumber
            InputNumber,
        symbolLengthTestState
            TestState,
        symbolLengthEnable
            Enable,
        symbolLengthCounter
            Counter32,
        symbolLengthCounterDiscontinuity
            DateAndTime,
        symbolLengthCounterReset
            TruthValue,
        symbolLengthLatestError
            DateAndTime,
        symbolLengthActiveTime
            ActiveTime,
        symbolLengthMeasurementState
            MeasurementState,
        symbolLengthValue
            FloatingPoint
     }

symbolLengthInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { symbolLengthEntry 1 }

symbolLengthTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
```

```
    STATUS current
    DESCRIPTION
        "This indicates whether the symbolLengthValue is within the thresholds."
    ::= { symbolLengthEntry 2 }

symbolLengthEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { symbolLengthEntry 3 }

symbolLengthCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { symbolLengthEntry 4 }

symbolLengthCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { symbolLengthEntry 5 }

symbolLengthCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { symbolLengthEntry 6 }

symbolLengthLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { symbolLengthEntry 7 }

symbolLengthActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { symbolLengthEntry 8 }

symbolLengthMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { symbolLengthEntry 9 }

symbolLengthValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "microsecond"
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "This is the symbol length in microseconds."
    ::= { symbolLengthEntry 10 }

rfIfPowerTable OBJECT-TYPE
    SYNTAX SEQUENCE OF RfIfPowerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "RF/IF signal power"
    REFERENCE
        "TR 101 290 clause 9.5"
    ::= { tr101290Terrestrial 5 }

rfIfPowerEntry OBJECT-TYPE
    SYNTAX RfIfPowerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { rfIfPowerInputNumber }
    ::= { rfIfPowerTable 1 }

RfIfPowerEntry ::=
    SEQUENCE {
        rfIfPowerInputNumber
            InputNumber,
        rfIfPowerTestState
            TestState,
        rfIfPowerEnable
            Enable,
        rfIfPowerCounter
            Counter32,
        rfIfPowerCounterDiscontinuity
            DateAndTime,
        rfIfPowerCounterReset
            TruthValue,
        rfIfPowerLatestError
            DateAndTime,
        rfIfPowerActiveTime
            ActiveTime,
        rfIfPowerMeasurementState
            MeasurementState,
        rfIfPowerValue
            FloatingPoint
     }

rfIfPowerInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "RF input on which the measurement is made"
    ::= { rfIfPowerEntry 1 }

rfIfPowerTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the rfIfPowerValue is within
        the thresholds."
    ::= { rfIfPowerEntry 2 }

rfIfPowerEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { rfIfPowerEntry 3 }

rfIfPowerCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "Count of the number of times a threshold error has
            occurred for this measurement."
        ::= { rfIfPowerEntry 4 }

rfIfPowerCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a discontinuity
            in the counter object."
        ::= { rfIfPowerEntry 5 }

rfIfPowerCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { rfIfPowerEntry 6 }

rfIfPowerLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { rfIfPowerEntry 7 }

rfIfPowerActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { rfIfPowerEntry 8 }

rfIfPowerMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { rfIfPowerEntry 9 }

rfIfPowerValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dBm"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current RF power expressed in dBm, which references
            0 dBm as the power of 1 mW."
        ::= { rfIfPowerEntry 10 }

rfIfSpectrumTable OBJECT-TYPE
        SYNTAX SEQUENCE OF RfIfSpectrumEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "RF and IF spectrum mask test"
        REFERENCE
            "TR 101 290 clause 9.7"
        ::= { tr101290Terrestrial 7 }

rfIfSpectrumEntry OBJECT-TYPE
        SYNTAX RfIfSpectrumEntry
        MAX-ACCESS not-accessible
        STATUS current
```

```
        DESCRIPTION
            "Row specification"
        INDEX { rfIfSpectrumInputNumber }
        ::= { rfIfSpectrumTable 1 }


RfIfSpectrumEntry ::=
        SEQUENCE {
            rfIfSpectrumInputNumber
                InputNumber,
            rfIfSpectrumTestState
                TestState,
            rfIfSpectrumEnable
                Enable,
            rfIfSpectrumCounter
                Counter32,
            rfIfSpectrumCounterDiscontinuity
                DateAndTime,
            rfIfSpectrumCounterReset
                TruthValue,
            rfIfSpectrumLatestError
                DateAndTime,
            rfIfSpectrumActiveTime
                ActiveTime
         }

rfIfSpectrumInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { rfIfSpectrumEntry 1 }

rfIfSpectrumTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This indicates whether the signal conforms to the
            spectrum mask"
        ::= { rfIfSpectrumEntry 2 }

rfIfSpectrumEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Determines whether the spectrum mask test and the associated
            trap are enabled."
        DEFVAL { { testEnable } }
        ::= { rfIfSpectrumEntry 3 }

rfIfSpectrumCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Count of the number of times an error has occurred."
        ::= { rfIfSpectrumEntry 4 }

rfIfSpectrumCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a discontinuity
            in the counter object."
        ::= { rfIfSpectrumEntry 5 }

rfIfSpectrumCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.
```

```
                    When read, the value of this object is always 'false'."
                DEFVAL { false }
                ::= { rfIfSpectrumEntry 6 }

        rfIfSpectrumLatestError OBJECT-TYPE
            SYNTAX DateAndTime
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The timestamp at the most recent occurrence of an error."
            ::= { rfIfSpectrumEntry 7 }

        rfIfSpectrumActiveTime OBJECT-TYPE
            SYNTAX ActiveTime
            UNITS "second"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The total time when it has been possible to perform this measurement"
            ::= { rfIfSpectrumEntry 8 }

-- Equivalent Noise Degradation and Equivalent Noise Floor measurements
        eNDT OBJECT IDENTIFIER ::= { tr101290Terrestrial 9 }

        eNDTTable OBJECT-TYPE
            SYNTAX SEQUENCE OF ENDTEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Equivalent Noise Degradation measurement. If the DVB-T
                transmission is hierarchical, this table contains the
                measurement for the HP (high priority) stream. If the
                transmission is not hierarchical, this table contains
                the measurement for the whole stream."
            REFERENCE
                "TR 101 290 clause 9.9"
            ::= { eNDT 1 }

        eNDTEntry OBJECT-TYPE
            SYNTAX ENDTEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { eNDTInputNumber }
            ::= { eNDTTable 1 }

        ENDTEntry ::=
            SEQUENCE {
                eNDTInputNumber
                    InputNumber,
                eNDTTestState
                    TestState,
                eNDTEnable
                    Enable,
                eNDTCounter
                    Counter32,
                eNDTCounterDiscontinuity
                    DateAndTime,
                eNDTCounterReset
                    TruthValue,
                eNDTLatestError
                    DateAndTime,
                eNDTActiveTime
                    ActiveTime,
                eNDTMeasurementState
                    MeasurementState,
                eNDTValue
                    FloatingPoint
            }

        eNDTInputNumber OBJECT-TYPE
            SYNTAX InputNumber
            MAX-ACCESS not-accessible
            STATUS current
```

```
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { eNDTEntry 1 }

eNDTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether eNDTValue is within the thresholds."
    ::= { eNDTEntry 2 }

eNDTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { eNDTEntry 3 }

eNDTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { eNDTEntry 4 }

eNDTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { eNDTEntry 5 }

eNDTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { eNDTEntry 6 }

eNDTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { eNDTEntry 7 }

eNDTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { eNDTEntry 8 }

eNDTMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { eNDTEntry 9 }


eNDTValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dB"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Equivalent Noise Degradation expressed in dB."
        ::= { eNDTEntry 10 }


eNFTTable OBJECT-TYPE
        SYNTAX SEQUENCE OF ENFTEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Equivalent Noise Floor measurement. If the DVB-T transmission
            is hierarchical, this table contains the measurement for the HP
            (high priority) stream. If the transmission is not hierarchical,
            this table contains the measurement for the whole stream."
        REFERENCE
            "TR 101 290 clause 9.9.1"
        ::= { eNDT 2 }


eNFTEntry OBJECT-TYPE
        SYNTAX ENFTEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { eNFTInputNumber }
        ::= { eNFTTable 1 }


ENFTEntry ::=
        SEQUENCE {
            eNFTInputNumber
                InputNumber,
            eNFTTestState
                TestState,
            eNFTEnable
                Enable,
            eNFTCounter
                Counter32,
            eNFTCounterDiscontinuity
                DateAndTime,
            eNFTCounterReset
                TruthValue,
            eNFTLatestError
                DateAndTime,
            eNFTActiveTime
                ActiveTime,
            eNFTMeasurementState
                MeasurementState,
            eNFTValue
                FloatingPoint
        }


eNFTInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { eNFTEntry 1 }


eNFTTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This indicates whether the eNFTValue is within the thresholds."
        ::= { eNFTEntry 2 }


eNFTEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
```

```
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { eNFTEntry 3 }

eNFTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { eNFTEntry 4 }

eNFTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { eNFTEntry 5 }

eNFTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { eNFTEntry 6 }

eNFTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { eNFTEntry 7 }

eNFTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { eNFTEntry 8 }

eNFTMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { eNFTEntry 9 }

eNFTValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Equivalent Noise Floor expressed in dB,
        see the reference for the method of calculation."
    REFERENCE
        "TR 101 290 E.9.1"
    ::= { eNFTEntry 10 }

eNDTLPTable OBJECT-TYPE
    SYNTAX SEQUENCE OF ENDTLPEntry
```

```
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Equivalent Noise Degradation measurement. If the
        DVB-T transmission is hierarchical, this table
        contains the measurement for the LP (low priority)
        stream. If the transmission is not hierarchical,
        the MeasurementState for this table will be 'unknown'."
    ::= { eNDT 3 }

eNDTLPEntry OBJECT-TYPE
    SYNTAX ENDTLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { eNDTLPInputNumber }
    ::= { eNDTLPTable 1 }

ENDTLPEntry ::=
    SEQUENCE {
        eNDTLPInputNumber
            InputNumber,
        eNDTLPTestState
            TestState,
        eNDTLPEnable
            Enable,
        eNDTLPCounter
            Counter32,
        eNDTLPCounterDiscontinuity
            DateAndTime,
        eNDTLPCounterReset
            TruthValue,
        eNDTLPLatestError
            DateAndTime,
        eNDTLPActiveTime
            ActiveTime,
        eNDTLPMeasurementState
            MeasurementState,
        eNDTLPValue
            FloatingPoint
     }

eNDTLPInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { eNDTLPEntry 1 }

eNDTLPTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether eNDTLPValue is within the thresholds."
    ::= { eNDTLPEntry 2 }

eNDTLPEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { eNDTLPEntry 3 }

eNDTLPCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error
        has occurred for this measurement."
    ::= { eNDTLPEntry 4 }
```

```
eNDTLPCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { eNDTLPEntry 5 }

eNDTLPCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { eNDTLPEntry 6 }

eNDTLPLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { eNDTLPEntry 7 }

eNDTLPActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { eNDTLPEntry 8 }

eNDTLPMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { eNDTLPEntry 9 }

eNDTLPValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Equivalent Noise Degradation for the low
        priority stream expressed in dB."
    ::= { eNDTLPEntry 10 }

eNFTLPTable OBJECT-TYPE
    SYNTAX SEQUENCE OF ENFTLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Equivalent Noise Floor measurement. If the DVB-T transmission
        is hierarchical, this table contains the measurement for the LP
        (low priority) stream. If the transmission is not hierarchical,
        the MeasurementState for this table will be 'unknown'."
    ::= { eNDT 4 }

eNFTLPEntry OBJECT-TYPE
    SYNTAX ENFTLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { eNDTLPInputNumber }
    ::= { eNFTLPTable 1 }
```

```
ENFTLPEntry ::=
    SEQUENCE {
        eNFTLPInputNumber
            InputNumber,
        eNFTLPTestState
            TestState,
        eNFTLPEnable
            Enable,
        eNFTLPCounter
            Counter32,
        eNFTLPCounterDiscontinuity
            DateAndTime,
        eNFTLPCounterReset
            TruthValue,
        eNFTLPLatestError
            DateAndTime,
        eNFTLPActiveTime
            ActiveTime,
        eNFTLPMeasurementState
            MeasurementState,
        eNFTLPValue
            FloatingPoint
     }

eNFTLPInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { eNFTLPEntry 1 }

eNFTLPTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether eNFTLPValue is within the thresholds."
    ::= { eNFTLPEntry 2 }

eNFTLPEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { eNFTLPEntry 3 }

eNFTLPCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error
        has occurred for this measurement."
    ::= { eNFTLPEntry 4 }

eNFTLPCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { eNFTLPEntry 5 }

eNFTLPCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.
```

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```
            When read, the value of this object is always 'false'."
        ::= { eNFTLPEntry 6 }

    eNFTLPLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { eNFTLPEntry 7 }

    eNFTLPActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { eNFTLPEntry 8 }

    eNFTLPMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { eNFTLPEntry 9 }

    eNFTLPValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dB"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Equivalent Noise Floor for the low priority
            stream, expressed in dB, see the reference for the
            method of calculation."
        REFERENCE
            "TR 101 290 E.9.1"
        ::= { eNFTLPEntry 10 }

linearityTable OBJECT-TYPE
    SYNTAX SEQUENCE OF LinearityEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Linearity characterization (shoulder attenuation)"
    REFERENCE
        "TR 101 290 clause 9.10"
    ::= { tr101290Terrestrial 10 }

linearityEntry OBJECT-TYPE
    SYNTAX LinearityEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { linearityInputNumber }
    ::= { linearityTable 1 }

LinearityEntry ::=
    SEQUENCE {
        linearityInputNumber
            InputNumber,
        linearityTestState
            TestState,
        linearityEnable
            Enable,
        linearityCounter
            Counter32,
        linearityCounterDiscontinuity
            DateAndTime,
        linearityCounterReset
            TruthValue,
        linearityLatestError
            DateAndTime,
        linearityActiveTime
            ActiveTime,
```

```
            linearityMeasurementState
                MeasurementState,
            linearityValue
                FloatingPoint
         }

linearityInputNumber OBJECT-TYPE
     SYNTAX InputNumber
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
         "Transport Stream on which the measurement is made"
     ::= { linearityEntry 1 }

linearityTestState OBJECT-TYPE
     SYNTAX TestState
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
         "This indicates whether the linearityValue is above
         the minimum permitted."
     ::= { linearityEntry 2 }

linearityEnable OBJECT-TYPE
     SYNTAX Enable
     MAX-ACCESS read-write
     STATUS current
     DESCRIPTION
         "Determines whether the threshold test and associated traps
         for this measurement are enabled."
     DEFVAL { { testEnable } }
     ::= { linearityEntry 3 }

linearityCounter OBJECT-TYPE
     SYNTAX Counter32
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
         "Count of the number of times a threshold error has
         occurred for this measurement."
     ::= { linearityEntry 4 }

linearityCounterDiscontinuity OBJECT-TYPE
     SYNTAX DateAndTime
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
         "Provides the last time at which there was a discontinuity
         in the counter object."
     ::= { linearityEntry 5 }

linearityCounterReset OBJECT-TYPE
     SYNTAX TruthValue
     MAX-ACCESS read-write
     STATUS current
     DESCRIPTION
         "The counter object is reset to zero and the counter
         discontinuity object is set to the current time if
         'true' is written to this object.

         When read, the value of this object is always 'false'."
     ::= { linearityEntry 6 }

linearityLatestError OBJECT-TYPE
     SYNTAX DateAndTime
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
         "The timestamp at the most recent occurrence of a
         threshold error on this measurement."
     ::= { linearityEntry 7 }

linearityActiveTime OBJECT-TYPE
     SYNTAX ActiveTime
     UNITS "second"
     MAX-ACCESS read-only
     STATUS current
```

```
            DESCRIPTION
                "The total time when it has been possible to perform this measurement"
            ::= { linearityEntry 8 }

        linearityMeasurementState OBJECT-TYPE
            SYNTAX MeasurementState
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Specifies the validity of the measurement value"
            ::= { linearityEntry 9 }

        linearityValue OBJECT-TYPE
            SYNTAX FloatingPoint
            UNITS "dB"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The current linearity (shoulder attenuation) expressed in dB."
            ::= { linearityEntry 10 }

-- BER before Viterbi (inner) decoder measurements
        berViterbiT OBJECT IDENTIFIER ::= { tr101290Terrestrial 15 }

        berViterbiTTable OBJECT-TYPE
            SYNTAX SEQUENCE OF BerViterbiTEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "BER before Viterbi measurement. If the DVB-T transmission
                is hierarchical, this table contains the measurement
                for the HP (high priority) stream. If the transmission is
                not hierarchical, this table contains the measurement for
                the whole stream."
            REFERENCE
                "TR 101 290 clause 9.15"
            ::= { berViterbiT 1 }

        berViterbiTEntry OBJECT-TYPE
            SYNTAX BerViterbiTEntry
            MAX-ACCESS not-accessible
            STATUS current
            DESCRIPTION
                "Row specification"
            INDEX { berViterbiTInputNumber }
            ::= { berViterbiTTable 1 }

        BerViterbiTEntry ::=
            SEQUENCE {
                berViterbiTInputNumber
                    InputNumber,
                berViterbiTTestState
                    TestState,
                berViterbiTEnable
                    Enable,
                berViterbiTCounter
                    Counter32,
                berViterbiTCounterDiscontinuity
                    DateAndTime,
                berViterbiTCounterReset
                    TruthValue,
                berViterbiTLatestError
                    DateAndTime,
                berViterbiTActiveTime
                    ActiveTime,
                berViterbiTMeasurementState
                    MeasurementState,
                berViterbiTValue
                    FloatingPoint
             }

        berViterbiTInputNumber OBJECT-TYPE
            SYNTAX InputNumber
            MAX-ACCESS not-accessible
            STATUS current
```

```
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { berViterbiTEntry 1 }

berViterbiTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the berViterbiTValue is
        within the thresholds."
    ::= { berViterbiTEntry 2 }

berViterbiTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { berViterbiTEntry 3 }

berViterbiTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { berViterbiTEntry 4 }

berViterbiTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { berViterbiTEntry 5 }

berViterbiTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { berViterbiTEntry 6 }

berViterbiTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { berViterbiTEntry 7 }

berViterbiTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { berViterbiTEntry 8 }

berViterbiTMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { berViterbiTEntry 9 }
```

```
berViterbiTValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the overall pre-Viterbi BER value, for
        example 0.0000046"
    ::= { berViterbiTEntry 10 }

berViterbiTLPTable OBJECT-TYPE
    SYNTAX SEQUENCE OF BerViterbiTLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "BER before Viterbi measurement. If the DVB-T transmission
        is hierarchical, this table contains the measurement for
        the LP (low priority) stream. If the transmission is not
        hierarchical, the MeasurementState for this table will be
        'unknown'."
    ::= { berViterbiT 2 }

berViterbiTLPEntry OBJECT-TYPE
    SYNTAX BerViterbiTLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { berViterbiTLPInputNumber }
    ::= { berViterbiTLPTable 1 }

BerViterbiTLPEntry ::=
    SEQUENCE {
        berViterbiTLPInputNumber
            InputNumber,
        berViterbiTLPTestState
            TestState,
        berViterbiTLPEnable
            Enable,
        berViterbiTLPCounter
            Counter32,
        berViterbiTLPCounterDiscontinuity
            DateAndTime,
        berViterbiTLPCounterReset
            TruthValue,
        berViterbiTLPLatestError
            DateAndTime,
        berViterbiTLPActiveTime
            ActiveTime,
        berViterbiTLPMeasurementState
            MeasurementState,
        berViterbiTLPValue
            FloatingPoint
     }

berViterbiTLPInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { berViterbiTLPEntry 1 }

berViterbiTLPTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether the berViterbiTLPValue is
        within the thresholds."
    ::= { berViterbiTLPEntry 2 }

berViterbiTLPEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
```

```
            DEFVAL { { testEnable } }
            ::= { berViterbiTLPEntry 3 }

        berViterbiTLPCounter OBJECT-TYPE
            SYNTAX Counter32
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Count of the number of times a threshold error has
                occurred for this measurement."
            ::= { berViterbiTLPEntry 4 }

        berViterbiTLPCounterDiscontinuity OBJECT-TYPE
            SYNTAX DateAndTime
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Provides the last time at which there was a discontinuity
                in the counter object."
            ::= { berViterbiTLPEntry 5 }

        berViterbiTLPCounterReset OBJECT-TYPE
            SYNTAX TruthValue
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "The counter object is reset to zero and the counter
                discontinuity object is set to the current time if
                'true' is written to this object.

                When read, the value of this object is always 'false'."
            ::= { berViterbiTLPEntry 6 }

        berViterbiTLPLatestError OBJECT-TYPE
            SYNTAX DateAndTime
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The timestamp at the most recent occurrence of a
                threshold error on this measurement."
            ::= { berViterbiTLPEntry 7 }

        berViterbiTLPActiveTime OBJECT-TYPE
            SYNTAX ActiveTime
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "The total time when it has been possible to perform this measurement"
            ::= { berViterbiTLPEntry 8 }

        berViterbiTLPMeasurementState OBJECT-TYPE
            SYNTAX MeasurementState
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "Specifies the validity of the measurement value"
            ::= { berViterbiTLPEntry 9 }

        berViterbiTLPValue OBJECT-TYPE
            SYNTAX FloatingPoint
            UNITS "dB"
            MAX-ACCESS read-only
            STATUS current
            DESCRIPTION
                "This is the overall pre-Viterbi BER value, for
                example 0.0000046"
            ::= { berViterbiTLPEntry 10 }

-- BER before RS (outer) decoder measurements
        berRS OBJECT IDENTIFIER ::= { tr101290Terrestrial 16 }

        berRSTable OBJECT-TYPE
            SYNTAX SEQUENCE OF BerRSEntry
            MAX-ACCESS not-accessible
            STATUS current
```

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```
    DESCRIPTION
        "BER before RS measurement. If the DVB-T transmission
        is hierarchical, this table contains the measurement
        for the HP (high priority) stream. If the transmission
        is not hierarchical, this table contains the measurement
        for the whole stream."
    REFERENCE
        "TR 101 290 clause 9.16"
    ::= { berRS 1 }

berRSEntry OBJECT-TYPE
    SYNTAX BerRSEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { berRSInputNumber }
    ::= { berRSTable 1 }

BerRSEntry ::=
    SEQUENCE {
        berRSInputNumber
            InputNumber,
        berRSTestState
            TestState,
        berRSEnable
            Enable,
        berRSCounter
            Counter32,
        berRSCounterDiscontinuity
            DateAndTime,
        berRSCounterReset
            TruthValue,
        berRSLatestError
            DateAndTime,
        berRSActiveTime
            ActiveTime,
        berRSMeasurementState
            MeasurementState,
        berRSValue
            FloatingPoint
      }

berRSInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { berRSEntry 1 }

berRSTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether berRSValue is below the maximum."
    ::= { berRSEntry 2 }

berRSEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { berRSEntry 3 }

berRSCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { berRSEntry 4 }
```

```
berRSCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { berRSEntry 5 }

berRSCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { berRSEntry 6 }

berRSLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { berRSEntry 7 }

berRSActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { berRSEntry 8 }

berRSMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { berRSEntry 9 }

berRSValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the BER before RS (outer) decoder measured using
        the in-service method. It is expressed as a number,
        e.g. 0.0000034"
    ::= { berRSEntry 10 }

berRSLPTable OBJECT-TYPE
    SYNTAX SEQUENCE OF BerRSLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "BER before RS measurement. If the DVB-T transmission
        is hierarchical, this table contains the measurement
        for the LP (low priority) stream. If the transmission
        is not hierarchical, the MeasurementState for this
        table will be 'unknown'."
    ::= { berRS 2 }

berRSLPEntry OBJECT-TYPE
    SYNTAX BerRSLPEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { berRSLPInputNumber }
    ::= { berRSLPTable 1 }
```

```
BerRSLPEntry ::=
    SEQUENCE {
        berRSLPInputNumber
            InputNumber,
        berRSLPTestState
            TestState,
        berRSLPEnable
            Enable,
        berRSLPCounter
            Counter32,
        berRSLPCounterDiscontinuity
            DateAndTime,
        berRSLPCounterReset
            TruthValue,
        berRSLPLatestError
            DateAndTime,
        berRSLPActiveTime
            ActiveTime,
        berRSLPMeasurementState
            MeasurementState,
        berRSLPValue
            FloatingPoint
    }

berRSLPInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { berRSLPEntry 1 }

berRSLPTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether berRSLPValue is within the thresholds."
    ::= { berRSLPEntry 2 }

berRSLPEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { berRSLPEntry 3 }

berRSLPCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { berRSLPEntry 4 }

berRSLPCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { berRSLPEntry 5 }

berRSLPCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.
```

```
        When read, the value of this object is always 'false'."
    ::= { berRSLPEntry 6 }

berRSLPLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { berRSLPEntry 7 }

berRSLPActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { berRSLPEntry 8 }

berRSLPMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { berRSLPEntry 9 }

berRSLPValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the BER before RS (outer) decoder for the low
        priority stream measured using the in-service method.
        It is expressed as a number, e.g. 0.0000034"
    ::= { berRSLPEntry 10 }

iqAnalysisT OBJECT IDENTIFIER ::= { tr101290Terrestrial 18 }

merTTable OBJECT-TYPE
    SYNTAX SEQUENCE OF MerTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Modulation Error Ratio (MER) measurement"
    REFERENCE
        "TR 101 290 clause 9.18.2"
    ::= { iqAnalysisT 2 }

merTEntry OBJECT-TYPE
    SYNTAX MerTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { merTInputNumber }
    ::= { merTTable 1 }

MerTEntry ::=
    SEQUENCE {
        merTInputNumber
            InputNumber,
        merTTestState
            TestState,
        merTEnable
            Enable,
        merTCounter
            Counter32,
        merTCounterDiscontinuity
            DateAndTime,
        merTCounterReset
            TruthValue,
        merTLatestError
            DateAndTime,
        merTActiveTime
            ActiveTime,
        merTMeasurementState
```

```
         MeasurementState,
     merTValue
         FloatingPoint
  }


merTInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { merTEntry 1 }


merTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether merTValue is within the thresholds."
    ::= { merTEntry 2 }


merTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { merTEntry 3 }


merTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { merTEntry 4 }


merTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the merTCounter object."
    ::= { merTEntry 5 }


merTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { merTEntry 6 }


merTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { merTEntry 7 }


merTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { merTEntry 8 }

merTMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { merTEntry 9 }

merTValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dB"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Modulation Error Ratio expressed in dB"
        ::= { merTEntry 10 }

steT OBJECT IDENTIFIER ::= { iqAnalysisT 3 }

steMeanTTable OBJECT-TYPE
        SYNTAX SEQUENCE OF SteMeanTEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "System Target Error Mean (STEM) measurement"
        REFERENCE
            "TR 101 290 clause 9.18.3"
        ::= { steT 1 }

steMeanTEntry OBJECT-TYPE
        SYNTAX SteMeanTEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { steMeanTInputNumber }
        ::= { steMeanTTable 1 }

SteMeanTEntry ::=
        SEQUENCE {
            steMeanTInputNumber
                InputNumber,
            steMeanTTestState
                TestState,
            steMeanTEnable
                Enable,
            steMeanTCounter
                Counter32,
            steMeanTCounterDiscontinuity
                DateAndTime,
            steMeanTCounterReset
                TruthValue,
            steMeanTLatestError
                DateAndTime,
            steMeanTActiveTime
                ActiveTime,
            steMeanTMeasurementState
                MeasurementState,
            steMeanTValue
                FloatingPoint
        }

steMeanTInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { steMeanTEntry 1 }

steMeanTTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
```

```
        DESCRIPTION
            "This indicates whether steMeanTValue is currently
            within the thresholds."
        ::= { steMeanTEntry 2 }


steMeanTEnable OBJECT-TYPE
        SYNTAX Enable
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "Determines whether the threshold test and associated traps
            for this measurement are enabled."
        DEFVAL { { testEnable } }
        ::= { steMeanTEntry 3 }

steMeanTCounter OBJECT-TYPE
        SYNTAX Counter32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Count of the number of times a threshold error has
            occurred for this measurement."
        ::= { steMeanTEntry 4 }

steMeanTCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a discontinuity
            in the counter object."
        ::= { steMeanTEntry 5 }

steMeanTCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { steMeanTEntry 6 }

steMeanTLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { steMeanTEntry 7 }

steMeanTActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { steMeanTEntry 8 }

steMeanTMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { steMeanTEntry 9 }

steMeanTValue OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current System Target Error Mean as a numeric value"
```

```
        ::= { steMeanTEntry 10 }

steDeviationTTable OBJECT-TYPE
    SYNTAX SEQUENCE OF SteDeviationTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "System Target Error Deviation (STED) measurement"
    REFERENCE
        "TR 101 290 clause 9.18.3"
    ::= { steT 2 }

steDeviationTEntry OBJECT-TYPE
    SYNTAX SteDeviationTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { steDeviationTInputNumber }
    ::= { steDeviationTTable 1 }

SteDeviationTEntry ::=
    SEQUENCE {
        steDeviationTInputNumber
            InputNumber,
        steDeviationTTestState
            TestState,
        steDeviationTEnable
            Enable,
        steDeviationTCounter
            Counter32,
        steDeviationTCounterDiscontinuity
            DateAndTime,
        steDeviationTCounterReset
            TruthValue,
        steDeviationTLatestError
            DateAndTime,
        steDeviationTActiveTime
            ActiveTime,
        steDeviationTMeasurementState
            MeasurementState,
        steDeviationTValue
            FloatingPoint
     }

steDeviationTInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { steDeviationTEntry 1 }

steDeviationTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether steDeviationTValue is currently
        within the thresholds."
    ::= { steDeviationTEntry 2 }

steDeviationTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { steDeviationTEntry 3 }

steDeviationTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { steDeviationTEntry 4 }

steDeviationTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { steDeviationTEntry 5 }

steDeviationTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { steDeviationTEntry 6 }

steDeviationTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { steDeviationTEntry 7 }

steDeviationTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { steDeviationTEntry 8 }

steDeviationTMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { steDeviationTEntry 9 }

steDeviationTValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current System Target Error Deviation as a numeric value"
    ::= { steDeviationTEntry 10 }

csTTable OBJECT-TYPE
    SYNTAX SEQUENCE OF CsTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Carrier Suppression (CS) measurement"
    REFERENCE
        "TR 101 290 clause 9.18.4"
    ::= { iqAnalysisT 4 }

csTEntry OBJECT-TYPE
    SYNTAX CsTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
```

```
    INDEX { csTInputNumber }
    ::= { csTTable 1 }

CsTEntry ::=
    SEQUENCE {
        csTInputNumber
            InputNumber,
        csTTestState
            TestState,
        csTEnable
            Enable,
        csTCounter
            Counter32,
        csTCounterDiscontinuity
            DateAndTime,
        csTCounterReset
            TruthValue,
        csTLatestError
            DateAndTime,
        csTActiveTime
            ActiveTime,
        csTMeasurementState
            MeasurementState,
        csTValue
            FloatingPoint
     }

csTInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { csTEntry 1 }

csTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether csTValue is currently
        within the thresholds."
    ::= { csTEntry 2 }

csTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { csTEntry 3 }

csTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error
        has occurred for this measurement."
    ::= { csTEntry 4 }

csTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { csTEntry 5 }

csTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
```

```
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { csTEntry 6 }

csTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { csTEntry 7 }

csTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { csTEntry 8 }

csTMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { csTEntry 9 }

csTValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The current Carrier Suppression value in dB."
    ::= { csTEntry 10 }

aiTTable OBJECT-TYPE
    SYNTAX SEQUENCE OF AiTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Amplitude Imbalance (AI) measurement"
    REFERENCE
        "TR 101 290 clause 9.18.5"
    ::= { iqAnalysisT 5 }

aiTEntry OBJECT-TYPE
    SYNTAX AiTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { aiTInputNumber }
    ::= { aiTTable 1 }

AiTEntry ::=
    SEQUENCE {
        aiTInputNumber
            InputNumber,
        aiTTestState
            TestState,
        aiTEnable
            Enable,
        aiTCounter
            Counter32,
        aiTCounterDiscontinuity
            DateAndTime,
        aiTCounterReset
            TruthValue,
        aiTLatestError
            DateAndTime,
```

```
        aiTActiveTime
            ActiveTime,
        aiTMeasurementState
            MeasurementState,
        aiTValue
            FloatingPoint
     }

aiTInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { aiTEntry 1 }

aiTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether aiTValue is currently
        within the thresholds."
    ::= { aiTEntry 2 }

aiTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { aiTEntry 3 }

aiTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { aiTEntry 4 }

aiTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a
        discontinuity in the counter object."
    ::= { aiTEntry 5 }

aiTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { aiTEntry 6 }

aiTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { aiTEntry 7 }

aiTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
```

```
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { aiTEntry 8 }

aiTMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { aiTEntry 9 }

aiTValue OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Amplitude Imbalance as a percentage"
        ::= { aiTEntry 10 }

qeTTable OBJECT-TYPE
        SYNTAX SEQUENCE OF QeTEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Quadrature Error (QE) measurement"
        REFERENCE
            "TR 101 290 clause 9.18.6"
        ::= { iqAnalysisT 6 }

qeTEntry OBJECT-TYPE
        SYNTAX QeTEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { qeTInputNumber }
        ::= { qeTTable 1 }

QeTEntry ::=
        SEQUENCE {
            qeTInputNumber
                InputNumber,
            qeTTestState
                TestState,
            qeTEnable
                Enable,
            qeTCounter
                Counter32,
            qeTCounterDiscontinuity
                DateAndTime,
            qeTCounterReset
                TruthValue,
            qeTLatestError
                DateAndTime,
            qeTActiveTime
                ActiveTime,
            qeTMeasurementState
                MeasurementState,
            qeTValue
                FloatingPoint
        }

qeTInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { qeTEntry 1 }

qeTTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
```

```
        DESCRIPTION
            "This indicates whether qeTValue is currently
            within the thresholds."
        ::= { qeTEntry 2 }

qeTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { qeTEntry 3 }

qeTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times a threshold error has
        occurred for this measurement."
    ::= { qeTEntry 4 }

qeTCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a
        discontinuity in the counter object."
    ::= { qeTEntry 5 }

qeTCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    DEFVAL { false }
    ::= { qeTEntry 6 }

qeTLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a
        threshold error on this measurement."
    ::= { qeTEntry 7 }

qeTActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { qeTEntry 8 }

qeTMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { qeTEntry 9 }

qeTValue OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "degree"
    MAX-ACCESS read-only
    STATUS current
```

```
    DESCRIPTION
        "The current Quadrature Error value in degrees."
    ::= { qeTEntry 10 }

pjTTable OBJECT-TYPE
    SYNTAX SEQUENCE OF PjTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Phase Jitter (PJ) measurement"
    REFERENCE
        "TR 101 290 clause 9.18.7"
    ::= { iqAnalysisT 7 }

pjTEntry OBJECT-TYPE
    SYNTAX PjTEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { pjTInputNumber }
    ::= { pjTTable 1 }

PjTEntry ::=
    SEQUENCE {
        pjTInputNumber
            InputNumber,
        pjTTestState
            TestState,
        pjTEnable
            Enable,
        pjTCounter
            Counter32,
        pjTCounterDiscontinuity
            DateAndTime,
        pjTCounterReset
            TruthValue,
        pjTLatestError
            DateAndTime,
        pjTActiveTime
            ActiveTime,
        pjTMeasurementState
            MeasurementState,
        pjTValue
            FloatingPoint
    }

pjTInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { pjTEntry 1 }

pjTTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This indicates whether pjTValue is currently
        within the thresholds."
    ::= { pjTEntry 2 }

pjTEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { pjTEntry 3 }

pjTCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "Count of the number of times a threshold error has
            occurred for this measurement."
        ::= { pjTEntry 4 }

pjTCounterDiscontinuity OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Provides the last time at which there was a
            discontinuity in the counter object."
        ::= { pjTEntry 5 }

pjTCounterReset OBJECT-TYPE
        SYNTAX TruthValue
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "The counter object is reset to zero and the counter
            discontinuity object is set to the current time if
            'true' is written to this object.

            When read, the value of this object is always 'false'."
        DEFVAL { false }
        ::= { pjTEntry 6 }

pjTLatestError OBJECT-TYPE
        SYNTAX DateAndTime
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The timestamp at the most recent occurrence of a
            threshold error on this measurement."
        ::= { pjTEntry 7 }

pjTActiveTime OBJECT-TYPE
        SYNTAX ActiveTime
        UNITS "second"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The total time when it has been possible to perform this measurement"
        ::= { pjTEntry 8 }

pjTMeasurementState OBJECT-TYPE
        SYNTAX MeasurementState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { pjTEntry 9 }

pjTValue OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "degree"
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "The current Phase Jitter value in degrees."
        ::= { pjTEntry 10 }

mipSyntaxTable OBJECT-TYPE
        SYNTAX SEQUENCE OF MipSyntaxEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "SFN MIP baseband tests"
        REFERENCE
            "TR 101 290 clause 9.20"
        ::= { tr101290Terrestrial 20 }

mipSyntaxEntry OBJECT-TYPE
        SYNTAX MipSyntaxEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
```

```
        INDEX { mipSyntaxTestNumber, mipSyntaxInputNumber }
        ::= { mipSyntaxTable 1 }


MipSyntaxEntry ::=
     SEQUENCE {
          mipSyntaxInputNumber
               InputNumber,
          mipSyntaxTestNumber
               IndexMIPSyntaxTest,
          mipSyntaxState
               TestState,
          mipSyntaxEnable
               Enable,
          mipSyntaxCounter
               Counter32,
          mipSyntaxCounterDiscontinuity
               DateAndTime,
          mipSyntaxCounterReset
               TruthValue,
          mipSyntaxLatestError
               DateAndTime,
          mipSyntaxActiveTime
               ActiveTime
       }

mipSyntaxInputNumber OBJECT-TYPE
     SYNTAX InputNumber
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
          "Transport Stream on which the measurement is made"
     ::= { mipSyntaxEntry 1 }

mipSyntaxTestNumber OBJECT-TYPE
     SYNTAX IndexMIPSyntaxTest
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
          "The specific SFN MIP test that this row applies to"
     ::= { mipSyntaxEntry 2 }

mipSyntaxState OBJECT-TYPE
     SYNTAX TestState
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
          "This gives the overall pass/fail state of the test."
     ::= { mipSyntaxEntry 3 }

mipSyntaxEnable OBJECT-TYPE
     SYNTAX Enable
     MAX-ACCESS read-write
     STATUS current
     DESCRIPTION
          "Determines whether this test and the associated trap are enabled."
     DEFVAL { { testEnable } }
     ::= { mipSyntaxEntry 4 }

mipSyntaxCounter OBJECT-TYPE
     SYNTAX Counter32
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
          "Count of the number of times this error has occurred"
     ::= { mipSyntaxEntry 5 }

mipSyntaxCounterDiscontinuity OBJECT-TYPE
     SYNTAX DateAndTime
     MAX-ACCESS read-only
     STATUS current
     DESCRIPTION
          "Provides the last time at which there was a discontinuity
          in the mipSyntaxCounter object."
     ::= { mipSyntaxEntry 6 }

mipSyntaxCounterReset OBJECT-TYPE
     SYNTAX TruthValue
     MAX-ACCESS read-write
```

```
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { mipSyntaxEntry 7 }

mipSyntaxLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of the error"
    ::= { mipSyntaxEntry 8 }

mipSyntaxActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { mipSyntaxEntry 9 }

systemErrorPerformance OBJECT IDENTIFIER ::= { tr101290Terrestrial 21 }

sepEtiTable OBJECT-TYPE
    SYNTAX SEQUENCE OF SepEtiEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Measurement of Errored Second Ratio (ESR) or
        Errored Time Interval Ratio (ETIR)."
    REFERENCE
        "TR 101 290 clause 9.21"
    ::= { systemErrorPerformance 1 }

sepEtiEntry OBJECT-TYPE
    SYNTAX SepEtiEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { sepEtiInputNumber }
    ::= { sepEtiTable 1 }

SepEtiEntry ::=
    SEQUENCE {
        sepEtiInputNumber
            InputNumber,
        sepEtiTestState
            TestState,
        sepEtiEnable
            Enable,
        sepEtiCounter
            Counter32,
        sepEtiCounterDiscontinuity
            DateAndTime,
        sepEtiCounterReset
            TruthValue,
        sepEtiLatestError
            DateAndTime,
        sepEtiActiveTime
            ActiveTime,
        sepEtiMeasurementState
            MeasurementState,
        sepEtiValue
            FloatingPoint
      }

sepEtiInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
```

ETSI

```
    DESCRIPTION
        "Transport Stream on which the measurement is made"
    ::= { sepEtiEntry 1 }

sepEtiTestState OBJECT-TYPE
    SYNTAX TestState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "A 'fail' indicates that the most recently completed
        time interval TI was an Errored Time Interval (ETI).
        A 'pass' indicates that the most recent TI was not
        errored."
    ::= { sepEtiEntry 2 }

sepEtiEnable OBJECT-TYPE
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { sepEtiEntry 3 }

sepEtiCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times an ETI has occurred."
    ::= { sepEtiEntry 4 }

sepEtiCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a discontinuity
        in the counter object."
    ::= { sepEtiEntry 5 }

sepEtiCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { sepEtiEntry 6 }

sepEtiLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of an ETI."
    ::= { sepEtiEntry 7 }

sepEtiActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { sepEtiEntry 8 }

sepEtiMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
```

```
        DESCRIPTION
            "Specifies the validity of the measurement value"
        ::= { sepEtiEntry 9 }

sepEtiValue OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "This is the Errored Time Interval Ratio (ETIR) for
            the most recently completed Measurement Interval (MI).
            It is expressed as a numeric value."
        ::= { sepEtiEntry 10 }

sepSetiTable OBJECT-TYPE
        SYNTAX SEQUENCE OF SepSetiEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Measurement of Severly Errored Second Ratio (SESR)
            or Severely Errored Time Interval Ratio (SETIR)."
        REFERENCE
            "TR 101 290 clause 9.21"
        ::= { systemErrorPerformance 2 }

sepSetiEntry OBJECT-TYPE
        SYNTAX SepSetiEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Row specification"
        INDEX { sepSetiInputNumber }
        ::= { sepSetiTable 1 }

SepSetiEntry ::=
        SEQUENCE {
            sepSetiInputNumber
                InputNumber,
            sepSetiTestState
                TestState,
            sepSetiEnable
                Enable,
            sepSetiCounter
                Counter32,
            sepSetiCounterDiscontinuity
                DateAndTime,
            sepSetiCounterReset
                TruthValue,
            sepSetiLatestError
                DateAndTime,
            sepSetiActiveTime
                ActiveTime,
            sepSetiMeasurementState
                MeasurementState,
            sepSetiValue
                FloatingPoint
        }

sepSetiInputNumber OBJECT-TYPE
        SYNTAX InputNumber
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
            "Transport Stream on which the measurement is made"
        ::= { sepSetiEntry 1 }

sepSetiTestState OBJECT-TYPE
        SYNTAX TestState
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
            "A 'fail' indicates that the most recently completed
            time interval TI was a Severely Errored Time Interval
            (SETI). A 'pass' indicates that the most recent TI
            was not severely errored."
        ::= { sepSetiEntry 2 }

sepSetiEnable OBJECT-TYPE
```

```
    SYNTAX Enable
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the threshold test and associated traps
        for this measurement are enabled."
    DEFVAL { { testEnable } }
    ::= { sepSetiEntry 3 }

sepSetiCounter OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Count of the number of times an SETI has occurred."
    ::= { sepSetiEntry 4 }

sepSetiCounterDiscontinuity OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the last time at which there was a
        discontinuity in the counter object."
    ::= { sepSetiEntry 5 }

sepSetiCounterReset OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The counter object is reset to zero and the counter
        discontinuity object is set to the current time if
        'true' is written to this object.

        When read, the value of this object is always 'false'."
    ::= { sepSetiEntry 6 }

sepSetiLatestError OBJECT-TYPE
    SYNTAX DateAndTime
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The timestamp at the most recent occurrence of a SETI."
    ::= { sepSetiEntry 7 }

sepSetiActiveTime OBJECT-TYPE
    SYNTAX ActiveTime
    UNITS "second"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The total time when it has been possible to perform this measurement"
    ::= { sepSetiEntry 8 }

sepSetiMeasurementState OBJECT-TYPE
    SYNTAX MeasurementState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Specifies the validity of the measurement value"
    ::= { sepSetiEntry 9 }

sepSetiValue OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This is the Severely Errored Time Interval Ratio (SETIR)
        for the most recently completed Measurement Interval (MI).
        It is expressed as a numeric value."
    ::= { sepSetiEntry 10 }

terrestrialPreferencesTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TerrestrialPreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
```

```
    DESCRIPTION
        "Table of terrestrial specific measurement preferences."
    ::= { tr101290Terrestrial 100 }

terrestrialPreferencesEntry OBJECT-TYPE
    SYNTAX TerrestrialPreferencesEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Row specification"
    INDEX { terrestrialPrefInputNumber }
    ::= { terrestrialPreferencesTable 1 }

TerrestrialPreferencesEntry ::=
    SEQUENCE {
        terrestrialPrefInputNumber
            InputNumber,
        terrestrialPrefCentreFrequency
            FloatingPoint,
        terrestrialPrefBandwidth
            FloatingPoint,
        terrestrialPrefModulation
            Modulation,
        terrestrialPrefTransmissionMode
            TerrestrialTransmissionMode,
        terrestrialPrefGuardInterval
            GuardInterval,
        terrestrialPrefHierarchical
            Hierarchy,
        terrestrialPrefCentreFreqExpected
            FloatingPoint,
        terrestrialPrefCentreFreqLimit
            FloatingPoint,
        terrestrialPrefChannelWidthLimit
            FloatingPoint,
        terrestrialPrefSymbolLengthLimit
            FloatingPoint,
        terrestrialPrefPowerMin
            FloatingPoint,
        terrestrialPrefPowerMax
            FloatingPoint,
        terrestrialPrefENDBER
            FloatingPoint,
        terrestrialPrefENDIdeal
            FloatingPoint,
        terrestrialPrefENDMax
            FloatingPoint,
        terrestrialPrefENFIdeal
            FloatingPoint,
        terrestrialPrefENFMax
            FloatingPoint,
        terrestrialPrefENDLPIdeal
            FloatingPoint,
        terrestrialPrefENDLPMax
            FloatingPoint,
        terrestrialPrefENFLPIdeal
            FloatingPoint,
        terrestrialPrefENFLPMax
            FloatingPoint,
        terrestrialPrefLinearityMin
            FloatingPoint,
        terrestrialPrefBERViterbiMax
            FloatingPoint,
        terrestrialPrefBERViterbiLPMax
            FloatingPoint,
        terrestrialPrefBERRSMax
            FloatingPoint,
        terrestrialPrefBERRSLPMax
            FloatingPoint,
        terrestrialPrefMerTMin
            FloatingPoint,
        terrestrialPrefSteMeanMax
            FloatingPoint,
        terrestrialPrefSteDeviationMax
            FloatingPoint,
        terrestrialPrefCsMin
            FloatingPoint,
        terrestrialPrefAiMax
```

```
            FloatingPoint,
        terrestrialPrefQeMax
            FloatingPoint,
        terrestrialPrefPjMax
            FloatingPoint,
        terrestrialPrefMIPTimingLimit
            FloatingPoint,
        terrestrialPrefMIPDeviationMax
            FloatingPoint,
        terrestrialPrefSEPUATMode
            UATMode,
        terrestrialPrefSEPN
            Unsigned32,
        terrestrialPrefSEPT
            FloatingPoint,
        terrestrialPrefSEPM
            Unsigned32,
        terrestrialPrefSEPTI
            FloatingPoint,
        terrestrialPrefSEPEBPerCent
            FloatingPoint,
        terrestrialPrefSEPMeasurementInterval
            FloatingPoint
    }

terrestrialPrefInputNumber OBJECT-TYPE
    SYNTAX InputNumber
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Transport Stream input to which the preferences apply"
    ::= { terrestrialPreferencesEntry 1 }

terrestrialPrefCentreFrequency OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "MHz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the centre frequency to which the measuring
        equipment is tuned for making terrestrial measurements.
        This frequency is the actual input frequency to the
        measuring equipment, which may be at an intermediate
        frequency (IF) rather than the final RF."
    ::= { terrestrialPreferencesEntry 2 }

terrestrialPrefBandwidth OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "MHz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The instrument is set to expect a DVB-T transmission
        adapted for this bandwidth. Normal values will be
        6.0MHz, 7.0MHz or 8.0MHz."
    ::= { terrestrialPreferencesEntry 3 }

terrestrialPrefModulation OBJECT-TYPE
    SYNTAX Modulation
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the modulation which the measuring equipment
        expects to see and against which it makes modulation
        measurements. This applies to terrestrial measurements."
    REFERENCE
        "EN 300 744 clause 4.3.5"
    ::= { terrestrialPreferencesEntry 4 }

terrestrialPrefTransmissionMode OBJECT-TYPE
    SYNTAX TerrestrialTransmissionMode
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The instrument is set to expect a transmission in
        either 2k mode or 8k mode as set by this object."
    ::= { terrestrialPreferencesEntry 5 }
```

```
terrestrialPrefGuardInterval OBJECT-TYPE
    SYNTAX GuardInterval
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The instrument is set to expect a transmission using
        the guard interval specified by this object."
    ::= { terrestrialPreferencesEntry 6 }

terrestrialPrefHierarchical OBJECT-TYPE
    SYNTAX Hierarchy
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The instrument is set according to the value of
        this object to expect a transmission which is
        either non-hierachical or hierarchical using the
        specified alpha value."
    ::= { terrestrialPreferencesEntry 7 }

terrestrialPrefCentreFreqExpected OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Hz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the expected value for the centre frequency
        as measured by rfAccuracyValue."
    REFERENCE
        "TR 101 290 clause 9.1.1"
    ::= { terrestrialPreferencesEntry 8 }

terrestrialPrefCentreFreqLimit OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Hz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the permitted deviation for the centre frequency
        as measured by rfAccuracyValue. If rfAccuracyValue is
        outside the range:

        [terrestrialPrefCentreFreqExpected - terrestrialPrefCentreFreqLimit ..
         terrestrialPrefCentreFreqExpected + terrestrialPrefCentreFreqLimit]

        an error will be indicated."
    REFERENCE
        "TR 101 290 clause 9.1.1"
    ::= { terrestrialPreferencesEntry 9 }

terrestrialPrefChannelWidthLimit OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "Hz"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the permitted deviation for the channel width
        as measured by rfChannelWidthValue. The nominal value
        of the channel width has a fixed value which depends
        on the bandwidth (as set by terrestrialPrefBandwidth).
        If rfChannelWidthValue is outside the range

        [nominalWidth - terrestrialPrefChannelWidthLimit ..
         nominalWidth + terrestrialPrefChannelWidthLimit]

        an error will be indicated."
    REFERENCE
        "TR 101 290 clause 9.1.2"
    ::= { terrestrialPreferencesEntry 10 }

terrestrialPrefSymbolLengthLimit OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "s"
    MAX-ACCESS read-write
    STATUS current
```

```
        DESCRIPTION
            "This is the permitted deviation for the symbol length
            as measured by symbolLengthValue. The nominal value of
            the symbol length has a fixed value which depends on
            the bandwidth, the mode and the guard interval (as set
            by terrestrialPrefBandwidth, terrestrialPrefTransmissionMode
            and terrestrialPrefGuardInterval respectively).

            If symbolLengthValue is outside the range

            [nominalLength - terrestrialPrefSymbolLengthLimit ..
             nominalLength + terrestrialPrefSymbolLengthLimit]

            an error will be indicated."
        REFERENCE
            "TR 101 290 clause 9.1.3
            EN 300 744 clause 4.4 and annex E"
        ::= { terrestrialPreferencesEntry 11 }

terrestrialPrefPowerMin OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dBm"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "If the power measured by rfIfPowerValue is less
            than this value, the associated test fails."
        REFERENCE
            "TR 101 290 clause 9.5"
        ::= { terrestrialPreferencesEntry 12 }

terrestrialPrefPowerMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dBm"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "If the power measured by rfIfPowerValue is greater
            than this value, the associated test fails."
        REFERENCE
            "TR 101 290 clause 9.5"
        ::= { terrestrialPreferencesEntry 13 }

terrestrialPrefENDBER OBJECT-TYPE
        SYNTAX FloatingPoint
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "BER value which is to be used for the END and ENF
            measurements."
        REFERENCE
            "TR 101 290 clause 9.9"
        DEFVAL { "2E-04" }
        ::= { terrestrialPreferencesEntry 14 }

terrestrialPrefENDIdeal OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dB"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "This is the 'ideal' value of C/N for measurement of
            END on the whole or high priority stream. It is used
            in the measurement of eNDTValue."
        REFERENCE
            "TR 101 290 clause 9.9"
        ::= { terrestrialPreferencesEntry 15 }

terrestrialPrefENDMax OBJECT-TYPE
        SYNTAX FloatingPoint
        UNITS "dB"
        MAX-ACCESS read-write
        STATUS current
        DESCRIPTION
            "If the measured value of eNDTValue exceeds this,
            the associated test fails."
        REFERENCE
            "TR 101 290 clause 9.9"
```

```
         ::= { terrestrialPreferencesEntry 16 }

terrestrialPrefENFIdeal OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the 'ideal' value of C/N for measurement of ENF
        on the whole or high priority stream. It is used in the
        measurement of eNFTValue."
    REFERENCE
        "TR 101 290 clause 9.9.1"
    ::= { terrestrialPreferencesEntry 17 }

terrestrialPrefENFMax OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the measured value of eNFTValue is exceeds this value,
        the associated test fails."
    REFERENCE
        "TR 101 290 clause 9.9.1"
    ::= { terrestrialPreferencesEntry 18 }

terrestrialPrefENDLPIdeal OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the 'ideal' value of C/N for measurement of END
        on the low priority stream. It is used in the measurement
        of eNDTLPValue."
    REFERENCE
        "TR 101 290 clause 9.9"
    ::= { terrestrialPreferencesEntry 19 }

terrestrialPrefENDLPMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the measured value of eNDTLPValue exceeds this,
        the associated test fails."
    REFERENCE
        "TR 101 290 clause 9.9"
    ::= { terrestrialPreferencesEntry 20 }

terrestrialPrefENFLPIdeal OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This is the 'ideal' value of C/N for measurement of ENF
        on the low priority stream. It is used in the measurement
        of eNFTLPValue."
    REFERENCE
        "TR 101 290 clause 9.9.1"
    ::= { terrestrialPreferencesEntry 21 }

terrestrialPrefENFLPMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the measured value of eNFTLPValue exceeds this value,
        the associated test fails."
    REFERENCE
        "TR 101 290 clause 9.9.1"
    ::= { terrestrialPreferencesEntry 22 }

terrestrialPrefLinearityMin OBJECT-TYPE
    SYNTAX FloatingPoint
```

```
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the shoulder attenuation as measured by linearityValue is
        less than this value, an error is indicated."
    REFERENCE
        "TR 101 290 clause 9.10"
    ::= { terrestrialPreferencesEntry 23 }

terrestrialPrefBERViterbiMax OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the BER measured by berViterbiTValue exceeds this value,
        an error is indicated."
    REFERENCE
        "TR 101 290 clause 9.15"
    ::= { terrestrialPreferencesEntry 24 }

terrestrialPrefBERViterbiLPMax OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the BER measured by berViterbiTLPValue exceeds this value,
        an error is indicated."
    REFERENCE
        "TR 101 290 clause 9.15"
    ::= { terrestrialPreferencesEntry 25 }

terrestrialPrefBERRSMax OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the BER measured by berRSValue exceeds this value,
        an error is indicated."
    REFERENCE
        "TR 101 290 clause 9.16"
    ::= { terrestrialPreferencesEntry 26 }

terrestrialPrefBERRSLPMax OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If the BER measured by berRSLPValue exceeds this value,
        an error is indicated."
    REFERENCE
        "TR 101 290 clause 9.16"
    ::= { terrestrialPreferencesEntry 27 }

terrestrialPrefMerTMin OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If merTValue is less than this value, the associated
        test fails."
    REFERENCE
        "TR 101 290 clause 9.18.2"
    ::= { terrestrialPreferencesEntry 28 }

terrestrialPrefSteMeanMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If steMeanTValue exceeds this value, the associated
        test fails."
    REFERENCE
        "TR 101 290 clause 9.18.3"
    ::= { terrestrialPreferencesEntry 29 }
```

```
terrestrialPrefSteDeviationMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If steDeviationTValue exceeds this value, the associated
        test fails."
    REFERENCE
        "TR 101 290 clause 9.18.3"
    ::= { terrestrialPreferencesEntry 30 }

terrestrialPrefCsMin OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If csTValue is less than this value, the associated
        test fails"
    REFERENCE
        "TR 101 290 clause 9.18.4"
    ::= { terrestrialPreferencesEntry 31 }

terrestrialPrefAiMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If aiTValue exceeds this value, the associated
        test fails."
    REFERENCE
        "TR 101 290 clause 9.18.5"
    ::= { terrestrialPreferencesEntry 32 }

terrestrialPrefQeMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If qeTValue exceeds this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 9.18.6"
    ::= { terrestrialPreferencesEntry 33 }

terrestrialPrefPjMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "dB"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If pjTValue exceeds this value, the associated test fails."
    REFERENCE
        "TR 101 290 clause 9.18.7"
    ::= { terrestrialPreferencesEntry 34 }

terrestrialPrefMIPTimingLimit OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This preference affects the MIP_timing_error test. If
        the calculated value of nT differs from an integral number
        of seconds by more than terrestrialPrefMIPTimingLimit then
        an error is indicated."
    REFERENCE
        "TR 101 290 clause 9.20.1"
    ::= { terrestrialPreferencesEntry 35 }

terrestrialPrefMIPDeviationMax OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "bit/s"
    MAX-ACCESS read-write
    STATUS current
```

```
    DESCRIPTION
        "This preference affects the MIP_ts_rate_error test. It
        is the value of Max_deviation in the inequality given
        in TR 101 290 as the condition for an error indication."
    REFERENCE
        "TR 101 290 clause 9.20.6"
    ::= { terrestrialPreferencesEntry 36 }

terrestrialPrefSEPUATMode OBJECT-TYPE
    SYNTAX UATMode
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines whether the 'N consecutive' or 'rolling window'
        mode of determining the start of a period of Unavailable
        Time (UAT) is used. If the 'N consecutive' mode is selected,
        the 'M' and 'T' preference parameters are ignored. Likewise,
        if the 'rolling window' mode is selected, the 'N' preference
        parameter is ignored."
    REFERENCE
        "TR 101 290 clause 9.21"
    ::= { terrestrialPreferencesEntry 37 }

terrestrialPrefSEPN OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The N value used to identify the start and end of a
        period of unavailable time (UAT)."
    REFERENCE
        "TR 101 290 clause 9.21"
    ::= { terrestrialPreferencesEntry 38 }

terrestrialPrefSEPT OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The T value used to identify the start and end of a
        period of unavailable time (UAT)."
    REFERENCE
        "TR 101 290 clause 9.21"
    ::= { terrestrialPreferencesEntry 39 }

terrestrialPrefSEPM OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The M value used to identify the start and end of a
        period of unavailable time (UAT)."
    REFERENCE
        "TR 101 290 clause 9.21"
    ::= { terrestrialPreferencesEntry 40 }

terrestrialPrefSEPTI OBJECT-TYPE
    SYNTAX FloatingPoint
    UNITS "second"
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Each Time Interval of this length is assessed as to
        whether it is an Errored Time Interval or a Severely
        Errored Time Interval."
    REFERENCE
        "TR 101 290 clause 9.21"
    ::= { terrestrialPreferencesEntry 41 }

terrestrialPrefSEPEBPerCent OBJECT-TYPE
    SYNTAX FloatingPoint
    MAX-ACCESS read-write
    STATUS current
```

```
            DESCRIPTION
                "If more than this percentage of blocks within a Time
                Interval is an Errored Block, the Time Interval is a
                Severely Errored Time Interval (SETI). Example values
                are: '1.53', '10', '0.33'."
            REFERENCE
                "TR 101 290 clause 9.21"
            ::= { terrestrialPreferencesEntry 42 }

        terrestrialPrefSEPMeasurementInterval OBJECT-TYPE
            SYNTAX FloatingPoint
            UNITS "second"
            MAX-ACCESS read-write
            STATUS current
            DESCRIPTION
                "The Measurement Interval (MI) over which the ESR/ETIR
                and SESR/SETIR are calculated."
            REFERENCE
                "TR 101 290 clause 6.1"
            ::= { terrestrialPreferencesEntry 43 }

        tr101290Conformance OBJECT IDENTIFIER ::= { tr101290 3 }

        tr101290Compliances OBJECT IDENTIFIER ::= { tr101290Conformance 1 }

        complianceTransportStream MODULE-COMPLIANCE
            STATUS current
            DESCRIPTION
                "Compliance for Transport Stream monitor devices"
            MODULE -- this module
                MANDATORY-GROUPS { groupControl, groupCapability, groupTransportStream,
groupTrapControl, groupTraps
                    }
            ::= { tr101290Compliances 1 }

        complianceCable MODULE-COMPLIANCE
            STATUS current
            DESCRIPTION
                "Compliance for Cable RF measurement devices"
            MODULE -- this module
                MANDATORY-GROUPS { groupControl, groupTrapControl, groupTraps, groupCapability,
groupCable
                    }
            ::= { tr101290Compliances 2 }

        complianceSatellite MODULE-COMPLIANCE
            STATUS current
            DESCRIPTION
                "Compliance for Satellite RF measurement devices"
            MODULE -- this module
                MANDATORY-GROUPS { groupControl, groupTrapControl, groupTraps, groupCapability,
groupSatellite
                    }
            ::= { tr101290Compliances 3 }

        complianceTerrestrial MODULE-COMPLIANCE
            STATUS current
            DESCRIPTION
                "Compliance for Terrestrial RF measurement devices"
            MODULE -- this module
                MANDATORY-GROUPS { groupControl, groupTrapControl, groupTraps, groupCapability,
groupTerrestrial
                    }
            ::= { tr101290Compliances 4 }

        tr101290ObjectGroups OBJECT IDENTIFIER ::= { tr101290Conformance 2 }

        groupControl OBJECT-GROUP
            OBJECTS { controlNow, controlEventPersistence, rfSystemDelivery, controlSynchronizedTime
}
            STATUS current
            DESCRIPTION
                "Contains all the objects from the tr101290Control
                branch of the MIB"
            ::= { tr101290ObjectGroups 1 }

        groupTrapControl OBJECT-GROUP
```

```
            OBJECTS { trapControlOID, trapControlGenerationTime, trapControlMeasurementValue,
trapControlRateStatus, trapControlPeriod ,
                trapControlFailureSummary, trapInput }
            STATUS current
            DESCRIPTION
                "Contains all the normal objects from the tr101290Trap
                branch of the MIB"
            ::= { tr101290ObjectGroups 2 }

        groupTraps NOTIFICATION-GROUP
            NOTIFICATIONS { testFailTrap, measurementFailTrap, measurementUnknownTrap }
            STATUS current
            DESCRIPTION
                "Contains all the traps/notifications from the MIB."
            ::= { tr101290ObjectGroups 3 }

        groupCapability OBJECT-GROUP
            OBJECTS { capabilityMIBRevision, capabilityTSGroup, capabilityTSAvailability,
capabilityTSPollInterval, capabilityCableSatGroup,
                capabilityCableSatAvailability, capabilityCableSatPollInterval,
capabilityCableGroup, capabilityCableAvailability, capabilityCablePollInterval,
                capabilitySatelliteGroup, capabilitySatelliteAvailability,
capabilitySatellitePollInterval, capabilityTerrestrialGroup, capabilityTerrestrialAvailability,
                capabilityTerrestrialPollInterval }
            STATUS current
            DESCRIPTION
                "Contains all objects from the tr101290Capability
                branch of the MIB"
            ::= { tr101290ObjectGroups 4 }

        groupTransportStream OBJECT-GROUP
            OBJECTS { tsTestsSummaryState, tsTestsSummaryEnable, tsTestsSummaryCounter,
tsTestsSummaryCounterDiscontinuity, tsTestsSummaryCounterReset,
                tsTestsSummaryLatestError, tsTestsSummaryActiveTime, tsTestsPIDRowStatus,
tsTestsPIDState, tsTestsPIDEnable,
                tsTestsPIDCounter, tsTestsPIDCounterDiscontinuity, tsTestsPIDCounterReset,
tsTestsPIDLatestError, tsTestsPIDActiveTime,
                tsTestsPrefTransitionDuration, tsTestsPrefPATSectionIntervalMax,
tsTestsPrefPMTSectionIntervalMax, tsTestsPrefReferredIntervalMax, tsTestsPrefPCRIntervalMax,
                tsTestsPrefPCRDiscontinuityMax, tsTestsPrefPCRInaccuracyMax,
tsTestsPrefPTSIntervalMax, tsTestsPrefNITActualIntervalMax, tsTestsPrefNITActualIntervalMin,
                tsTestsPrefNITOtherIntervalMax, tsTestsPrefSIGapMin, tsTestsPrefNITTableIntervalMax,
tsTestsPrefBATTableIntervalMax, tsTestsPrefSDTActualTableIntervalMax,
                tsTestsPrefSDTOtherTableIntervalMax, tsTestsPrefEITPFActualTableIntervalMax,
tsTestsPrefEITPFOtherTableIntervalMax, tsTestsPrefEITSActualNearTableIntervalMax,
tsTestsPrefEITSActualFarTableIntervalMax,
                tsTestsPrefEITSOtherNearTableIntervalMax, tsTestsPrefEITSOtherFarTableIntervalMax,
tsTestsPrefTxTTableIntervalMax, tsTestsPrefSDTActualIntervalMax, tsTestsPrefSDTActualIntervalMin,
                tsTestsPrefSDTOtherIntervalMax, tsTestsPrefEITActualIntervalMax,
tsTestsPrefEITActualIntervalMin, tsTestsPrefEITOtherIntervalMax, tsTestsPrefRSTIntervalMin,
                tsTestsPrefTDTIntervalMax, tsTestsPrefTDTIntervalMin, tsTestsPrefPIDRowStatus,
tsTestsPrefPIDReferredIntervalMax, tsPcrMeasurementRowStatus,
                tsPcrMeasurementState, tsPcrMeasurementEnable, tsPcrMeasurementCounter,
tsPcrMeasurementCounterDiscontinuity, tsPcrMeasurementCounterReset,
                tsPcrMeasurementLatestError, tsPcrMeasurementActiveTime,
tsPcrMeasurementMeasurementState, tsPcrMeasurementValue, tsTransportStreamBitRateState,
                tsTransportStreamBitRateEnable, tsTransportStreamBitRateCounter,
tsTransportStreamBitRateCounterDiscontinuity, tsTransportStreamBitRateCounterReset,
tsTransportStreamBitRateLatestError,
                tsTransportStreamBitRateActiveTime, tsTransportStreamBitRateMeasurementState,
tsTransportStreamBitRateValue, tsTransportStreamBitRateNomenclature, tsServiceBitRateRowStatus,
                tsServiceBitRateState, tsServiceBitRateEnable, tsServiceBitRateCounter,
tsServiceBitRateCounterDiscontinuity, tsServiceBitRateCounterReset,
                tsServiceBitRateLatestError, tsServiceBitRateActiveTime,
tsServiceBitRateMeasurementState, tsServiceBitRateValue, tsServiceBitRateNomenclature,
                tsPIDBitRateRowStatus, tsPIDBitRateState, tsPIDBitRateEnable, tsPIDBitRateCounter,
tsPIDBitRateCounterDiscontinuity,
                tsPIDBitRateCounterReset, tsPIDBitRateLatestError, tsPIDBitRateActiveTime,
tsPIDBitRateMeasurementState, tsPIDBitRateValue,
                tsPIDBitRateNomenclature, tsConsistencyState, tsConsistencyEnable,
tsConsistencyCounter, tsConsistencyCounterDiscontinuity,
                tsConsistencyCounterReset, tsConsistencyLatestError, tsConsistencyActiveTime,
tsMeasurePrefPCRDemarcationFrequency, tsMeasurePrefPCRFOMax,
                tsMeasurePrefPCRDRMax, tsMeasurePrefPCROJMax, tsMeasurePrefTSBitRateTau,
tsMeasurePrefTSBitRateN, tsMeasurePrefTSBitRateElement,
                tsMeasurePrefTSBitRateMin, tsMeasurePrefTSBitRateMax,
tsMeasurePrefAllServiceBitRateTau, tsMeasurePrefAllServiceBitRateN,
tsMeasurePrefAllServiceBitRateElement,
```

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                tsMeasurePrefAllPIDBitRateTau, tsMeasurePrefAllPIDBitRateN,
        tsMeasurePrefAllPIDBitRateElement, tsMeasurePrefExpectedTSID, tsMeasurePrefServiceRowStatus,
                tsMeasurePrefServiceBitRateTau, tsMeasurePrefServiceBitRateN,
        tsMeasurePrefServiceBitRateElement, tsMeasurePrefServiceBitRateMin, tsMeasurePrefServiceBitRateMax,
                tsMeasurePrefPIDRowStatus, tsMeasurePrefPIDBitRateTau, tsMeasurePrefPIDBitRateN,
        tsMeasurePrefPIDBitRateElement, tsMeasurePrefPIDBitRateMin,
                tsMeasurePrefPIDBitRateMax, tsServicePerformanceState, tsServicePerformanceEnable,
        tsServicePerformanceCounter, tsServicePerformanceCounterDiscontinuity,
                tsServicePerformanceCounterReset, tsServicePerformanceLatestError,
        tsServicePerformanceActiveTime, tsServicePerformanceMeasurementState, tsServicePerformanceError,
                tsServicePerformanceErrorRatio, tsSPPrefDeltaT, tsSPPrefEvaluationTime,
        tsSPPrefThreshold }
            STATUS current
            DESCRIPTION
                "Contains all objects relevant to Transport Stream measurement"
            ::= { tr101290ObjectGroups 5 }

        groupCable OBJECT-GROUP
            OBJECTS { sysAvailabilityTestState, sysAvailabilityEnable, sysAvailabilityCounter,
        sysAvailabilityCounterDiscontinuity, sysAvailabilityCounterReset,
                sysAvailabilityLatestError, sysAvailabilityActiveTime,
        sysAvailabilityMeasurementState, sysAvailabilityUnavailableTime, sysAvailabilityRatio,
                sysAvailabilityInSETI, linkAvailabilityTestState, linkAvailabilityEnable,
        linkAvailabilityCounter, linkAvailabilityCounterDiscontinuity,
                linkAvailabilityCounterReset, linkAvailabilityLatestError,
        linkAvailabilityActiveTime, linkAvailabilityMeasurementState, linkAvailabilityUnavailableTime,
                linkAvailabilityRatio, linkAvailabilityInSUTI, berRSinServiceTestState,
        berRSinServiceEnable, berRSinServiceCounter,
                berRSinServiceCounterDiscontinuity, berRSinServiceCounterReset,
        berRSinServiceLatestError, berRSinServiceActiveTime, berRSinServiceMeasurementState,
                berRSinServiceValue, rfIFsignalPowerTestState, rfIFsignalPowerEnable,
        rfIFsignalPowerCounter, rfIFsignalPowerCounterDiscontinuity,
                rfIFsignalPowerCounterReset, rfIFsignalPowerLatestError, rfIFsignalPowerActiveTime,
        rfIFsignalPowerMeasurementState, rfIFsignalPowerValue,
                noisePowerTestState, noisePowerEnable, noisePowerCounter,
        noisePowerCounterDiscontinuity, noisePowerCounterReset,
                noisePowerLatestError, noisePowerActiveTime, noisePowerMeasurementState,
        noisePowerValue, merCSTestState,
                merCSEnable, merCSCounter, merCSCounterDiscontinuity, merCSCounterReset,
        merCSLatestError,
                merCSActiveTime, merCSMeasurementState, merCSValue, steMeanCSTestState,
        steMeanCSEnable,
                steMeanCSCounter, steMeanCSCounterDiscontinuity, steMeanCSCounterReset,
        steMeanCSLatestError, steMeanCSActiveTime,
                steMeanCSMeasurementState, steMeanCSValue, steDeviationCSTestState,
        steDeviationCSEnable, steDeviationCSCounter,
                steDeviationCSCounterDiscontinuity, steDeviationCSCounterReset,
        steDeviationCSLatestError, steDeviationCSActiveTime, steDeviationCSMeasurementState,
                steDeviationCSValue, csCSTestState, csCSEnable, csCSCounter,
        csCSCounterDiscontinuity,
                csCSCounterReset, csCSLatestError, csCSActiveTime, csCSMeasurementState, csCSValue,
                aiCSTestState, aiCSEnable, aiCSCounter, aiCSCounterDiscontinuity, aiCSCounterReset,
                aiCSLatestError, aiCSActiveTime, aiCSMeasurementState, aiCSValue, qeCSTestState,
                qeCSEnable, qeCSCounter, qeCSCounterDiscontinuity, qeCSCounterReset,
        qeCSLatestError,
                qeCSActiveTime, qeCSMeasurementState, qeCSValue, rteCSTestState, rteCSEnable,
                rteCSCounter, rteCSCounterDiscontinuity, rteCSCounterReset, rteCSLatestError,
        rteCSActiveTime,
                rteCSMeasurementState, rteCSValue, ciCSTestState, ciCSEnable, ciCSCounter,
                ciCSCounterDiscontinuity, ciCSCounterReset, ciCSLatestError, ciCSActiveTime,
        ciCSMeasurementState,
                ciCSValue, pjCSTestState, pjCSEnable, pjCSCounter, pjCSCounterDiscontinuity,
                pjCSCounterReset, pjCSLatestError, pjCSActiveTime, pjCSMeasurementState, pjCSValue,
                snrCSTestState, snrCSEnable, snrCSCounter, snrCSCounterDiscontinuity,
        snrCSCounterReset,
                snrCSLatestError, snrCSActiveTime, snrCSMeasurementState, snrCSValue,
        cableSatPrefCentreFrequency,
                cableSatPrefModulation, cableSatPrefSysAvailUATMode, cableSatPrefSysAvailN,
        cableSatPrefSysAvailT, cableSatPrefSysAvailM,
                cableSatPrefSysAvailTI, cableSatPrefSysAvailEBPerCent,
        cableSatPrefSysAvailTotalTime, cableSatPrefLinkAvailUATMode, cableSatPrefLinkAvailN,
                cableSatPrefLinkAvailT, cableSatPrefLinkAvailM, cableSatPrefLinkAvailTI,
        cableSatPrefLinkAvailUPPerCent, cableSatPrefLinkAvailTotalTime,
                cableSatPrefBERMax, cableSatPrefSignalPowerMin, cableSatPrefSignalPowerMax,
        cableSatPrefNoisePowerMax, cableSatPrefMerCSMin,
                cableSatPrefSteMeanCSMax, cableSatPrefSteDeviationCSMax, cableSatPrefCsCSMin,
        cableSatPrefAiCSMax, cableSatPrefQeCSMax,
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                cableSatPrefRteCSMax, cableSatPrefCiCSMin, cableSatPrefPjCSMax,
cableSatPrefSnrCSMin, noiseMarginTestState,
                noiseMarginEnable, noiseMarginCounter, noiseMarginCounterDiscontinuity,
noiseMarginCounterReset, noiseMarginLatestError,
                noiseMarginActiveTime, noiseMarginMeasurementState, noiseMarginValue,
estNoiseMarginTestState, estNoiseMarginEnable,
                estNoiseMarginCounter, estNoiseMarginCounterDiscontinuity,
estNoiseMarginCounterReset, estNoiseMarginLatestError, estNoiseMarginActiveTime,
                estNoiseMarginMeasurementState, estNoiseMarginValue, signQualMarTTestState,
signQualMarTEnable, signQualMarTCounter,
                signQualMarTCounterDiscontinuity, signQualMarTCounterReset, signQualMarTLatestError,
signQualMarTActiveTime, eNDCTestState,
                eNDCEnable, eNDCCounter, eNDCCounterDiscontinuity, eNDCCounterReset,
eNDCLatestError,
                eNDCActiveTime, eNDCMeasurementState, eNDCValue, outBandEmissTestState,
outBandEmissEnable,
                outBandEmissCounter, outBandEmissCounterDiscontinuity, outBandEmissCounterReset,
outBandEmissLatestError, outBandEmissActiveTime,
                cablePrefNoiseMarginMin, cablePrefEstNoiseMarginMin, cablePrefSignQualBoxSize,
cablePrefSignQualPercentMax, cablePrefENDBER,
                cablePrefENDCtoNSpecified, cablePrefENDIdeal , cablePrefENDMax }
          STATUS current
          DESCRIPTION
                "Contains all objects relevant to cable RF measurement"
          ::= { tr101290ObjectGroups 6 }


      groupSatellite OBJECT-GROUP
          OBJECTS { sysAvailabilityTestState, sysAvailabilityEnable, sysAvailabilityCounter,
sysAvailabilityCounterDiscontinuity, sysAvailabilityCounterReset,
                sysAvailabilityLatestError, sysAvailabilityActiveTime,
sysAvailabilityMeasurementState, sysAvailabilityUnavailableTime, sysAvailabilityRatio,
                sysAvailabilityInSETI, linkAvailabilityTestState, linkAvailabilityEnable,
linkAvailabilityCounter, linkAvailabilityCounterDiscontinuity,
                linkAvailabilityCounterReset, linkAvailabilityLatestError,
linkAvailabilityActiveTime, linkAvailabilityMeasurementState, linkAvailabilityUnavailableTime,
                linkAvailabilityRatio, linkAvailabilityInSUTI, berRSinServiceTestState,
berRSinServiceEnable, berRSinServiceCounter,
                berRSinServiceCounterDiscontinuity, berRSinServiceCounterReset,
berRSinServiceLatestError, berRSinServiceActiveTime, berRSinServiceMeasurementState,
                berRSinServiceValue, rfIFsignalPowerTestState, rfIFsignalPowerEnable,
rfIFsignalPowerCounter, rfIFsignalPowerCounterDiscontinuity,
                rfIFsignalPowerCounterReset, rfIFsignalPowerLatestError, rfIFsignalPowerActiveTime,
rfIFsignalPowerMeasurementState, rfIFsignalPowerValue,
                noisePowerTestState, noisePowerEnable, noisePowerCounter,
noisePowerCounterDiscontinuity, noisePowerCounterReset,
                noisePowerLatestError, noisePowerActiveTime, noisePowerMeasurementState,
noisePowerValue, merCSTestState,
                merCSEnable, merCSCounter, merCSCounterDiscontinuity, merCSCounterReset,
merCSLatestError,
                merCSActiveTime, merCSMeasurementState, merCSValue, steMeanCSTestState,
steMeanCSEnable,
                steMeanCSCounter, steMeanCSCounterDiscontinuity, steMeanCSCounterReset,
steMeanCSLatestError, steMeanCSActiveTime,
                steMeanCSMeasurementState, steMeanCSValue, steDeviationCSTestState,
steDeviationCSEnable, steDeviationCSCounter,
                steDeviationCSCounterDiscontinuity, steDeviationCSCounterReset,
steDeviationCSLatestError, steDeviationCSActiveTime, steDeviationCSMeasurementState,
                steDeviationCSValue, csCSTestState, csCSEnable, csCSCounter,
csCSCounterDiscontinuity,
                csCSCounterReset, csCSLatestError, csCSActiveTime, csCSMeasurementState, csCSValue,
                aiCSTestState, aiCSEnable, aiCSCounter, aiCSCounterDiscontinuity, aiCSCounterReset,
                aiCSLatestError, aiCSActiveTime, aiCSMeasurementState, aiCSValue, qeCSTestState,
                qeCSEnable, qeCSCounter, qeCSCounterDiscontinuity, qeCSCounterReset,
qeCSLatestError,
                qeCSActiveTime, qeCSMeasurementState, qeCSValue, rteCSTestState, rteCSEnable,
                rteCSCounter, rteCSCounterDiscontinuity, rteCSCounterReset, rteCSLatestError,
rteCSActiveTime,
                rteCSMeasurementState, rteCSValue, ciCSTestState, ciCSEnable, ciCSCounter,
                ciCSCounterDiscontinuity, ciCSCounterReset, ciCSLatestError, ciCSActiveTime,
ciCSMeasurementState,
                ciCSValue, pjCSTestState, pjCSEnable, pjCSCounter, pjCSCounterDiscontinuity,
                pjCSCounterReset, pjCSLatestError, pjCSActiveTime, pjCSMeasurementState, pjCSValue,
                snrCSTestState, snrCSEnable, snrCSCounter, snrCSCounterDiscontinuity,
snrCSCounterReset,
                snrCSLatestError, snrCSActiveTime, snrCSMeasurementState, snrCSValue,
cableSatPrefCentreFrequency,
                cableSatPrefModulation, cableSatPrefSysAvailUATMode, cableSatPrefSysAvailN,
cableSatPrefSysAvailT, cableSatPrefSysAvailM,
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                cableSatPrefSysAvailTI, cableSatPrefSysAvailEBPerCent,
cableSatPrefSysAvailTotalTime, cableSatPrefLinkAvailUATMode, cableSatPrefLinkAvailN,
                cableSatPrefLinkAvailT, cableSatPrefLinkAvailM, cableSatPrefLinkAvailTI,
cableSatPrefLinkAvailUPPerCent, cableSatPrefLinkAvailTotalTime,
                cableSatPrefBERMax, cableSatPrefSignalPowerMin, cableSatPrefSignalPowerMax,
cableSatPrefNoisePowerMax, cableSatPrefMerCSMin,
                cableSatPrefSteMeanCSMax, cableSatPrefSteDeviationCSMax, cableSatPrefCsCSMin,
cableSatPrefAiCSMax, cableSatPrefQeCSMax,
                cableSatPrefRteCSMax, cableSatPrefCiCSMin, cableSatPrefPjCSMax,
cableSatPrefSnrCSMin, berViterbiSTestState,
                berViterbiSEnable, berViterbiSCounter, berViterbiSCounterDiscontinuity,
berViterbiSCounterReset, berViterbiSLatestError,
                berViterbiSActiveTime, berViterbiSMeasurementState, berViterbiSIValue,
berViterbiSQValue, berViterbiSMeasurementMethod,
                ifSpectrumTestState, ifSpectrumEnable, ifSpectrumCounter,
ifSpectrumCounterDiscontinuity, ifSpectrumCounterReset,
                ifSpectrumLatestError, ifSpectrumActiveTime, satellitePrefBERMax }
        STATUS current
        DESCRIPTION
            "Contains all objects relevant to satellite RF measurements"
        ::= { tr101290ObjectGroups 7 }


    groupTerrestrial OBJECT-GROUP
        OBJECTS { rfAccuracyTestState, rfAccuracyEnable, rfAccuracyCounter,
rfAccuracyCounterDiscontinuity, rfAccuracyCounterReset,
                rfAccuracyLatestError, rfAccuracyActiveTime, rfAccuracyMeasurementState,
rfAccuracyValue, rfChannelWidthTestState,
                rfChannelWidthEnable, rfChannelWidthCounter, rfChannelWidthCounterDiscontinuity,
rfChannelWidthCounterReset, rfChannelWidthLatestError,
                rfChannelWidthActiveTime, rfChannelWidthMeasurementState, rfChannelWidthValue,
symbolLengthTestState, symbolLengthEnable,
                symbolLengthCounter, symbolLengthCounterDiscontinuity, symbolLengthCounterReset,
symbolLengthLatestError, symbolLengthActiveTime,
                symbolLengthMeasurementState, symbolLengthValue, rfIfPowerTestState,
rfIfPowerEnable, rfIfPowerCounter,
                rfIfPowerCounterDiscontinuity, rfIfPowerCounterReset, rfIfPowerLatestError,
rfIfPowerActiveTime, rfIfPowerMeasurementState,
                rfIfPowerValue, rfIfSpectrumTestState, rfIfSpectrumEnable, rfIfSpectrumCounter,
rfIfSpectrumCounterDiscontinuity,
                rfIfSpectrumCounterReset, rfIfSpectrumLatestError, rfIfSpectrumActiveTime,
eNDTTestState, eNDTEnable,
                eNDTCounter, eNDTCounterDiscontinuity, eNDTCounterReset, eNDTLatestError,
eNDTActiveTime,
                eNDTMeasurementState, eNDTValue, eNFTTestState, eNFTEnable, eNFTCounter,
                eNFTCounterDiscontinuity, eNFTCounterReset, eNFTLatestError, eNFTActiveTime,
eNFTMeasurementState,
                eNFTValue, eNDTLPTestState, eNDTLPEnable, eNDTLPCounter, eNDTLPCounterDiscontinuity,
                eNDTLPCounterReset, eNDTLPLatestError, eNDTLPActiveTime, eNDTLPMeasurementState,
eNDTLPValue,
                eNFTLPTestState, eNFTLPEnable, eNFTLPCounter, eNFTLPCounterDiscontinuity,
eNFTLPCounterReset,
                eNFTLPLatestError, eNFTLPActiveTime, eNFTLPMeasurementState, eNFTLPValue,
linearityTestState,
                linearityEnable, linearityCounter, linearityCounterDiscontinuity,
linearityCounterReset, linearityLatestError,
                linearityActiveTime, linearityMeasurementState, linearityValue,
berViterbiTTestState, berViterbiTEnable,
                berViterbiTCounter, berViterbiTCounterDiscontinuity, berViterbiTCounterReset,
berViterbiTLatestError, berViterbiTActiveTime,
                berViterbiTMeasurementState, berViterbiTValue, berViterbiTLPTestState,
berViterbiTLPEnable, berViterbiTLPCounter,
                berViterbiTLPCounterDiscontinuity, berViterbiTLPCounterReset,
berViterbiTLPLatestError, berViterbiTLPActiveTime, berViterbiTLPMeasurementState,
                berViterbiTLPValue, berRSTestState, berRSEnable, berRSCounter,
berRSCounterDiscontinuity,
                berRSCounterReset, berRSLatestError, berRSActiveTime, berRSMeasurementState,
berRSValue,
                berRSLPTestState, berRSLPEnable, berRSLPCounter, berRSLPCounterDiscontinuity,
berRSLPCounterReset,
                berRSLPLatestError, berRSLPActiveTime, berRSLPMeasurementState, berRSLPValue,
merTTestState,
                merTEnable, merTCounter, merTCounterDiscontinuity, merTCounterReset,
merTLatestError,
                merTActiveTime, merTMeasurementState, merTValue, steMeanTTestState, steMeanTEnable,
                steMeanTCounter, steMeanTCounterDiscontinuity, steMeanTCounterReset,
steMeanTLatestError, steMeanTActiveTime,
                steMeanTMeasurementState, steMeanTValue, steDeviationTTestState,
steDeviationTEnable, steDeviationTCounter,
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                steDeviationTCounterDiscontinuity, steDeviationTCounterReset,
steDeviationTLatestError, steDeviationTActiveTime, steDeviationTMeasurementState,
                steDeviationTValue, csTTestState, csTEnable, csTCounter, csTCounterDiscontinuity,
                csTCounterReset, csTLatestError, csTActiveTime, csTMeasurementState, csTValue,
                aiTTestState, aiTEnable, aiTCounter, aiTCounterDiscontinuity, aiTCounterReset,
                aiTLatestError, aiTActiveTime, aiTMeasurementState, aiTValue, qeTTestState,
                qeTEnable, qeTCounter, qeTCounterDiscontinuity, qeTCounterReset, qeTLatestError,
                qeTActiveTime, qeTMeasurementState, qeTValue, pjTTestState, pjTEnable,
                pjTCounter, pjTCounterDiscontinuity, pjTCounterReset, pjTLatestError, pjTActiveTime,
                pjTMeasurementState, pjTValue, mipSyntaxState, mipSyntaxEnable, mipSyntaxCounter,
                mipSyntaxCounterDiscontinuity, mipSyntaxCounterReset, mipSyntaxLatestError,
mipSyntaxActiveTime, sepEtiTestState,
                sepEtiEnable, sepEtiCounter, sepEtiCounterDiscontinuity, sepEtiCounterReset,
sepEtiLatestError,
                sepEtiActiveTime, sepEtiMeasurementState, sepEtiValue, sepSetiTestState,
sepSetiEnable,
                sepSetiCounter, sepSetiCounterDiscontinuity, sepSetiCounterReset,
sepSetiLatestError, sepSetiActiveTime,
                sepSetiMeasurementState, sepSetiValue, terrestrialPrefCentreFrequency,
terrestrialPrefBandwidth, terrestrialPrefModulation,
                terrestrialPrefTransmissionMode, terrestrialPrefGuardInterval,
terrestrialPrefHierarchical, terrestrialPrefCentreFreqExpected, terrestrialPrefCentreFreqLimit,
                terrestrialPrefChannelWidthLimit, terrestrialPrefSymbolLengthLimit,
terrestrialPrefPowerMin, terrestrialPrefPowerMax, terrestrialPrefENDBER,
                terrestrialPrefENDIdeal , terrestrialPrefENDMax, terrestrialPrefENFIdeal ,
terrestrialPrefENFMax, terrestrialPrefENDLPIdeal ,
                terrestrialPrefENDLPMax, terrestrialPrefENFLPIdeal , terrestrialPrefENFLPMax,
terrestrialPrefLinearityMin, terrestrialPrefBERViterbiMax,
                terrestrialPrefBERViterbiLPMax, terrestrialPrefBERRSMax, terrestrialPrefBERRSLPMax,
terrestrialPrefMerTMin, terrestrialPrefSteMeanMax,
                terrestrialPrefSteDeviationMax, terrestrialPrefCsMin, terrestrialPrefAiMax,
terrestrialPrefQeMax, terrestrialPrefPjMax,
                terrestrialPrefMIPTimingLimit, terrestrialPrefMIPDeviationMax,
terrestrialPrefSEPUATMode, terrestrialPrefSEPN, terrestrialPrefSEPT,
                terrestrialPrefSEPM, terrestrialPrefSEPTI, terrestrialPrefSEPEBPerCent,
terrestrialPrefSEPMeasurementInterval }
            STATUS current
            DESCRIPTION
                "Contains all objects relevant to terrestrial RF measurements"
            ::= { tr101290ObjectGroups 8 }


    END


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-- DVB-MGTR101290-MIB.my
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Annex A (informative):
Bibliography

IETF RFC 1907 (1996) Management Information Base for Version 2 of the Simple Network Management Protocol (SNMPv2)".

IETF RFC 2580 (1999) Conformance Statements for SMIv2".

History

Document history		
V1.1.1	April 2002	Publication