

Lucent Technologies
Bell Labs Innovations



**5ESS[®]-2000 Switch
TR-NWT-000303
Interface Specification**

5E9(2) and Later Software
Releases

235-900-308
Issue 4.01
September 1997

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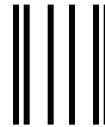
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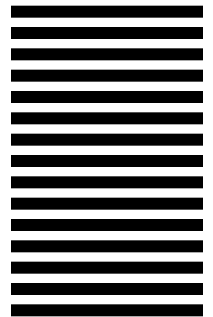
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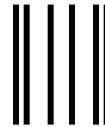
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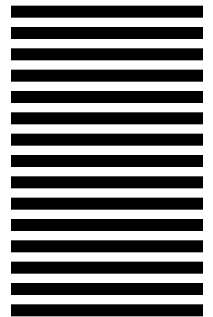
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The provisions of the interface capabilities as described in this document require certain business decisions, and possibly regulatory agency decisions. Note that, as of the date of publication of this document, many of these business decisions have not been made, nor has regulatory action been requested.

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1. INTRODUCTION

1.1 PURPOSE

This interface specification is published as a guide for the designers, manufacturers, consultants, and suppliers of systems and equipment that will interface with the 5ESS®-2000 switch using requirements published in both of the following sources:

- Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface*, Issue 2, December 1992; TR-NWT-000303.
- Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface: Operations (ROS/CMIS/ASN.1) Message Release 1.0*, Supplement 3, Revision 1, August 1992; TR-NWT-000303.

This Lucent Technologies document describes the TR303 interface supported by the 5ESS®-2000 switch.

Note: The 5ESS®-2000 switch does not support all of the requirements and options stated in document TR-NWT-000303. Differences are stated in this document.

1.2 UPDATE INFORMATION

1.2.1 NEW IN THIS ISSUE

As a result of an update to the 5E12 software release, Far-End Loopback (FELP) without Protection Line Switch (PLS) option is supported on the DNU-S interface. This update is reflected in changes to the following sections of this document:

- "Introduction to the TR303 Interface", Section 1.4
- "Far-End Loopback Procedure—With Protection Switch", Section 1.7.3.3.1
- "Far-End Loopback Procedure—Without Protection Switch", Section 1.7.3.3.2.

Also in Issue 4.01, "Multihosting - Option," Section 1.5.9.5, has been added for consistency with Bellcore document TR-NWT-000303, and technical corrections have been made in many of the attribute support, notification support, and parameter support tables of the "MOCS Supplement," Section 1.

Where technical content has been changed, vertical bars in the right-hand margin mark the affected pages.

1.2.2 LUCENT TECHNOLOGIES

As a result of the AT&T divestiture, the AT&T Network Systems division became Lucent Technologies, a separate and independent corporation. The 5ESS®-2000 switch and many other network and transmission products became products of Lucent Technologies. The marketing, sales, engineering, delivery, installation, support, and future development of these products are now provided by Lucent Technologies.

Therefore, the corporate name and logo on this document's cover, spine, and title page are changed from the AT&T brand to the Lucent Technologies brand. The AT&T name is being removed from the content (where appropriate), as well as from the 9-digit document order number.

Not all pages of this document are being reissued to make these changes; instead, the pages will be reissued over time, as technical and other changes are required. Customers on standing order for this document may see references to the AT&T name on previous-issue pages. Customers receiving new orders for this document will see the references changed to the Lucent Technologies name throughout the document as appropriate. Exceptions may exist in software-influenced elements such as input/output messages, master control center screens, and recent change/verify screens. These elements will not be changed in this document until such time as they are changed in the software code.

Document updates will not be made specifically to remove historical references to AT&T, especially in cases where the Network Systems division of AT&T, now Lucent Technologies, provided the product or service in question.

1.2.3 SUPPORTED SOFTWARE RELEASES

In accordance with the 5ESS®-2000 Switch Software Support Plan, the 5E9(2) software release is rated Discontinued Availability (DA) on November 15, 1997. The information supporting 5E9(2) and earlier is being removed from all documentation. The actual removal will occur over time, instead of concurrently.

If you are supporting offices that use a software release prior to 5E10 and you have a need for the information that is being removed, retain the associated pages as they are removed from the paper documents, or retain the earlier copy of the CD-ROM.

1.2.4 TERMINOLOGY

Effective with the 5E9(1) software release, the name of the 5ESS® switch was changed to be 5ESS®-2000 switch; therefore, the name 5ESS® switch is no longer valid. The name revision will be accomplished over time as other technical changes are required. In the interim, please assume that any reference to the 5ESS® switch is also applicable to the 5ESS®-2000 switch. Note that this name change may not have been carried forward into software influenced elements such as input/output messages, master control center screens, and recent change/verify screens.

As a result of the World Telecommunications Standardization Conference held March 1-12, 1993, the International Telegraph and Telephone Consultative Committee (CCITT), no longer exists as an organization under the International Telecommunication Union (ITU). According to the ITU, the CCITT is now referred to as the International Telecommunication Union - Telecommunication Standardization Sector (ITU-TS).

Recommendations of this organization are referenced in this document as follows:

- Any new or revised recommendation issued by the ITU-TS is designated "ITU-T Recommendation X.NNN."
- For a transition period from 1993 to 1997, the name of any recommendation that had a previous CCITT name is appended with "formerly CCITT Recommendation X.NNN."
- Any recommendation issued by the CCITT, until revised by the ITU-TS, is designated "CCITT Recommendation X.NNN."

1.3 GUIDE TO THIS DOCUMENT

1.3.1 ORGANIZATION OF THIS DOCUMENT

This *5ESS®-2000 Switch TR-NWT-000303 Interface Specification* is a reference document that uses the format of the Bellcore TR303 document, Issue 2, Section 12, for its structure. This format:

- Uses the reader's familiarity with the TR303 document as a knowledge base
- Minimizes repetition of redundant text and information
- Highlights the details and exceptions with respect to the TR303 document
- Facilitates compatibility analysis of this interface with other equipment.

The reference base, Section 12 of the Bellcore TR303 document, describes the "generic interface," which supports use of the widest variety of equipment. This section also provides information from Sections 3 through 11 of the Bellcore TR303 document and makes many cross-references to these sections as well as to many other documents.

Note: This Lucent Technologies interface specification is not a stand-alone document. The TR-NWT-000303 Bellcore document, Issue 2, and Supplement 3, Revision 1, will be needed as references.

1.3.2 INFORMATION PRESENTATION METHODS

Except for the ASN.1 information in Section 13, the details of the 5ESS®-2000 switch TR303 interface are provided in Section 12 of this document, whose headings match the corresponding headings in Section 12 of the Bellcore TR303 document.¹ After each heading, a special phrase describes agreement between this document and the Bellcore TR303 document. After a phrase, more explanatory text may continue. Each phrase applies to only the text in the Bellcore TR303 document that immediately follows the heading (up to the next heading, regardless of the next heading's level). Where both integrated digital terminal (IDT) and remote digital terminal (RDT) requirements are stated within a section, this interface description applies to only the IDT requirements.

The special phrases are defined as follows:

- *Requirement(s) supported as stated.*
This phrase indicates that the 5ESS®-2000 switch TR303 interface was implemented as described in the Bellcore TR303 document; additional text may be provided.
- *Requirement(s) supported with the following exceptions.*
This phrase indicates that relevant requirements are supported, but that some exceptions apply; additional text describes the exceptions of the 5ESS®-2000 switch interface with respect to the requirements in the Bellcore TR303 document.

1. This matching of headings does not apply in the following cases: Section 1.2.1, "IDCU Interface Requirements;" Section 1.2.2, "DNU-S Interface Requirements;" Section 1.2.3, "IDCU and DNU-S Interface Common Requirements". These three sections provide information that is based on how a TR303 remote digital terminal (RDT) is terminated on a 5ESS®-2000 switch.

- *Requirement(s) supported - the following interpretations were used for implementation.*
This phrase is used where implementation requirements are subject to interpretation; additional text describes how the Bellcore TR303 requirement was interpreted to implement the 5ESS®-2000 switch TR303 interface.
- *Requirement(s) supported with a different implementation than that stated.*
This phrase is used where Bellcore TR303 requirements state or imply an implementation different from that used in the 5ESS®-2000 switch TR303 interface; additional text describes the implementation used for the 5ESS®-2000 switch TR303 interface.
- *Requirement(s) not supported.*
This phrase indicates that the respective requirement is not supported on the 5ESS®-2000 switch TR303 interface at this time.
- *RDT requirement(s) only are stated.*
This phrase indicates that the TR303 requirements apply to only the RDT; additional text may state whether or not the 5ESS®-2000 switch supports RDTs that meet these requirements.
- *No requirements are stated.*
This phrase indicates that the Bellcore TR303 document contains no requirements in the text that immediately follows the heading; additional text may be provided after this phrase.
- *No text follows this heading.*
This phrase indicates that, in the Bellcore TR303 document, no text immediately follows the heading.

1.4 INTRODUCTION TO THE TR303 INTERFACE

An RDT can be terminated on a 5ESS®-2000 switch via:

- An Integrated Digital Carrier Unit (IDCU) with Release 5E9(1) or later software
- A Digital Network Unit-SONET (DNU-S) with Release 5E12 or later software.

Both interfaces provide the same functionality, except that the DNU-S does not support Protection Line Switching (PLS) or Far-End Loopback (FELP) with Protection Switch Option. Each TR303 remote digital terminal (RDT) supports up to 2,048 lines, regardless of whether an IDCU or a DNU-S terminates it on the switch.

1.4.1 THE IDCU TR303 INTERFACE CAPABILITY

The IDCU supports up to 40 DS1 signals that can be distributed across several TR303 remote digital terminals (RDTs). These DS1s can be carried by higher rate digital transmission facilities within the loop environment for distribution to the RDT.

Figure 1-1 depicts the 5ESS®-2000 switch IDCU TR-NWT-000303 (TR303) interface.

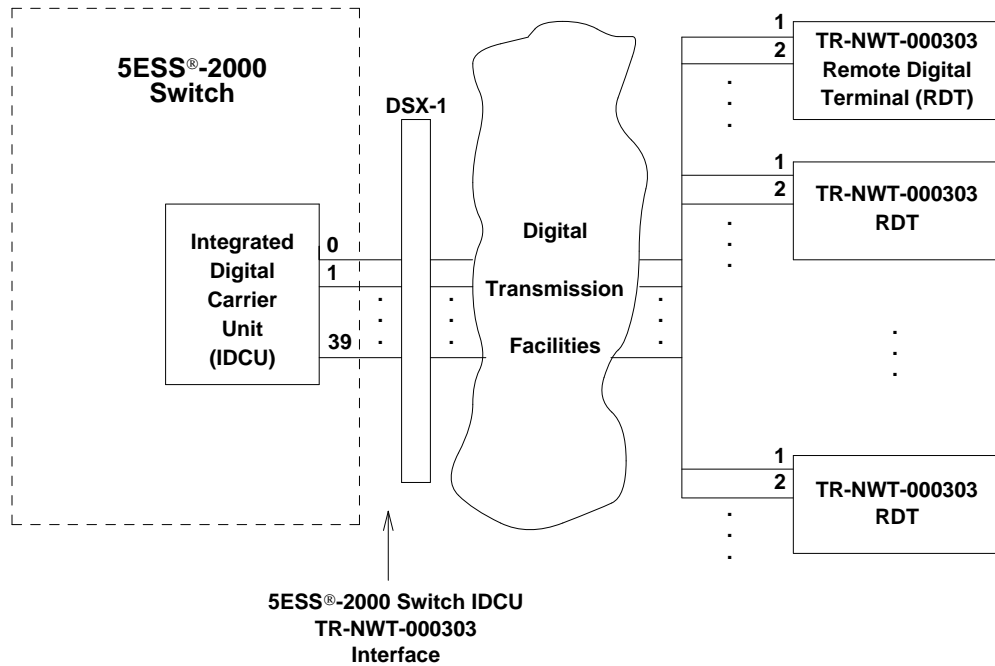


Figure 1-1 — 5ESS®-2000 Switch IDCU TR-NWT-000303 Interface

1.4.2 THE DNU-S TR303 INTERFACE CAPABILITY

Each DNU-S supports up to 12 EC-1 interfaces, each able to transport not fewer than 1 and not more than 28 asynchronous DS1s (VT1.5) that can be distributed across several TR303 RDTs. Byte synchronous DS1s are not supported.

Figure 1-2 depicts the 5ESS®-2000 switch DNU-S TR-NWT-000303 (TR303) interface.

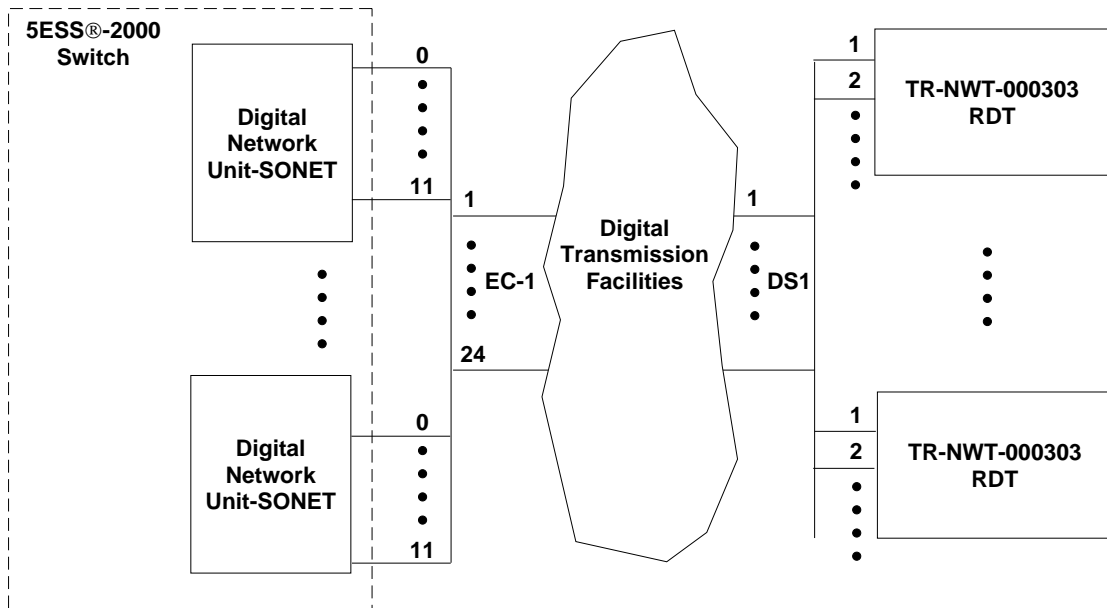


Figure 1-2 — 5ESS®-2000 Switch DNU-S TR-NWT-000303 Interface

1.5 USER FEEDBACK

The producers of this specification are constantly striving to improve quality and usability. Please use the enclosed comment form for your comments and to advise us of any errors. If your comments will not fit, you can write to the following address:

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1.7 TECHNICAL ASSISTANCE

Technical assistance for the 5ESS®-2000 switch can be obtained by calling the Regional Technical Assistance Center (RTAC) at **1-800-225-RTAC**. This telephone number is monitored 24 hours a day, 7 days a week. During regular business hours, your call will be answered by your local RTAC. Outside of normal business hours, all calls will be answered at a centralized technical assistance center that will dispatch news of any service-affecting problems immediately to your local RTAC. All other problems will be referred to your local RTAC on the next regular business day.

Lucent Technologies also provides an interoperability testing service for the 5ESS®-2000 switch. For information about interoperability testing with the TR-NWT-000303 interface, call the Feature Interactive Verification Environment (FIVE) Facility at (630) 224-2490.

1.8 REFERENCES

Readers of this document may find useful the following references, which contain information pertaining to subjects of this document:

- Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface*, Issue 2, December 1992; TR-NWT-000303.
- Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface: Operations (ROS/CMIS/ASN.1) Message Release 1.0*, Supplement 3, Revision 1, August 1992; TR-NWT-000303.
- Bellcore document *LATA Switching Systems Generic Requirements (LSSGR)*, Issue 1 (December 1984), Revision 6, June 1986; TR-TSY-000064.
- Bellcore document *Functional Criteria for Digital Loop Carrier Systems*, Technical Reference, Issue 1, April 1987; TR-NWT-000057.
- *Technical Reference: Digital Channel Bank Requirements and Objectives*, November 1982; PUB43801.
- Bellcore document *Digital Cross-Connect System Requirements and Objectives*, Technical Reference, Issue 1, November 1985; TR-NWT-000170.
- Bell Communications Research, *ISDN D-Channel Exchange Access Signaling and Switching Requirements (Layer 2)*, Technical Reference, Issue 1, October 1988; TR-TSY-000793,

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2. DEFINITION OF TERMS

Listed below are definitions for some of the terms used in this document.

1. *Call control* means control of the call processes after the call path between the RDT and IDCU has been established, and before the path is torn down. In TR303, this is referred to as "supervision."
2. *Carrier Failure Alarm (CFA)* defines the beginning and the end of a carrier system outage. It is described in Sections 6.3 and 6.4 of PUB43801.
3. *Carrier Group Alarm (CGA)* is a combination of CFA and trunk conditioning. Trunk conditioning refers to the completion of call processing events (for example, terminating active calls on the DS1, producing AMA records), counting the appropriate measurement peg counts, and maintenance events (for example, marking the DS1 OOS, generating an alarm report if necessary).
4. *Concentration* is an access arrangement in which the number of time slots available for calls (not used for operations, signaling or other noncustomer data) is less than the number of entities that can request a call.
5. *Connection control* means control of processes that lead to the establishment of a call path between the RDT and the switch, and of the processes of tearing down the path, after the call ends. In TR303, this is referred to as "time slot assignment/deassignment."
6. A *DS1 time slot* is a DS0 (64 kb/s channel) on the DS1 facility between the RDT and the switch.
7. An *EOC* is a permanently assigned DS0 used to transmit operations, administration, maintenance and provisioning messages between the switch and RDTs operating with a TR303 interface.
8. *Nail-up* is a connection in which a time slot is assigned a semipermanent path through the switch. Nonswitched (single channel) and non-locally-switched lines can be nailed up.
9. *Nonswitched specials* in this document, unless stated otherwise, refer to both non-locally-switched and nonswitched special services.
10. *Permanent assignment* is an assignment done when RDT specific data is entered into the 5ESS®-2000 switch data base. Both the primary and the protection time slot management channel (TMC) and both the primary and the protection EOC are permanently assigned.
11. *Provisioning* is the process of updating the switch data base to reflect the equipment configuration of the switch and the services assigned to subscribers. (Note that updating of the RDT data base is not part of *provisioning*.)
12. *Semipermanent assignment* is performed for the duration of the subscription. Nonswitched specials, the basic rate interface (BRI) D-channel and provisioned B-channel are semipermanently assigned.
13. *Switching Module (SM)* is used also to refer to remote switching module (RSM), and optically remoted module (ORM).
14. A *TMC* is a permanently assigned DS0 used to report originations for non-ISDN locally switched calls and to assign/deassign a DS1 time slot for all locally switched calls and for nonprovisioned ISDN B-channels.

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3. REQUIREMENTS AND OPTIONS FOR CUSTOMER SERVICES

Section 3 of Bellcore TR303 discusses requirements and options for customer services. Note that this document discusses only the TR303 requirements related to Local Digital Switch/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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4. REQUIREMENTS SUPPORTING INTERFACING TO THE DIGITAL NETWORK

Section 4 of Bellcore TR303 discusses requirements supporting interfacing to the digital network. Note that this document discusses only the TR303 requirements related to Local Digital Switch/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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5. OPERATIONS SYSTEM INTERFACES

Section 5 of Bellcore TR303 discusses operations system interfaces. Note that this document discusses only the TR303 requirements related to Local Digital Switch/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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6. IDLC SYSTEM CAPABILITIES: REQUIREMENTS AND OPTIONS

Section 6 of Bellcore TR303 discusses Integrated Digital Loop Carrier (IDLC) Capabilities. Note that this document discusses only the TR303 requirements related to Local Digital Switch/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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7. REQUIREMENTS SUPPORTING INTERFACING TO CRAFT PERSONNEL

Section 7 of Bellcore TR303 discusses requirements supporting interfacing to craft personnel. Note that this document discusses only the TR303 requirements related to Local Digital System/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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8. REQUIREMENTS SUPPORTING BOC/IDC ADMINISTRATION

Section 8 of Bellcore TR303 discusses Requirements Supporting Bell Operating Company/Information Distribution Company (BOC/IDS) Administration. Note that this document discusses only the TR303 requirements related to Local Digital System/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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9. REQUIREMENTS SUPPORTING SYSTEM TURNUP

Section 9 of Bellcore TR303 discusses Requirements Support System Turnup. Note that this document discusses only the TR303 requirements related to LDS/RDT interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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10. MISCELLANEOUS

Note that this document discusses only the TR303 requirements related to LDS/RDT interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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11. IDLC SYSTEM TRANSITION CONSIDERATIONS

Section 11 of Bellcore TR303 discusses Integrated Digital Loop Carrier (IDLC) transition considerations. Note that this document discusses only the TR303 requirements related to Local Digital System/Remote Digital Terminal (LDS/RDT) interface as described in TR303 Section 12. Where TR303 Section 12 refers to other TR303 sections, the relevant information is included in Section 12 of this document, if appropriate.

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12. LDS/RDT GENERIC INTERFACE - REQUIREMENTS AND OPTIONS

There are no requirements stated for Local Digital System/Remote Digital Terminal (LDS/RDT) Generic Interface.

12.1 INTRODUCTION

No requirements are stated.

12.2 GENERIC IDLC INTERFACE REQUIREMENTS - EXECUTIVE SUMMARY

No requirements are stated.

12.2.1 IDCU INTERFACE REQUIREMENTS

This section is not found in the Bellcore TR303 document.

The IDCU supports up to 40 DS1 terminations that can be randomly assigned within an IDCU to different RDTs. Figure 12-1 depicts the 5ESS®-2000 switch Integrated Digital Carrier Unit (IDCU) TR303 interface.

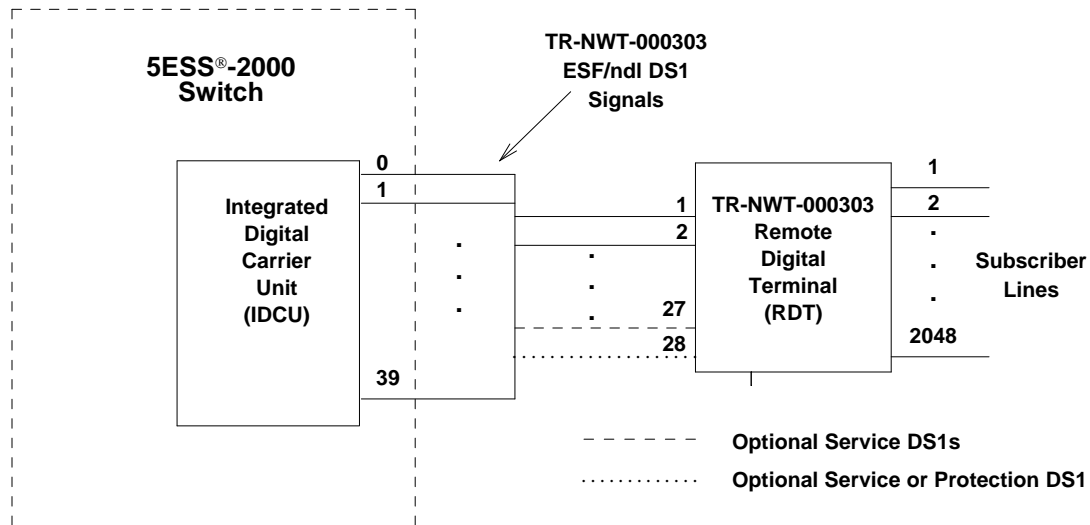


Figure 12-1 — 5ESS®-2000 Switch IDCU TR-NWT-000303 RDT Interface

Some of the unique salient properties of the IDCU interface are as follows:

- TR303-compatible RDTs with 2 to 28 DS1s.
- TR303-compatible RDTs with up to 2,048 subscriber lines.

12.2.2 DNU-S INTERFACE REQUIREMENTS

This section is not found in the Bellcore TR303 document.

The 5ESS®-2000 switch Digital Network Unit SONET (DNU-S) supports up to 12 EC-1 interfaces, in which each EC-1 can transport 1 to 28 asynchronous DS1s (VT1.5) that can be randomly assigned within the DNU-S to different TR303 RDTs. Byte synchronous DS1s are not supported.

Figure 12-2 depicts the 5ESS®-2000 switch DNU-S TR-NWT-000303 (TR303) interface.

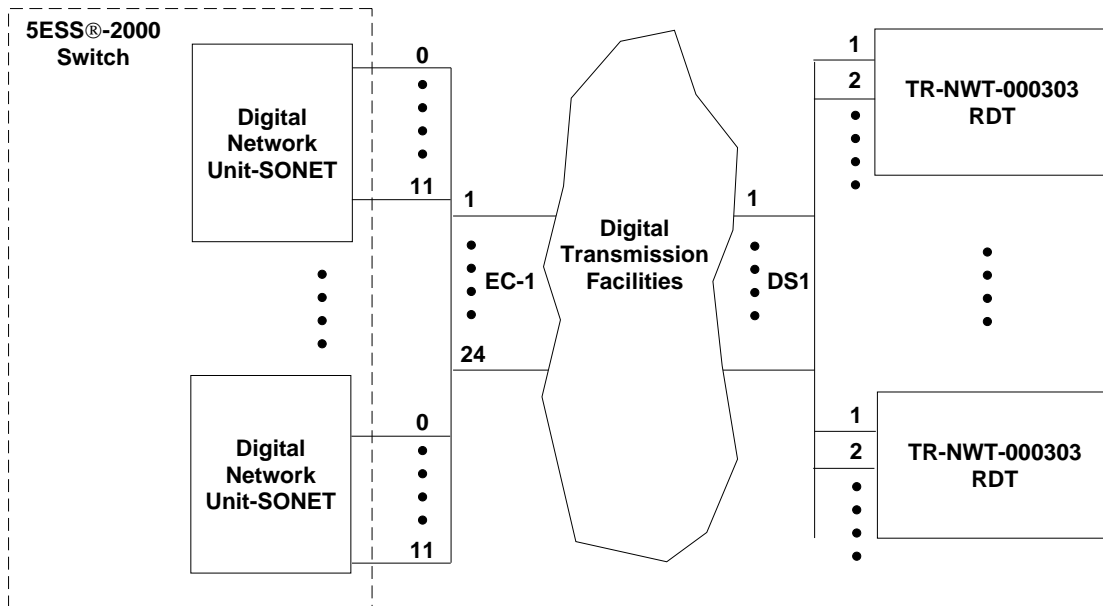


Figure 12-2 — 5ESS®-2000 Switch DNU-S TR-NWT-000303 RDT Interface

Some of the unique salient properties of the DNU-S interface are as follows:

- TR303-compatible RDTs that each have not fewer than 2 and not more than 28 DS1s mapped asynchronously into SONET VT1.5s contained within one or more EC-1 interfaces.
- TR303-compatible RDTs that each support up to 2,048 lines.

12.2.3 IDCU AND DNU-S INTERFACE COMMON REQUIREMENTS

This section is not found in the Bellcore TR303 document.

Some of the common salient properties of both the IDCU interface and the DNU-S interface are as follows:

- TR303-compatible RDTs using dynamic assignment of DS1 time slots are supported.
- TR303-compatible RDTs using fixed assignment of DS1 time slots are not supported.
- The DS1 line format, which is the extended super frame with new data link (ESF/ndl), is supported on the IDCU. The extended superframe with facility data link (ESF/fdl) is supported on the DNU-S.
- Performance monitoring of the DS1 facilities is supported using the cyclic redundancy check (CRC-6) code and bipolar violations (BPV).
- Call processing is supported with hybrid signaling using the TMC channel together with the in-band ABCD codes.
- Call processing using the out-of-band common signaling channel (CSC) is not supported.
- Voice frequency services supported include single-party and multiparty plain old telephone service (POTS) (with super-imposed ringing and with FSR), coin, direct inward dialing, ground-start PBX.
- For ISDN services, the 4:1 D-channel multiplexing method for the standard ANSI¹ UDSL interface is supported. Up to four D-channels may be multiplexed into a single time slot which is semipermanently assigned at subscription time.
- Termination of ISDN lines using the 3-DS0 multiplexing method is not supported.
- Nonlocally/nonswitched services are supported by assigning dedicated time-slots on the DS1 facilities; limited operations, administration, maintenance, and provisioning (OAM&P) are provided for these types of services.

12.3 APPLICATIONS OF THE GENERIC IDLC INTERFACE

No requirements are stated.

12.3.1 SELECTING THE NUMBER OF DS1s

No requirements are stated.

12.3.2 SELECTING THE CALL PROCESSING SIGNALING METHOD

No requirements are stated.

The 5ESS[®]-2000 switch TR303 interface supports call processing using the hybrid method of TMC plus ABCD codes in the ESF/ndl format on the IDCU and in the ESF/fdl format on the DNU-S. The CSC method of call process signaling is not supported.

1. Registered trademark of American National Standards Institute.

12.3.3 GROUPING GENERIC IDLC INTERFACE OPTIONS

No requirements are stated.

12.4 INTERFACE FUNCTIONALITY

No text follows this heading.

12.4.1 GENERAL

No requirements are stated.

12.4.2 GENERIC IMPLEMENTATION OF INTERFACE FUNCTIONS

No text follows this heading.

12.4.2.1 DS1 Operations

No requirements are stated.

The TR303 text refers to requirements in Section 12.6.1.2 related to per-DS1 alarm indication signal (AIS) and yellow alarms and per-DS1 far-end performance reports.

12.4.2.2 IDLC System/Terminal Operations

No requirements are stated.

The TR303 text states that requirements related to system and terminal operations are provided throughout Section 12.6.1.2.

12.4.2.3 Call Processing

Requirements supported with the following exceptions.

The 5ESS[®]-2000 switch TR303 interface supports call processing with hybrid signaling (TMC plus ABCD codes), but it does not support call processing with out-of-band signaling (CSC).

12.4.2.4 Information Transport

No requirements are stated.

The TR303 text refers to time-slot locations in Section 12 and division of transmission requirements between the Local Digital System (LDS) and RDT in Section 12.5.8.

12.4.2.5 Loop Testing

Requirement supported with the following exceptions.

Although no DS0 channel has been reserved to support proprietary testing protocols between a test system controller and its remote measurement unit, a semipermanent channel can be assigned through the nail-up function when the RDT is provisioned. This function can also be provided through a dial-up procedure.

12.4.2.6 Summary

No requirements are stated.

12.4.3 LINK ACCESS PROTOCOL D-CHANNEL (LAPD) PROTOCOL

No requirements are stated.

12.4.3.1 General LAPD Information

No requirements are stated.

12.4.3.2 LAPD Functions

Requirements supported as stated.

12.4.3.3 Overview of Frame Structure and Format

Requirements supported as stated.

The Bellcore TR303 document refers to LAPD tutorial information, which is available in Bellcore document *ISDN D-Channel Exchange Access Signaling and Switching Requirements (Layer 2)*, Technical Reference, Issue 1, October 1988; TR-TSY-000793.

12.4.3.4 Commands/Responses for Data-Link Operation

Requirements supported as stated.

12.4.3.5 LAPD Requirements for IDLC Systems

Requirements supported as stated.

12.4.3.5.1 Mode of Operation

Requirements supported as stated.

12.4.3.5.2 Maximum Number of Outstanding I-Frames (k)

Requirements supported as stated.

12.4.3.5.3 Maximum Number of Retransmissions (N200)

Requirements supported as stated.

12.4.3.5.4 Maximum Number of Octets in An I-Frame Information Field (N201)

Requirements supported as stated.

12.4.3.5.5 Maximum Number of TEI Assignment Requests (N202)

Requirements supported with the following exceptions.

See Section 12.4.3.5.11 for TEI assignment exceptions.

12.4.3.5.6 Timer T200

Requirements supported as stated.

12.4.3.5.7 Timer T201

No requirements are stated.

12.4.3.5.8 Timer T202

No requirements are stated.

12.4.3.5.9 Timer T203

Requirements supported as stated.

12.4.3.5.10 Idle Code

Requirements supported as stated.

12.4.3.5.11 Service Access Point Identifier/Terminal End-Point Identifier (SAPI/TEI) Addressing Conventions

Requirements supported with the following exceptions.

The 5ESS®-2000 switch implementation supports the EOC TEI/SAPI combinations as shown in Table 12-1. The Bellcore TR303 document specifies that messages with SAPI = 1 and TEI equal to 1, 2, or 3 are to be used for RDT communication with Operations Systems (OS), and messages with SAPI = 1 and TEI equal to 5, 6, or 7 for RDT communication with test system controllers. These SAPI/TEIs are to be used for messages between the RDT and OSs, and between the RDT and test system controllers, supporting the ASN.1 interface.

Because no OSs or test system controllers using the ASN.1 language are available, the 5ESS®-2000 switch implementation does not support these TEI/SAPI combinations. Instead, the switch processes the ASN.1 messages received from the RDT which are to be transmitted to an OS [such as Switching Control Center System (SCCS), Predictor, or Mechanized Loop Testing (MLT)/ISDN] and, when appropriate, converts the message into the language the 5ESS®-2000 switch uses to communicate with respective OSs.

Similarly, the switch acts on the messages received from the OSs and, if appropriate, it sends ASN.1 messages with SAPI = 1 and TEI = 4 to the RDT.

Note: The 5ESS®-2000 switch IDT is responsible for bringing up the EOC logical link at the time of initialization.

Table 12-1 — SAPIs and TEIs Used in IDT EOC Messages

SAPI	TEI	MESSAGE
1	0	EOC and TMC Path Operations
1	4	RDT - IDT

Note: Only the default TEI assignments are supported; user-specified TEI assignment is not supported.

12.4.3.5.12 Unrecoverable Data-Link Errors

Requirements supported as stated.

12.4.3.6 Management Entity Requirements

Requirements supported are stated.

The switch supports an escalating recovery strategy for EOC and TMC protocol errors. Protocol errors (LAPD, Convergence Function, TMC, ROSE, CMISE) are logged and accumulated. A set of fixed thresholds and intervals have been defined for each protocol layer and when one of these thresholds is reached within the given interval, the standby EOC or TMC is made active and the offending EOC or TMC is briefly taken out of service. This datalink will remain out of service for up to three minutes depending on switch load, keeping the EOC or TMC in a simplex state. During this interval, LAPD multiple frame operation is dropped to reset the protocol engines on both sides of the interface. After the EOC or TMC is restored, if the protocol errors

continue, it will again be taken out of service as before. If this behavior persists for three remove/restore attempts in a short period of time, the EOC or TMC will be left out of service until it is manually restored.

Note that if protocol errors are taken on the active EOC or TMC while the standby EOC or TMC is out of service, this could result in an EOC or TMC duplex failure. While this may seem drastic, this isolates the offending RDT and protects the rest of the switch from going into overload and affecting customers on other peripheral units or RDTs.

12.5 REQUIREMENTS AND OPTIONS SUPPORTING CUSTOMER SERVICES

No text follows this heading.

12.5.1 CALL PROCESSING TECHNIQUES

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports the hybrid signaling call processing technique (TMC plus ABCD codes). Out-of-band signaling using the CSC is not supported.

12.5.1.1 Hybrid Signaling

No explicit requirements are stated.

The 5ESS®-2000 switch TR303 interface supports call processing with dynamic time-slot assignment using hybrid signaling (TMC plus ABCD codes). Call processing with the full complement of time-slots preassigned (fixed channel assignment), and without relying on the TMC, is not supported on this interface.

12.5.1.2 Out-of-Band Signaling

No requirements are stated.

The 5ESS®-2000 switch TR303 interface does not support out-of-band signaling (CSC) for call processing.

12.5.2 CALL PROCESSING MESSAGES

No requirements are stated.

12.5.2.1 ABCD Codes

Requirements supported with the following exceptions.

- a. **Loop-Start - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- b. **Loop-Start - ABCD Codes Sent to the IDT**
The universal trunk out of service code (UNICODE) is not supported in the 5ESS®-2000 switch TR303 interface.
- c. **Ground-Start - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- d. **Ground-Start - ABCD Codes Sent to the IDT**
The UNICODE is not supported in the 5ESS®-2000 switch TR303 interface.
- e. **Loop Reverse Battery - ABCD Codes Received by the RDT**
These requirements apply to the RDT.

- f. **Loop Reverse Battery - ABCD Codes Sent to the IDT**
The UNICODE is not supported in the 5ESS®-2000 switch TR303 interface.
- g. **Coin - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- h. **Coin - ABCD Codes Sent to the IDT**
The UNICODE is not supported in the 5ESS®-2000 switch TR303 interface.
- i. **Multiparty - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- j. **Multiparty - ABCD Codes Sent to the IDT**
The UNICODE is not supported in the 5ESS®-2000 switch TR303 interface.
- k. **Foreign Exchange Station (FXS) (Loop-Start) - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- l. **FXS (Loop-Start) - ABCD Codes Sent to the Digital Network Element (DNE)**
These requirements apply to (DNE) and not to the 5ESS®-2000 switch IDT.
- m. **FXS (Ground-Start) - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- n. **FXS (Ground-Start) - ABCD Codes Sent to the DNE**
These requirements apply to DNEs and not to the 5ESS®-2000 switch IDT.
- o. **Foreign Exchange Originating (FXO) (Loop-Start) - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- p. **FXO (Loop-Start) - ABCD Codes Sent to the DNE**
These requirements apply to DNEs and not to the 5ESS®-2000 switch IDT.
- q. **FXO (Ground-Start) - ABCD Codes Received by the RDT**
These requirements apply to the RDT.
- r. **FXO (Ground-Start) - ABCD Codes Sent to the DNE**
These requirements apply to DNEs and not to the 5ESS®-2000 switch IDT.

12.5.2.2 TMC and CSC Messages

Requirements supported with the following exceptions.

The overall exception is that in the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)

The details concerning each of the TMC and CSC messages are listed as follows.

- a. **SETUP**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- b. **SETUP ACKNOWLEDGE**
The *SETUP ACKNOWLEDGE* message is not used with the TMC method.
- c. **ALERTING**
The *ALERTING* message is not used with the TMC method.

- d. **CALL PROCEEDING**
The *CALL PROCEEDING* message is not used with the TMC method.
- e. **CONNECT**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- f. **DISCONNECT**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- g. **RELEASE**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- h. **RELEASE COMPLETE**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- i. **INFORMATION**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- j. **NOTIFY**
The *NOTIFY* message is not used with the TMC method.
- k. **STATUS ENQUIRY**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- l. **STATUS**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- m. **CONNECT ACKNOWLEDGE**
Requirements supported as stated.

12.5.2.3 TMC and CSC Information Elements

Requirements supported with the following exceptions.

- a. **Protocol Discriminator**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- b. **Call Reference**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- c. **Message Type**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)
- d. **Bearer Capability**
In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)

e. **Cause**

In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)

16 *Normal Clearing* - Supported on the TMC.

27 *Destination Out of Service* - Supported on the TMC. (Equivalent to *Permanent Signal*.)

30 *Response to STATUS ENQUIRY* - Supported on the TMC.

34 *Channel Unavailable* - Supported on the TMC.

41 *Temporary Failure* - Supported on the TMC.

44 *Line Unit Unavailable* - Supported on the TMC. (Equivalent to *Resources Unavailable*.)

47 *Ring Failure* - Supported on the TMC.

81 *Invalid Call Reference* - Supported on the TMC.

96 *Mandatory Element Missing* - Supported on the TMC.

97 *Message Unimplemented* - Supported on the TMC.

99 *Information Element Unimplemented* - Supported on the TMC.

100 *Invalid Information Element Contents* - Supported on the TMC.

f. **Call State**

In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)

g. **Channel Identification**

In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)

h. **Notification Indicator**

Notification Indicator is not used with the TMC method of call control.

i. **Keypad Facility**

Keypad Facility is not used with the TMC method of call control.

j. **Signal**

Signal is not used with the TMC method of call control.

k. **Switchhook**

In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method. (The CSC method is not supported.)

12.5.3 TIME-SLOT MANAGEMENT CHANNEL SCENARIOS

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports RDTs with dynamic time-slot assignment; fixed time-slot RDTs are not supported.

12.5.3.1 Assignment Initiated by the Integrated Digital Terminal (IDT)

Requirements supported as stated.

12.5.3.2 Assignment Initiated by the Customer

Requirements supported as stated.

12.5.3.3 Clearing

Requirements supported as stated.

12.5.3.4 On-Hook Transmission

Requirements supported with the following exceptions.

- Data transfer is supported in the on-hook state only.
- Per-office peg counts of unsuccessful attempts to gain access to central office data transmission equipment is not supported.
- Data transmission cannot take place when the voice path was established without using power ringing. The 5ESS®-2000 switch sends information only in conjunction with ringing (that is, during the first silent interval).
- The Bit Error Rate and Phase Continuity parameters are not included by the 5ESS®-2000 switch.
- The 5ESS®-2000 switch does not support the Multiple Data Message Format.
- The 5ESS®-2000 switch supplies an extra message in the Data Message Format that is called Data Word Count.
- Continuous peg counts to determine usage of data transmission equipment is not supported by the 5ESS®-2000 switch.

12.5.4 COMMON SIGNALING CHANNEL (CSC) SCENARIOS

No requirements are stated.

12.5.4.1 General

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface does not support call processing using the CSC. The circuits referred to are supported using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.2.1.)

12.5.4.2 Loop-Start Circuits

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface does not support call processing using the CSC. Loop-start circuits are supported using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.2.1.)

12.5.4.3 Ground-Start Circuits

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports *ground-start circuits* using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.2.1.)

12.5.4.4 Loop Reverse Battery Circuits

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports *loop reverse battery* circuits using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.2.1.)

12.5.4.5 Coin

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports *coin* using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.2.1.)

12.5.4.6 Multiparty

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports *multiparty* using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.2.1.)

12.5.4.7 ISDN Basic Access Circuits

Requirements supported as stated.

The 5ESS®-2000 switch TR303 interface supports *basic access ISDN circuits* using the TMC (not the CSC). For these circuits, the TMC and CSC messages are the same.

12.5.4.8 Digital Data System Circuits

Requirements supported as stated.

12.5.4.9 On-Hook Transmission

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports *on-hook transmission* using hybrid signaling (TMC plus ABCD codes). (See Section 12.5.3.4.)

12.5.5 DETAILED TMC/CSC PROCEDURES

No requirements are stated.

12.5.5.1 Null - 0

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.2 Call Initiated - 1

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.3 Overlap Sending - 2

Requirements not supported.

This state applies only to the CSC which is not supported in the 5ESS®-2000 switch TR303 interface.

12.5.5.4 Call Present - 6

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.5 Call Received - 7

Requirements not supported.

This state applies only to the CSC which is not supported in the 5ESS®-2000 switch TR303 interface.

12.5.5.6 Call Proceeding - 9

Requirements not supported.

This state applies only to the CSC which is not supported in the 5ESS®-2000 switch TR303 interface.

12.5.5.7 Active - 10

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.8 Disconnect Request - 11

Requirements not supported.

This state applies only to the CSC which is not supported in the 5ESS®-2000 switch TR303 interface.

12.5.5.9 Disconnect Indication - 12

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.10 Release Request - 19

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.11 Call Clearing

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.12 Coin

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.13 Tip Party Test

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.14 Permanent Signal Procedures (Permanent Signal - 100)

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.15 Call State Mismatch Procedures

Requirements supported with the following exceptions.

Supported in the TMC mode only.

12.5.5.16 Error Handling Procedures

Requirements supported with the following exceptions.

- a. **Protocol Discriminator Error** - Supported in the TMC mode only.
- b. **Length Error** - Supported in the TMC mode only.
- c. **Call Reference Error** - Supported in the TMC mode only.
- d. **Message Type Error** - Supported in the TMC mode only.
- e. **Mandatory Information Element Missing Error** - Supported in the TMC mode only.
- f. **Information Element Content Error** - Supported in the TMC mode only.
- g. **Unrecognized Information Element Error** - Supported in the TMC mode only.
- h. **Channel Identifier Error** - Supported in the TMC mode only.
- i. **Cutoff Calls** - Supported as stated.
- j. **Unexpected Call Origination Requests** - Supported as stated.

12.5.5.17 TMC/CSC Timers

Requirements supported with the following exceptions.

The CSC is not supported in the 5ESS®-2000 switch TR303 interface.

- a. **T303** - Supported on the TMC only.
The T303 interface value is 2 seconds and, the 5ESS®-2000 switch sets the RDT T303 value to 0.7 seconds with an EOC provisioning message.
- b. **T305** - Supported on the TMC only.
- c. **T308** - Supported on the TMC only.
- d. **T322** - Supported on the TMC only.
- e. **T397** - Used only by the RDT.
- f. **T398** - Not supported—used only on the CSC.
- g. **T399** - Not supported—used only on the CSC.
- h. **T313** - Supported as stated
- i. **T396** - Supported on the TMC only.
While T396 is on, the RDT shall not send SETUP messages to the switch, but will react to CONNECT or RELEASE COMPLETE messages received from the switch. During RDT initialization, the TR303 interface will set the RDT T396 value equal to 14.7 seconds via an EOC provisioning message.

12.5.5.18 Connect Request - 8

Requirements supported as stated.

12.5.6 PROVISIONING SCENARIOS

No requirements are stated.

12.5.7 ISDN BASIC ACCESS

Requirements supported with the following exceptions.

The 5ESS[®]-2000 switch TR303 interface does not terminate 3-DS0 TDM ISDN signals; however, means are provided to groom the 3-DS0 signals onto another DS1 signal.

12.5.7.1 3-DS0 TDM

No requirements are stated.

(See the Section 12.5.7 statement.)

12.5.7.2 4:1 TDM

No requirements are stated.

The 5ESS[®]-2000 switch TR303 interface supports 4:1 TDM ISDN signals.

When corrupt crc test is requested by the 5ESS[®]-2000 switch, the RDT should initialize U-DSL PM counts and mark corrupt indicator flag. Marking of the flag is necessary because the PM counts will be corrupt and craft should know that the UDSL PM counts are invalid due to crc testing.

When the switch requests 2B+D loopback at the channel unit (CU) the circuit is open from the CU towards the NT1 and the U-DSL PM counts will be corrupt. The RDT should mark the corrupt indicator flag in this case also.

12.5.8 TRANSMISSION - VOICE

No text follows this heading.

12.5.8.1 General

RDT requirements only are stated.

12.5.8.2 Transmission Level Point

No requirements are stated.

12.5.8.3 Return Loss

RDT requirements only are stated.

12.5.8.4 Longitudinal Balance

RDT requirements only are stated.

12.5.8.5 Total Loss

Requirements supported with the following exceptions.

The 5ESS[®]-2000 switch does not support all of the options provided in Bellcore document *Region Digital Switched Network (RDSN) Transmission Plan*, Issue 1, October 1988; ST-NPL-000060.

In particular, only 0 dB of loss is available for line-to-line intra-switch calls. At the time this document was being prepared, the T1Q1 standards body had not voted on the RDSN requirements. Once these RDSN requirements are finalized in T1Q1, addition of this functionality to the 5ESS®-2000 switch will be re-evaluated.

12.5.8.6 IDLC System Loss Tolerance

RDT requirements only are stated.

12.5.8.7 Frequency Response

RDT requirements only are stated.

12.5.8.8 60-Hz Loss

RDT requirements only are stated.

12.5.8.9 Amplitude Tracking

RDT requirements only are stated.

12.5.8.10 Idle Channel Noise

RDT requirements only are stated.

12.5.8.11 Signal-to-Distortion Ratio

RDT requirements only are stated.

12.5.8.12 Intermodulation Distortion

RDT requirements only are stated.

12.5.8.13 Single Frequency Distortion

RDT requirements only are stated.

12.5.8.14 Peak-to-Average Ratio

RDT requirements only are stated.

12.5.8.15 Crosstalk

RDT requirements only are stated.

12.5.8.16 Hybrid Balance

RDT requirements only are stated.

12.5.9 SIGNALING AND SUPERVISION

Requirements supported as stated.

12.5.9.1 Service Related Timing Requirements

Requirements supported as stated.

12.5.9.2 60-Hz Induction Immunity

RDT requirements only are stated.

12.5.9.3 Non-Locally-Switched Services

Requirements supported as stated.

12.5.9.4 Intra-RDT Calls

No requirements are stated.

12.5.9.5 Multihosting - Option

Requirements not supported.

12.6 REQUIREMENTS AND OPTIONS SUPPORTING INTERFACING TO THE DIGITAL NETWORK

No text follows this heading.

12.6.1 INTERFACE REQUIREMENTS

No requirements are stated.

12.6.1.1 Digital-Transmission-Facility Requirements

Requirements supported with the following exceptions.

- a. TR303 Section 4.1 - Supported as stated.
- b. TR303 Section 4.2 - Supported as stated.
- c. TR303 Section 4.3 - Supported as stated.
- d. TR303 Section 4.4

Note that the round trip echo-path-delay from digital facility interface to digital facility interface in the 5ESS[®]-2000 switch is estimated to be 1.6 ms using the IDCU and less than 1 ms using the DNU-S. This delay includes an integrated electronic digital cross-connect (EDSX) function that allows grooming of non-switched traffic onto other DS1 signals. Supported with the following exceptions.

- The 5ESS[®]-2000 switch TR303 interface does not support ZBTSL.
 - The 5ESS[®]-2000 switch TR303 interface supports DS-1 level UNICODE alarms and treats DS0 level UNICODE as an off-hook indication.
 - The 5ESS[®]-2000 switch TR303 interface does not support RDTs with fixed time-slot assignment. (Only RDTs with dynamic time-slot assignment are supported.)
- e. TR303 Section 4.5 - Loopback of DS1 signal payloads is not supported within the 5ESS[®]-2000 switch TR303 interface.
 - f. TR303 Section 4.6 - The 5ESS[®]-2000 switch TR303 interface does not provide DS1 protection switching based on a threshold of the number of BPVs per second; CRC-6 is used to monitor the DS1 lines.
 - g. TR303 Section 4.7 - UNICODE is not supported.
Also, referring to TR303 Figure 4.2, the time to clear a red alarm is 5 to 10 times as long as the time to set the red alarm, that is 10 to 30 seconds. The carrier failure alarm (CFA) and yellow alarm timing then follow the red alarm clearing and not the fault clearing.

- h. TR303 Section 4.8 - Supported with the following exceptions.
 - The message-oriented ESF/ndl data link is not supported.
 - There is no specification of how many times a TR303 ESF/ndl bit-oriented message should be sent. The IDCU transmits each bit-oriented message at least ten times to provide operation when errors are present on the DS1 lines. If the same bit-oriented message is received twice consecutively, the message is considered valid.
- i. TR303 Section 4.9 - The IDCU does not support the Section 4.9.4 requirements concerning accumulating and storing far-end DS1 performance data. The DNU-S supports ES, SES, FLS, and UAS counts via EOC messaging.
- j. TR303 Section 4.10 - Supported as stated.

12.6.1.2 Physical Layer Requirements

Requirements supported with the following exceptions.

- The message-oriented ESF/ndl data link mode is not supported. If message-oriented codes are received on the ESF/ndl data link, they will be ignored and no action will result.
- In the 5ESS®-2000 switch TR303 interface, call processing is supported using the TMC method only. (The CSC method is not supported.)
- The 5ESS®-2000 switch TR303 interface does not support ZBTSL.

12.6.1.3 Data Link Layer Requirements

Requirements supported with the following exceptions.

The CSC is not supported.

12.6.1.3.1 ABCD Robbed-Bit Signaling

Requirements supported as stated.

12.6.1.3.2 Call Processing DL Control

Requirements supported with the following exceptions.

The CSC is not supported.

12.6.1.3.3 Operations DL Control

Requirements supported with the following exceptions.

A LAPD switch-to-OS data link is not provided in the 5ESS®-2000 switch TR303 interface.

12.6.1.4 Convergence Function

No requirements are stated.

12.6.1.4.1 EOC Segmentation/Reassembly Requirement

Requirements supported as stated.

12.6.1.4.2 Error Handling with the Convergence Function

Requirements supported as stated.

12.6.1.5 Application Layer

Requirements supported as stated.

Timers T700 and T701 apply to the application layer. These timers determine how long the switch will wait for a reply to an invoke-type message on the EOC. Retries as a result of either of these timers expiring will be dependent on the relevant message.

Timer T700, equal to 10 seconds, is used for single object instances, and timer T701, equal to 30 seconds, is used for multiple object instances. Timer values for T700 and T701 were chosen assuming the EOC convergence function (equivalent to layers 3 through 6) plus EOC layers 1 and 2 will require no more than 3 seconds in each direction within the switch. Therefore, the RDT is allowed 4 seconds to complete the reply to a single object instance and 24 seconds to complete the reply to a multiple object instance.

12.6.2 DS1 FACILITY PROTECTION SWITCH

Requirements supported with the following exceptions.

DS1 protection switching is not supported for TR303 interfaces on the DNU-S. The 5ESS®-2000 switch does not continue call processing for calls on the affected DS1 that are not in the talking state during the protection switching interval. That is, calls that are being processed (for example, calls for which dialed digits are being collected) are disconnected. This is done to avoid misrouting these calls.

The IDCU will not have a threshold for DS1 protection switching based on the number of BPVs in 1 second.

Note that the protection DS1 line will carry the same signal as that on the primary DS1 when no DS1 line failures are in effect.

12.6.2.1 Successful Protection Line Switch Procedures

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface implementation does not provide the OIM gateway because no OSs that use the ASN.1 messages are available. Instead, the 5ESS®-2000 switch converts the ASN.1 messages received from RDT into a language the 5ESS®-2000 switch uses to communicate with respective OSs.

12.6.2.2 Failure to Complete Facility Protection Switch Procedures

Requirements supported as stated.

12.6.2.3 Facility Protection Switching Procedures

Requirements supported as stated.

12.6.2.4 Successful Facility Protection DS1 Release Procedures

Requirements supported as stated.

Note that for a protection switch release, if the RDT does not receive the proper response within 3 seconds after it sends the "protection switch release" or "forced protection switch release" message, the RDT is expected to resume transmitting the "protection switch complete" message. In addition, if the protection switch release was

not initiated by an operations message, the RDT is expected to periodically retry a protection switch release.

12.6.2.5 Facility Protection DS1 Release Procedures

Requirements supported as stated.

12.6.3 EOC AND TMC/CSC PATH PROTECTION SWITCHING

Requirements supported as stated.

12.6.3.1 General EOC Path and TMC/CSC Path Protection Switch Requirements

Requirements supported as stated.

12.6.3.2 Detection of EOC and TMC/CSC Path Faults

No requirements are stated.

Bellcore has indicated that the four counters described in this section are no longer required. Instead, path switching is only required upon failure to establish or reestablish multiframe operation.

12.6.3.2.1 Received Disconnected Mode Response Frame Counter

Requirements not supported.

12.6.3.2.2 Data Link Reset Counter

Requirements not supported.

12.6.3.2.3 Failure to Establish Multiple Frame Operation

Requirement supported as stated.

12.6.3.2.4 Received Invalid Frame Counter

Requirements not supported.

12.6.3.3 Forced EOC and TMC/CSC Path Activity

Requirements supported as stated.

12.6.3.4 EOC and TMC/CSC Path Protection Switch Messages

Requirements supported as stated.

12.6.3.5 EOC and TMC/CSC Path Protection Switch Procedures

Requirements supported with the following exceptions.

The 5ESS®-2000 switch handles a data link path switch request, such as a manual data link switch request or an automatic removal of the active data link, as follows:

- When the 5ESS®-2000 switch TR303 interface requests a data link path switch, the switch issues the request on the standby data link (if available) and waits for acknowledgement.
 - If the request encounters a time-out, the 5ESS®-2000 switch issues a second request, this one on the active link.
- If the initial request (or the second request, if the initial request encountered a time-out) fails, but the request was to correct a hardware inconsistency between the LDS and the RDT, a new request is placed on a maintenance queue for another attempt.
- If the request fails, but the request was not to correct a hardware inconsistency, the method of recovery is determined by whether the request was forced:
 - If the request was forced, the 5ESS®-2000 switch executes a data link switch within the LDS, without receiving acknowledgement of success from the RDT.
 - If the request was not a forced request, the request is denied.
- If the data link switch attempt with the RDT is successful, the data link switch within the LDS is executed.

If both data links for an RDT encounter a duplex failure condition, the 5ESS®-2000 switch issues the following alarm:

- Major alarm, if the RDT has less than 128 ports
- Critical alarm, if the RDT has 128 or more ports.

12.6.3.6 EOC and TMC/CSC Path Recovery

Requirements supported as stated.

12.6.3.7 Architecture Dependent Issues

Requirements supported as stated.

12.6.4 EOC AND TMC/CSC APPLICATION LAYER PROCESSOR

Requirements supported as stated.

12.7 OPERATIONS REQUIREMENTS ACROSS THE GENERIC IDLC INTERFACE

No text follows this heading.

12.7.1 OS/IDLC COMMUNICATION CONVENTIONS

Requirements supported to match current 5ESS®-2000 switch-OS configurations.

The 5ESS®-2000 switch TR303 implementation operates in the current OS environment. The 5ESS®-2000 switch interfaces with existing switch Operations Systems and provides a mediation function between these systems and the TR303 RDT. The OIM Gateway function is not supported.

12.7.1.1 OS-to-RDT Communications

No requirements are stated.

12.7.1.1.1 RDT Routing

Requirements supported to match current switch-OS functionality.

12.7.1.1.2 IDT Routing

Requirements supported to match current switch-OS functionality.

12.7.1.2 RDT-to-OS Communications

No requirements are stated.

12.7.1.2.1 RDT Response Routing

Requirements supported to match current switch-OS functionality.

12.7.1.2.2 IDT Response Routing

Requirements supported to match current switch-OS functionality.

12.7.1.3 Automatic Message Routing

Requirements supported to match current switch-OS functionality.

12.7.1.4 Circuit-Equipment Identity

Requirements supported to match current switch-OS functionality.

12.7.2 OPERATIONS MESSAGES

Information relevant to this section (of TR303, Revision 2) is provided in Section 13.1 of this document.

(Note that Section 13.1 is not reference based and does not have a corresponding section in TR303—refer to TR303, Supplement 3 for ASN.1 information.)

12.7.2.1 System Administration and Security Messages

Information relevant to this section (of TR303, Revision 2) is provided in Section 13.1 of this document.

(Note that Section 13.1 is not reference based and does not have a corresponding section in TR303—refer to TR303, Supplement 3 for ASN.1 information.)

12.7.2.2 Memory Administration (Provisioning)

Information relevant to this section (of TR303, Revision 2) is provided in Section 13.1 of this document.

(Note that Section 13.1 is not reference based and does not have a corresponding section in TR303—refer to TR303, Supplement 3 for ASN.1 information.)

12.7.2.3 System Maintenance Messages

Information relevant to this section (of TR303, Revision 2) is provided in Section 13.1 of this document.

(Note that Section 13.1 is not reference based and does not have a corresponding section in TR303—refer to TR303, Supplement 3 for ASN.1 information.)

12.7.2.4 Circuit Testing (System Maintenance) Messages

No requirements are stated.

12.7.2.5 Test Access (System Maintenance) Messages

Information relevant to this section (of TR303, Revision 2) is provided in Section 13.1 of this document.

(Note that Section 13.1 is not reference based and does not have a corresponding section in TR303—refer to TR303, Supplement 3 for ASN.1 information.)

12.7.3 TESTING

Requirements supported as stated.

In the following subsections in this document, it is understood that the IDCU will support only ASN.1 syntax messages over the EOC. ASN.1 information is provided in Section 13.1 of this document. (Note that Section 13.1 is not reference based and does not have a corresponding section in TR303—refer to TR303, Supplement 3 for ASN.1 information.)

12.7.3.1 Switched Services Testing

Requirements supported with the following exceptions.

The only requirement in this section states that the TR303 interface shall support all the requirements in the following subsections. Since some requirements in the following subsections are not supported at this time, the phrase *Requirements supported with the following exceptions* is used.

12.7.3.1.1 Metallic Test Access Procedures

Requirements supported with the following exceptions.

In the 5ESS®-2000 switch TR303 interface:

- a. Monitor access on the test access path is not supported.
- b. Full splitting test access to RDT line termination equipment is not supported. Split-out test access is supported, and testing can be performed on the drop toward the CPE.

12.7.3.1.2 Line Terminating Equipment Test Procedures

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface does not support the CSC call processing signaling method for sending the requested signaling to the line terminating equipment under test.

12.7.3.1.3 Line Terminating Equipment Diagnostic Procedures Option

Requirements not supported.

The 5ESS®-2000 switch TR303 interface does not support RDT equipment diagnostic messages because it does not support the OIM gateway functionality.

12.7.3.2 Special Service Testing

Requirements not supported.

12.7.3.3 Facility Testing

Requirements supported with the following exception.

In the 5ESS®-2000 switch TR303 interface, a switch technician may request that a DS1 signal be looped back at the RDT, but this interface does not take action on a similar request from an RDT over the EOC.

Note: A DS1 loopback is considered to include the entire DS1 line signal (193 bits) including the DS1 framing bit.

12.7.3.3.1 Far-End Loopback Procedure—With Protection Switch Option

Requirements supported with a different implementation than that stated.

- On the IDCU, only out-of-band (that is, EOC) far-end loopback procedures are supported.
- At the RDT, loopback is supported via the 5ESS®-2000 switch maintenance workstations.
- On the DNU-S, far-end loopback procedure with protection switch option is not supported.

12.7.3.3.2 Far-End Loopback Procedure—Without Protection Switch

Requirements supported with a different implementation than that stated.

- The 5ESS®-2000 switch TR303 interface supports only the out-of-band (that is, EOC) far-end loopback procedure.
- At the RDT, loopback is supported via the 5ESS®-2000 switch maintenance workstations.
- On the DNU-S, far-end loopback testing without protection switch option is supported.

12.7.3.4 Common Equipment Testing

RDT requirements only are stated.

12.7.4 MAINTENANCE SCENARIOS

No requirements are stated.

In the following subsections in this document, it is understood that the 5ESS®-2000 switch TR303 interface supports only ASN.1 syntax messages over the EOC.

12.7.4.1 Trouble Reporting

Requirements supported - the following interpretations were used for implementation.

The network monitoring and analysis system is interpreted to be both the 5ESS®-2000 switch receive-only printer (ROP) and the 5ESS®-2000 switch maintenance I/O channel.

12.7.4.2 Trouble Verification

RDT requirements only are stated.

The 5ESS®-2000 switch TR303 interface does not support RDT equipment diagnostics because it does not support the OIM gateway functionality.

12.7.4.3 Service Protection

Requirements supported as stated.

In the 5ESS®-2000 switch IDCU implementation, it is not possible to force a protection line switch to occur when the protection DS1 is not in service or is otherwise unavailable.

12.7.4.4 Sectionalize and Locate Fault

Requirements supported as stated.

Note that a DS1 loopback is considered to include the entire DS1 line signal (193 bits) including the DS1 framing bit.

12.7.4.5 Verify Repair

RDT requirements only are stated.

12.8 REQUIREMENTS AND OPTIONS SUPPORTING SYSTEM TURNUP

No requirement is stated.

12.8.1 MEMORY ADMINISTRATION DATA INITIALIZATION FOR THE IDLC INTERFACE

Requirements supported with the following exceptions.

The 5ESS®-2000 switch TR303 interface supports hybrid signaling (TMC plus ABCD codes), but it does not support Common Signaling Channel (CSC); this includes initialization of LAPD parameters for CSC. The major IDLC system memory administration data initialization requirements are evaluated in TR303 Section 9.1.3. However, this section evaluates the additional initialization requirements. Refer to the comments in Section 12.4.3.5.11 of this 5ESS®-2000 switch interface specification for more information on TEI assignment.

12.8.2 SYSTEM START

RDT requirements only are stated.

12.8.3 POWER ON FOLLOWING COMMERCIAL AC POWER FAILURE

Requirement(s) supported with the following exceptions.

Under item *k*, the performance monitoring requirements are met by the 5ESS®-2000 switch TR303 interface with the exception that CSC counters will not be supported.

12.8.4 POWER-ON PLUG-IN REPLACEMENT

RDT requirements only are stated.

12.9 IDLC INTERFACE TRANSITION CONSIDERATIONS

No requirements are stated.

This section provides guidelines for conversion of universal DLC to integrated DLC. The DNU-S supports only the TR303 interface and, therefore, cannot support temporary termination of a non-TR303 interface during conversion.

12.9.1 UNIVERSAL DLC TO INTEGRATED DLC CONSIDERATIONS

No requirements are stated.

This section provides guidelines for conversion of universal DLC to integrated DLC.

12.9.2 SIGNALING AND TRANSMISSION CONSIDERATIONS

No requirements are stated.

This section provides guidelines for conversion of universal DLC to integrated DLC.

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TR-NWT-000303 INTERFACE SPECIFICATION**

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13. ASN.1 MESSAGE SPECIFICATIONS

13.1 SECTION OVERVIEW

13.1.1 OVERVIEW

This section defines the TR303 Embedded Operations Channel (EOC) messages and the objects that the 5ESS®-2000 switch will support. The embedded object oriented model, as defined by the messages and the objects, basically follows that defined in the Bellcore TR303 Supplement 3*. The interface presented in the Bellcore TR303 document, Supplement 3, is open and flexible. This Lucent Technologies interface specification document presents only the TR303 interface to be implemented in 5ESS®-2000 switch. Some messages and objects, beyond TR303 Supplement 3 domain, for vendor-enhanced operations, administration, and maintenance (OA&M) functions are also included in this document.

The EOC messages are defined using Abstract Syntax Notation One (ASN.1)†, Remote Operations Service Element (ROSE)‡, and Common Management Information Service Element (CMISE)§. The CMISE syntax used in this interface specification is primarily the 1991 version, with exceptions indicated in the document. A brief overview of the protocols is presented in Section 13.2. The actual CMISE definitions used in this specification are included in Section 13.6.3 for reference.

13.1.2 SECTION STRUCTURE

This section is divided into five sections as follows:

- Section 13.1 gives an overview on the structure of this section.
- Section 13.2 provides a high-level description on the concept of object and the CMISE and ROSE protocols.
- Section 13.3 defines the objects and their attributes.
- Section 13.4 provides the management service descriptions.
- Section 13.5 provides the operational procedures.
- Section 13.6 presents the ASN.1 modules of the objects, attributes, actions, notifications, and syntax.

* Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface: Operations (ROS/CMIS/ASN.1) Message Release 1.0*, Supplement 3, Revision 1, August 1992; TR-NWT-000303.

† CCITT Recommendation X.208, *Specification of Abstract Syntax Notation One (ASN.1)*, 1988.

‡ International Standard - *Information Processing Systems - Text Communication - Remote Operations - Part 1: Model, Notation and Service Definition*, ISO/IEC/DIS 9072-1.2, International Organization for Standardization, 1988.

§ International Standard - *Information Processing Systems - Open Systems Interconnection - Common Management Information Service Definition*, ISO/IEC 9596, International Organization for Standardization, 1991.

13.2 PROTOCOL DESCRIPTION

13.2.1 BASIC OVERVIEW

The TR303 EOC utilizes the following communication layers:

Layer 1 (Physical):	DS0
Layer 2 (Link):	LAPD
Layer 7 (Application):	ASN.1, ROSE, and CMISE

The application layer is modeled as having several layers. For the TR303 EOC, these are as follows:

1. User Program
2. The Common Management Information Service Element (CMISE)
3. The Remote Operations Service Element (ROSE).

The different layers interact through the usage of the ROSE and CMISE primitives. ROSE provides an underlying service for the application layer. The service includes the invocation of an operation request from CMISE and the reception of a response. ROSE application protocol data units (APDU) are exchanged between the ROSE layers of the two application entities. In this document, a ROSE APDU is equivalent to an application layer message.

The Common Management Information Service Element (CMISE) defines a set of services that are used to perform operations over the message link. For example, to set a parameter value, the "M-SET" service is used. The Common Management Information Protocol (CMIP) defines the operations based on CMISE in ASN.1, and assigns values to the operations. The messages in this document are based on the operations defined by CMIP. The ASN.1 in CMIP and the basic encoding rules (BER) of ASN.1 are used to encode the messages defined in this document.

This document covers only layer 7¹. The basic encoding rules can be found in CCITT Recommendation X.209, *Specification of the Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)*, 1988.

Abstract Syntax Notation One (ASN.1) defines the syntax of the object messages in this document. Section 13.6 contains the ASN.1 for the objects, the attributes, and the messages. The ASN.1 in reference imports definitions.**

The 5ESS[®]-2000 switch TR303 interface does not support the Association Control Service Element (ACSE) in the application layer.

¹ The 5ESS[®]-2000 switch implementation of the TR303 interface includes a convergence function between Layer 2 and Layer 7, based on V.120.

** International Standard *Information Processing Systems - Text Communication - Remote Operations - Part 2: Protocol Specification*, ISO/IEC/DIS 9072-2, International Organization for Standardization, 1988; International Standard *Information Processing Systems - Open Systems Interconnection - Common Management Information Protocol Definition*, ISO/IEC 9596, International Organization for Standardization, 1990; and other ASN.1 sources.

13.2.2 OBJECTS

13.2.2.1 General

The basic premise of this document is that an Operations System (OS) or a Local Digital Switch (LDS) is used to manage a Network Element (NE) such as an RDT. The process of managing the Network Element involves performing operations that manipulate elements in the NE. For example, a DS1 loopback command from a LDS/OS is an operation performed on a DS1 Line Termination in the NE.

In order to define a generic interface between the LDS/OS and the RDT, the LDS/OS and RDT must have the same logical view of the RDT. The term "object" has been used to represent this logical view. Managed objects are objects that model physical elements of an RDT. For example, an Analog Line Termination object can be used to model the Channel Unit hardware in addition to any parameters related to the line which it terminates.

Managed support objects are logical objects that do not represent physical resources but are defined to support the function of managing the RDT. For example, an Event Report Control does not represent any physical hardware, but is used to facilitate managing the event report activities.

For this interface, a set of objects, described in Section 13.3, are used as a model of the RDT. Each object contains an ID, which is used for naming purpose, and a set of attributes. Some of these attributes are provisionable (for example, performance monitoring thresholds), and some are read-only (for example, the Line Circuit Address is the location or slot that a line unit is plugged into). Some attributes represent the state of the object. Each object definition also includes a set of operations that may be performed on the object.

The object definitions in this document indicate which attributes are mandatory and which attributes are optional. Regardless of whether or not an attribute is mandatory, if it is supported by the RDT, the RDT should support all the attribute's characteristics. That is, if an attribute is settable and readable in an object class description, the RDT should support writing and reading of the attribute for any instance of that object class.

13.2.2.2 Object Creation and Deletion

There are three methods for creating object instances at the RDT. They are as follows:

- Inherently
- Explicitly
- Automatically.

Explicit creation implies that the LDS/OS may create an object using an M-CREATE service. This method is used for objects such as Analog Line Terminations and Cross-Connections. When objects that physically exist are created by the RDT at system initialization time, it is known as inherent creation. Examples of objects that are inherently created at system initialization time are the DS1 Framed Path Termination and the DS0 Channel Termination object instances. Objects can also be automatically created, for example, when a circuit pack is installed, an instance of the Circuit Pack class is automatically created by the RDT.

Explicit deletion from an LDS/OS can apply to inherently or explicitly created objects; the 5ESS[®]-2000 switch, however, will not send an M-DELETE service to an RDT for an inherently created object generally.

13.2.2.3 Object Naming

Each object class defined in the RDT model is given a tag value in ASN.1 that is termed the "Object Class ID" in this document. Each attribute defined in the RDT is given an ASN.1 tag that is termed "Attribute Type ID" in this document.

Each object in the RDT has a name attribute. In general, each name attribute is integer valued. The Attribute Type ID of the name attribute, along with the assigned integer value, form the relative distinguished name (RDN) of an object. For example, DS1 number 1, modeled as a DS1 Line Termination object, has a name attribute called DS1 Line Termination ID, which is assigned an integer value of 1. Therefore, the RDN is a sequence of the Analog Line Termination ID Attribute Type ID and the integer value 1.

The name of the RDT is an integer value stored in the Network Element ID attribute of the Network Element object. Therefore, the RDT RDN is a sequence of the Network Element ID Attribute Type ID and the integer value n. So the name for an RDT is a sequence of the Network Element ID Attribute Type ID and the Network Element ID value.

Each object class has its own numbering space. To distinguish between objects of the same class that may be contained in different network elements, name sequencing (called "name binding" in the standards) is used. For instance, Analog Line Termination number 1 in network element number 5 is called Network Element 5, Analog Line Termination 1. This distinguishes it from Analog Line Termination number 1 in all of the other network elements. The sequence of names is called a sequence of RDNs (denoted RDNSequence in the sections that follow). This is used to distinguish objects that have the same class and same RDN but are contained in different objects. For this interface, we only need to be concerned about naming inside the RDT. Therefore, it is not necessary to append the network element ID to each object in the RDT when identifying them in a message.

In using the ObjectClass and ObjectInstance CMISE productions, this interface specification document only supports the globalForm for ObjectClass and the localDistinguishedName for ObjectInstance. Furthermore, the local DN of the Network Element itself is the empty SEQUENCE.

13.2.2.4 Allomorhism

Allomorhism is the ability of an object of a given class to be managed as an instance of one or more other object classes. If an object class A identifies class B as a member of its allomorphic set, an instance of class A can be managed as if it were an instance of class B.

13.2.2.5 Subclassing

The object-oriented interface model used for TR303 interface utilizes subclassing. Internally, the RDT vendors may subclass from any object to provide vendor specific RDT features. In interfacing with the RDT, the 5ESS[®]-2000 switch supports only the object classes documented in this document.

13.2.3 OVERVIEW OF THE REMOTE OPERATIONS STANDARDS

The Remote Operations standards provide a basic format for the invocation of an operation (that is, a message) and the corresponding success and failure replies. There are four ROSE APDUs that this document makes use of as follows:

ROIvapdu: Invocation

This is sent to invoke an operation. If a message requires that more than one response be returned, this primitive is used for all of the responses except for the last one.

RORSapdu: Return Result

This is used to indicate that the operation was successful. For an invocation that requires multiple responses, this is the last response sent if the operation was successful.

ROERapdu: Return Error

This is used to indicate that the operation was not successful. For an invocation that requires multiple responses, this is the last response sent if part or all of the operation was unsuccessful.

RORJapdu: Reject

This is used to indicate that the operation was rejected. Many optional features of this APDU (including optional parameter fields) have been omitted in this document to simplify the descriptions since they are not used in any of the messages.

13.2.4 CMIP OPERATIONS OVERVIEW

The following CMIP operations are used in this document:

m-Action-Confirmed:

This operation requests the receiver to perform an action on managed object(s).

m-Create:

This operation is used by an OS/LDS to create a new managed object instance in the RDT.

m-Delete:

This message requests the RDT to delete a managed object.

m-EventReport:

This operation provides a means for the RDT to autonomously notify the far end of conditions or events that have occurred. Some of the events it may be used for include reporting the following:

- Alarms
- Performance monitoring threshold crossings (alerts)
- RDT data corruption
- Service state changes.

m-Get:

This message is used to retrieve information from the network element. It is invoked to retrieve attribute values of objects in the RDT. The invoker requests the performer to return the value(s) of the indicated object attribute(s).

m-Linked-Reply:

This operation is used for multiple replies to the following operations:

- m-Action-Confirmed
- m-Delete
- m-Get
- m-Set-Confirmed.

m-Set-Confirmed:

This message is used to provision/modify data in the network element. It is invoked to set attribute values of objects in the RDT.

CMISE scoping and filtering are used in the interface specified by this document and the RDT vendors are required to support them.

13.3 OBJECTS

This section describes the subset of the TR303 defined objects used in the LDS-RDT interface. Those object classes with which the 5ESS®-2000 switch does not interact are not mentioned here. Similarly, objects defined for inheritance purposes only are not described here. These object definitions that follow are not intended to replace those found in TR303, but rather to explain how the 5ESS®-2000 switch intends to use the objects and to specify selections where the Bellcore TR303 document allows implementation options.

In addition, the definitions for two object classes defined by Lucent Technologies to support enhanced ISDN Performance Monitoring are included. The object class names for these objects are prefixed by "ATT."

13.3.1 OBJECT CLASS TEMPLATE

The following form is used for describing the behavior definitions and characteristics for each object class.

MANAGED OBJECT CLASS:	Object class name
Object Class Label:	ASN.1 identifier

13.3.1.1 Behavior Definitions

This describes the behavior definitions of the object class. References may be made here to other parts of the section.

13.3.1.2 Characteristics

13.3.1.2.1 Subclass

This describes the subclassing.

13.3.1.2.2 Naming

This describes the name bindings supported by the 5ESS®-2000 switch for this object class.

13.3.1.2.3 Creation and Deletion

This describes how instances are created and deleted.

13.3.1.2.4 Notifications

This section lists the notifications that the 5ESS®-2000 switch expects and will process from the given object class. While other notifications may be allowed in TR303 for the object class, they will be ignored.

13.3.1.2.5 Actions

This section describes the actions that the 5ESS®-2000 switch will use for the given object class. While TR303 may allow other actions to operate on a given object class, the 5ESS®-2000 switch will not send them.

13.3.1.2.6 Attributes Restrictions

This describes the restrictions that can be placed on the domains of attributes.

13.3.2 ANALOG LINE TERMINATION

MANAGED OBJECT CLASS:	Analog Line Termination
Object Class Label:	analogLineTermination

13.3.2.1 Behavior Definitions

The Analog Line Termination object class is a class of managed objects that delimit analog lines. Analog Line Terminations represent points at which the analog signal is originated and/or terminated.

13.3.2.2 Characteristics

13.3.2.2.1 Subclass

top/terminationPoint/lineTermination/**analogLineTermination**

13.3.2.2.2 Naming

The name binding **analogLineTermination-networkElement** using the attribute **Analog Line Termination Id** is used for naming instances of this class.

13.3.2.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will explicitly create instances of this object class. The TR303 also allows inherent creation of this object class for all equipped line terminations at system turn-up.
- (b) **Deletion:** Instances of this object are explicitly deleted. If the value of redlined attribute is TRUE, the object can only be deleted when the Access Control field of the M-Delete message indicates the attribute ID=Redlined and attribute value =TRUE. If the Redlined attribute is FALSE or the Redlined attribute is not present, the object instance can be deleted using M-DELETE without access control.

13.3.2.2.4 Notifications

- (a) **Event Reporting:** This event report service is used to report the primary service state changes of this Line Termination object. The switch caused service state changes shall not be reported. When used for this purpose, this event report service contains the following arguments:
 - **Problem Type:** This argument specifies the type of problem. The value "service problem type" should be used for reporting service state changes.
 - **Alarm Severity:** This argument specifies the alarm severity.
 - **Monitored Attributes:** This argument includes the Primary Service State and Secondary Service State attributes.

13.3.2.2.5 Actions

- (a) **Connect Test Response Circuit:** This is used to connect a test response circuit to the analog line termination.
- (b) **Release Test Response Circuit:** This action is used to release the test response circuit from the analog line termination.
- (c) **Remove:** This action is used to remove a line from service. Once a line termination has been removed from service (OOS MT SWITCH), the RDT should not forward any originations (that is, SETUP messages) to the switch over the TMC for that line.
- (d) **Restore:** This action is used to restore a line to service.

13.3.2.2.6 Attributes Restrictions

- (a) **Analog Line Termination ID:** The value for the Analog Line Termination ID is restricted to be the same as the value of the Call Reference Value attribute for the object instance. This applies to all line terminations, whether they be inherently or explicitly created.
- (b) **Line Circuit Address:** This read-only attribute is **NOT** supplied in the M-CREATE sent by the 5ESS[®]-2000 switch. The RDT is expected to derive an appropriate value for this attribute from the physical wire number as provided by the Call Reference Value attribute.

13.3.3 ATT ISDN FRAMED PATH TERMINATION

MANAGED OBJECT CLASS: ATT ISDN Framed Path Termination

Object Class Label: attIsdnFramedPathTermination

13.3.3.1 Behavior Definitions

The ATT ISDN Framed Path Termination object class is a class of managed objects that delimit U-DSL paths. It is an allomorphic subclass of ISDN Framed Path Termination object class with additional attributes. This object class was defined to provide enhanced ISDN Level 1 Performance Monitoring capabilities, equivalent to those provided for ISDN lines that terminate directly on the 5ESS®-2000 switch. While all RDT vendors are encouraged to use this object class definition for ISDN Framed Path objects, they may choose to implement the ISDN Framed Path Termination object class as defined by TR303.

13.3.3.2 Characteristics

13.3.3.2.1 Subclass

top/terminationPoint/framedPathTermination/isdnFramedPathTermination/
attIsdnFramedPathTermination

13.3.3.2.2 Naming

The name binding **attIsdnFramedPathTermination-isdnLineTermination** using the attribute **ISDN Framed Path Term Id** is used for naming instances of this class.

13.3.3.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object class may be created by specifying the ATT ISDN Framed Path Termination object in the CMIS M-CREATE service.
- (b) **Deletion:** Instances of this object class may be deleted by specifying the ATT ISDN Framed Path Termination object in the CMIS M-DELETE service.

13.3.3.2.4 Notifications

All notifications are inherited from the ISDN Framed Path Termination object class. See Section 13.3.21.2.4 for details.

13.3.3.2.5 Actions

All actions are inherited from the ISDN Framed Path Termination object class. See Section 13.3.21.2.5 for details.

13.3.3.2.6 Attributes Restrictions

- (a) **ISDN Framed Path Term Id:** The value for the ISDN Framed Path Termination ID is restricted to be the same as the value of the ISDN Line Termination ID attribute of the containing object.

- (b) **Current Threshold Crossing Register:** The "Current Threshold Crossing Register" attribute indicates which of the Performance Monitoring thresholds have been crossed for the current hour, day, or interval. A bit with a value of "1" indicates that the corresponding threshold was crossed. A bit with a value of "0" indicates that the corresponding threshold was not crossed. The thresholds have the following set of associated bits:
- **Bit 0** -- SES Hr Threshold (Alert)
 - **Bit 1** -- ES Hr Threshold (Alert)
 - **Bit 2** -- SES Day Threshold (Alert)
 - **Bit 3** -- ES Day Threshold (Alert)
 - **Bit 4** -- SES Int Report Threshold
 - **Bit 5** -- ES Int Report Threshold
 - **Bit 6** -- SES Day Report Threshold
 - **Bit 7** -- ES Day Report Threshold.
- (c) **Previous Threshold Crossing Register:** The "Previous Threshold Crossing Register" attribute indicates which of the thresholds was crossed for the previous hour, day, or interval. It has the same format as the Current Threshold Crossing Register.
- (d) **eoc State Upstream:** The "eoc State Upstream" attribute indicates the bit state of the upstream eoc for instances of this object.
- (e) **eoc State Downstream:** The "eoc State Downstream" attribute indicates the bit state of the downstream eoc for instances of this object.
- (f) **CV FE Int Current:** The "CV FE Int Current" attribute indicates the value of Coding Violation Far End (block error downstream) counts for the current monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (g) **SES FE Int Current:** The "SES FE Int Current" attribute indicates the value of Severely Errored Second Far End (downstream) counts for the current monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (h) **ES FE Int Current:** The "ES FE Int Current" attribute indicates the value of Errored Second Far End (downstream) counts for the current monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (i) **CV Int Current:** The "CV Int Current" attribute indicates the value of Coding Violation Near End (block error upstream) counts for the current monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.

- (j) **SES Int Current:** The "SES Int Current" attribute indicates the value of Severely Errored Second Near End (upstream) counts for the current monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (k) **ES Int Current:** The "ES Int Current" attribute indicates the value of Errored Second Near End (upstream) counts for the current monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (l) **CV FE Int Previous:** The "CV FE Int Previous" attribute indicates the value of Coding Violation Far End (block error downstream) counts for the previous monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (m) **SES FE Int Previous:** The "SES FE Int Previous" attribute indicates the value of Severely Errored Second Far End (downstream) counts for the previous monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (n) **ES FE Int Previous:** The "ES FE Int Previous" attribute indicates the value of Errored Second Far End (downstream) counts for the previous monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (o) **CV Int Previous:** The "CV Int Current" attribute indicates the value of Coding Violation Near End (block error upstream) counts for the previous monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (p) **SES Int Previous:** The "SES Int Current" attribute indicates the value of Severely Errored Second Near End (upstream) counts for the previous monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (q) **ES Int Previous:** The "ES Int Current" attribute indicates the value of Errored Second Near End (upstream) counts for the previous monitored period of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (r) **ES FE Int History:** The "ES FE Int History" attribute indicates the value of Errored Second Far End (downstream) counts for the other previous monitored periods of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.
- (s) **ES Int History:** The "ES Int History" attribute indicates the value of Errored Second Near End (upstream) counts for the other previous monitored periods of "x" hours. The length of "x" hours is specified by the attribute *Interval Length* in the PM Interval Profile object.

- (t) ***SES Int Report Threshold:*** The "SES Int Report Threshold" attribute specifies the Severely Errored Seconds interval reporting threshold. If the number of severely errored seconds during an interval exceeded this threshold, the performance monitoring report generated at the end of the interval would include the performance data for this DSL.
- (u) ***ES Int Report Threshold:*** The "ES Int Report Threshold" attribute specifies the Errored Seconds interval reporting threshold. If the number of errored seconds during an interval exceeded this threshold, the performance monitoring report generated at the end of the interval would include the performance data for this DSL.
- (v) ***SES Day Report Threshold:*** The "SES Day Report Threshold" attribute specifies the Severely Errored Seconds daily reporting threshold. If the number of severely errored seconds during a day exceeded this threshold, the corresponding CTCR bit is set for this DSL. The default value is 15.
- (w) ***ES Day Report Threshold:*** The "ES Day Report Threshold" attribute specifies the Errored Seconds daily reporting threshold. If the number of errored seconds during a day exceeded this threshold, the corresponding CTCR bit is set for this DSL. The default value is 50.

13.3.4 ATT PM FREEZE SCHEDULE

SUPPORT OBJECT CLASS:	ATT PM Freeze Schedule
Object Class Label:	attPmFreezeSchedule

13.3.4.1 Behavior Definitions

The ATT PM Freeze Schedule object class is a class of management support objects used to provide enhanced Performance Monitoring for ISDN and DS1 Line Terminations. The PM Start Time attribute is used to indicate the hour at which the PM day begins. The other attributes define the schedule which the RDT uses to notify the 5ESS[®]-2000 switch that its PM data is ready for collection. The ATT PM Data Ready notification, is sent to the switch at the end of each freeze operation as specified by the Interval attribute. On receipt of this notification, the 5ESS[®]-2000 switch will use the M-GET service to retrieve the appropriate PM counts for a scheduled report.

13.3.4.2 Characteristics

13.3.4.2.1 Subclass

top/mgmtOpnsSched/attPmFreezeSchedule

13.3.4.2.2 Naming

The name binding **attPmFreezeSchedule-networkElement** using the attribute **attPmFreezeScheduleId** is used for naming instances of this object class for DSL performance monitoring reporting. The name binding **attPmFreezeSchedule-idlcTerminal** using the attribute **attPmFreezeScheduleId** is used for naming instances of this object class for DS1 performance monitoring reporting.

13.3.4.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object class are created by specifying the ATT PM Freeze Schedule object in the CMIS M-CREATE service. The 5ESS[®]-2000 switch will create zero, one, or two instances of this object: one for ISDN Framed Path Termination and one for DS1 Framed Path Termination as specified by the "Affected Object Class" attribute.
- (b) **Deletion:** Instances of this object class may be deleted by specifying the ATT PM Freeze Schedule object in the CMIS M-DELETE service.

13.3.4.2.4 Notifications

- (a) **ATT PM Data Ready:** This event report service is sent from the RDT when the RDT has finished its freeze, update, and collect operation of the performance monitoring counts. No arguments are supplied.

13.3.4.2.5 Actions

No actions are requested of instances of this object class.

13.3.4.2.6 Attributes Restrictions

- (a) **ATT PM Freeze Schedule Id:** The "ATT PM Freeze Schedule Id" is an attribute type whose distinguished value can be used as an RDN when naming an instance of the ATT PM Freeze Schedule object class. Its value may be a naming integer or a printable string.
- (b) **Scheduled State:** This attribute is inherited from the Management Operations Schedule object. The "Scheduled State" attribute indicates whether the object is active or inactive.
- (c) **Management User Id:** This attribute is inherited from the Management Operations Schedule object. The "Management User Id" attribute identifies the management application entity in a system where a service is associated. Examples of these entities are the destination to which a report will be sent and the source from which a message is sent.
- (d) **Begin Time:** This attribute is inherited from the Management Operations Schedule object. The "Begin Time" attribute indicates the starting time of a time span or the starting time of a series of periodic time spans. It is complemented by an "end time" attribute to be described later in this section. If "begin time" is implemented as generalized time, the associated value is used to indicate the absolute starting time (year, month, day, hour, etc.). If implemented as a TimeOfDay (a time based upon the 24-hour clock), the starting time will occur when the real-time 24-hour clock reaches the value specified by begin time. A value of "immediate" may be achieved by specifying "NULL" for this attribute in the CMIP M-CREATE message. In this case, the network element will fetch its own current generalized time and use it as the attribute value.

The choice of type must be the same for both begin time and end time attributes.

- (e) **End Time:** This attribute is inherited from the Management Operations Schedule object. The "End Time" attribute works in conjunction with the "begin time" attribute. The end time attribute indicates the termination time of a time span or a series of periodic time spans. If "end time" is implemented as generalized time, the associated value is used to indicate the absolute ending time (year, month, day, hour, etc.). If implemented as a TimeOfDay (a time based upon the 24-hour clock), the ending time will occur when the real-time 24-hour clock reaches the value specified by end time. A value of "no end" may be achieved by specifying "NULL" for this attribute in the CMIP m-Create message.

The choice of type must be the same for both begin time and end time attributes.

- (f) **Interval:** This attribute is inherited from the Management Operations Schedule object. The "Interval" attribute indicates the frequency that ATT PM Data Ready notification is sent to the LDS from the RDT. The interval can be specified in seconds, minutes, hours, or days.
- (g) **Affected Object Class:** This attribute is inherited from the Management Operations Schedule object. The "Affected Object Class" attribute identifies the object class affected by a management operation. Valid values of this attribute are subclasses of "Line Termination" or "Framed Path Termination" only.
- (h) **Affected Object Instances:** This attribute is inherited from the Management Operations Schedule object. The "Affected Object Instances" attribute identifies the object instances affected by a management operation that the ATT PM Freeze

Schedule is applicable to. The valid values for this attribute are sets of DistinguishedName. For the ATT PM Freeze Schedule object instance for ISDN Framed Path Termination, the valid affected object instances are the ISDN Framed Path Termination object instances name bound to the Network Element. For the ATT PM Freeze Schedule object instance for DS1 Framed Path Termination, the valid affected object instances are the DS1 Framed Path Termination object instances name bound to the same IDLC Terminal as the ATT PM Freeze Schedule object instance. When this attribute is an empty set, it means that all valid affected object instances are under the control of the schedule.

- (i) ***PM Start Time:*** This attribute identifies the hour at which the performance monitoring daily and interval counts should start. Valid values are integers (0-23). Zero denotes midnight.

13.3.5 CIRCUIT PACK

MANAGED OBJECT CLASS:	Circuit Pack
Object Class Label:	circuitPack

13.3.5.1 Behavior Definitions

The Circuit Pack object class is a class of managed objects that represent physical circuits packs that can be plugged into the equipment holders. The 5ESS[®]-2000 switch does not interact with the circuit pack object class in any way.

13.3.5.2 Characteristics

13.3.5.2.1 Subclass

top/circuitPack

13.3.5.2.2 Naming

The name binding **circuitPack-equipmentHolder** using the attribute **Circuit Pack Id**, is used for naming instances of this class.

13.3.5.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object class are automatically created in an RDT when a circuit pack is installed.
- (b) **Deletion:** Instances of this object class are automatically deleted in an RDT when a circuit pack is removed.

13.3.5.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.5.2.5 Actions

No actions are requested of instances of this object class.

13.3.5.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.6 CROSS-CONNECTION

MANAGED OBJECT CLASS:	Cross-Connection
Object Class Label:	crossConnection

13.3.6.1 Behavior Definitions

The Cross-Connection object class is a class of managed objects that indicates an assignment relationship between two terminations. Instances of this object class represent physical cross-connections between two terminations.

The 5ESS[®]-2000 switch will create cross-connection objects for the following applications:

- ISDN D channel to Quarter DS0 Channel Termination for all DSLs
- ISDN B channel to DS0 Channel Termination for provisioned packet B channels
- Line Termination to DS0 Channel Termination for nonswitched services nailed up through the switch
- Line Termination to DS0 Channel Termination for nonswitched services hairpinned through the IDCU.

The 5ESS[®]-2000 switch will NOT create cross-connection objects for the following applications:

- Line termination to DS0 Channel Termination for INA DS1s
- Line Termination to Line Termination.

13.3.6.2 Characteristics

13.3.6.2.1 Subclass

top/crossConnection

13.3.6.2.2 Naming

The name binding **crossConnection-networkElement** using the attribute **Cross-Connection Id** is used for naming instances of this class.

13.3.6.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object are created explicitly. The 5ESS[®]-2000 switch will use the automatic instance naming feature of CMISE for creation of cross connects.
- (b) **Deletion:** Instances of this object are deleted explicitly.

13.3.6.2.4 Notifications

No notifications are generated for instances of this object class.

13.3.6.2.5 Actions

No actions are requested of instances of this object class.

13.3.6.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.7 DDS LINE TERMINATION

MANAGED OBJECT CLASS:	DDS Line Termination
Object Class Label:	ddsLineTermination

13.3.7.1 Behavior Definitions

The DDS Line Termination object class is a class of managed objects that delimit digital data system lines. The 5ESS[®]-2000 switch does not provision DDS line terminations. It is expected that a Supervisory System will be available to create instances of this object class.

13.3.7.2 Characteristics

13.3.7.2.1 Subclass

top/terminationPoint/lineTermination/DDSLineTermination

13.3.7.2.2 Naming

The name binding **ddsLineTermination-networkElement** using the attribute **DDS Line Term Id** is used for naming instances of this class.

13.3.7.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object are created by other interfaces. The 5ESS[®]-2000 switch will not create instances of this object.
- (b) **Deletion:** Instances of this object are deleted by other interfaces. With the possible exception of a scoped delete (see "Parameters" [REF. .RM 13.4.1.2/), the 5ESS[®]-2000 switch will not delete instances of this object.

13.3.7.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.7.2.5 Actions

No actions are requested of instances of this object class.

13.3.7.2.6 Attributes Restrictions

- (a) **DDS Line Termination ID:** The value for the DDS Line Termination ID is restricted to be the same as the value of the Call Reference Value attribute for the object instance. This applies to all line terminations, whether they be inherently or explicitly created.

13.3.8 DS0 CHANNEL TERMINATION

MANAGED OBJECT CLASS:	DS0 Channel Termination
Object Class Label:	ds0ChannelTermination

13.3.8.1 Behavior Definitions

The DS0 Channel Termination object class is a class of managed objects that delimit ds0 channels.

13.3.8.2 Characteristics**13.3.8.2.1 Subclass**

top/terminationPoint/channelTermination/ds0ChannelTermination

13.3.8.2.2 Naming

The attribute DS0 Channel Termination ID is used to name instances of this class. The following name bindings are supported:

- ds0ChannelTermination-ds1FramedPathTermination (for DS0s contained in DS1 facility)
- ds0ChannelTermination-isdnFramedPathTermination (for DS0s contained in U-DSL path)
- ds0ChannelTermination-ddsLineTermination (for optional Secondary Channel Error Correction DS0).

13.3.8.2.3 Creation and Deletion

- (a) **Creation:** The DS0 Channel Terminations associated with an ISDN Framed Path Termination are created explicitly by the 5ESS[®]-2000 switch as needed. DS0 Channel Terminations associated with DS1 Framed Path Terminations and DDS Line Terminations are not created by the 5ESS[®]-2000 switch and must either be inherently created or created by a Supervisory System.
- (b) **Deletion:** The DS0 Channel Terminations associated with ISDN Framed Path Terminations are deleted by the 5ESS[®]-2000 switch as needed.

13.3.8.2.4 Notifications

No notifications are generated for instances of this object class.

13.3.8.2.5 Actions

No actions are requested of instances of this object class.

13.3.8.2.6 Attributes Restrictions

- (a) **DS0 Channel Term ID:** This "DS0 Channel Term Id" is an attribute whose distinguished value can be used as an RDN when naming an instance of the DS0 Channel Termination object class. Valid value are integers 1 to 24, corresponding to the DS1 time slot numbers, for DS0s that are part of a DS1 Framed Path

Termination object. The supported values for ISDN channels are 1 for B1 and 2 for B2. The only supported value for a DDS SCEC DS0 is 1.

13.3.9 DS1 FRAMED PATH TERMINATION

MANAGED OBJECT CLASS:	DS1 Framed Path Termination
Object Class Label:	ds1FramedPathTermination

13.3.9.1 Behavior Definitions

The DS1 Framed Path Termination object class is a class of managed objects that delimit DS1 framed paths.

13.3.9.2 Characteristics

13.3.9.2.1 Subclass

top/terminationPoint/framedPathTermination/**ds1FramedPathTermination**

13.3.9.2.2 Naming

The name binding **ds1FramedPathTermination-ds1LineTermination** using the attribute **DS1 Framed Path Term Id** is used for naming instances of this class.

13.3.9.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS®-2000 switch does not create instances of this object class. They must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS®-2000 switch does not delete instances of this object class.

13.3.9.2.4 Notifications

The CMIS M-EVENT-REPORT service can be invoked to report the following event(s) in the nonconfirmed mode.

- (a) **Event Reporting:** This event report service is used to report the occurrence of a threshold alert (that is, a performance monitoring threshold crossing). This event report service contains the following arguments:
 - **Problem Type:** This argument specifies the type of problem (that is, a threshold alert). This argument is comprised of the following additional subarguments:
 - **Triggered Threshold:** This subargument specifies the ID and value of the threshold that was exceeded (that is, triggered).
 - **Triggered Attribute:** This subargument specifies the ID and value of the count that exceeded the threshold.
 - **Alarm Severity:** This argument specifies the alarm severity of the event. The valid value is "warning."

- **Monitored Attributes:** This argument specifies additional data for a threshold alert. This data consists of the other related performance monitoring counts and thresholds. Tables 13-1 and 13-2 specify the valid combinations.

Table 13-1 — Valid Combinations for a Day Threshold Alert

TRIGGERED THRESHOLD	TRIGGERED ATTRIBUTE	MONITORED ATTRIBUTES
ES Day	ES Day Current	SES Day Current, SES Day Threshold SEFS Day Current, SEFS Day Threshold UAS Day Current, UAS Day Threshold DM Day Current, DM Day Threshold
SES Day	SES Day Current	ES Day Current, ES Day Threshold SEFS Day Current, SEFS Day Threshold UAS Day Current, UAS Day Threshold DM Day Current, DM Day Threshold
SEFS Day	SEFS Day Current	SES Day Current, SES Day Threshold ES Day Current, ES Day Threshold UAS Day Current, UAS Day Threshold DM Day Current, DM Day Threshold
UAS Day	UAS Day Current	SES Day Current, SES Day Threshold ES Day Current, ES Day Threshold SEFS Day Current, SEFS Day Threshold DM Day Current, DM Day Threshold
DM Day	DM Day Current	SES Day Current, SES Day Threshold ES Day Current, ES Day Threshold SEFS Day Current, SEFS Day Threshold UAS Day Current, UAS Day Threshold

Table 13-2 — Valid Combinations for a 15-Minute Threshold Alert

TRIGGERED THRESHOLD	TRIGGERED ATTRIBUTE	MONITORED ATTRIBUTES
ES Min	ES Min Current	SES Min Current, SES Min Threshold SEFS Min Current, SEFS Min Threshold UAS Min Current, UAS Min Threshold DM Min Current, DM Min Threshold
SES Min	SES Min Current	ES Min Current, ES Min Threshold SEFS Min Current, SEFS Min Threshold UAS Min Current, UAS Min Threshold DM Min Current, DM Min Threshold
SEFS Min	SEFS Min Current	SES Min Current, SES Min Threshold ES Min Current, ES Min Threshold UAS Min Current, UAS Min Threshold DM Min Current, DM Min Threshold
UAS Min	UAS Min Current	SES Min Current, SES Min Threshold ES Min Current, ES Min Threshold SEFS Min Current, SEFS Min Threshold DM Min Current, DM Min Threshold
DM Min	DM Min Current	SES Min Current, SES Min Threshold ES Min Current, ES Min Threshold SEFS Min Current, SEFS Min Threshold UAS Min Current, UAS Min Threshold

13.3.9.2.5 Actions

No actions are requested of instances of this object class.

13.3.9.2.6 Attributes Restrictions

The "DS1 Framed Path Term ID" attribute should have the same value as the corresponding DS1 Line Term Id.

- (a) **DS1 Framed Path Term ID:** The value for the DS1 Framed Path Termination ID is restricted to be the same as the value of the DS1 Line Termination ID attribute of the containing object.

13.3.10 DS1 LINE TERMINATION

MANAGED OBJECT CLASS:	DS1 Line Termination
Object Class Label:	ds1LineTermination

13.3.10.1 Behavior Definitions

The DS1 Line Termination object class is a class of managed objects that delimit DS1 lines.

13.3.10.2 Characteristics

13.3.10.2.1 Subclass

top/terminationPoint/lineTermination/**ds1LineTermination**

13.3.10.2.2 Naming

The DS1 Line Term Id attribute is used to name instances of this class. The following name bindings are allowed:

- ds1LineTermination-idlcTerminal (DS1 facility)
- ds1LineTermination-networkElement (DS1 extension)
- ds1LineTermination-equipment.

13.3.10.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch does not create instances of this object class. They must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.10.2.4 Notifications

The 5ESS[®]-2000 switch does not process notifications from instances of this object class.

13.3.10.2.5 Actions

- (a) **Operate Loopback:** This action service may be used to request a loopback. The action contains the following arguments:
- **Location:** Near end (that is, RDT)
 - **Direction:** Z to A
 - **Type:** Frame (that is, full bit pattern).
- (b) **Release Loopback:** This action service may be used to release a loopback. The action contains the following arguments:
- **Location:** Near end (that is, RDT)
 - **Direction:** Z to A.

13.3.10.2.6 Attributes Restrictions

- (a) **DS1 Line Term ID:** The DS1 Line Termination ID value used for facility DS1s is restricted to the physical DS1 number (1-28).

13.3.11 EQUIPMENT

MANAGED OBJECT CLASS:	Equipment
Object Class Label:	equipment

13.3.11.1 Behavior Definitions

The Equipment object class is a class of managed objects contained within Network Elements and performing Network Element Functions.

While the equipment/equipment holder structure is RDT vendor specific, the 5ESS[®]-2000 switch must know where it can retrieve power and environmental alarm information. For this reason, the 5ESS[®]-2000 switch assumes that power and environmental alarms are stored in the current problem list of an equipment object with Equipment ID = "RT", name bound to the Network Element object. The 5ESS[®]-2000 switch places no restrictions on any additional equipment object instances.

13.3.11.2 Characteristics

13.3.11.2.1 Subclass

top/equipment

13.3.11.2.2 Naming

The attribute **Equipment Id** is used for naming instances of this class. The following name bindings may be used to name instances of this class:

- equipment-networkElement
- equipment-idlcTerminal
- equipment-equipment.

The switch will handle any valid combination of these name bindings. However, for E2A telemetry to work, power and environmental alarms must be stored in the current problem list of an equipment object with name binding equipment-networkElement with Equipment Id equal to printable string RT.

13.3.11.2.3 Creation and Deletion

- (a) **Creation:** The switch never creates instances of this object class. At least one instance of this object class should be inherently created as described in Section 13.3.11.1.
- (b) **Deletion:** The switch never deletes instances of this object class.

13.3.11.2.4 Notifications

(a) **Event Reporting:** This event report service is used to report the occurrence of a miscellaneous alarm or for other equipment alarms. This event report service contains the following arguments:

- **Problem Type:** This argument specifies the type of problem being reported. The only problem types supported by the 5ESS®-2000 switch for this object class are as follows:
 - Equipment problem type - Any valid subtype
 - Environmental problem type - The 5ESS®-2000 switch supports sensor IDs 1 through 14.

All other problem types are discarded by the 5ESS®-2000 switch.

- **Alarm Severity:** This argument specifies the alarm severity associated with the reporting alarms.
- **Problem Data:** This optional argument provides additional data to be reported with the alarm. The 5ESS®-2000 switch can interpret the printable string usage of the attProblemData attribute or the problemText field of the ProblemInfo attribute. The 5ESS®-2000 switch will only print out the first 36 characters of the string when the alarm is reported.

13.3.11.2.5 Actions

No actions are requested of instances of this object class.

13.3.11.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.12 EQUIPMENT HOLDER

MANAGED OBJECT CLASS:	Equipment Holder
Object Class Label:	equipmentHolder

13.3.12.1 Behavior Definitions

The Equipment Holder object class is a class of managed objects that represent physical units where circuit packs (data record associated with the circuit pack) are held.

13.3.12.2 Characteristics

13.3.12.2.1 Subclass

top/equipmentHolder

13.3.12.2.2 Naming

The attribute **Equipment Holder Id** is used for naming instances of this class. The following name bindings may be used to name instances of this class:

- equipmentHolder-networkElement
- equipmentHolder-idlcTerminal
- equipmentHolder-equipment
- equipmentHolder-equipmentHolder.

The switch will handle any valid combination of these name bindings.

13.3.12.2.3 Creation and Deletion

- (a) **Creation:** The switch never creates instances of this object class.
- (b) **Deletion:** The switch never deletes instances of this object class.

13.3.12.2.4 Notifications

- (a) **Event Reporting:** This event report service may be used to report the occurrence of an equipment holder alarm. The RT can report specific circuit pack failures via the Equipment Holder object. This event report service contains the following arguments:

- **Problem Type:** This argument specifies the type of problem being reported. The only problem type supported by the 5ESS[®]-2000 switch for this object class is equipment problem type.

All other problem types are discarded by the 5ESS[®]-2000 switch.

- **Alarm Severity:** This argument specifies the alarm severity.

- **Problem Data:** This optional argument provides additional data to be reported with the alarm. The 5ESS®-2000 switch can interpret the printable string usage of the attProblemData attribute or the problemText field of the ProblemInfo attribute. The 5ESS®-2000 switch will only print out the first 36 characters of the string when the alarm is reported.

13.3.12.2.5 Actions

No actions are requested of instances of this object class.

13.3.12.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.13 EVENT REPORT CONTROL

SUPPORT OBJECT CLASS:	Event Report Control
Object Class Label:	eventReportControl

13.3.13.1 Behavior Definitions

The Event Report Control object class is a class of management support objects containing attributes used to determine which events are reported and where they are reported. Instances of this class are operated on in order to control the reporting of events on the basis of specific criteria, for example, event types and the associated managed object instances.

Only events that satisfy the criteria (specified by the Discriminator Construct attribute) defined in an active (specified by the Discriminator State, Begin Time, and End Time attributes) discriminator may be sent to the application entity (defined by the Management User Id) attribute. The above application entity may in reality represent a group of managing systems.

If no Event Report Control object exists at the RDT, all alerts are sent to the 5ESS[®]-2000 switch.

13.3.13.2 Characteristics

13.3.13.2.1 Subclass

top/discriminator/eventReportControl

13.3.13.2.2 Naming

The name binding **eventReportControl-networkElement** using the attribute **eventReportControlId** is used for naming instances of this class.

13.3.13.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object class may be created by specifying an Event Report Control object in the CMIS M-CREATE service.
- (b) **Deletion:** Instances of this object class may be deleted by specifying an Event Report Control object in the CMIS M-DELETE service.

13.3.13.2.4 Notifications

No notifications are generated for instances of this object class.

13.3.13.2.5 Actions

No actions are requested of instances of this object class.

13.3.13.2.6 Attributes Restrictions

(a) ***Discriminator Construct:*** The 5ESS®-2000 switch will only use two specific discriminator constructs:

—DS1 PM Alerts - The following construct will block the RT from sending DS1 Performance Monitoring alerts to the switch:

```
CMISFilter ::= not { dslFramedPathTermId PRESENT }
```

—DSL PM Alerts - The following construct will block the RT from sending DSL Performance Monitoring alerts to the switch:

```
CMISFilter ::= not { and { isdnFramedPathTermId PRESENT },  
                      { problemType EQUALITY anyThresholdAlert } }
```

13.3.14 IDLC CALL PROCESSING PROFILE

MANAGED OBJECT CLASS:	IDLC Call Processing Profile
Object Class Label:	IdlcCPPProfile

13.3.14.1 Behavior Definitions

The IDLC Call Processing Profile object class is a class of managed objects that represents the profiles of the call processing channel connections (that is, the TMC or CSC Connections). The profiles contain the values of the timers defined for Layer 3 at the RDT.

13.3.14.2 Characteristics

13.3.14.2.1 Subclass

top/IdlcCPPProfile

13.3.14.2.2 Naming

The name binding **IdlcCPPProfile-idlcTerminal** using the attribute **IDLC CP Profile Id** is used for naming instances of this class.

13.3.14.2.3 Creation and Deletion

- (a) **Creation:** One instance of this object class is inherently created at the RDT.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.14.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.14.2.5 Actions

No actions are requested of instances of this object class.

13.3.14.2.6 Attributes Restrictions

- (a) **IDLC Call Processing Profile ID:** This naming attribute is restricted to the value 1. If any other value is used, the 5ESS[®]-2000 switch will not be able to change the timer attribute values from the default values.

13.3.15 IDLC DATA LINK PROFILE

MANAGED OBJECT CLASS:	IDLC Data Link Profile
Object Class Label:	IdlcDLProfile

13.3.15.1 Behavior Definitions

The IDLC Data Link Profile object class is a class of managed objects that represents the virtual data link connections within the LAPD data link, that is, the Layer 2 connections. One instance is required for each SAPI at the layer 2.

13.3.15.2 Characteristics

13.3.15.2.1 Subclass

top/IdlcDLProfile

13.3.15.2.2 Naming

The name binding **idlcDLProfile-idlcTerminal** using the attribute **IDLC DL Profile Id** is used for naming instances of this class.

13.3.15.2.3 Creation and Deletion

- (a) **Creation:** Two instances of this object class are inherently created at the RDT.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object.

13.3.15.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.15.2.5 Actions

No actions are requested of instances of this object class.

13.3.15.2.6 Attributes Restrictions

- (a) **IDLC DL Profile ID:** This naming attribute is restricted to one of two values:
 - IDLC DL Profile ID = 1 should be used for SAPI 0.
 - IDLC DL Profile ID = 2 should be used for SAPI 1.

If values other than those previously shown are used, the 5ESS[®]-2000 switch will not be able to change the LAPD timer attribute values from the default values.

13.3.16 IDLC DATA LINK TERMINATION

MANAGED OBJECT CLASS:	IDLC Data Link Termination
Object Class Label:	IdlcDLTermination

13.3.16.1 Behavior Definitions

The IDLC Data Link Termination object class is a class of managed objects that delimits the IDLC data link paths as defined for automatic protection switching. This may include the DS0 Channel and the LAPD layer. Four instances of this object class exist. One for the active EOC, one for the standby EOC, one for the active TMC, and one for standby TMC.

The 5ESS®-2000 switch does not operate on, or provision any data for this object class. The only reason it is listed here is that other objects point to instances of this object class (see Protection Group Unit object class definition).

TR303 requires that four instances of this object class be inherently created as shown in Table 13-3.

Table 13-3 — IDLC DL Termination Object Class

IDLC DL TERM ID	PROTECTION GROUP POINTER	DATALINK TYPE
1	1	EOC
2	1	EOC
3	2	TMC
4	2	TMC

13.3.16.2 Characteristics

13.3.16.2.1 Subclass

top/termination point/IdlcDLTermination

13.3.16.2.2 Naming

The name binding `idlcDLTermination-idlcTerminal` using the attribute `IDLC DL Termination Id` is used for naming instances of this class.

13.3.16.2.3 Creation and Deletion

- (a) **Creation:** Four instances of this object class are inherently created at the RDT.
- (b) **Deletion:** The 5ESS®-2000 switch does not delete instances of this object class.

13.3.16.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.16.2.5 Actions

No action is required for instance of this object.

13.3.16.2.6 Attributes Restrictions

No restrictions are placed on attribute values for this object class.

13.3.17 IDLC TERMINAL

MANAGED OBJECT CLASS:	IDLC Terminal
Object Class Label:	idlcTerminal

13.3.17.1 Behavior Definitions

The IDLC Terminal object class is a class of managed objects that represents the logical terminals of the IDLC systems. The network elements required for an IDLC system, the LDS and the RDT, may contain one or more of these logical entities. The LDS may contain more than one IDLC Terminal object, each of which represents an IDT. The RDT contains exactly one IDLC Terminal object.

13.3.17.2 Characteristics

13.3.17.2.1 Subclass

top/networkElement/idlcTerminal

13.3.17.2.2 Naming

The name-binding **idlcTerminal-networkElement** using the attribute IDLC Term Id is used for naming instances of this class.

13.3.17.2.3 Creation and Deletion

- (a) **Creation:** One instance of this object class is inherently created at the RDT.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.17.2.4 Notifications

No Event Reporting service is required for instances of this object class.

13.3.17.2.5 Actions

No action is required for instance of this object.

13.3.17.2.6 Attributes Restrictions

- (a) **Terminal ID:** This is the naming attribute for the IDLC Terminal object class. The value is restricted to the integer 1.

13.3.18 ISDN FRAMED PATH TERMINATION

MANAGED OBJECT CLASS:	ISDN Framed Path Termination
Object Class Label:	isdnFramedPathTermination

13.3.18.1 Behavior Definitions

The ISDN Framed Path Termination object class is a class of managed objects that delimit U-DSL paths.

13.3.18.2 Characteristics

13.3.18.2.1 Subclass

top/terminationPoint/framedPathTermination/**isdnFramedPathTermination**

13.3.18.2.2 Naming

The name binding **isdnFramedPathTermination-isdnLineTermination** using the attribute **ISDN Framed Path Term Id** is used for naming instances of this class.

13.3.18.2.3 Creation and Deletion

- (a) **Creation:** Instances of this object class are created by specifying the ISDN Framed Path Termination object in the CMIS M-CREATE service.
- (b) **Deletion:** Instances of this object class are deleted by specifying the ISDN Framed Path Termination object in the CMIS M-DELETE service.

13.3.18.2.4 Notifications

- (a) **Event Reporting:** This event report service is used to report the occurrence of a transmission problem, or a performance monitoring threshold alert. For reporting a performance monitoring threshold alert, this event report service contains the following arguments:
 - **Problem Type:** This argument specifies the type of problem (that is, a threshold alert). This argument is comprised of the following additional subarguments:
 - **Triggered Threshold:** This subargument specifies the ID and value of the threshold that was exceeded (that is, triggered).
 - **Triggered Attribute:** This subargument specifies the ID and value of the count that exceeded the threshold.
 - **Alarm Severity:** This argument specifies the alarm severity of the event.
 - **Monitored Attributes:** This argument specifies additional data for a threshold alert. This data consists of the other related performance monitoring counts and thresholds. Tables 13-4 and 13-5 specify the valid combinations.

Table 13-4 — Valid Combinations of Daily Related Performance Monitoring Counts and Thresholds

TRIGGERED THRESHOLD	TRIGGERED ATTRIBUTE	MONITORED ATTRIBUTES
ES Day Threshold	ES Day Current	ES Fe Day Current SES Day Current SES Fe Day Current SES Day Threshold
ES Day Threshold	ES Fe Day Current	ES Day Current SES Day Current SES Fe Day Current SES Day Threshold
SES Day Threshold	SES Day Current	SES Fe Day Current ES Day Current ES Fe Day Current ES Day Threshold
SES Day Threshold	SES Fe Day Current	SES Day Current ES Day Current ES Fe Day Current ES Day Threshold

Table 13-5 — Valid Combinations of Hourly Related Performance Monitoring Counts and Thresholds

TRIGGERED THRESHOLD	TRIGGERED ATTRIBUTE	MONITORED ATTRIBUTES
ES Hr Threshold	ES Hr Current	ES Fe Hr Current SES Hr Current SES Fe Hr Current SES Hr Threshold
ES Hr Threshold	ES Fe Hr Current	ES Hr Current SES Hr Current SES Fe Hr Current SES Hr Threshold
SES Hr Threshold	SES Hr Current	SES Fe Hr Current ES Fe Hr Current ES Fe Hr Current ES Hr Threshold
SES Hr Threshold	SES Fe Hr Current	SES Hr Current ES Hr Current ES Fe Hr Current ES Hr Threshold

When used to report the occurrence of a transmission problem, this event report service contains the following arguments:

- **Problem Type:** The valid "transmissionProblemType" is used to indicate a loss of signal (lossOfSignal) on the U-DSL.
 - **Alarm Severity:** This argument specifies the alarm severity.
- (b) **Change of Overhead Bits Report:** This event report service may be used to report the occurrence of a change in the overhead bits state for instances of this object class. This event report service contains the following arguments:
- **Old State:** The previous state of the superframe overhead bits prior to the change.
 - **New State:** The current state of the superframe overhead bits after the change.

13.3.18.2.5 Actions

The CMIS M-ACTION service can be invoked to perform the following actions in the confirmed mode.

- (a) **Generate Corrupt CRC:** This action service may be used to generate intentionally corrupted *crcs* for a specified interval of time.
- (b) **Initialize PM Attributes:** This action service may be used to initialize the performance monitoring counts to a "zero" value.
- (c) **Operate ISDN Loopback:** This action service may be used to establish a loopback.
- (d) **Release ISDN Loopback:** This action service may be used to remove a loopback.
- (e) **Remove:** This action service may be used to remove an object instance from service. Once an ISDN Framed Path Termination has been removed from service, the RDT should not forward any M_EVENT_REPORTS to the switch from that line. This includes loss of signal/frame reports, change of overhead bits reports, and DSL Performance Monitoring alerts.
- (f) **Restore:** This action service may be used to restore an object instance into service.

13.3.18.2.6 Attributes Restrictions

- (a) **ISDN Framed Path Term Id:** The value for the ISDN Framed Path Termination ID is restricted to be the same as the value of the ISDN Line Termination ID attribute of the containing object.

13.3.19 ISDN LINE TERMINATION

MANAGED OBJECT CLASS:	ISDN Line Termination
Object Class Label:	isdnLineTermination

13.3.19.1 Behavior Definitions

The ISDN Line Termination object class is a class of managed objects that delimit ISDN basic rate access 2B1Q lines.

13.3.19.2 Characteristics

13.3.19.2.1 Subclass

top/terminationPoint/lineTermination/isdnLineTermination

13.3.19.2.2 Naming

The name binding **isdnLineTermination-networkElement** using the attribute **ISDN Line Term Id** is used for naming instances of this class.

13.3.19.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will explicitly create instances of this object class.
- (b) **Deletion:** The 5ESS[®]-2000 switch will explicitly delete instances of this object class.

When an instance of this object class receives a delete request, the RDT ascertains whether managed object instances are contained in the object. If other managed object instances are contained within the object instance to be deleted, the RDT should reject the delete request with a processingFailure - containingObjectInstance error code.

13.3.19.2.4 Notifications

- (a) **Event Reporting:** This event report service is used to report the primary service state changes of this Line Termination object. The switch caused service state changes shall not be reported. When used for this purpose, this event report service contains the following arguments:
- **Problem Type:** This argument specifies the type of problem. To report the status change of the ISDN Line Termination object, this argument is specified as "service problem type."
 - **Alarm Severity:** This argument specifies the alarm severity.
 - **Monitored Attributes:** This argument includes the Primary Service State and Secondary Service State attributes.

13.3.19.2.5 Actions

No actions are requested of instances of this object class.

13.3.19.2.6 Attributes Restrictions

- (a) **ISDN Line Term ID:** The value for the ISDN Line Term ID is restricted to be the same as the value of the Call Reference Value attribute for the object instance.
- (b) **Line Circuit Address:** This read-only attribute is **NOT** supplied in the M-CREATE sent by the 5ESS[®]-2000 switch. The RDT is expected to derive an appropriate value for this attribute from the physical wire number as provided by the Call Reference Value attribute.

13.3.20 ISDN PER SYSTEM PROFILE

MANAGED OBJECT CLASS:	ISDN Per System Profile
Object Class Label:	isdnPerSystemProfile

13.3.20.1 Behavior Definitions

The ISDN Per System Profile object class is a class of managed objects that contains per system (for example, a Network Element or Equipment) information.

13.3.20.2 Characteristics**13.3.20.2.1 Subclass**

`top/isdnPerSystemProfile`

13.3.20.2.2 Naming

The name binding `isdnPerSystemProfile-networkElement` using the attribute **ISDN Per System Profile Id** is used for naming instances of this class.

13.3.20.2.3 Creation and Deletion

One instance of this object class is explicitly created using CMIS M-CREATE service.

13.3.20.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.20.2.5 Actions

No actions are requested of instances of this object class.

13.3.20.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.21 MEMORY

MANAGED OBJECT CLASS:	Memory
Object Class Label:	memory

13.3.21.1 Behavior Definitions

The Memory object class is a class of managed objects that represents the binary information stored in Network Element, including software programs and data tables.

While the memory configuration is RDT vendor specific, the 5ESS[®]-2000 switch must know where it can retrieve memory alarm information. For this reason, the 5ESS[®]-2000 switch assumes that memory alarms are stored in the current problem list of a memory object with Memory ID = 1, name bound to the Network Element object. The 5ESS[®]-2000 switch places no restrictions on any additional memory object instances.

13.3.21.2 Characteristics

13.3.21.2.1 Subclass

top/memory

13.3.21.2.2 Naming

The attribute **Memory Id** is used for naming instances of this class. The following name bindings may be used to name instances of this class:

- memory-networkElement
- memory-idlcTerminal
- memory-equipment.

The switch will handle any valid combination of these name bindings. However, to allow the switch to retrieve memory alarms on demand, these alarms must be stored in the current problem list of a memory object with name binding memory-networkElement with Memory Id equal to integer 1.

13.3.21.2.3 Creation and Deletion

- (a) **Creation:** The switch never creates instances of this object class. At least one instance of this object class should be inherently created as described in Section 13.3.21.1.
- (b) **Deletion:** The switch never deletes instances of this object class.

13.3.21.2.4 Notifications

- (a) **Event Reporting:** This service may be used to report problems with the RDT's nonvolatile memory. The following arguments should be supplied:
- **Problem Type:** The type of problem that generated the event. While all valid software problem types are supported, the following subtypes have special meaning to the 5ESS[®]-2000 switch:
 - **corruptData:** The RDT's nonvolatile memory has been corrupted. Immediate provisioning is requested. The 5ESS[®]-2000 switch will provision all data for the RDT on receipt of this notification.
 - **memoryMismatch:** The RDT's nonvolatile memory is in a nonrecoverable state. All provisioning operations are suspended until this alarm state is cleared. The 5ESS[®]-2000 switch will inhibit provisioning while in this state.
 - **Alarm Severity:** The severity of the event generated.
 - **Problem Data:** This optional argument provides additional data to be reported with the alarm. The 5ESS[®]-2000 switch can interpret the printable string usage of the attProblemData attribute or the problemText field of the ProblemInfo attribute. The 5ESS[®]-2000 switch will only print out the first 36 characters of the string when the alarm gets reported.

13.3.21.2.5 Actions

No actions are requested of instances of this object class.

13.3.21.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.22 METALLIC TEST ACCESS PATH TERMINATION

MANAGED OBJECT CLASS: Metallic Test Access Path Termination

Object Class Label: metTestAccPathTerm

13.3.22.1 Behavior Definitions

The Metallic Test Access Path Termination (MTAPT) object class is a class of managed objects that delimits the virtual testing paths between a remote test unit (RTU) and a Metallic Test Access Unit (MTAU). An MTAU must be operational for an MTAPT to be operated.

13.3.22.2 Characteristics

13.3.22.2.1 Subclass

top/terminationPoint/testAccPathTerm/metTestAccPathTerm

13.3.22.2.2 Naming

The name binding **metTestAccPathTerm-mtau** using the attribute **Test Access Path Termination Id** is used for naming instances of this class.

13.3.22.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will not create instances of this object class. One instance of this object class with ID=1 must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.22.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.22.2.5 Actions

- (a) **Looparound to Diagnose TAP:** This action service is used to verify the integrity of a particular test access path without entering the test access command sequence. The 5ESS[®]-2000 switch uses it for Diode Protocol Test.
- (b) **Release Looparound:** This action service is used to release the test access path looparound, release the assigned access, and open the test access path connections.
- (c) **Connect Split Out Access:** This action service may be used to request look-out access (that is, either nonsimultaneous full splitting access or split out only) without a hitless monitor.
- (d) **Disconnect Test Access:** This action service may be used to restore the circuit under test to its through state and open all test access path connections to that access point.

- (e) ***Reset Timer:*** This action service is used to reset the 75-second activity timer associated with a particular Test Access Path (TAP) and test operation. This service is used when a long or indefinite holding time is required for a given test in the absence of other test access activity.

13.3.22.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.23 METALLIC TEST ACCESS UNIT

MANAGED OBJECT CLASS:	Metallic Test Access Unit
Object Class Label:	mtau

13.3.23.1 Behavior Definitions

The Metallic Test Access Unit (MTAU) object class is a class of managed objects that provides metallic test access to any line termination appearing on the MTAU. A Test Access Path (TAP) for metallic access is a metallic transmission path between the remote test unit (RTU) and the MTAU. Metallic TAPs are provided as a function of the number of line terminations appearing on the MTAU. An MTAU must be capable of providing and managing TAP assignment(s), as well as accepting TAP assignment(s), from the Test System Controller (TSC). An MTAU shall support a looparound in order for the TSC to verify the continuity of the TAP.

An MTAU may be contained in a system that provides switching functions or transport functions.

13.3.23.2 Characteristics

13.3.23.2.1 Subclass

top/tau/mtau

13.3.23.2.2 Naming

The name binding **mtau-networkElement** using the attribute **MTAU Id** is used for naming instances of this class.

13.3.23.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will not create instances of this object class. One instance of this object class with ID=1 must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.23.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.23.2.5 Actions

- (a) **Connect Looparound Access:** This action service is used to instruct the MTAU to assign a TAP to a circuit to be tested and apply a looparound to the assigned TAP.
- (b) **Initialize and Restore:** This action service may be used to release all test access path connections and restore all accessed circuits to the released (normal) state.

13.3.23.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.24 NETWORK ELEMENT

MANAGED OBJECT CLASS:	Network Element
Object Class Label:	networkElement

13.3.24.1 Behavior Definitions

The Network Element object class is a class of managed objects that represent telecommunications equipment (either groups or parts) within the Telecommunications Network and perform Network Element Functions, that is, providing support and/or service to the subscriber. Network Elements may or may not additionally perform Mediation Functions. A Network Element communicates with the Telecommunications Management Network over one or more standard interfaces for the purpose of being monitored and/or controlled.

13.3.24.2 Characteristics

13.3.24.2.1 Subclass

top/networkElement

13.3.24.2.2 Naming

The name binding **networkElement-network** using the attribute **Network Element Id** is used for naming instances of this class.

13.3.24.2.3 Creation and Deletion

- (a) **Creation:** One instance of this object class may be inherently created per RDT.
- (b) **Deletion:** Instances of this object class may not be deleted.

13.3.24.2.4 Notifications

- (a) **Event Reporting:** This Event Reporting message is sent to the LDS to report a monitored event that generates or clears the highest alarm severity present in the RT. This event report service contains the following arguments:
 - **Problem Type:** This argument specifies the type of problem. The valid value of the argument is based on the problem type of the reporting monitored event.
 - **Alarm Severity:** This argument specifies the alarm severity. The valid value of this argument is based on the alarm severity of the reporting monitored event.
 - **Problem Data:** This optional argument provides additional data to be reported with the alarm. The 5ESS[®]-2000 switch can interpret the printable string usage of the attProblemData attribute or the problemText field of the ProblemInfo attribute. The 5ESS[®]-2000 switch will only print out the first 36 characters of the string when the alarm gets reported.

13.3.24.2.5 Actions

No actions are requested of instances of this object class.

13.3.24.2.6 Attributes Restrictions

- a. ***System Alarm State***: This optional attribute is mandatory for RDTs that send alarm event reports to the 5ESS[®]-2000 switch.

13.3.25 PM INTERVAL PROFILE

MANAGED OBJECT CLASS:	PM Interval Profile
Object Class Label:	pmIntervalProfile

13.3.25.1 Behavior Definitions

The PM Interval Profile object class is a class of managed objects that specify the length of the interval period used for performance monitoring. The interval value may be specified for each performance monitoring attribute (for example, threshold, count), for each object class (for example, DS1 Framed Path Termination, ISDN Framed Path Termination, etc.), or for several performance monitoring attributes of several object classes.

In order for DS1 Performance Monitoring to work with the 5ESS®-2000 switch, the following instances of this object in Table 13-6 must be created either inherently or by a Supervisory System:

Table 13-6 — PM Interval Profile Object Class

PM INTERVAL PROFILE ID	PM CLASS	PM ATTRIBUTE	INTERVAL VALUE
1	DS1 Framed Path Termination	All daily DS1 PM attributes	1
2	DS1 Framed Path Termination	All 15-minute DS1 PM attributes	15

In order for DSL Performance Monitoring to work with the 5ESS®-2000 switch, the following instances of this object in Table 13-7 must be created either inherently or by a Supervisory System:

Table 13-7 — PM Interval Profile Object Class—ISDN

PM INTERVAL PROFILE ID	PM OBJECT CLASS	PM ATTRIBUTE	INTERVAL VALUE
3	ISDN Framed Path Path Termination	All daily and hourly ISDN PM attributes	1
4	ATT ISDN Framed Path Termination	All interval ISDN PM attributes	1*
<p>* Assuming this instance is inherently created, the 5ESS®-2000 switch will set this attribute to match the multiple hour interval value provisioned in the switch.</p>			

13.3.25.2 Characteristics**13.3.25.2.1 Subclass**

top/pmIntervalProfile

13.3.25.2.2 Naming

The name binding **pmIntervalProfile-networkElement** using the attribute **PM Interval Profile Id** is used for naming instances of this class.

13.3.25.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will not create instances of this object class. Instances of this object class must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.25.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.25.2.5 Actions

No actions are requested of instances of this object class.

13.3.25.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.26 PROTECTION GROUP

SUPPORT OBJECT CLASS:	Protection Group
Object Class Label:	protectionGroup

13.3.26.1 Behavior Definitions

The Protection Group object class is a class of support objects that represents a grouping of working and corresponding backup units or paths. For each protection relationship, one instance of this object class must exist. Each instance may contain zero or more Protection Group Units.

TR303 requires two instances of this object class be inherently created to support EOC and TMC path switching as shown in Table 13-8.

Table 13-8 — Protection Group Object Class—EOC

GROUP	PROTECTION GROUP ID	PROTECTION TYPE	REVERTIVE
EOC	1	1:n	FALSE
TMC	2	1:n	FALSE

In order to support DS1 protection switching, the 5ESS®-2000 switch requires that one additional instance of this object class be either inherently created or created by a Supervisory System as shown in Table 13-9.

Table 13-9 — Protection Group Object Class—DS1

GROUP	PROTECTION GROUP ID	PROTECTION TYPE	REVERTIVE
DS1	3	1:n	TRUE

13.3.26.2 Characteristics

13.3.26.2.1 Subclass

top/ProtectionGroup

13.3.26.2.2 Naming

The name binding **protectionGroup-idlcTerminal** using the attribute **Protection Group Id** is used for naming instances of this class used for DS1 protection switch, and TMC and EOC data link protection switch.

13.3.26.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS®-2000 switch will not create instances of this object class. Instances of this object class must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS®-2000 switch does not delete instances of this object class.

13.3.26.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.26.2.5 Actions

(a) **Protection Switch:** This action is used to move traffic from the active data link path to the standby data link path and is directed at the active path. The request contains the following arguments:

- **Protection Switch Mode:** The mode of the path switch. Valid values are as follows:

- Normal: switch only if the standby path is in service and operating satisfactorily.
- Forced: switch path no matter what the condition of the standby path.

- **Protected Unit Name:** It identifies the protected Protection Group Unit for which the Protection Switch action is requested. Valid values are Distinguished Names of protected Protection Group Units contained in the Protection Group.

13.3.26.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class. This object contains no optional attributes.

13.3.27 PROTECTION GROUP UNIT

SUPPORT OBJECT CLASS:	Protection Group Unit
Object Class Label:	protectionGroupUnit

13.3.27.1 Behavior Definitions

The Protection Group Unit object class is a class of support objects that represent managed or support objects that represent a working or backup, unit or path. A Protection Group Unit may be defined for a managed object of any object class (for RDT, however, this is limited to the DS1 Line Termination and IDLC Data Link Termination object classes). The working and backup objects are related indirectly by their containment relationships to the protection group.

The TR303 requires four instances of this object class be inherently created to support EOC and TMC path switching as shown in Table 13-10.

Table 13-10 — Protection Group Unit Object Class—IDLC

CONTAINING PROTECTION GROUP ID	PROTECTION GROUP UNIT ID	PROTECTION GROUP UNIT TYPE	PROTECTION OBJECT POINTER
1	1	protected	IDLC DL Termination ID = 1
1	2	protecting	IDLC DL Termination ID = 2
2	1	protected	IDLC DL Termination ID = 3
2	2	protecting	IDLC DL Termination ID = 4

In order to support DS1 protection switching, the 5ESS®-2000 switch requires that additional instances of this object class be either inherently created or created by a Supervisory System for each DS1 Line Termination as shown in Table 13-11.

Table 13-11 — Protection Group Unit Object Class—DS1 Line

CONTAINING PROTECTION GROUP ID	PROTECTION GROUP UNIT ID	PROTECTION GROUP UNIT TYPE	PROTECTION OBJECT POINTER
3	x where x=1:n	protected	DS1 Line Termination ID = x
3	n+1	protecting	DS1 Line Termination ID = n+1

13.3.27.2 Characteristics**13.3.27.2.1 Subclass**

top/ProtectionGroupUnit

13.3.27.2.2 Naming

The name binding **protectionGroupUnit-protectionGroup** using the attribute **Protection Group Unit Id** is used for naming instances of this class.

13.3.27.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will not create instances of this object class. Instances of this object class must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS[®]-2000 switch does not delete instances of this object class.

13.3.27.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.27.2.5 Actions

No actions are requested of instances of this object class.

13.3.27.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.3.28 QUARTER DS0 CHANNEL TERMINATION

MANAGED OBJECT CLASS:	Quarter DS0 Channel Termination
Object Class Label:	quarterDS0ChannelTermination

13.3.28.1 Behavior Definitions

The Quarter DS0 Channel Termination object class is a class of managed objects that delimit quarter DS0 channels (D channels on ISDN Framed Path Termination or a quarter time slot on a DS1 Framed Path Termination).

13.3.28.2 Characteristics

13.3.28.2.1 Subclass

top/terminationPoint/channelTermination/**quarterDS0ChannelTermination**

13.3.28.2.2 Naming

The name-binding **quarterDS0ChannelTermination-ds0ChannelTermination** using the attribute **Quarter DS0 Channel Term Id** is used for naming instances of this class (for a quarter time slot contained in DS1 facility).

The name-binding **quarterDS0ChannelTermination-isdnFramedPathTermination** using the attribute **Quarter DS0 Channel Term Id** is used for naming instances of this class (for a D channel on a DSL path).

13.3.28.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS[®]-2000 switch will create instances of this object class.
- (b) **Deletion:** The 5ESS[®]-2000 switch will delete instances of this object class.

13.3.28.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.28.2.5 Actions

No action are requested of instances of this object class.

13.3.28.2.6 Attributes Restrictions

- (a) **Quarter DS0 Channel Term Id:** This naming attribute is restricted to values 1 through 4, corresponding to the actual quarter timeslot position within the DS0.

13.3.29 TEST RESPONSE CIRCUIT

MANAGED OBJECT CLASS:	Test Response Circuit
Object Class Label:	testResponseCircuit

13.3.29.1 Behavior Definitions

The Test Response Circuit (TRC) object class is a class of managed objects that represents the test response circuit in the RDT. In order for channel testing to work with the 5ESS®-2000 switch, one instance of this object class with Test Response Circuit ID = 1 must be created either inherently or by a Supervisory System.

13.3.29.2 Characteristics

13.3.29.2.1 Subclass

top/testResponseCircuit

13.3.29.2.2 Naming

The name binding **testResponseCircuit-networkElement** using the attribute **Test Response Circuit Id** is used for naming instances of this class.

13.3.29.2.3 Creation and Deletion

- (a) **Creation:** The 5ESS®-2000 switch will not create instances of this object class. Instances of this object class must be either inherently created or created by a Supervisory System.
- (b) **Deletion:** The 5ESS®-2000 switch does not delete instances of this object class.

13.3.29.2.4 Notifications

No notifications are expected from instances of this object class.

13.3.29.2.5 Actions

- (a) **Operate Termination:** This request is directed at the Test Response Circuit to apply test terminations during channel testing of locally-switched services.

13.3.29.2.6 Attributes Restrictions

No restrictions are placed on attribute values for instances of this object class.

13.4 MANAGEMENT SERVICE DESCRIPTIONS

This section describes how the 5ESS[®]-2000 switch uses the management services as defined in TR303. As specified by TR303, the 5ESS[®]-2000 switch uses the global form for the ObjectClass CMISE production and localDistinguishedName for the ObjectInstance CMISE production.

This section is intended to define the subset of TR303 services used by the 5ESS[®]-2000 switch as well as to include some procedural information that was not included in TR303 but is necessary to make the interface work.

13.4.1 M-CREATE

CMISE Service:	M-CREATE
Related Object Classes:	
Analog Line Termination	Cross-Connection
DS0 Channel Termination	Event Report Control
ISDN Framed Path Termination	ISDN Line Termination
ISDN Per System Profile	Quarter DS0 Channel Termination
ATT ISDN Framed Path Termination	ATT PM Freeze Schedule

13.4.1.1 Behavior Definition

The M-CREATE service is used as specified in Supplement 3 of TR303.

13.4.1.2 Parameters

With the exception of the Cross-Connection object class, all M-CREATEs include the Managed Object Instance parameter. The 5ESS®-2000 switch selects the IDs for all objects that it creates except for cross connects. Automatic Instance Naming is used for creation of the cross-connection object class. In this case, the Superior Object Instance (that is, local DN of the Network Element) is provided in the M-CREATE instead of the Managed Object Instance.

13.4.1.3 Errors

All CMISE errors applicable to an M-CREATE operation are recognized by the 5ESS®-2000 switch. Table 13-12 lists the correct error response for a few important cases.

Table 13-12 — M-CREATE Errors

ERROR CONDITION	ERROR CODE
cross connect endpoint already has a cross connect assigned to it	processing failure - improper condition (from/to term ID = DN of endpoint that is already cross connected)
cross connect endpoint does not exist	processing failure - improper condition (from/to term ID = DN of endpoint that is missing)
cross connect endpoint contains other object instances (DS0 CT contains Quarter DS0 CTs)	processing failure - improper condition (from/to term ID = DN of endpoint that contains other object instances)

13.4.2 M-DELETE

CMISE Service:	M-DELETE
Related Object Classes:	
Analog Line Termination	Cross Connection
DDS Line Termination	DS0 Channel Termination
ISDN Framed Path Termination	ISDN Line Termination
Quarter DS0 Channel Termination	ATT ISDN Framed Path Termination

13.4.2.1 Behavior Definition

The M-DELETE service is used as specified in Supplement 3 of TR303.

13.4.2.2 Parameters

The Access Control parameter is not used by the 5ESS®-2000 switch. Thus, the 5ESS®-2000 switch will not be able to delete any object that has a redlined attribute set to YES.

The 5ESS®-2000 switch uses the following scope/filter combination to delete a line termination, regardless of object class:

```
object class:      Network Element
object instance:  {}
scope:            base to 1st level
filter:           { callReferenceValue EQUALITY n }
                  where n = line number to be deleted
```

Cross Connect object instances will be deleted using the following scope/filter combination:

```
object class:      Network Element
object instance:  {}
scope:            base object and all subordinates
filter:           OR { fromTerminationId EQUALITY X,
                    toTerminationId EQUALITY X }
```


Possible values for X include the following types of Distinguished Names:

- analogLineTermId
- ddsLineTermId
- ddsLineTermId-ds0ChannelTermID
- isdnLineTermId-isdnFramedPathTermId-ds0ChannelTermId
- isdnLineTermId-isdnFramedPathTermId-quarterDS0ChannelTermId
- terminalId-ds1LineTermId-DS1FramedPathTermId-ds0ChannelTermId
- terminalId-ds1LineTermId-DS1FramedPathTermId-ds0ChannelTermId-quarterDS0ChannelTermId

13.4.2.3 Errors

All CMISE errors applicable to an M-DELETE operation are recognized by the 5ESS®-2000 switch. Table 13-13 lists the correct error response for a few important cases.

Table 13-13 — M-DELETE Errors

ERROR CONDITION	ERROR CODE
instance does not exist	noSuchObjectInstance
instance is redlined	accessDenied
instance contains other objects	processingFailure - containingObjectInstance

13.4.3 M-GET

CMISE Service: M-GET
Related Object Classes: All objects that contain at least one readable attribute

13.4.3.1 Behavior Definition

The M-GET service is used as specified in Supplement 3 of TR303.

13.4.3.2 Parameters

In addition to the normal single object instance M-GETS, the 5ESS®-2000 switch uses the following scope/filter combinations to retrieve data from multiple objects:

- a. **Alarms:** The following M-GET is used to retrieve alarm information from all objects in the RDT that have an active current problem list.

```
object class:      Network Element
object instance:  {}
scope:            base object and all subordinates
filter:           AND { Current Problem List PRESENT,
                  NOT { Current Problem List EQUALITY {} } }
```

- b. **Demand DSL Performance Monitoring:** The following M-GET is used to retrieve PM counts from any ATT ISDN Framed Path Termination object instance that has experienced a PM threshold crossing event in one of the current PM daily or periodic intervals, that is, has a nonzero Current Threshold Crossing Register.

```
object class:      Network Element
object instance:  {}
scope:            base object and all subordinates
filter:           AND { Current Threshold Crossing Register PRESENT,
                  NOT { Current Threshold Crossing Register EQUALITY 0 } }
```

- c. **Routine DSL Performance Monitoring:** The following M-GET is used to retrieve PM counts from any ATT ISDN Framed Path Termination object instance that has experienced a PM threshold crossing event in one of the previous PM daily or periodic intervals, that is, has a nonzero Previous Threshold Crossing Register.

```
object class:      Network Element
object instance:  {}
scope:           base object and all subordinates
filter:          AND { Current Threshold Crossing Register PRESENT,
                  NOT { Current Threshold Crossing Register EQUALITY 0 } }
```

- d. **Cross-Connect Audit:** The following M_GET is used to find out if a cross connect exists for a given endpoint and if so, what it is cross-connected to.

```
object class:      Network Element
object instance:  {}
scope:           base object and all subordinates
filter:          OR { fromTerminationId EQUALITY X,
                    toTerminationId EQUALITY X }
```

Possible values for X include the following types of Distinguished Names:

- analogLineTermId
- ddsLineTermId
- ddsLineTermId-ds0ChannelTermId
- isdnLineTermId-isdnFramedPathTermId-ds0ChannelTermId
- isdnLineTermId-isdnFramedPathTermId-quarterDS0ChannelTermId
- terminalId-ds1LineTermId-DS1FramedPathTermId-ds0ChannelTermId
- terminalId-ds1LineTermId-DS1FramedPathTermId-ds0ChannelTermId-quarterDS0ChannelTermId

13.4.3.3 Errors

All CMISE errors applicable to an M-GET operation are recognized by the 5ESS®-2000 switch.

13.4.4 M-SET

CMISE Service:	M-SET
Related Object Classes: All objects that contain at least one settable attribute	

13.4.4.1 Behavior Definition

The M-SET service is used as specified in Supplement 3 of TR303.

13.4.4.2 Parameters

The CMISE M-SET syntax used for this message is based on CCITT-ISO Recommendation X.711 (ISO/IEC 9596), 1991. It includes modificationList in SetArgument for default replace capability.

13.4.4.3 Errors

All CMISE errors applicable to an M-SET operation are recognized by the 5ESS®-2000 switch.

13.4.5 M-ACTION

This section lists the subset of the TR303 defined actions that the 5ESS®-2000 switch will use. This information will clarify and/or qualify the definitions presented in TR303.

13.4.5.1 Connect Looparound Access

CMISE Service:	M-ACTION
Action Type:	connLooparoundAcc
Related Object Classes:	
Metallic Test Access Unit	

13.4.5.1.1 Purpose

The Connect Looparound Access action is sent by a managing system (LDS) to a managed system (RDT) to instruct the MTAU to assign a TAP to a circuit to be tested and apply a looparound to the assigned TAP.

13.4.5.1.2 Action Argument

The following arguments shall be supplied:

- **Termination Point Id:** The identifier of the line to be accessed. The value of Line Term Id attribute shall be used to identify the line.
- **Configuration Code:** The 5ESS®-2000 switch will only use 2WA (twowireA) for the configuration code.
- **Test Access Path Term Id:** The 5ESS®-2000 switch will use the Distinguished Name of the Metallic Test Access Path Termination object instance with ID = 1.

13.4.5.1.3 Action Result

A confirmation is required when the action is completed. The following arguments shall be supplied:

- **Test Access Path Term Id:** The identifier of the test access path used for test access. The value of the Test Access Path Term Id attribute shall be used to identify the test access path.
- **Monitor Access Mode:** An argument that indicates whether the metallic test access unit at the RDT supports monitor access. A default value of TRUE indicates support. A value of FALSE indicates lack of support.
- **Split Access Capability:** An argument that indicates the type of split access capability the metallic test access unit at the RDT supports. Possible values are simultaneous full splitting test access, nonsimultaneous full splitting test access, and split out only. Simultaneous full splitting access is the default.

- **Special Circuit:** An argument that indicates whether a line termination requires special handling. A value of TRUE indicates special handling required. A default value of FALSE indicates special handling not required.
- **Terminate Leave Status:** An optional argument that indicates the state of the A, B, or C pairs. Valid values are as follows: A terminated, B terminated, A and B terminated, C terminated, or normal.

13.4.5.1.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS[®]-2000. Table 13-14 lists the correct error response for a few important scenarios:

Table 13-14 — M-ACTION Errors

ERROR CONDITION	ERROR CODE
MTAU out of service	processing failure - improper condition

13.4.5.2 Connect Split Out Access

CMISE Service:	M-ACTION
Action Type:	connSplitOutAcc
Related Object Classes:	
Metallic Test Access Path Termination	

13.4.5.2.1 Purpose

The Connect Split Out Access action is sent by a managing system (LDS) to a managed system (RDT) when look-out access (either nonsimultaneous full splitting or split out only) without a hitless monitor is needed.

13.4.5.2.2 Action Argument

A NULL argument value is required when the action is requested.

13.4.5.2.3 Action Result

A NULL confirmation is required when the action is completed.

13.4.5.2.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-15 lists the correct error response for a few important scenarios.

Table 13-15 — Connect Split Out Access Errors

ERROR CONDITION	ERROR CODE
channel unit not equipped	processing failure - with no specific error
MTAU out of service	processing failure - improper condition
out of sequence	processing failure - error description

13.4.5.3 Connect Test Response Circuit

CMISE Service:	M-ACTION
Action Type:	connectTestResponseCircuit
Related Object Classes:	
Analog Line Termination	

13.4.5.3.1 Purpose

The Connect Test Response Circuit Service is sent by the managing system (for example, LDS/TSC/RTU) to the RDT to direct an Analog Line Termination to connect to a Test Response Circuit. This service is in the confirmed mode and is to be performed only on one object instance. Upon receipt of this service, the RDT disconnects the line unit side of the RDT Test Access Path Termination assigned to the termination under test from all external equipment and connects the termination under test to a Test Response Circuit. The Test Response Circuit applies the loop closure absorptive and positive ground termination to the Analog Line Termination upon this connection.

The default Test Response Circuit is the one associated with the Test Access Path Termination assigned to the Termination under test. However, the RDT may provide the capability to share Test Response Circuit under failure conditions. A Test Response Circuit different from the default may be connected to the termination in this case based on the RDT's selection. The optional response to this service is sent to indicate the identification of the actual connected Test Response Circuit if this capability is provided and used.

After the managing system has completed gaining test access at the RDT, this service should be the first in the sequence of channel testing services.

13.4.5.3.2 Action Argument

A NULL argument value is required when the action is requested.

13.4.5.3.3 Action Result

A confirmation is required when the action is completed. The following argument shall be optionally supplied.

- **Alternate Test Response Circuit:** The value Alternate Test Response circuit object identifier is supplied upon completion of the action only when the default cannot be used.

13.4.5.3.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-16 lists the correct error response for a few important scenarios.

Table 13-16 — Connect Test Response Circuit Errors

ERROR CONDITION	ERROR CODE
channel unit not equipped	processing failure - with no specific error
MTAU out of service	processing failure - improper condition
TRC out of service	processing failure - improper condition
out of sequence	processing failure - error description

13.4.5.4 Disconnect Test Access

CMISE Service:	M-ACTION
Action Type:	discTestAcc
Related Object Classes:	
Metallic Test Access Path Termination	

13.4.5.4.1 Purpose

The Disconnect Test Access action is sent by a managing system (LDS) to a managed system (RDT) to restore the circuit under test to its through state and open all test access path connections to that access point. The accessed circuit must be restored before the test access path connections are opened.

13.4.5.4.2 Action Argument

A NULL argument is required when the action is requested.

13.4.5.4.3 Action Result

A confirmation is required when the action is completed. The following argument shall be supplied.

- **Terminate Leave Status:** An optional argument that indicates the state of the A, B, or C pairs. Valid values are as follows: A terminated, B terminated, A and B terminated, C terminated, or normal.

13.4.5.4.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-17 lists the correct error response for a few important scenarios.

Table 13-17 — Disconnect Test Access Errors

ERROR CONDITION	ERROR CODE
no test access connected	processing failure - already in condition

13.4.5.5 Generate Corrupted crc

CMISE Service:	M-ACTION
Action Type:	generateCorruptedcrc
Related Object Classes:	
ISDN Framed Path Termination	

13.4.5.5.1 Purpose

The Generate Corrupted crc action is sent by a managing system (LDS) to a managed system (RDT) to request an instance of the ISDN Framed Path Termination object to generate intentionally corrupted *crcs* for a specified interval of time. The Action Arguments specify the location where intentionally corrupted *crcs* are to be generated and the duration of the test.

Depending on the value of the location argument (that is, near end or line 0), the intentional corruption of *crcs* may take place at the RDT or the NT1 that terminates (or access) the embedded operations channel (*eoc*).

This action requires the RDT to transmit the "Request Corrupted crc," the "Notify NT1 of Corrupted crc," or the "Return to Normal" *eoc* messages to the NT1. The *eoc* messages to transmit depends on the location where the intentionally corrupted *crcs* are to be generated. If intentionally corrupted *crcs* are to be generated at the RDT, then prior to such corruption, the "Notify NT1 of Corrupt crc" *eoc* message shall be sent to the NT1. On the other hand, if intentionally corrupted *crcs* are to be generated at the NT1, then the "Request Corrupt crc" *eoc* message shall be sent to the NT1. In both cases, the RDT shall time the generation of corrupted *crcs*, and once the time has elapsed, transmit the "Return to Normal" *eoc* message to the NT1.

The RDT will reset the PM counters and flag counts as corrupted when a Generate Corrupt crc message is received. A CRC test will prevent the hourly interval freeze from occurring should the crc test cross PM freeze boundary.

13.4.5.5.2 Action Argument

The following arguments shall be supplied.

- **Corruption Location:** The location where the intentional corrupted *crcs* are generated.
 - Near End (that is, RDT), or
 - Line-0 (that is, NT1).
- **Duration:** The amount of time (1-256 seconds) during which intentionally corrupted *crcs* are generated.

13.4.5.5.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.5.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-18 lists the correct error response for a few important scenarios.

Table 13-18 — Generate Corrupted crc Errors

ERROR CONDITION	ERROR CODE
corruption location out of service	processing failure - improper condition
test in progress	processing failure - already in condition

13.4.5.6 Initialize PM Attributes

CMISE Service:	M-ACTION
Action Type:	initializePMAttributes
Related Object Classes:	
ISDN Framed Path Termination ATT ISDN Framed Path Termination	

13.4.5.6.1 Purpose

The Initialize PM Attribute action is sent by a managing system (LDS) to instances of managed object classes of a managed system (RDT) to initialize the performance monitoring attributes. The performance monitoring attributes will be initialized to an integer value of zero.

13.4.5.6.2 Action Argument

The following argument shall be supplied.

- **Initialize PM List:** This argument specifies the set of performance monitoring counts to be initialized to zero.
 - All performance monitoring counts, or
 - All current performance monitoring counts.

13.4.5.6.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.6.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS[®]-2000 switch.

13.4.5.7 Looparound to Diagnose Tap

CMISE Service:	M-ACTION
Action Type:	loopAroundDiagTAP
Related Object Classes:	
Metallic Test Access Path Termination	

13.4.5.7.1 Purpose

The Looparound to Diagnose TAP action is sent by a managing system (LDS) to a managed system (RDT) to verify the integrity of a particular test access path without entering the test access command sequence. The 5ESS®-2000 switch uses this message for requesting Diode Protocol Test. On receipt of the loopAroundDiagTAP action, the RDT is required to looparound the look-in pairs to the look-out pairs of the Metallic TAP. In particular, the look-in tip should be connected to the look-out tip, the look-in ring should be connected to the look-out ring, and the look-in ground should be connected to the look-out ground.

13.4.5.7.2 Action Argument

A NULL argument value is required when the action is requested.

13.4.5.7.3 Action Result

A NULL confirmation is required when the action is completed.

13.4.5.7.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-19 lists the correct error response for a few important scenarios.

Table 13-19 — Looparound to Diagnose Tap Errors

ERROR CONDITION	ERROR CODE
MTAP out of service	processing failure - improper condition

13.4.5.8 Operate ISDN Loopback

CMISE Service:	M-ACTION
Action Type:	operateISDNLoopback
Related Object Classes:	
ISDN Framed Path Termination	

13.4.5.8.1 Purpose

The Operate ISDN Loopback action is sent by a managing system (LDS) to a managed system (RDT) to direct a loopback operation on an instance of the ISDN Framed Path Termination.

Depending on the value of the location argument (that is, near end or line 0), the physical loopback may take place at either the RDT or NT1 that terminates (or access) the embedded operations channel (*eoc*). Performing a loopback operation at the NT1 requires *eoc* translation at the RDT; whereas, performing the loopback operation at the RDT requires no *eoc* translation. For this action, *eoc* translation simply reduces to the transmission of either the "Operate B1 Loopback," "Operate B2 Loopback," or "Operate 2B+D Loopback" *eoc* message, depending on whether the channel argument value is B1, B2, or 2B+D, respectively. Included in this message is a 3-bit *eoc* address that is based on the value of the loopback location argument provided in this action. The Corrupt Indicator Flag is set before the loopback operation is performed. The loopback operation prevents the hourly interval freeze from occurring if the loopback operation crosses the PM freeze.

The RDT is expected to perform loopbacks on in service and out of service DSLs. The 5ESS[®]-2000 switch does not take the DSL out of service at the RDT prior to loopback testing.

13.4.5.8.2 Action Argument

The following arguments shall be supplied:

- **Loopback Location:** The location where the loopback is to be performed.
 - Near End (that is, RDT)
 - Line-0 (that is, NT1).
- **Channel:** The channel(s) that will be looped back.
 - B1 Channel,
 - B2 Channel, or
 - 2B+D Channel.

13.4.5.8.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.8.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-20 lists the correct error response for a few important scenarios.

Table 13-20 — Operate ISDN Loopback Errors

ERROR CONDITION	ERROR CODE
channel unit not equipped	processing failure - improper condition
test in progress	processing failure - already in condition
channel busy	processing failure - improper condition

13.4.5.9 Operate Loopback

CMISE Service:	M-ACTION
Action Type:	operateLoopback
Related Object Classes:	
DS1 Line Termination	

13.4.5.9.1 Purpose

The Operate Loopback action is sent by a managing system (LDS) to a managed system (RDT) to direct a loopback operation on a given instance of a line or framed path termination.

Prior to setting up a loopback, the 5ESS®-2000 switch will try to put the DS1 on protection. However, the 5ESS®-2000 switch will not remove the DS1 from service via a remove M-ACTION. The 5ESS®-2000 switch expects to be able to loop back in service DS1s.

13.4.5.9.2 Action Argument

The following arguments shall be supplied:

- **Loopback Location:** The location where the loopback is to be performed.
 - Near End (that is, RDT).
- **Loopback Direction:** The direction that the loopback is to be performed.
 - ZA -- From Z to A.
- **Loopback Type:** The type of loopback to be performed.
 - Payload -- partial information bit pattern
 - Frame -- full information bit pattern.

13.4.5.9.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.9.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-21 lists the correct error response for a few important scenarios.

Table 13-21 — Operate Loopback Errors

ERROR CONDITION	ERROR CODE
DS1 termination plug-in not equipped	processing failure - improper condition
active EOC on object instance	processing failure - improper condition
active TMC on object instance	processing failure - improper condition
already in loopback	processing failure - already in condition

13.4.5.10 Operate Termination

CMISE Service:	M-ACTION
Action Type:	operateTermination
Related Object Classes:	
Test Response Circuit	

13.4.5.10.1 Purpose

The Operate Termination action is sent by a managing system (LDS) to a managed system (RDT) to direct a test response circuit to apply test terminations during channel testing of locally-switched services. Two terminations are applied with this service: an initial and a detect termination. The detect termination is applied only if the specified output is detected from the initial termination. If the specified output is not detected, the initial termination should remain applied. The test response circuit must have been connected to the circuit under test with a "Connect Test Response Circuit" action before the Operate Termination action can be sent.

13.4.5.10.2 Action Argument

The following arguments shall be supplied:

- **Initial Termination:**

- Open -- Default
- Loop Closure Absorptive
- Loop Closure Reflective
- Loop Closure Absorptive and Positive Ground
- Loop Closure Reflective and Negative Ground
- Ring Ground
- Negative Tip Ground
- Positive Tip Ground.

- **Detect Output:** The line unit output condition to be detected by the RDT test response circuit with the specified Initial Termination applied to the line unit under test. Valid values are as follows:

- Normal Loop Current Feed
- Reverse Loop Current Feed
- Positive Loop Current Feed
- Ground Start Idle

- Negative Coin Check
- Positive Coin Check
- Negative Coin Control Voltage
- Positive Coin Control Voltage
- Negative Superimposed Ringing on Ring
- Negative Superimposed Ringing on Tip
- Positive Superimposed Ringing on Ring
- Positive Superimposed Ringing on Tip
- Normal Loop Current
- Reverse Loop Current
- No Loop Current
- Anything -- Default.

- **Detect Termination:** The detect termination that will be applied if and only if the condition specified by Detect Output is detected by the RDT Test Response Circuit. Valid values are the same as Initial Termination.

13.4.5.10.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.10.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-22 lists the correct error response for a few important scenarios.

Table 13-22 — Operate Termination Errors

ERROR CONDITION	ERROR CODE
TRC out of service	processing failure - improper condition
out of sequence	processing failure - error description

13.4.5.11 Protection Switch

CMISE Service:	M-ACTION
Action Type:	protectionSwitch
Related Object Classes:	
Protection Group	

13.4.5.11.1 Purpose

The Protection Switch action is sent by either the managing system (LDS) or the managed system (RDT) to direct a protection switch of the data links (that is, the EOC or the TMC paths).

13.4.5.11.2 Action Argument

The following arguments shall be supplied:

- **Protection Switch Mode:** The mode in which the operation is to be implemented. Valid values are as follows:
 - Normal
 - Forced.

Normal mode means switching the EOC/TMC path only if the standby path is in service and operating satisfactorily. Force mode means switching the path no matter what the condition of the standby path.

- **Protected Unit Name:** The *protected* Protection Group Unit for which the Protection Switch action is requested. Valid values are Distinguished Names of *protected* Protection Group Units contained in the Protection Group.

13.4.5.11.3 Action Result

The following results are supplied upon completion of the action:

- **Protection Switch Result:** This argument returns the result of the Protection Switch request. Valid value is as follows:

— TRUE --- The action is completed.

13.4.5.11.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-23 lists the correct error response for a few important scenarios.

Table 13-23 — Protection Switch Errors

ERROR CONDITION	ERROR CODE
protection unit already active	processing failure - already in condition
protecting unit out of service	processing failure - improper condition

13.4.5.12 Release ISDN Loopback

CMISE Service:	M-ACTION
Action Type:	releaseISDNLoopback
Related Object Classes:	
ISDN Framed Path Termination	

13.4.5.12.1 Purpose

The Release ISDN Loopback action is sent by a managing system (LDS) to a managed system (RDT) to release a loopback previously operated by an instance of the ISDN Framed Path Termination object. Parameters are defined in the Action Argument to specify the loopback location (RDT or NT1) and the loopback channel (B1, B2, or 2B+D).

Releasing the loopback at the NT1 requires *eoc* translation at the RDT; whereas, releasing a loopback at the RDT (marked by a loopback location argument value of "near end") requires no *eoc* translation. For this action, *eoc* translation is simply the transmission of the "Return to Normal" *eoc* message. Included in the message is a 3-bit *eoc* address that is based on the loopback location argument value.

13.4.5.12.2 Action Argument

The following arguments shall be supplied:

- **Loopback Location:** The location where the loopback is to be released.
 - Near End (that is, RDT) or
 - Line-0 (that is, NT1).
- **Channel:** The channel(s) that will be released.
 - B1 Channel,
 - B2 Channel, or
 - 2B+D Channel.

13.4.5.12.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.12.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-24 lists the correct error response for a few important scenarios:

Table 13-24 — Release ISDN Loopback Errors

ERROR CONDITION	ERROR CODE
no ISDN loopback in progress	processing failure - already in condition

13.4.5.13 Release Looparound

CMISE Service:	M-ACTION
Action Type:	releaseLooparound
Related Object Classes:	
Metallic Test Access Path Termination	

13.4.5.13.1 Purpose

The Release Looparound action is sent by a managing system (LDS) to a managed system (RDT) to release the test access path loop around, release the assigned access, and open the test access path connections.

13.4.5.13.2 Action Argument

A NULL argument value is required when the action is requested.

13.4.5.13.3 Action Result

A Null confirmation is required when the action is completed.

13.4.5.13.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-25 lists the correct error response for a few important scenarios:

Table 13-25 — Release Looparound Errors

ERROR CONDITION	ERROR CODE
no looparound in progress	processing failure - already in condition

13.4.5.14 Release Loopback

CMISE Service:	M-ACTION
Action Type:	releaseLoopback
Related Object Classes:	
DS1 Line Termination	

13.4.5.14.1 Purpose

The Release Loopback action is sent by a managing system (LDS) to a managed system (RDT) to release a loopback operation on a given instance of a line or framed path termination.

The loopback should have been established at the near end (RDT).

13.4.5.14.2 Action Argument

The following arguments shall be supplied:

- **Loopback Location:** The location where the loopback is to be performed.
 - Near End (that is, RDT).
- **Loopback Direction:** The direction that the loopback is to be performed.
 - ZA -- From Z to A.

13.4.5.14.3 Action Result

A null confirmation is required when the action is completed.

13.4.5.14.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-26 lists the correct error response for a few important scenarios.

Table 13-26 — Release Loopback Errors

ERROR CONDITION	ERROR CODE
no loopback in progress	processing failure - already in condition

13.4.5.15 Release Test Response Circuit

CMISE Service:	M-ACTION
Action Type:	releaseTestResponseCircuit
Related Object Classes:	
Analog Line Termination	

13.4.5.15.1 Purpose

The Release Test Response Circuit Service is sent by the managing system to the RDT to direct an Analog Line Termination to release the Test Response Circuit. This service is in the confirmed mode and is performed only on one object instance. Upon receipt of this service, the RDT disconnects the Test Response Circuit from the termination under test and reconnects the line unit side of the Test Access Path Termination that is assigned to that termination to its associated external equipment (for example, the Remote Test Unit 2) if this access is in an active state.

This service can be sent to the RDT any time during channel testing to disconnect the TRC from the termination. Note that for the typical success scenario, this service is sent after channel testing has been completed.

13.4.5.15.2 Action Argument

A NULL argument value is required when the action is requested.

13.4.5.15.3 Action Result

The value NULL is supplied upon completion of the action.

13.4.5.15.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-27 lists the correct error response for a few important scenarios:

Table 13-27 — Release Test Response Circuit Errors

ERROR CONDITION	ERROR CODE
no TRC connected	processing failure - already in condition

13.4.5.16 Remove

CMISE Service:	M-ACTION
Action Type:	remove
Related Object Classes:	
Analog Line Termination ISDN Framed Path Termination	

13.4.5.16.1 Purpose

The Remove action is sent by a managing system (LDS) to a managed system (RDT) to remove one or more managed object instances from service. This action automatically changes the value of the managed object instance's Primary Service State and Secondary Service State attributes. Primary Service State attribute is changed from In Service to Out of Service. The Secondary Service State attribute is changed to reflect that the object instance is out of service due to either testing, maintenance, memory administration, or switching system activity.

When the RDT receives a remove M_ACTION from the switch for a given line termination, the Primary Service State should be changed to OOS if it is not already OOS. The values MT and SWTCH should be added to the Secondary Service State list. A manual remove takes precedence over any previously existing OOS condition. Once a line termination has been removed, the only way to put it back into service is via a restore M_ACTION or through an automatic recovery at the RDT when the associated circuit page (for example, channel unit) is plugged in.

Two removing modes are provided: normal and forced. For a normal mode, the RDT will follow its normal procedure of removal, which ensures an orderly interruption of service. In forced mode, the related object instance will be immediately removed from service without any regard to service interruption.

13.4.5.16.2 Action Argument

The following arguments shall be supplied:

- **Mode:** The mode in which the operation is to be implemented. Valid values are as follows:
 - Normal
 - Forced.

13.4.5.16.3 Action Result

A NULL confirmation is required when the action is completed.

13.4.5.16.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-28 lists the correct error response for a few important scenarios:

Table 13-28 — Remove Errors

ERROR CONDITION	ERROR CODE
object instance already removed	processing failure - already in condition

13.4.5.17 Restore

CMISE Service:	M-ACTION
Action Type:	restore
Related Object Classes:	
Analog Line Termination ISDN Framed Path Termination	

13.4.5.17.1 Purpose

The Restore action is sent by a managing system (LDS) to a managed system (RDT) to restore one or more managed object instances into service. This action automatically changes the value of the managed object instance's Primary Service State and Secondary Service State attributes. The Primary Service State attribute is changed from Out of Service to In Service. The Secondary Service State attribute is changed to reflect that the object instance is no longer out of service due to either testing, maintenance, memory administration, or switching system activity.

Two restoring modes are provided: normal and forced. For a normal mode, the RDT will make the appropriate verification, if any, before returning the instance to service. For a forced mode, the RDT will return the instance to service without any verification.

13.4.5.17.2 Action Argument

The following argument shall be supplied:

- **Mode:** The mode in which the operation is to be implemented. Valid values are as follows:
 - Normal
 - Forced.

13.4.5.17.3 Action Result

A RestoreResult confirmation is required when the action is completed.

13.4.5.17.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-29 lists the correct error response for a few important scenarios.

Table 13-29 — Restore Errors

ERROR CONDITION	ERROR CODE
object instance already in service	processing failure - already in condition
OOS condition exist	processing failure - improper condition

13.4.5.18 Reset Timer

CMISE Service:	M-ACTION
Action Type:	resetTimer
Related Object Classes: Metallic Test Access Path Termination	

13.4.5.18.1 Purpose

The Reset Timer action is sent by a managing system (LDS) to a managed system (RDT) to reset the 75-second activity timer associated with a particular access (TAP) and test operation. This service is used when long or indefinite holding time is required for a given test in the absence of other test access activity. After receiving the message, the RDT will reset the activity timer to 0.

13.4.5.18.2 Action Argument

The NULL Argument value is required when the action is requested.

13.4.5.18.3 Action Result

A NULL confirmation is required when the action is completed.

13.4.5.18.4 Errors

All CMISE errors applicable to an M-ACTION operation are recognized by the 5ESS®-2000 switch. Table 13-30 lists the correct error response for a few important scenarios.

Table 13-30 — Reset Timer Errors

ERROR CONDITION	ERROR CODE
MTAP out of service	processing failure - improper condition

13.4.6 M-EVENT-REPORT

13.4.6.1 General

This section lists the subset of the TR303 defined notifications that the 5ESS®-2000 switch will use. This information will clarify and/or qualify the definitions presented in TR303.

13.4.6.2 ATT PM Data Ready

CMISE Service:	M-EVENT-REPORT
Event Type:	attPmDataReady
Related Object Classes:	
ATT PM Freeze Schedule	

13.4.6.2.1 Purpose

The ATT PM Data Ready notification is used by a managed system (RDT) to report the availability of performance monitoring data on the specified managed object instance to its managing system (LDS). This notification is sent from the RDT when the RDT has finished its regularly scheduled freeze, update, and collect operation of the performance monitoring counts. This operation must be completed and the notification sent to the switch within 5 minutes of the end of the PM interval.

13.4.6.2.2 Event Argument

A NULL argument is supplied for this Event Report message.

13.4.6.3 Change of Overhead Bits Report

CMISE Service:	M-EVENT-REPORT
Event Type:	changeOfOverheadBitsReport
Related Object Classes:	
ISDN Framed Path Termination	

13.4.6.3.1 Purpose

The Change Of Overhead Bits Report notification is used by a managed system (RDT) to report to a managing system (LDS) the change of superframe overhead bits on an ISDN DSL.

13.4.6.4 Event Argument

The following arguments shall be supplied:

Old State:

The previous state of the superframe overhead bits prior to the change.

New State:

The current state of the superframe overhead bits after the change.

13.4.6.5 Event Reporting

CMISE Service:	M-EVENT-REPORT
Event Type:	eventReporting
Related Object Classes:	
Analog Line Termination	ISDN Framed Path Termination
ATT ISDN Framed Path Termination	ISDN Line Termination
DS1 Framed Path Termination	Network Element
Equipment	Memory
Equipment Holder	

13.4.6.5.1 Purpose

The Event Reporting notification is used by a managed system (RDT) to report to the managing system (LDS) the detection of either an alarmed, nonalarmed, or data corruption event. Refer to the "NOTIFICATIONS" descriptions of individual objects for the details of the usage of this message.

13.4.6.5.2 Event Argument

The following arguments shall be supplied:

- **Problem Type:** The general problem that the alarm report is identifying. Valid values are indeterminate, equipment problem, transmission problem, environmental problem, software problem, service problem, threshold alert, and scheduled management operations problem.
- **Alarm Severity:** The relative importance of an alarm. Valid values are clear, indeterminate, warning, minor, major, and critical.
- **Problem Data:** Miscellaneous vendor defined data used to further refine the alarm report. This argument will contain a printable string so that the LDS can display the message at the craft interface. Problem data is not included for service state change Event Reports notification.
- **Monitored Attributes:** This argument is used in an Event Reporting message that reports the service state changes of the Line Termination objects, or the performance monitoring threshold alerts of the Framed Path Termination objects. For the exact syntax, refer to the "NOTIFICATIONS" descriptions of each object.

13.4.7 ERROR CODES

This section defines the error codes and shows what parameters are returned for each error code. This section is to be used as a reference only.

13.4.7.1 Error Definitions

This section defines the errors for the operations. In some cases, the type of error determines the type of ROSE APDU that is sent. The errors that are defined by ROSE are sent in an RORJapdu. These reflect general application layer problems and apply to any operation invocation reply. The errors that are defined by CMISE are sent in the ROERapdu. Each of these errors applies to a particular subset of operations. Some CMISE error values are used in the m-LinkedReply ROIVapdu for multiple replies.

13.4.7.1.1 RORJapdu Error Values

Duplicate Invocation

The invoke identifier specified was allocated to another notification or operation.

Mistyped Argument

One of the parameters supplied has not been agreed for use on the association.

Resource Limitation

The operation was not performed due to a resource limitation.

Unrecognized Operation

The operation is not one of those agreed for use on the association.

13.4.7.1.2 ROERapdu Error Values

Access Denied

Operations: m-Get, m-Set-Confirmed, m-Action-Confirmed, m-Create, m-Delete.

The requested operation was not performed for reasons pertinent to the security of the open system.

Class Instance Conflict

Operations: m-Get, m-Set-Confirmed, m-Action-Confirmed, m-Create, m-Delete.

The specified managed object instance is not a member of the specified object class.

Complexity Limitation

Operations: m-Get, m-Set-Confirmed, m-Action-Confirmed, m-Create, m-Delete.

The requested operation was not performed because a parameter was too complex.

Get List Error

Operations: m-Get.

One or more attribute values were not read for one of the following reasons:

Access Denied

(Defined above)

No Such Attribute

(Defined below)

The attribute values that could be read are returned.

Invalid Argument Value

Operations: m-EventReport-Confirmed, m-Action-Confirmed.

The event or action information value specified was out of range or otherwise inappropriate.

Invalid Attribute Value

Operations: m-Set-Confirmed, m-Create.

The attribute value specified was out of range or otherwise inappropriate.

Invalid Filter

Operations: m-Get, m-Set-Confirmed, m-Action-Confirmed, m-Delete.

The filter parameter contains an invalid assertion or an unrecognized logical operator.

Invalid Object Instance

Operations: m-Create.

The object instance name specified implied a violation of the naming rules.

Invalid Scope

Operations: m-Get, m-Set-Confirmed, m-Action-Confirmed, m-Delete.

The value of the scope parameter is invalid.

Missing Attribute Value

Operations: m-Create.

A required attribute value was not supplied, and a default value was not available.

No Such Action

Operations: m-Action-Confirmed.

The action type specified is not supported.

No Such Argument

Operations: m-EventReport-Confirmed, m-Action-Confirmed.

The event or action information specified is not supported.

No Such Attribute

Operations: m-Get, m-Set-Confirmed, m-Create.

The identifier for the specified attribute or attribute group was not recognized.

No Such Event Type

Operations: m-EventReport-Confirmed.

No Such Object Class

Operations: m-EventReport-Confirmed, m-Get, m-Set-Confirmed,
m-Action-Confirmed, m-Create, m-Delete.
The class of the specified managed object was not recognized.

No Such Object Instance

Operations: m-EventReport-Confirmed, m-Get, m-Set-Confirmed,
m-Action-Confirmed, m-Create, m-Delete.
The instance of the specified managed object was not recognized.

No Such Reference Object

Operations: m-Create.
The reference object instance parameter was not recognized.

Processing Failure

Operations: m-EventReport-Confirmed, m-Get, m-Set-Confirmed,
m-Action-Confirmed, m-Create, m-Delete.
A general failure in processing the operation was encountered.

Set List Error

Operations: m-Set-Confirmed.
One or more attribute values were not modified for the following reasons:

Access Denied

(Defined previously)

Invalid Attribute Value

(Defined previously)

No Such Attribute

(Defined previously)

The attribute values that could be modified were modified.

Synchronization Not Supported

Operations: m-Get, m-Set-Confirmed, m-Action-Confirmed, m-Delete.
The type of synchronization specified is not supported.

The "Processing Failure" error has a field for additional information. This information is specified in the object class definition.

13.4.7.1.3 ROIVapdu Error Values

The following error values may be used with the m-LinkedReply operation in the ROIVapdu ROSE APDU.

Action Error

This may be one of the following:

- Access Denied
- No Such Action (includes Action Type)
- No Such Argument
- Invalid Argument Value (includes Argument Value).

Delete Error

The only error code defined is "Access Denied."

Get List Error

This is a list of the retrievable attributes with their values and a list of the unretrievable attributes, each attribute accompanied by one of the following error codes:

- Access Denied
- No Such Attribute.

Set List Error

This is a list of the attributes that were set with their values and a list of the attributes that were not set, each attribute accompanied by one of the following error codes:

- Access Denied
- No Such Attribute.

Processing Failure

(Defined previously)

13.4.7.2 RORJapdu Error Codes

The RORJapdu error codes are shown in Tables 13-31, 13-32, and 13-33.

Table 13-31 — RORJapdu Error Codes for ROIVapdu Rejection

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Duplicate Invocation	Invoke Problem	Duplicate Invocation	All
Mistyped Argument	Invoke Problem	Mistyped Argument	All
Resource Limitation	Invoke Problem	Resource Limitation	All
Unrecognized Operation	Invoke Problem	Unrecognized Operation	All
Unrecognized Linked Id	Invoke Problem	Unrecognized Linked Id	m-Linked-Reply
Linked Response Unexpected	Invoke Problem	Linked Response Unexpected	m-Linked-Reply
Unexpected Child Operation	Invoke Problem	Unexpected Child Operation	m-Linked-Reply

Table 13-32 — RORJapdu Error Codes for RORSapdu Rejection

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Unrecognized Invocation	Return Result Problem	Unrecognized Invocation	All
Result Response Unexpected	Return Result Problem	Result Response Unexpected	All
Mistyped Result	Return Result Problem	Mistyped Result	All

Table 13-33 — RORJapdu Error Codes for ROERapdu Rejection

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Unrecognized Invocation	Return Error Problem	Unrecognized Invocation	All
Error Response Unexpected	Return Error Problem	Error Response Unexpected	All
Unrecognized Error	Return Error Problem	Unrecognized Error	All
Mistyped Parameter	Return Error Problem	Mistyped Parameter	All

13.4.7.3 ROERapdu Error Codes

Table 13-34 lists the ROERapdu error codes.

Table 13-34 — ROERapdu Error Codes

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Access Denied	Error Value	Access Denied	m-Get m-Set-Conf m-Action-Conf m-Create m-Delete
Class Instance Conflict	Error Value Object Class Object Instance	Class Instance Conflict	m-Get m-Set-Conf m-Action-Conf m-Create m-Delete
Complexity Limitation	Error Value Scope* Filter* Synchronization*	Complexity Limitation Same as request Same as request Same as request	m-Get m-Set-Conf m-Action-Conf m-Create m-Delete
Get List Error	Error Value Managed Object Class† Managed Object Instance† Current Time* Get Info Status‡	Get List Error Same as request Same as request	m-Get
Invalid Argument Value	Error Value Action Type Action Info	Invalid Argument Value Same as request Same as request	m-Action-Conf
Invalid Argument Value	Error Value Event Type Event Info	Invalid Argument Value Same as request Same as request	m-EventReport-Conf
Invalid Attribute Value	Error Value Attribute Id Attribute Value	Invalid Attribute Value Same as request Same as request	m-Set-Conf m-Create
Invalid Filter	Error Value Filter	Invalid Filter Same as request	m-Set-Conf m-Get m-Action-Conf m-Delete

Table 13-34 — ROERapdu Error Codes (contd.)

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Invalid Object Instance	Error Value Object Instance	Invalid Object Instance Same as request	m-Create
Invalid Scope	Error Value Scope	Invalid Scope Same as request	m-Get m-Set-Conf m-Action-Conf m-Delete
Missing Attribute Value	Error Value Attribute Id	Missing Attribute Value Same as request	m-Create
No Such Action	Error Value Object Class Action Type	No Such Action Same as request Same as request	m-Action-Conf
No Such Argument	Error Value Managed Object Class* Action Type	No Such Argument Object Class Id Same as request	m-Action-Conf
No Such Argument	Error Value Managed Object Class* Event Type	No Such Argument Object Class Id Same as request	m-EventReport-Conf
No Such Attribute	Error Value Attribute Id	No Such Attribute Same as request	m-Get m-Set-Conf m-Create
No Such Event Type	Error Value Managed Object Class Event Type	No Such Event Type Object Class Id Same as request	m-EventReport-Conf
No Such Object Class	Error Value Object Class	No Such Object Class Same as request	m-EventReport-Conf m-Get m-Set-Conf m-Action-Conf m-Create m-Delete
No Such Object Instance	Error Value Object Instance	No Such Object Instance Same as request	m-EventReport-Conf m-Get m-Set-Conf m-Action-Conf m-Create m-Delete
No Such Reference Object	Error Value Object Object Instance	No Such Reference Same as request	m-Create

Table 13-34 — ROERapdu Error Codes (contd.)

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Processing Failure	Error Value Managed Object Class Managed Object Instance* Specific Error Info	Processing Failure Object Class Id RDNSSequence (see Table 13-35)	m-EventReport-Conf m-Get m-Set-Conf m-Action-Conf m-Create m-Delete
Set List Error	Error Value Managed Object Class† Managed Object Instance† Current Time* Set Info Status§	Set List Error	m-Set-Conf
Synchronization Not Supported	Error Value Synchronization	Synchronization Not Supported Same as request	m-Get m-Set-Conf m-Action-Conf m-Delete
<p>* Optional.</p> <p>† Only required if a filter is used in the request and the scope exceeds "base object only."</p> <p>‡ Get Info Status is a list of the attribute Ids with either the corresponding attribute values (for each retrievable attribute value), or one of the following error values (for each nonretrievable attribute value):</p> <ul style="list-style-type: none"> • Access Denied • No Such Attribute. <p>§ Set Info Status consists of a sequence of the following:</p> <ul style="list-style-type: none"> • Attribute Id • Attribute value • Error Value (If attribute cannot be set, use one of the following): <ul style="list-style-type: none"> — Access Denied — No Such Attribute — Invalid Attribute Value — Invalid Operator — Invalid Operation. 			

The parameter description of the object specific errors is presented in Table 13-35.

Table 13-35 — Processing Failure Error Code

SPECIFIC ERROR	ERROR DESCRIPTION	ERROR PARAMETER
Improper Condition	The values of a subset of attributes of this managed object are improper to perform the requested operation.	The set of attributes (attribute Id and value) which are improper.
Corrupted Memory Error	The values of a subset of attributes of this managed object have unrecognized or invalid values.	The set of attribute Ids whose values are invalid.
Already In Condition	The managed object is already in the condition requested.	The set of attributes (attribute Id and value) which describe the current condition.
Associated Entity Unavailable	The managed object has an associated entity which is unavailable due to either it is in an improper condition, it is busy, or it has failed. The unavailability prevents the managed object from performing the requested operation.	If possible, the DN of the associated entity and the indication of the associated entity being supported or supporting entity.
Error Description	The managed object has an error which does not have an error code.	A printable string.
Containing Object Instance	The managed object contains other managed object instances which have not been deleted.	The list of contained object instances.

13.4.7.4 ROIVapdu (M-Linked-Reply) Error Codes

Table 13-36 lists the ROIVapdu error codes.

Table 13-36 — ROIVapdu Error Codes

ERROR CODE	PARAMETER	VALUE	OPERATIONS
Action Error	Managed Object Class* Managed Object Instance* Current Time* Action Error Info	Object Class Id †	m-Action-Conf
Delete Error	Managed Object Class* Managed Object Instance* Current Time* Error Value	Object Class Id Access Denied	m-Delete
Get List Error	Managed Object Class* Managed Object Instance* Current Time* Get Info Status	Object Class Id ‡	m-Get
Set List Error	Managed Object Class* Managed Object Instance* Current Time* Set Info Status	Object Class Id §	m-Set-Conf
Processing Failure	Managed Object Class Managed Object Instance* Current Time* Specific Error Info	Object Class Id (Defined in Table 13-35)	m-Action-Conf m-Delete m-Get m-Set-Conf
<p>* Optional.</p> <p>† Action Error Info consists of one of the following:</p> <ul style="list-style-type: none"> • Access Denied • No Such Action (includes the Action Type sent in the request) • No Such Argument (includes the Action Type sent in the request) • Invalid Argument Value (includes Action Type and Argument Value sent in the request). <p>‡ Get Info Status is a list of the Attribute Ids with either the corresponding attribute values (for each retrievable attribute value) or one of the following error values (for each nonretrievable attribute value):</p> <ul style="list-style-type: none"> • Access Denied • No Such Attribute. <p>§ Set Info Status consists of a sequence of the following:</p> <ul style="list-style-type: none"> • Attribute Id • Attribute value • Error Value (If attribute cannot be set): <ul style="list-style-type: none"> — Access Denied — No Such Attribute — Invalid Attribute Value. 			

13.5 OPERATIONAL PROCEDURES

13.5.1 General

This section is intended to show how the 5ESS®-2000 switch uses the services described in Section 13.4 for the different EOC applications.

13.5.2 RDT MEMORY ADMINISTRATION

13.5.2.1 Overview

In order to preserve the existing operations flow through for switched services, the 5ESS®-2000 switch has the capability to provision objects in the RDT. If RDT provisioning is enabled, the 5ESS®-2000 switch provisions both the "global" objects and line-related objects based on the data provisioned in the switch's data base. If RDT provisioning is disabled, the 5ESS®-2000 switch will not attempt to provision data in the RDT and assumes that the RDT gets provisioned through some other mechanism.

One exception is that the provisioning enable/disable status does not apply to Cross Connection and Quarter DS0 Channel Termination (DS1 side only) creation. The 5ESS®-2000 switch will always create Cross Connection objects for non-switched and non-locally switched specials (analog and DDS), as well as ISDN D and semi-permanent B channels. Similarly, the Quarter DS0 Channel Termination is name bound to the DS0 Channel Termination contained in the DS1 Framed Path Terminations.

The 5ESS®-2000 switch provisioning application sets attributes of the following object classes:

- Network Element: System Clock
- PM Interval Profile: Interval Value
- DS1 Framed Path Termination: APS BER Threshold, DAY and MIN PM Thresholds (ES, SES, DM, UAS, SEFS)
- IDLC DL Profile: max I Frame, N200, T200, T203
- IDLC CP Profile: T303, T308, T396, T397.

The 5ESS®-2000 switch provisioning application creates instances of the following object classes:

- ISDN Per-System Profile
- ATT PM Freeze Schedule
- Event Report Control
- Analog Line Termination
- Cross-Connection
- ISDN Line Termination
- ISDN Framed Path Termination
- Quarter DS0 Channel Termination (ISDN D channels)
- DS0 Channel Termination (provisioned packet ISDN B channels).

If provisioning is enabled, the 5ESS®-2000 switch provisions all objects needed for switched services. For nonswitched services, line termination provisioning is controlled on a per-line basis. For POTS-like nonswitched lines, the 5ESS®-2000 switch can create

the line termination. Non-POTS-like services such as DDS or lines that require data to be provisioned that the 5ESS®-2000 switch does not have in its data base cannot be provisioned by the switch. This per-line control is specified when the line is assigned in the switch.

As described previously, the 5ESS®-2000 switch creates Cross-Connection objects for all nonswitched lines that route through the switch. The 5ESS®-2000 switch does not create Cross-Connection objects for lines that do not route through the switch, such as lines that go to an INA DS1. For some lines, the 5ESS®-2000 switch does not create the line termination but does create the cross-connection (for example, DDS that is nailed up through the switch).

13.5.2.2 Events

Assuming that provisioning is enabled for an RDT, the following events cause provisioning activity:

- Service Order Changes (Recent Change)
 - Line assignment/deletion
 - Nailup/Hairpin assignment
 - RDT growth
 - Parameter updates (such as Performance Monitoring thresholds)
- EOC/TMC recovery from duplex fail
 - Global data and any lines that are in need of provisioning will be provisioned
- Routine 24-hour refresh
 - All provisioned data is refreshed once a day
- RDT reports memory corruption via an event report
 - All provisioned data is refreshed
- Demand request
 - Switch technician can request a provisioning refresh.

13.5.2.3 Lucent Technologies Defined Objects

When the 5ESS®-2000 switch attempts global provisioning, it tries to create an ATT PM Freeze Schedule object instance. If the RDT does not support this object class, it should respond with the noSuchObjectClass CMISE error. The implication of not supporting this object class is that PM Start Time will default to midnight and routine DSL PM reporting will not be available for this RDT.

When the 5ESS®-2000 switch attempts ISDN line provisioning, it tries to create an ATT ISDN Framed Path Termination object instance. If the RDT does not support this object class, it should respond with the noSuchObjectClass CMISE error. The implication of not supporting this object class is that multiple hour interval Performance Monitoring will not be available for this RDT.

13.5.3 LINE MAINTENANCE

13.5.3.1 Line Termination Administration

13.5.3.1.1 Overview

The purpose of Line Termination Administration is to keep the 5ESS®-2000 switch port status and the RDT's line termination status consistent. This is done for several reasons:

- It is a waste of call processing resources to continue to offer calls to a line termination if it is incapable of handling them because of a problem at the RDT.
- It is a waste of resources to process call setups from a line termination if a technician has removed the line from service at the 5ESS®-2000 switch.
- When resolving customer trouble reports, the switch technician expects the port status to reflect the actual condition of the line.

Line Termination Administration includes the following activities:

- Retrieving the line termination status information routinely and on demand.
- Removing and Restoring the line termination from the switch.
- The RDT autonomously sending service state change event reports to the switch.
- The RDT autonomously sending ISDN Level 1 state change reports to the switch.

13.5.3.1.2 Generic Service State Model

In order for the 5ESS®-2000 switch to interpret the line termination status for a given object, the 5ESS®-2000 switch and the RDT must share a common state model. This section presents the 5ESS®-2000 switch interpretation of the TR303 generic state model.

In the TR303 interface, the service state of an object is represented by two parameters, namely, the Primary Service State (PSS) and the Secondary Service State (SSS). The Primary Service State of an object reflects the ability of the object to perform its service functions or network duties as defined by the object's behavior and attributes. It has one of the two values: In Service (IS) - capable of providing service, and Out of Service (OOS) - incapable of providing service.

The SSS provides supplementary information about the object's ability to provide service. It can be classified into the following three types:

1. **Service Condition Qualifier:** This type of flags qualifies the service condition indicated in the PSS. Two flags belong to this type:
 - **Memory Administration (MA):** The MA deals with provisioning. Provisioning refers to the processes which arrange and connect equipment and facilities, create their associated software and data base translations in response to service demands and forecasts.
 - **Maintenance (MT):** The MT deals with fault detection and service recovery. It also deals with testing that is done to insure an object is functioning properly or to sectionalize and isolate a fault.

2. **Service Condition Data:** This type of SSS flags provides specific information about the condition of the following object:
 - **Abnormal (ANR):** The object is IS but only able to perform part of its designated service functions.
 - **Active (ACT):** The object is active (for data link path switching).
 - **Fault (FLT):** The object is OOS because it is faulty.
 - **Loopback (LPBK):** Loopback activity is currently being performed on the object.
 - **Manual (MTCE):** The object has been manually taken OOS for maintenance reasons.
 - **Mismatch of Equipment and Attributes (MEA):** The object is equipped with improper equipment.
 - **Monitor (MON):** The object has reached a monitored performance level at which it is taken out of service by the NE.
 - **Power (PWR):** The object is OOS because it does not have power.
 - **Standby (STBY):** The object is standby (for data link path switching).
 - **Switch (SWTCH):** The object is manually removed from service by the switching system.
 - **Test (TS):** Testing activity is currently being performed on the object.
 - **Unequipped (UEQ):** The object has not been equipped with the necessary equipment.
3. **Associated Service Data:** This type of SSS flags provides information about the service availability of the following associated objects of an object.
 - **Facility Failure (FAF):** The associated supporting facility is OOS.
 - **Family of Equipment Failure (FEF):** The associated controlling supporting equipment is OOS.*

The following list summarizes the allowed groupings of the SSS flags when working in conjunction with the PSS. Three groups are formed, and each group represents the possible state of an object. The groupings are shown in the form Primary Service State - Service Condition Qualifier - Service Condition Data - Associated Service Data. Optional values are shown by the square bracket (that is, [...]), mutually exclusive conditions are separated by the pipe construct (that is, ...|...), and multiple conditions that may appear simultaneously are separated by commas.

- IS-[ANR]-[TS, {ACT | STBY}]
- OOS-MA-[UEQ | MEA]-[FAF, FEF]

* Bell Communications Research, *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface*, TR-TSY-000303, Revision 4, August 1991.

- OOS-MT-[{UEQ | MEA | {FLT, LPBK, PWR, TS, MON}}, {MTCE, SWITCH}]-[FAF, FEF]

It is not crucial that the RDT adopt every aspect of this model. The following guideline is presented to indicate which aspects of the model are important to the 5ESS[®]-2000 switch.

When the 5ESS[®]-2000 switch reads a line termination status (via M_GET of PSS and SSS), it is interpreted as follows:

- If the PSS is IS, the SSS list is not examined.
- The presence of SWITCH in the SSS list indicates that the switch has removed the object from service. This should correspond to an OOS condition in the switch.
- The MON, ANR, ACT, LPBK, MA, MT, STBY, and TS qualifiers are not considered to be service affecting. Unless they are qualified with another SSS value, they do not cause the 5ESS[®]-2000 switch service state to change. If the current service state is IS, it remains IS.
- Any other SSS qualifier is considered to be service affecting and a true OOS condition.

13.5.3.1.3 Analog Line Administration

When the 5ESS[®]-2000 switch creates an analog line termination, it creates it with an IS PSS. After successful creation, the RDT is expected to report nontransient service state changes via the event reporting service (service problem type) as described in the object description. The 5ESS[®]-2000 switch retrieves the PSS and SSS via M_GETS routinely, and takes recovery action if a mismatch is detected between the line termination state and the 5ESS[®]-2000 switch internal port status. This recovery action could include removing/restoring the line termination or changing the internal port status to reflect a problem at the RDT. With this scheme, the 5ESS[®]-2000 switch internal port status should accurately reflect the state of the line termination in the RDT at all times.

In addition, when the 5ESS[®]-2000 retrieves the PSS and SSS attributes, it also retrieves the Generic Signal Function attribute to verify that it is consistent with the line type provisioned in the 5ESS[®]-2000. If a mismatch is detected, the 5ESS[®]-2000 will take the line Out Of Service and if provisioning is enabled, re-provision the line termination.

13.5.3.1.4 Digital Subscriber Line Administration

The service state model of the ISDN objects is complicated by the containment relationships of the objects. For the 5ESS[®]-2000 switch ISDN line termination administration functionality, only the service states of the ISDN Line Termination and the ISDN Framed Path Termination objects are used.

- **ISDN Line Termination:** The ISDN Line Termination object contains all other ISDN objects. As long as the ISDN Line Termination object exists, the RDT shall try to maintain layer one in operational condition. The state of layer one is not reflected in the service state of the ISDN Line Termination object.

- **(ATT) ISDN Framed Path Termination:** The (ATT) ISDN Framed Path Termination object is contained in the ISDN Line Termination object. Thus, ISDN Line Termination is a controlling object of the (ATT) ISDN Framed Path Termination object. Also, the SSS flag MON of an (ATT) ISDN Framed Path Termination object shall be exclusively used to indicate the LOS of layer one.
- **DS0 Channel Termination and Quarter DS0 Channel Termination:** These objects are contained in the (ATT) ISDN Framed Path Termination object. The 5ESS®-2000 switch does not explicitly use the service states of these objects.

Table 13-37 presents some cases to demonstrate the ISDN service state model described previously.

Table 13-37 — ISDN Service State Model

CONDITION	RESULTING OBJECT SERVICE STATE	
	ISDN LT	ISDN FPT
LT IS, FPT IS, L1 up	IS	IS
LT IS, FPT IS, L1 down	IS	OOS-MON
LT IS, FPT removed by LDS, L1 up	IS	OOS-SWCH
LT IS, FPT removed by LDS, L1 down	IS	OOS-SWCH-MON
RDT Eq. Prob., L1 up	OOS-FEF	OOS-FEF
RDT Eq. Prob., L1 down	OOS-FEF	OOS-FEF-MON

When the 5ESS®-2000 switch creates an ISDN line termination, it creates it with an IS PSS. After successful creation, the RDT is expected to report nontransient service state changes via the event reporting service (service problem type) as described in the object description. Once the ISDN Line Termination object instance is created, the RDT should try to maintain level 1 on the U interface in an operational condition.

Similarly, the (ATT) ISDN Framed Path Termination is created with an IS PSS; however, service state changes are not reported. Service state changes should only be reported for line terminations. The SSS of the ISDN Framed Path Termination should reflect the status of level one on the U interface. The MON qualifier is exclusively used to indicate loss of signal on the U-DSL.

Once the framed path has been created, the event reporting service (transmission problem type - loss of signal) is used to report loss of signal (LOS) on the U interface. The RDT should use 2-second hit timing to avoid reporting transient conditions. Similarly, changes to the superframe overhead bits are reported via the change of overhead bits notification.

For ISDN lines, the 5ESS®-2000 switch queries the ISDN Framed Path Termination object for status information. The attributes to be retrieved include the PSS, SSS, ltOHStates, ntOHStates, and channelSelection. If an inconsistency is detected between the switch and the RDT, the 5ESS®-2000 switch will take recovery action. This recovery action could include removing/restoring the ISDN Framed Path Termination, changing the internal port status to reflect a problem at the RDT, or removing a loopback that should not be present. With this scheme, the 5ESS®-2000 switch internal port status will accurately reflect the condition of the line termination at the RDT, including the level 1 status.

13.5.3.2 Metallic and Channel Testing

13.5.3.2.1 Basic Metallic Testing

The following sequence defines how the 5ESS switch uses the appropriate M_ACTIONS to do metallic testing of line terminations:

- Connect Looparound Access - Set up the metallic test path to the RDT and seize the TAP.
- Connect Split-Out Access - Connect the metallic test path to the line to be tested.
- Metallic measurements are made in this state.
- If appropriate, test system performs channel tests:
 - Connect Test Response Circuit - sets up the path between the channel unit and the Test Response Circuit.
 - Using the TMC, set up the path between the switch and the channel unit to be tested.
 - Operate Termination - apply a termination at the TRC.
 - Apply appropriate ABCD signaling and check the resulting TRC termination.
 - Repeat the last two steps as needed.
 - Release Test Response Circuit - disconnect the Test Response Circuit.
- Disconnect Test Access - disconnect the metallic test path.

The response to the Connect Looparound Access M-ACTION indicates whether or not the RDT supports Monitor Mode. Regardless of the value returned, the 5ESS®-2000 switch does not support Monitor Mode. Similarly, Split Access Capability is returned by the RDT, but the 5ESS®-2000 switch only supports Split-Out Access.

13.5.3.2.2 Diode Protocol Test

As part of the Metallic Test Pair diagnostics, the 5ESS®-2000 switch runs a Bypass Pair Integrity Test (sometimes referred to as the Diode Protocol Test). The 5ESS®-2000 switch will send a Looparound Diagnose TAP M-ACTION to the RDT at which time the RDT is expected to looparound the look-in-pair to the look-out-pair of the TAP. This same function is performed by the RDT when it receives the Connect Looparound Access M-ACTION. However, the 5ESS®-2000 switch will not run a Diode Protocol Test for every metallic access.

Since the 5ESS®-2000 switch only supports a 2-wire TAP (that is, the look-out-pair), if a termination is installed across the look-in-pair at the RDT TAP, the looparound has the effect of applying the termination across the look-out-pair. The 5ESS®-2000 switch can then run tests depending on the type of termination to verify the integrity of the bypass pair. The termination type (diode/resistor combination, short, or none) is provisioned in the switch during RDT growth. If the termination type is "none," the Looparound Diagnose TAP M-ACTION message is not sent to the RDT.

13.5.3.2.3 Activity Timer

TR303 requires that if a metallic test access is left up for 75 seconds, the RDT should automatically disconnect the access unless it receives a Reset Timer M-ACTION during the 75-second window. The 5ESS®-2000 switch will send the Reset Timer M-ACTION every 30 seconds during a metallic access.

13.5.3.2.4 Channel Test Specifics

This section provides detailed information about the channel test sequences used for the different service types.

13.5.3.2.4.1 Single Party

Table 13-38 is used to test single party lines:

Table 13-38 — Single Party Channel Test

STEP	EOC		ABCD SIGNALLING		CHANNEL
	M-ACTION	RESULT	APPLIED	EXPECTED RESULT	MEASUREMENT
1	connectTRC (absorptive)	LCPG			
2			LCFO (ground start)	NOT Coin Ground	
3			LCF (idle code)	LC (off-hook)	
4					Return Loss
5	operateTermination initial term—open detect output—NSRR detect term—LCRF	OPEN applied			
6			NSRR (-R Ringing)	termination switched to LCRF (reflective)	
7			LCF (idle code)	LC (off-hook)	
8					Loss
9					Noise
10			Tip Party Test	NOT Tip Party Ground	
11			LCF (idle code)		

13.5.3.2.4.2 Multiparty

To test multiparty lines, the single party test sequence provided in Table 13-38 is used first, followed by the sequence provided in Table 13-39.

Table 13-39 — Multiparty Channel Test

STEP	EOC		ABCD SIGNALING		CHANNEL
	M-ACTION	RESULT	APPLIED	EXPECTED RESULT	MEASUREMENT
1	operateTermination initial term - open detect output - NSRT detect term - LCNG	OPEN applied	NSRT (-T ringing)	termination switched to LCNG (reflective)	Tip Party Ground
2					
3					
4					
5					
6	operateTermination initial term - open detect output - PSRR detect term - LCAB	OPEN applied	PSRR (+R ringing)	termination switched to LCAB (absorptive)	Loss
7					
8					
9					
10					
11	operateTermination initial term - open detect output - PSRT detect term - LCPG	OPEN applied	PSRT (+T ringing)	termination switched to LCPG (absorptive)	Return Loss
12					
13					
14					
					Return Loss

13.5.3.2.4.3 Coin

The single party test sequence, in Table 13-38, is first used for coin lines, followed by Table 13-40.

Table 13-40 — Coin Channel Test

STEP	EOC		ABCD SIGNALLING		CHANNEL
	M-ACTION	RESULT	APPLIED	EXPECTED RESULT	MEASUREMENT
1	operateTermination initial term - open detect output - PCCV detect term - LCPG	OPEN applied	PCCV (pos coin control)	termination switched to LCPG (absorptive) LC (off-hook)	Return Loss
2					
3					
4					
5					
6	operateTermination initial term - open detect output - NCCV detect term - LCNG	OPEN applied	PCCH (pos coind check)	Coin Ground	Loss
7					
8					
9					
10					
11	operateTermination initial term - open detect output - PCCV detect term - LCPG	OPEN applied	NCCV (neg coin control)	termination switched to LCNG (reflective) LC (off-hook)	Loss
12					
13					
14					
15					
16	operateTermination initial term - open detect output - ANYT detect term - LCRF	OPEN applied	NCCH (neg coin check)	Coin Ground	Return Loss
17					
17			RLCF (pos loop mode)	LC (off-hook) termination switched to LCRF	Loss

13.5.3.2.4.4 ISDN

Channel testing is not performed on ISDN lines.

13.5.3.3 DSL Loopback Testing

The 5ESS®-2000 switch uses the Operate ISDN Loopback and Release ISDN Loopback M-ACTIONS to set up and take down loopbacks as specified in the M-ACTION descriptions. Loopbacks are set up for technician initiated digital tests as well as for automatic path integrity testing done as part of DSL initialization. The 5ESS®-2000 switch maintenance philosophy does not include removing the DSL from service before testing.

13.5.3.4 DSL Performance Monitoring

13.5.3.4.1 Overview

The ATT ISDN Framed Path Termination object class was defined by ATT as an allomorphic subclass of the ISDN Framed Path Termination object class in order to provide enhanced Performance Monitoring capabilities. The 5ESS®-2000 switch ISLU implementation currently supports the concept of provisionable, multiple hour intervals for ISDN PM. Since TR303 does not support this concept, the ATT ISDN Framed Path Termination was designed to provide that capability. Since it is an allomorphic subclass, aside from the additional attributes, it operates as an ISDN Framed Path Termination.

A similar extension of TR303 was to define the ATT PM Freeze Schedule object class. Lucent Technologies decided that it could not safely implement the scheduled PM reporting scheme defined by TR303. Instead, a more controllable scheme for scheduled PM reporting was designed using the ATT PM Freeze Schedule object class and the Current and Previous Threshold Crossing Registers in the ATT ISDN Framed Path Termination object. If an RDT supports these extensions, the Performance Monitoring capabilities will match those of the current ISLU implementation. If the RDT does not support these extensions, the Performance Monitoring capabilities will be limited.

The following DSL PM operations make use of the following provisioned data:

- **System Clock:** The System Clock is maintained in the Network Element object.
- **DSL SES Definition:** The DSL SES definition is stored in the ISDN Per-System Profile object.
- **Interval Value:** The length of the multiple hour interval is stored in the Interval attribute of the PM Interval Profile object with ID = 4.
- **PM Start Time:** The hour at which the daily PM counts are initialized is stored in the PM Start Time attribute of the ATT PM Freeze Schedule object. If this object class is not supported, PM Start Time defaults to midnight.
- **PM Thresholds:** DSL PM thresholds are maintained in each (ATT) ISDN Framed Path Termination object.
- **DSL PM Alert Inhibit:** An Event Report Control object is created with a Discriminator Construct that can inhibit the RDT from sending DSL PM Alerts.

13.5.3.4.2 DSL Alerts

When an hourly or daily alert threshold crossing is detected by the RDT, the event reporting service (Problem Type: Threshold Alert) is used to report the event to the switch as specified in the ISDN Framed Path Termination object class description. The RDT should report the event within 2 minutes of detection. Only one alert per interval, per count is to be sent even if the threshold is raised after an alert is sent.

The 5ESS®-2000 switch can inhibit the sending of alerts to the switch by creating an event report control object as specified in Section 13.3.13. If the object does not exist or the discriminator state is set to false, then the RDT is allowed to send the alerts. If the object exists and the discriminator state is set to true, then the RDT is inhibited from sending DSL PM alerts to the switch.

13.5.3.4.3 PM Count Reset

The 5ESS®-2000 switch uses the Initialize PM Attributes M-ACTION to reset either all or all current PM counts for a given DSL. If a different set of counts is to be reset, the 5ESS®-2000 switch uses the M-SET service, specifying the specific attributes to be reset. Current and previous counts are reset by setting the attribute to zero. History counts are reset by replacing the set valued history attribute with an empty set {}. The RDT is expected to add members to the set as intervals pass. Alternately, instead of actually deleting all members of the set, the RDT could just set the members of the set to zero.

13.5.3.4.4 PM Count Retrieval

The 5ESS®-2000 switch uses the M-GET service to retrieve PM thresholds and counts on demand for a specified DSL. In addition, through CMISE scoping and filtering, the 5ESS®-2000 switch uses the M-GET service to retrieve PM counts for all DSLs that have experienced a threshold crossing during one of the current intervals. The particular filter is described in Section 13.4.3 and takes advantage of the Current Threshold Crossing Register attribute in the ATT ISDN Framed Path Termination object class.

13.5.3.4.5 Scheduled PM Reporting

The ATT PM Data Ready M-EVENT-REPORT is used by the RDT to report that the latest PM freeze, update and collect operations are done for the latest interval, and the PM data is ready for retrieval. This notification is controlled by the ATT PM Freeze Schedule object. If the object instance does not exist, the notification is not sent and scheduled PM reporting will not occur. If the object does exist, and the schedule state is active, then the RDT should send the notification when the hourly freeze, update, and collect operations are done. If this is the end of a reporting interval, the 5ESS®-2000 switch retrieves the PM data from all DSLs that have experienced a threshold crossing during the previous interval. This is done using the M-GET service with a filter on the Previous Threshold Crossing Register in the ATT ISDN Framed Path Termination object as specified in Section 13.3.3. The RDT sends one report (M-LINKED-REPLY) for each DSL that has one or more report threshold crossings. The RDT should report its DSLs in lowest to highest numbered order.

13.5.3.5 DSL Corrupt CRC Testing

The Generate Corrupted CRC M-ACTION is used to clear the current PM counts in the RDT and to start the generation of corrupt CRC for the duration specified in the M-ACTION. When the RDT sends the response indicating that the test duration has passed and the corrupt CRC has been terminated, the 5ESS®-2000 switch uses the M-GET service to retrieve the current PM counts.

13.5.4 RDT MAINTENANCE

13.5.4.1 Alarms

13.5.4.1.1 Equipment Alarms

The RDT uses the eventReporting M-EVENT-REPORT service to notify the 5ESS®-2000 switch of power, environmental, or other miscellaneous problem types. This alarm information is stored in the Current Problem List of the reporting Equipment object. The 5ESS®-2000 switch expects Power and Environmental alarms to be reported from the Equipment object with ID='RT'. No restrictions are placed on the other Equipment objects. The M-EVENT-REPORT is sent when the problem is detected with an appropriate alarm severity and also when the condition is cleared (alarm severity = clear).

13.5.4.1.2 Equipment Holder Alarms

Some of the eventReporting problem types can be reported from Equipment Holder object instances. Other than Power and Environmental alarms, the 5ESS®-2000 switch does not distinguish between Equipment and Equipment Holder object instances.

13.5.4.1.3 Memory Alarms

The 5ESS®-2000 switch expects the RDT to report software problems (eventReporting - softwareProblemType) from Memory object instances. In particular, memoryMismatch and corruptData alarms should be reported from the Memory object with ID=1. memoryMismatch is used by the 5ESS®-2000 switch as an indication to disable RDT provisioning. Provisioning remains disabled until the appropriate clear indication is received. corruptData is interpreted as a request by the RDT to be reprovisioned. On receipt of this notification, the 5ESS®-2000 switch immediately begins to provision all RDT data.

13.5.4.1.4 Network Element Alarms

The single Network Element object contains the System Alarm State attribute indicating the highest overall alarm condition in the RDT. Whenever the System Alarm State changes, the eventReporting service is used to notify the 5ESS®-2000 switch of the state change. Note that this notification always follows a notification sent from a different object class (Equipment, Equipment Holder, or Memory). The Problem Type should indicate the problem type that triggers the highest alarm state in the RDT.

13.5.4.1.5 Routine Audit

In order to audit the alarm information in the RDT, the 5ESS®-2000 switch routinely uses the M-GET service to retrieve the System Alarm State from the Network Element and Current Problem Lists from several other objects. In addition, it uses the M-GET service with a filter on a nonnull Current Problem List to retrieve the Current Problem List of any object with a problem.

13.5.4.2 DS1 Performance Monitoring

The following DS1 PM operations make use of the following provisioned data:

- **System Clock:** The System Clock is maintained in the Network Element object.
- **PM Start Time:** The hour at which the daily PM counts are initialized is stored in the PM Start Time attribute of the ATT PM Freeze Schedule object. If this object class is not supported, PM Start Time defaults to midnight.
- **PM Thresholds:** The DS1 PM thresholds are maintained in each DS1 Framed Path Termination object.
- **DS1 PM Alert Inhibit:** An Event Report Control object is created with a Discriminator Construct that can inhibit the RDT from sending DS1 PM Alerts.

13.5.4.2.1 DS1 Alerts

When a 15-minute or daily alert threshold crossing is detected by the RDT, the event reporting service (Problem Type: Threshold Alert) is used to report the event to the switch as specified in the DS1 Framed Path Termination object class description. The RDT should report the event within 2 minutes of detection. Only one alert per interval, per count is to be sent even if the threshold is raised after an alert is sent.

The 5ESS®-2000 switch can inhibit the sending of alerts to the switch by creating an event report control object as specified in Section 13.3.13. If the object does not exist or the discriminator state is set to false, then the RDT is allowed to send the alerts. If the object exists and the discriminator state is set to true, then the RDT is inhibited from sending DSL PM alerts to the switch.

13.5.4.2.2 PM Count Reset

The 5ESS®-2000 switch uses the M-SET service to reset PM counts in the DS1 Framed Path Termination, specifying the specific attributes to be reset. Current and previous counts are reset by setting the attribute to zero. History counts are reset by replacing the set valued history attribute with an empty set {}. The RDT is expected to add members to the set as intervals pass. Alternately, instead of actually deleting all members of the set, the RDT could just set the members of the set to zero.

13.5.4.2.3 PM Count Retrieval

The 5ESS®-2000 switch uses the M-GET service to retrieve PM thresholds and counts on demand for a specified DS1.

13.5.4.3 DS1 Loopback Testing

Upon manual invocation by a switch technician, the 5ESS®-2000 switch sends the Operate Loopback M-ACTION to the RDT instructing it to loopback the DS1 at the near end. The RDT is considered to be the 'A' location, that is, the az-locality attribute in the DS1 Line Termination should be 'A'. The direction specified in the Operate Loopback M-ACTION is Z to A. The Release Loopback M-ACTION is used to remove the DS1 loopback.

Note that the 5ESS®-2000 switch does not attempt to remove the DS1 from service at the RDT prior to testing. Although a DS1 with protection switch may be looped back while in service, a DS1 without protection switch must be removed from service by craft action prior to loopback. For additional information, see Section 12.7.3.3.1, "Far-End Loopback Procedure—With Protection Switch Option," and Section 12.7.3.3.2, "Far-End Loopback Procedure—Without Protection Switch."

13.5.4.4 DS1 Protection Line Switching

As specified in TR303, DS1 Protection Line Switching is done via ESF/ndl messages rather than CMISE EOC messages. The 5ESS®-2000 switch queries the protection status on demand, by using the M-GET service to retrieve the following attributes from the Protection Group Unit object instance representing the protecting DS1 (that is, the highest numbered DS1 equipped in the 5ESS®-2000 switch data base):

- **Protection Group Unit Type:** Should be protecting.
- **Protection Object Pointer:** Distinguished Name of the corresponding protecting DS1 Line Termination.
- **Switched Protection Group Unit:** Distinguished Name of the Protection Group Unit that corresponds to the DS1 Line Termination that is currently on protection (if any).
- **Inhibit Switch:** Indicates if protection switching is inhibited for this DS1.

13.5.4.5 EOC/TMC Path Switching

13.5.4.5.1 Stimuli

The 5ESS®-2000 switch attempts to switch to a standby EOC or TMC for one of the following reasons:

- A switch technician requests an EOC or TMC path switch.
- Multiframe is lost on one of the two logical links of an active EOC or TMC.
- An excessive number of protocol errors are generated on the active link.

In addition, the 5ESS®-2000 switch will attempt a resynchronization, that is, send a switch to the currently active path message, for one of the following reasons:

- A datalink comes into service, that is, multiframe is established on both logical links of an EOC or TMC.
- An EOC or TMC message is received on the standby link.

While the 5ESS®-2000 switch always transmits on what it thinks is the currently active link, it processes all received messages, whether they come in on either the active or standby links. If a message is received on the standby link, in addition to processing the message, the 5ESS®-2000 switch attempts a resynchronization to resolve the potential mismatch. Messages received on the standby link during a path switch or a 2-second window after a path switch do not trigger a resynchronization.

13.5.4.5.2 Procedures

The 5ESS®-2000 switch uses the Protection Switch M-ACTION service for both switching to the standby as well as for resynchronization. The Protected Unit indicates the link to be switched from. The 5ESS®-2000 switch uses the forced mode only when the technician requests an unconditional switch. The M-ACTION is sent first on the standby link. If no response is received within 30 seconds, the M-ACTION is then sent on the active link.

If no response is received for this second attempt, or a failure response is received for either attempt, no further retransmissions are attempted. If it was a manual request, the technician is informed of the failure and is free to try again. If the path switch was initiated because of a failure of the active link (that is, loss of multiframe, since the

previously active link is down), then the 5ESS®-2000 switch changes to the standby anyway.

In order to avoid deadlock or extended outages, the RDT should implement similar procedures as those described above for the 5ESS®-2000 switch. In particular, the RDT should attempt resynchronization whenever it detects a potential mismatch condition (for example, receives a message on the standby link).

13.6 ASN.1 SYNTAX

This section includes the ASN.1 type and value definitions for the object classes, attribute types, actions, and notifications for both the Lucent Technologies-defined objects and the subset of the Bellcore TR303 ASN.1 definition supported by Lucent Technologies. The Bellcore TR303 ASN.1 definitions used by the 5ESS®-2000 switch to implement TR303 have been copied directly from the Bellcore TR303 specification and are included for clarity.

These ASN.1 descriptions are to be used by both the RDT and the 5ESS®-2000 switch.

13.6.1 LUCENT TECHNOLOGIES TR303 DEFINITIONS

Lucent Technologies has defined optional objects for enhanced performance monitoring of digital subscriber lines. These objects are not required for TR303 operation, but add performance monitoring capabilities: multiple-hour intervals and scheduled performance monitoring reports.

13.6.1.1 Object Classes

Throughout Section 13.6.1.1, the usage of an attribute is indicated by the font, as in the following examples:

- An attribute the 5ESS®-2000 switch uses to create, set, or get objects from the RDT
- An unused attribute.

```
att-idlc-objectClassDefinitions {ccitt(0) network-operator(3) 3134 0 idlc (9) att-idlc objectClass(1)}
```

```
DEFINITIONS ::=
BEGIN
```

```
-- everything is exported
```

```
IMPORTS
```

```
    M-OBJECT CLASS
```

```
    FROM TmnMacros {iso member-body usa(840) ansi-t1.20x-1989(y) tmnMacroModule(7)}
```

```
    top
```

```
    FROM TmnObjectDefinitions {iso member-body usa(840) ansi.t1.20x-1989(y) tmnObjectsModule(1)}
```

```
    analogLineTermination, networkElement, isdnFramedPathTermination, mgmtOpnSched
```

```
    FROM BellcoreIDLCObjectsDefinitions {iso(1)identified-organization(3) bellcore(17) idlc(101)
```

```
        idlcRelease1p0(1) bellcoreIDLCObjectsModule(1)}
```

```
att-idlc OBJECT IDENTIFIER ::= {ccitt(0) network-operator(3) 3134 0 idlc(9)}
```

```
att-idlc-objectClass OBJECT IDENTIFIER ::= {att-idlc objectClass(1)}
```


attIsdnFramedPathTermination M-OBJECT-CLASS
DERIVED FROM **isdnFramedPathTermination**
CHARACTERIZED BY
BEHAVIOUR DEFINITIONS {-- --}
ATTRIBUTES {
 currentThresholdCrossingRegister SET TO DEFAULT
 DEFAULT VALUE BIT STRING {00000000}
 GET,
 previousThresholdCrossingRegister SET TO DEFAULT
 DEFAULT VALUE BIT STRING {00000000}
 GET,
 eocStateUpstream SET TO DEFAULT
 DEFAULT VALUE BIT STRING {11111111}
 GET-REPLACE,
 eocStateDownstream SET TO DEFAULT
 DEFAULT VALUE BIT STRING {11111111}
 GET-REPLACE,
 cvFelntCurrent SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 sesFelntCurrent SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 esFelntCurrent SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 cvIntCurrent SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 sesIntCurrent SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 esIntCurrent SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 cvFelntPrevious SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 sesFelntPrevious SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 esFelntPrevious SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 cvIntPrevious SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 sesIntPrevious SET TO DEFAULT
 DEFAULT VALUE CHOICE corruptedCount 0
 GET-REPLACE,
 esIntPrevious SET TO DEFAULT

```
        DEFAULT VALUE CHOICE corruptedCount 0
        GET-REPLACE,
esFelntHistory SET TO DEFAULT
        DEFAULT VALUE SET {}
        GET-REPLACE,
esIntHistory SET TO DEFAULT
        DEFAULT VALUE SET {}
        GET-REPLACE,
sesIntReportThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 5
        GET-REPLACE,
esIntReportThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 20
        GET-REPLACE,
sesDayReportThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 50
        GET-REPLACE,
esDayReportThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 15
        GET-REPLACE
    }
    OPERATIONS
    CREATIONS {
        with-reference-object
    }
    DELETE {
    }
} ::= {att-idlc-objectClass 3 }
```

```
attPmFreezeSchedule M-OBJECT-CLASS
    DERIVED FROM      mgmtOpnsSched
    CHARACTERIZED BY
        BEHAVIOUR DEFINITIONS {-- --}
    ATTRIBUTES {
        attPmFreezeScheduleId GET,
        pmStartTime GET-REPLACE
    }
    OPERATIONS
        CREATE {
            with-reference-object
        }
        DELETE {
        }
        NOTIFICATIONS {
            attPmDataReady
        }
} ::= {att-idlc-objectClass 4 }
END
```

13.6.1.2 Attributes

att-idlc-attribute Definitions {ccitt(0) network-operator(3) 3134 0 idlc(9) att-idlc attribute(2)}

DEFINITIONS ::=
 BEGIN

-- everything is exported

IMPORTS

ATTRIBUTE
 FROM TmnMacros {iso member-body usa(840) ansi-t1.20x-1989(y) tmnMacroModule(7)}
 CMISFilter, Attribute, AttributeId
 FROM CMIP-1 {joint-iso-ccitt ms(9) cmip(1) protocol(3)}
 RDNSequence, DistinguishedName, RelativeDistinguishedName
 FROM InformationFramework {joint-iso-ccitt ds(5) modules(1) informationFramework(1)}
 AE-Title
 FROM ACSE-1 {joint-iso-ccitt association-control(2) abstract-syntax(1)apdus(0)version(1)}

att-idlc OBJECT IDENTIFIER ::= {ccitt(0) network-operator(3) 3134 0 idlc(9)}

att-idlc-attribute OBJECT IDENTIFIER ::= {att-idlc attribute(2)}

pmStartTime ATTRIBUTE
 SINGLE-VALUED
 WITH ATTRIBUTE SYNTAX INTEGER
 BEHAVIOUR { -- identifies the hour at which the performance monitoring daily and interval
 -- counts should start
 -- valid values are integers (0 to 23), where zero denotes midnight
 }
 MATCHES FOR Equality
 ::= {att-idlc-attribute 7}

attProblemData ATTRIBUTE
 SINGLE-VALUED
 WITH ATTRIBUTE SYNTAX AttProblemData
 BEHAVIOUR { -- provides a printable ASCII string describing the failure and a bit string option
 -- the printable string will be less than 36 characters long
 }
 ::= {att-idlc-attribute 8}

ProblemInfo ::= SEQUENCE{
 problemText [0] PrintableString,
 serviceAffected [1] BOOLEAN OPTIONAL,
 alarmSeverity [2] AlarmSeverity,

```
    problemId    [3]    INTEGER
  }
```

currentThresholdCrossingRegister ATTRIBUTE

SINGLE-VALUED

WITH ATTRIBUTE SYNTAX ThresholdCrossingRegister

BEHAVIOUR { -- indicates which of the alerting thresholds have been crossed for the
-- current hour/interval/day
-- a bit with a value of "1" indicates that the corresponding threshold was crossed
-- a bit with a value of "0" indicates that the corresponding threshold was not crossed
-- the following set of alerting thresholds have the associated bit:
-- bit 0 - SES Hr Threshold (Alert)
-- bit 1 - ES Hr Threshold (Alert)
-- bit 2 - SES Day Threshold (Alert)
-- bit 3 - ES Day Threshold (Alert)
-- bit 4 - SES Int Report Threshold
-- bit 5 - ES Int Report Threshold
-- bit 6 - SES Day Report Threshold
-- bit 7 - ES Day Report Threshold

}

MATCHES FOR Equality

::= {att-idlc-attribute 11 }

previousThresholdCrossingRegister ATTRIBUTE

SINGLE-VALUED

WITH ATTRIBUTE SYNTAX ThresholdCrossingRegister

BEHAVIOUR { -- indicates which of the alerting thresholds have been crossed for the previous
-- hour/interval/day
-- a bit with the value of "1" indicates that the corresponding threshold was crossed
-- a bit with the value of "0" indicates that the corresponding threshold was
-- not crossed
-- see currentThresholdCrossingRegister for bit definitions

}

MATCHES FOR Equality

::= {att-idlc-attribute 15 }

eocStateUpstream ATTRIBUTE

SINGLE-VALUED

WITH ATTRIBUTE SYNTAX EOCSState

BEHAVIOUR { -- indicates the bit state of the upstream EOC for instances of this object }

MATCHES FOR Equality

::= {att-idlc-attribute 16 }

eocStateDownstream ATTRIBUTE

SINGLE-VALUED

WITH ATTRIBUTE SYNTAX EOCSState

BEHAVIOUR { -- indicates the bit state of the downstream EOC for instances of this object }

```
MATCHES FOR Equality
 ::= {att-idlc-attribute 17 }

cvFeIntCurrent ATTRIBUTE
  SINGLE-VALUED
  WITH ATTRIBUTE SYNTAX    CountMeasure
  BEHAVIOUR { -- indicates the value of Coding Violation Far End (block error downstream)
             -- counts for the current monitored period of length "x" hours
             -- the length of "x" hours is specified by the attribute intervalValue
             -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 18 }

sesFeIntCurrent ATTRIBUTE
  SINGLE-VALUED
  WITH ATTRIBUTE SYNTAX    CountMeasure
  BEHAVIOUR { -- indicates the value of Severely Errored Second Far End (downstream)
             -- counts for the current monitored period of length "x" hours
             -- the length of "x" hours is specified by the attribute intervalValue in the
             -- Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 19 }

esFeIntCurrent ATTRIBUTE
  SINGLE-VALUED
  WITH ATTRIBUTE SYNTAX    CountMeasure
  BEHAVIOUR { -- indicates the value of Error Second Far End (downstream)
             -- counts for the current monitored period of length "x" hours
             -- the length of "x" hours is specified by the attribute intervalValue
             -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 20 }

cvIntCurrent ATTRIBUTE
  SINGLE-VALUED
  WITH ATTRIBUTE SYNTAX    CountMeasure
  BEHAVIOUR { -- indicates the value of Coding Violation Near End (block error upstream)
             -- counts for the current monitored period of length "x" hours
             -- the length of "x" hours is specified by the attribute intervalValue
             -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 21 }

sesIntCurrent ATTRIBUTE
  SINGLE-VALUED
```

```
WITH ATTRIBUTE SYNTAX    CountMeasure
BEHAVIOUR    { -- indicates the value of Severely Error Second Near End (upstream)
               -- counts for the current monitored period of length "x" hours
               -- the length of "x" hours is specified by the attribute intervalValue
               -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 22 }

esIntCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX    CountMeasure
BEHAVIOUR    { -- indicates the value of Error Second Near End (upstream)
               -- counts for the current monitored period of length "x" hours
               -- the length of "x" hours is specified by the attribute intervalValue
               -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 23 }

cvFeIntPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX    CountMeasure
BEHAVIOUR    { -- indicates the value of Coding Violation Far End (block error downstream)
               -- counts for the previous monitored period of length "x" hours
               -- the length of "x" hours is specified by the attribute intervalValue
               -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 24 }

sesFeIntPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX    CountMeasure
BEHAVIOUR    { -- indicates the value of Severely Error Second Far End (downstream)
               -- counts for the previous monitored period of length "x" hours
               -- the length of "x" hours is specified by the attribute intervalValue
               -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
 ::= {att-idlc-attribute 25 }

esFeIntPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX    CountMeasure
BEHAVIOUR    { -- indicates the value of Errored Second Far End (downstream)
               -- counts for the previous monitored period of length "x" hours
               -- the length of "x" hours is specified by the attribute intervalValue
               -- in the Bellcore-defined object pmIntervalProfile (id = 4)
             }
```

::= {att-idlc-attribute 26 }

cvIntPrevious ATTRIBUTE
 SINGLE-VALUED
 WITH ATTRIBUTE SYNTAX CountMeasure
 BEHAVIOUR { -- indicates the value of Coding Violation Near End (block error upstream)
 -- counts for the previous monitored period of length "x" hours
 -- the length of "x" hours is specified by the attribute intervalValue
 -- in the Bellcore-defined object pmIntervalProfile (id = 4)
 }
 ::= {att-idlc-attribute 27 }

sesIntPrevious ATTRIBUTE
 SINGLE-VALUED
 WITH ATTRIBUTE SYNTAX CountMeasure
 BEHAVIOUR { -- indicates the value of Severely Errored Second Near End (upstream)
 -- counts for the previous monitored period of length "x" hours
 -- the length of "x" hours is specified by the attribute intervalValue
 -- in the Bellcore-defined object pmIntervalProfile (id = 4)
 }
 ::= {att-idlc-attribute 28 }

esIntPrevious ATTRIBUTE
 SINGLE-VALUED
 WITH ATTRIBUTE SYNTAX CountMeasure
 BEHAVIOUR { -- indicates the value of Errored Second Near End (upstream)
 -- counts for the previous monitored period of length "x" hours
 -- the length of "x" hours is specified by the attribute intervalValue in the
 -- Bellcore-defined object pmIntervalProfile (id = 4)
 }
 ::= {att-idlc-attribute 29 }

esFeIntHistory ATTRIBUTE
 SET-VALUED
 WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
 BEHAVIOUR { -- indicates the value of Errored Second Far End (downstream)
 -- counts for seven other previous monitored period of length "x" hours
 -- the length of "x" hours is specified by the attribute intervalValue in the
 -- Bellcore-defined object pmIntervalProfile (id = 4)
 }
 ::= {att-idlc-attribute 30 }

esIntHistory ATTRIBUTE
 SET-VALUED
 WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
 BEHAVIOUR { -- indicates the value of Errored Second Near End (upsstream)

```
        -- counts for seven other previous monitored period of length "x" hours
        -- the length of "x" hours is specified by the attribute intervalValue in the
        -- Bellcore-defined object pmIntervalProfile (id = 4)
    }
 ::= {att-idlc-attribute 31 }
```

```
sesIntReportThreshold ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX    INTEGER
    BEHAVIOUR { -- indicates the value of Severely Errored Seconds interval reporting threshold
                -- if the number of severely errored seconds during an interval exceeds
                -- this threshold, the corresponding CTCR bit is set for this DSL
    }
    MATCHES FOR Equality,Ordering
 ::= {att-idlc-attribute 32 }
```

```
esIntReportThreshold ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX    INTEGER
    BEHAVIOUR { -- indicates the value of Errored Seconds interval reporting threshold
                -- if the number of errored seconds during an interval exceeds
                -- this threshold, the corresponding CTCR bit is set for this DSL
    }
    MATCHES FOR Equality,Ordering
 ::= {att-idlc-attribute 33 }
```

```
sesDayReportThreshold ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX    INTEGER
    BEHAVIOUR { -- indicates the value of Severely Errored Seconds daily reporting threshold
                -- if the number of severely errored seconds during a day exceeds
                -- this threshold, the corresponding CTCR bit is set for this DSL
    }
    MATCHES FOR Equality,Ordering
 ::= {att-idlc-attribute 34 }
```

```
esDayReportThreshold ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX    INTEGER
    BEHAVIOUR { -- indicates the value of Errored Seconds daily reporting threshold
                -- if the number of errored seconds during a day exceeds
                -- this threshold, the corresponding CTCR bit is set for this DSL
    }
    MATCHES FOR Equality,Ordering
 ::= {att-idlc-attribute 35 }
```



```
attPmFreezeScheduleId ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX    AttPmFreezeScheduleId
    BEHAVIOUR    { -- identifies the attPMFreezeSchedule object for DS1 or DSL PM }
    MATCHES FOR Equality
 ::= { att-idlc-attribute 40 }
```

END

13.6.1.2.1 Data Syntax Definitions

```
AttPmFreezeScheduleId ::= CHOICE {  
    INTEGER,  
    PrintableString  
}
```

```
AttProblemData ::= SEQUENCE {  
    display [0] PrintableString  
    lineTestResults [1] LineTestResults OPTIONAL  
}
```

```
LineTestResults ::= CHOICE {  
    lineTests      SET OF INTEGER,  
    lineFailures   BITSTRING  
}
```

```
ThresholdCrossingRegister ::= BIT STRING {  
    tcr0          (0),    -- SES Hr Threshold (Alert)  
    tcr1          (1),    -- ES Hr Threshold (Alert)  
    tcr2          (2),    -- SES Day Threshold (Alert)  
    tcr3          (3),    -- ES Day Threshold (Alert)  
    tcr4          (4),    -- SES Interval Report Threshold  
    tcr5          (5),    -- ES Interval Report Threshold  
    tcr6          (6),    -- SES Day Report Threshold  
    tcr7          (7)     -- ES Day Report Threshold  
}
```

13.6.1.3 Name Bindings

att-idlcNameBindings {ccitt(0) network-operator(3) 3134 0 idlc(9) att-idlcNameBinding}

DEFINITIONS ::=
BEGIN

--everything is exported

IMPORTS NAME-BINDING
FROM TmnMacros {iso member-body usa(840) ansi-t1.20x-1989(y) tmnMacroModule(7)}

idlcNameBinding OBJECT IDENTIFIER ::= {iso(1) identified-organization(3)
bellcore(17) idlc(101) idlcRelease1p0(1) bellcoreIDLCNameBindings(10)}

attIsdnFramedPathTermination-isdnLineTermination NAME-BINDING
SUBORDINATE OBJECT CLASS attIsdnFramedPathTermination
NAMED BY
SUPERIOR OBJECT CLASS isdnLineTermination
WITH ATTRIBUTES isdnFramedPathTermId
::= {att Name Binding}

attPmFreezeSchedule-networkElement NAME-BINDING
SUBORDINATE OBJECT CLASS attPmFreezeSchedule
NAMED BY
SUPERIOR OBJECT CLASS networkElement
WITH ATTRIBUTES attPMFreezeScheduleId
::= {att Name Binding}

END

13.6.1.4 Actions and Notifications

att-idlc-actionDefinitions {ccitt(0) network-operator(3) 3134 0 idlc(9) att-idlcAction(3)}

DEFINITIONS ::=
BEGIN

--everything is exported

IMPORTS
ACTION
FROM TmnMacros {iso member-body usa(840) ansi-t1.20x-1989(y) tmnMacroModule(7)}

att-idlc OBJECT IDENTIFIER ::= {ccitt(0) network-operator(3) 3134 0 idlc(9)}
att-idlc-action OBJECT IDENTIFIER ::= {att-idlc action(3)}
att-idlc-notification OBJECT IDENTIFIER ::= {att-idlc notification(4)}

attPmDataReady NOTIFICATION
 BEHAVIOUR {see Section 13.4.26}
 WITH DATA SYNTAX NULL
 WITH RESULT SYNTAX NULL
::= {att-idlc-notification 0 }

END

13.6.2 SUBSET OF TR303 USED BY THE 5ESS®-2000 SWITCH

In the following ASN.1 definitions, only objects supported by the 5ESS®-2000 switch are included.

13.6.2.1 Object Classes

Throughout Section 13.6.2.1, the usage of an attribute, action, or notification is indicated by the font, as in the following examples:

- **An attribute the 5ESS®-2000 switch uses to create, set, or get objects from the RDT**
- An attribute not used for this purpose
- An action sent by the 5ESS®-2000 switch to the RDT
- An unused action
- A notification processed from the RDT
- An ignored notification.

```

analogLineTermination M-OBJECT-CLASS
  DERIVED FROM lineTermination
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      analogLineTermId GET,
      genSigFuncCode SET TO DEFAULT
        DEFAULT VALUE SEQUENCE {wire2,ls}
        GET-REPLACE,
      alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE,
      lineCircuitAddress GET,
    }
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
    ACTIONS {
      connectTRC,
      releaseTRC
    }
    NOTIFICATIONS {
      eventReporting
    }
    OPTIONAL ATTRIBUTES {
      currentProblemList GET,
      eventReportControlPointers GET-REPLACE ADD-REMOVE,
  
```

```
currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE,  
robbedBitSignal GET-REPLACE,  
callRefValue GET,  
terminateLeaveStatus GET-REPLACE,  
redlined GET-REPLACE,  
cableLoaded GET-REPLACE,  
transmitEqualization GET-REPLACE,  
receiveEqualization GET-REPLACE,  
transmitTLP GET-REPLACE,  
receiveTLP GET-REPLACE,  
transmitBalance GET-REPLACE,  
receiveBalance GET-REPLACE,  
transmitImpedance GET-REPLACE,  
receiveImpedance GET-REPLACE,  
enableLPBK GET-REPLACE,  
flashDetection GET-REPLACE  
}  
::= {idlcObjectClass 3}
```

```
channelTermination M-OBJECT-CLASS  
  DERIVED FROM      termination point  
  CHARACTERIZED BY  
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }  
  ::= {idlcObjectClass 6}
```

```
circuitPack M-OBJECT-CLASS  
  DERIVED FROM      top  
  CHARACTERIZED BY  
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }  
    ATTRIBUTES {  
      circuitPackId GET,  
      primaryServiceState GET,  
      secondaryServiceState GET,  
      circuitPackType GET,  
      equipHolderAddress GET;  
      seriesId GET,  
    }  
    OPERATIONS  
      ACTIONS {  
        remove,  
        restore,  
        applyPatch,  
        diagnose,  
        diagnoseLineUnit,  
        applyPatch,  
        removePatch,  
        bootProcessor,  
      }
```

```

        restartProcessor
    }
    NOTIFICATIONS {
        eventReporting,
        objectCreationReporting,
        objectDeletionReporting,
        attributeChangeReporting
    }
    OPTIONAL ATTRIBUTES {
        supplierCode GET,
        appliedPatches GET,
        currentProcLoad GET
    }
}

```

crossConnection M-OBJECT-CLASS

DERIVED FROM top

CHARACTERIZED BY

BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 3.2 --}

ATTRIBUTES {

```

    crossConnectionId GET,
    fromTerminationId GET-REPLACE,
    toTerminationId GET-REPLACE,
    primaryServiceState GET,
    secondaryServiceState GET,
    connectionType SET TO DEFAULT
    DEFAULT VALUE ENUMERATED oneWay
    GET-REPLACE
}

```

OPERATIONS

```

    CREATE {
        with-reference-object,
        with-automatic-instance-naming
    }

```

DELETE

```

    ACTIONS {
        roll,
        remove,
        restore
    }

```

```

    NOTIFICATIONS {
        objectCreationReporting,
        objectDeletionReporting,
        attributeChangeReporting
    }

```

```

    OPTIONAL ATTRIBUTES {
        redlined GET-REPLACE
    }
}

```

```

 ::= {idlcObjectClass 10}

```

```
ddsLineTermination M-OBJECT-CLASS
  DERIVED FROM    lineTermination
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      ddsLineTermId GET,
      dataRate GET-REPLACE,
      alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE,
      lineCircuitAddress GET,
    }
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
    NOTIFICATIONS {
      eventReporting
    }
    OPTIONAL ATTRIBUTES{
      currentProblemList GET,
      eventReportControlPointers GET-REPLACE ADD-REMOVE,
      currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE,
      enableLPBK GET-REPLACE,
      secondaryChannel GET-REPLACE,
      errorCorrection GET-REPLACE,
      callRefValue GET,
      redlined GET-REPLACE,
      allZeroCodeAllowed GET-REPLACE
    }
  ::= {idlcObjectClass 13}
```

```
discriminator M-OBJECT-CLASS
  DERIVED FROM    top
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      discriminatorConstruct GET-REPLACE,
      beginTime GET-REPLACE,
      discriminatorState SET TO DEFAULT
        DEFAULT VALUE BOOLEAN TRUE -- active
        GET-REPLACE,
      endTime SET TO DEFAULT
        DEFAULT VALUE NULL - no ending
        GET-REPLACE,
      managementUserId GET-REPLACE
    }
  ::= {idlcObjectClass 15}
```



```

ds0ChannelTermination M-OBJECT-CLASS
  DERIVED FROM      channelTermination
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      ds0ChannelTermId GET
    }
    OPERATIONS
      CREATE {
        -- explicitly created for B channels in ISDN
        -- inherently created for DS1 facilities
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
    ACTIONS {
      remove,
      restore
    }
    OPTIONAL ATTRIBUTES {
      robbedBitSignal GET-REPLACE,
      disconnectTC GET-REPLACE,
      disconnectIW GET-REPLACE,
      troubleTC GET-REPLACE,
      troubleIW GET-REPLACE,
      channIdentification GET,
      farEndAddress GET-REPLACE
    }
  ::= {idlcObjectClass 16}

```

```

ds1FramedPathTermination M-OBJECT-CLASS
  DERIVED FROM      framedPathTermination
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      ds1FramedPathTermId GET,
      ds1frameFormat GET-REPLACE,
      alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE,
    }
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
    NOTIFICATIONS {
      eventReporting
    }
    OPTIONAL ATTRIBUTES {

```

sequence GET-REPLACE,
timingSource GET-REPLACE,
inhibitPM GET-REPLACE,
protectionGroupPointer GET-REPLACE,
dslPathThDefProfileId GET-REPLACE,
azLocality GET-REPLACE,
apsBerThreshold GET-REPLACE,
currentProblemList GET,
eventReportControlPointers GET-REPLACE ADD-REMOVE
inputCommandControlPointers GET-REPLACE ADD-REMOVE,
perfMonReportSchedPointers GET-REPLACE ADD-REMOVE,
currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE,
cvMinThreshold GET-REPLACE,
cvMinCurrent GET-REPLACE,
cvMinPrevious GET-REPLACE,
cvMinHistory GET-REPLACE
cvHrThreshold GET-REPLACE,
cvHrCurrent GET-REPLACE,
cvHrPrevious GET-REPLACE,
cvHrHistory GET-REPLACE,
cvDayThreshold GET-REPLACE,
cvDayCurrent GET-REPLACE,
cvDayPrevious GET-REPLACE,
cvDayHistory GET-REPLACE,
cvFeMinThreshold GET-REPLACE,
cvFeMinCurrent GET-REPLACE,
cvFeMinPrevious GET-REPLACE,
cvFeMinHistory GET-REPLACE
cvFeHrThreshold GET-REPLACE,
cvFeHrCurrent GET-REPLACE,
cvFeHrPrevious GET-REPLACE,
cvFeHrHistory GET-REPLACE,
cvFeDayThreshold GET-REPLACE,
cvFeDayCurrent GET-REPLACE,
cvFeDayPrevious GET-REPLACE,
cvFeDayHistory GET-REPLACE,
esMinThreshold GET-REPLACE,
esMinCurrent GET-REPLACE,
esMinPrevious GET-REPLACE,
esMinHistory GET-REPLACE,
esHrThreshold GET-REPLACE,
esHrCurrent GET-REPLACE,
esHrPrevious GET-REPLACE,
esHrHistory GET-REPLACE,
esDayThreshold GET-REPLACE,
esDayCurrent GET-REPLACE,
esDayPrevious GET-REPLACE,
esDayHistory GET-REPLACE,
esFeMinThreshold GET-REPLACE,
esFeMinCurrent GET-REPLACE,
esFeMinPrevious GET-REPLACE,

esFeMinHistory GET-REPLACE,
esFeHrThreshold GET-REPLACE,
esFeHrCurrent GET-REPLACE,
esFeHrPrevious GET-REPLACE,
esFeHrHistory GET-REPLACE,
esFeDayThreshold GET-REPLACE,
esFeDayCurrent GET-REPLACE,
esFeDayPrevious GET-REPLACE,
esFeDayHistory GET-REPLACE,
lineESFeMinThreshold GET-REPLACE,
lineESFeMinCurrent GET-REPLACE,
lineESFeMinPrevious GET-REPLACE,
lineESFeMinHistory GET-REPLACE,
lineESFeHrThreshold GET-REPLACE,
lineESFeHrCurrent GET-REPLACE,
lineESFeHrPrevious GET-REPLACE,
lineESFeHrHistory GET-REPLACE,
lineESFeDayThreshold GET-REPLACE,
lineESFeDayCurrent GET-REPLACE,
lineESFeDayPrevious GET-REPLACE,
lineESFeDayHistory GET-REPLACE,
sesMinThreshold GET-REPLACE,
sesMinCurrent GET-REPLACE,
sesMinPrevious GET-REPLACE,
sesMinHistory GET-REPLACE,
sesHrThreshold GET-REPLACE,
sesHrCurrent GET-REPLACE,
sesHrPrevious GET-REPLACE,
sesHrHistory GET-REPLACE,
sesDayThreshold GET-REPLACE,
sesDayCurrent GET-REPLACE,
sesDayPrevious GET-REPLACE,
sesDayHistory GET-REPLACE,
sesFeMinThreshold GET-REPLACE,
sesFeMinCurrent GET-REPLACE,
sesFeMinPrevious GET-REPLACE,
sesFeMinHistory GET-REPLACE,
sesFeHrThreshold GET-REPLACE,
sesFeHrCurrent GET-REPLACE,
sesFeHrPrevious GET-REPLACE,
sesFeHrHistory GET-REPLACE,
sesFeDayThreshold GET-REPLACE,
sesFeDayCurrent GET-REPLACE,
sesFeDayPrevious GET-REPLACE,
sesFeDayHistory GET-REPLACE,
sefsMinThreshold GET-REPLACE,
sefsMinCurrent GET-REPLACE,
sefsMinPrevious GET-REPLACE,
sefsMinHistory GET-REPLACE,
sefsHrThreshold GET-REPLACE,
sefsHrCurrent GET-REPLACE,

sefsHrPrevious GET-REPLACE,
sefsHrHistory GET-REPLACE,
sefsDayThreshold GET-REPLACE,
sefsDayCurrent GET-REPLACE,
sefsDayPrevious GET-REPLACE,
sefsDayHistory GET-REPLACE,
sefsFeMinThreshold GET-REPLACE,
sefsFeMinCurrent GET-REPLACE,
sefsFeMinPrevious GET-REPLACE,
sefsFeMinHistory GET-REPLACE,
sefsFeHrThreshold GET-REPLACE,
sefsFeHrCurrent GET-REPLACE,
sefsFeHrPrevious GET-REPLACE,
sefsFeHrHistory GET-REPLACE,
sefsFeDayThreshold GET-REPLACE,
sefsFeDayCurrent GET-REPLACE,
sefsFeDayPrevious GET-REPLACE,
sefsFeDayHistory GET-REPLACE,
cssMinThreshold GET-REPLACE,
cssMinCurrent GET-REPLACE,
cssMinPrevious GET-REPLACE,
cssMinHistory GET-REPLACE,
cssHrThreshold GET-REPLACE,
cssHrCurrent GET-REPLACE,
cssHrPrevious GET-REPLACE,
cssHrHistory GET-REPLACE,
cssDayThreshold GET-REPLACE,
cssDayCurrent GET-REPLACE,
cssDayPrevious GET-REPLACE,
cssDayHistory GET-REPLACE,
dmMinThreshold GET-REPLACE,
dmMinCurrent GET-REPLACE,
dmMinPrevious GET-REPLACE,
dmMinHistory GET-REPLACE,
dmHrThreshold GET-REPLACE,
dmHrCurrent GET-REPLACE,
dmHrPrevious GET-REPLACE,
dmHrHistory GET-REPLACE,
dmDayThreshold GET-REPLACE,
dmDayCurrent GET-REPLACE,
dmDayPrevious GET-REPLACE,
dmDayHistory GET-REPLACE,
uasMinThreshold GET-REPLACE,
uasMinCurrent GET-REPLACE,
uasMinPrevious GET-REPLACE,
uasMinHistory GET-REPLACE,
uasHrThreshold GET-REPLACE,
uasHrCurrent GET-REPLACE,
uasHrPrevious GET-REPLACE,
uasHrHistory GET-REPLACE,
uasDayThreshold GET-REPLACE,

```
    uasDayCurrent GET-REPLACE,  
    uasDayPrevious GET-REPLACE,  
    uasDayHistory GET-REPLACE  
  }  
  OPTIONAL GROUP ATTRIBUTES {  
    pathThresholdGroup ,  
    cvNeThresholdGroup ,  
    cvFeThresholdGroup ,  
    cvNeFeThresholdGroup ,  
    sefsNeThresholdGroup ,  
    sefsFeThresholdGroup ,  
    sefsNeFeThresholdGroup ,  
    esNeThresholdGroup ,  
    esFeThresholdGroup ,  
    lineESFeThresholdGroup ,  
    esNeFeThresholdGroup ,  
    sesNeThresholdGroup ,  
    sesFeThresholdGroup ,  
    sesNeFeThresholdGroup ,  
    uasThresholdGroup ,  
    dmThresholdGroup  
    cssThresholdGroup  
    pathHrNeThresholdGroup ,  
    pathHrFeThresholdGroup ,  
    pathHrNeFeThresholdGroup ,  
    pathDayNeThresholdGroup ,  
    pathDayFeThresholdGroup ,  
    pathDayNeFeThresholdGroup ,  
    pathMinNeThresholdGroup ,  
    pathMinFeThresholdGroup ,  
    pathMinNeFeThresholdGroup ,  
    pathPmNeFeGroup ,  
    pathPmNeGroup ,  
    pathPmFeGroup ,  
    pathPmNeFeCurrentGroup ,  
    pathPmNeFePreviousGroup ,  
    pathPmNeFeHistoryGroup ,  
    pathPmNeCurrentGroup ,  
    pathPmNePreviousGroup ,  
    pathPmNeHistoryGroup ,  
    pathPmFeCurrentGroup ,  
    pathPmFePreviousGroup ,  
    pathPmFeHistoryGroup ,  
    cvNeFeGroup ,  
    cvNeGroup ,  
    cvNeCurrentGroup ,  
    cvNePreviousGroup ,  
    cvNeHistoryGroup ,  
    cvFeGroup ,  
    cvFeCurrentGroup ,  
    cvFePreviousGroup ,
```

cvFeHistoryGroup ,
esNeFeGroup ,
esNeGroup ,
esNeCurrentGroup ,
esNePreviousGroup ,
esNeHistoryGroup ,
esFeGroup ,
esFeCurrentGroup ,
esFePreviousGroup ,
esFeHistoryGroup ,
lineESFeGroup ,
lineESFeCurrentGroup ,
lineESFeDayGroup ,
lineESFeHistoryGroup ,
lineESFeHrGroup ,
lineESFeMinGroup ,
lineESFePreviousGroup ,
sesNeFeGroup ,
sesNeGroup ,
sesNeCurrentGroup ,
sesNePreviousGroup ,
sesNeHistoryGroup ,
sesFeGroup ,
sesFeCurrentGroup ,
sesFePreviousGroup ,
sesFeHistoryGroup ,
sefsNeFeGroup ,
sefsNeGroup ,
sefsNeCurrentGroup ,
sefsNePreviousGroup ,
sefsNeHistoryGroup ,
sefsFeGroup
sefsFeCurrentGroup ,
sefsFePreviousGroup ,
sefsFeHistoryGroup ,
cssGroup ,
cssCurrentGroup ,
cssPreviousGroup ,
cssHistoryGroup ,
dmGroup ,
dmCurrentGroup ,
dmPreviousGroup ,
dmHistoryGroup ,
uasGroup ,
uasCurrentGroup ,
uasPreviousGroup ,
uasHistoryGroup ,
pathPMNeFeMinGroup ,
pathPMNeFeHrGroup ,
pathPMNeFeDayGroup ,
cvNeMinGroup ,

```

        cvNeHrGroup ,
        cvNeDayGroup ,
        cvFeMinGroup ,
        cvFeHrGroup ,
        cvFeDayGroup ,
        esNeMinGroup ,
        esNeHrGroup ,
        esNeDayGroup ,
        esFeMinGroup ,
        esFeHrGroup ,
        esFeDayGroup ,
        sesNeMinGroup ,
        sesNeHrGroup ,
        sesNeDayGroup ,
        sesFeMinGroup ,
        sesFeHrGroup ,
        sesFeDayGroup ,
        sefsNeMinGroup ,
        sefsNeHrGroup ,
        sefsNeDayGroup ,
        sefsFeMinGroup ,
        sefsFeHrGroup ,
        sefsFeDayGroup ,
        cssMinGroup ,
        cssHrGroup ,
        cssDayGroup ,
        dmMinGroup ,
        dmHrGroup ,
        dmDayGroup ,
        uasMinGroup ,
        uasHrGroup ,
        uasDayGroup ,
    }
 ::= {idlcObjectClass 17}

```

ds1LineTermination M-OBJECT-CLASSDERIVED FROM **lineTermination**

CHARACTERIZED BY

BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }

ATTRIBUTES {

```

    ds1LineTermId GET ,
    ds1LineCode GET-REPLACE ,
    alarmSeverityAssignmentList GET-REPLACE ,
    lineCircuitAddress GET-Replace

```

}

OPERATIONS

CREATE {

```

    with-reference-object ,
    with-automatic-instance-naming

```

```
    }
    DELETE
    ACTIONS {
        operateLoopback,
        releaseLoopback
    }
    NOTIFICATIONS {
        eventReporting
    }
    OPTIONAL ATTRIBUTES {
        callRefValue GET,
        terminateLeaveStatus GET-REPLACE,
        redlined GET-REPLACE,
        transmitGain GET-REPLACE,
        receiveGain GET-REPLACE,
        lineBuildOut GET-REPLACE,
        inhibitPM GET-REPLACE,
        enableLPBK GET-REPLACE,
        protectionGroupPointer GET-REPLACE,
        dslLineThDefProfileId GET-REPLACE,
        azLocality GET-REPLACE,
        currentProblemList GET,
        eventReportControlPointers GET-REPLACE ADD-REMOVE,
        inputCommandControlPointers GET-REPLACE ADD-REMOVE,
        perfMonReportSchedPointers GET-REPLACE ADD-REMOVE,
        currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE,
        apsBerThreshold GET-REPLACE,
        cvMinThreshold GET-REPLACE,
        cvMinCurrent GET-REPLACE,
        cvMinPrevious GET-REPLACE,
        cvMinHistory GET-REPLACE,
        cvHrThreshold GET-REPLACE,
        cvHrCurrent GET-REPLACE,
        cvHrPrevious GET-REPLACE,
        cvHrHistory GET-REPLACE,
        cvDayThreshold GET-REPLACE,
        cvDayCurrent GET-REPLACE,
        cvDayPrevious GET-REPLACE,
        cvDayHistory GET-REPLACE,
        esMinThreshold GET-REPLACE,
        esMinCurrent GET-REPLACE,
        esMinPrevious GET-REPLACE,
        esMinHistory GET-REPLACE,
        esHrThreshold GET-REPLACE,
        esHrCurrent GET-REPLACE,
        esHrPrevious GET-REPLACE,
        esHrHistory GET-REPLACE,
        esDayThreshold GET-REPLACE,
        esDayCurrent GET-REPLACE,
        esDayPrevious GET-REPLACE,
        esDayHistory GET-REPLACE,
```


sesMinThreshold GET-REPLACE,
sesMinCurrent GET-REPLACE,
sesMinPrevious GET-REPLACE,
sesMinHistory GET-REPLACE,
sesHrThreshold GET-REPLACE,
sesHrCurrent GET-REPLACE,
sesHrPrevious GET-REPLACE,
sesHrHistory GET-REPLACE,
sesDayThreshold GET-REPLACE,
sesDayCurrent GET-REPLACE,
sesDayPrevious GET-REPLACE,
sesDayHistory GET-REPLACE,
dmMinThreshold GET-REPLACE,
dmMinCurrent GET-REPLACE,
dmMinPrevious GET-REPLACE,
dmMinHistory GET-REPLACE,
dmHrThreshold GET-REPLACE,
dmHrCurrent GET-REPLACE,
dmHrPrevious GET-REPLACE,
dmHrHistory GET-REPLACE,
dmDayThreshold GET-REPLACE,
dmDayCurrent GET-REPLACE,
dmDayPrevious GET-REPLACE,
dmDayHistory GET-REPLACE,
uasMinThreshold GET-REPLACE,
uasMinThreshold GET-REPLACE,
uasMinCurrent GET-REPLACE,
uasMinPrevious GET-REPLACE,
uasMinHistory GET-REPLACE,
uasHrThreshold GET-REPLACE,
uasHrCurrent GET-REPLACE,
uasHrPrevious GET-REPLACE,
uasHrHistory GET-REPLACE,
uasDayThreshold GET-REPLACE,
uasDayCurrent GET-REPLACE,
uasDayPrevious GET-REPLACE,
uasDayHistory GET-REPLACE,
pscMinCurrent GET-REPLACE,
pscMinPrevious GET-REPLACE,
pscMinHistory GET-REPLACE,
pscHrCurrent GET-REPLACE,
pscHrPrevious GET-REPLACE,
pscHrHistory GET-REPLACE,
pscDayCurrent GET-REPLACE,
pscDayPrevious GET-REPLACE,
pscDayHistory GET-REPLACE,
psdMinCurrent GET-REPLACE,
psdMinPrevious GET-REPLACE,
psdMinHistory GET-REPLACE,
psdHrCurrent GET-REPLACE,
psdHrPrevious GET-REPLACE,

```
    psdHrHistory GET-REPLACE,  
    psdDayCurrent GET-REPLACE,  
    psdDayPrevious GET-REPLACE,  
    psdDayHistory GET-REPLACE
```

```
}  
OPTIONAL GROUP ATTRIBUTES {
```

```
    lineThresholdGroup,  
    cvNeThresholdGroup,  
    esNeThresholdGroup,  
    sesNeThresholdGroup,  
    uasThresholdGroup,  
    dmThresholdGroup,  
    lineHrNeThresholdGroup,  
    lineDayNeThresholdGroup,  
    lineMinNeThresholdGroup,  
    linePmGroup,  
    linePmCurrentGroup,  
    linePmPreviousGroup,  
    linePmHistoryGroup,  
    cvNeGroup,  
    cvNeCurrentGroup,  
    cvNePreviousGroup,  
    cvNeHistoryGroup,  
    esNeGroup,  
    esNeCurrentGroup,  
    esNePreviousGroup,  
    esNeHistoryGroup,  
    sesNeGroup,  
    sesNeCurrentGroup,  
    sesNePreviousGroup,  
    sesNeHistoryGroup,  
    dmGroup,  
    dmCurrentGroup,  
    dmPreviousGroup,  
    dmHistoryGroup,  
    uasGroup,  
    uasCurrentGroup,  
    uasPreviousGroup,  
    uasHistoryGroup,  
    pscGroup,  
    pscCurrentGroup,  
    pscPreviousGroup,  
    pscHistoryGroup,  
    psdGroup,  
    psdCurrentGroup,  
    psdPreviousGroup,  
    psdHistoryGroup,  
    linePMMinGroup,  
    linePMHrGroup,  
    linePMDayGroup,  
    cvNeMinGroup,
```

```

        cvNeHrGroup ,
        cvNeDayGroup ,
        esNeMinGroup ,
        esNeHrGroup ,
        esNeDayGroup ,
        sesNeMinGroup ,
        sesNeHrGroup ,
        sesNeDayGroup ,
        dmMinGroup ,
        dmHrGroup ,
        dmDayGroup ,
        uasMinGroup ,
        uasHrGroup ,
        uasDayGroup ,
        pscMinGroup ,
        pscHrGroup ,
        pscDayGroup ,
        psdMinGroup ,
        psdHrGroup ,
        psdDayGroup ,
    }
 ::= {idlcObjectClass 18}

```

equipment M-OBJECT-CLASSDERIVED FROM **top**

CHARACTERIZED BY

BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }

ATTRIBUTES {

```

    equipmentId GET,
    primaryServiceState GET,
    secondaryServiceState GET,
    alarmSeverityAssignmentList GET-REPLACE,

```

}

OPERATIONS

CREATE {

```

    with-reference-object,
    with-automatic-instance-naming

```

}

DELETE

ACTIONS {

```

    activateExternalEntity,
    deactivateExternalEntity,
    diagnose,
    exercise,
    remove,
    restore,
    bootProcessor,
    restartProcessor

```

}

```
    NOTIFICATIONS {
        objectCreationReporting,
        objectDeletionReporting,
        attributeChangeReporting,
        eventReporting
    }
OPTIONAL ATTRIBUTES {
    protectionGroupPointer GET-REPLACE,
    equipmentFunction GET-REPLACE,
    locationName GET-REPLACE,
    vendorName GET-REPLACE,
    currentProblemList GET,
    eventReportControlPointers GET-REPLACE ADD-REMOVE,
    inputCommandControlPointers GET-REPLACE ADD-REMOVE,
    dgnSchedPointers GET-REPLACE ADD-REMOVE,
    exerciseSchedPointers GET-REPLACE ADD-REMOVE,
    currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE,
    maintMeasReportSchedPointers GET-REPLACE ADD-REMOVE,
    externalEntityType GET-REPLACE,
    externalEntityOpnState GET,
    bootGenericProf GET-REPLACE
}
 ::= {idlcObjectClass 21}
```

equipmentHolder M-OBJECT-CLASS

DERIVED FROM top

CHARACTERIZED BY

BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }

ATTRIBUTES {

```
    equipHolderId GET,
    supportedCktPckType GET-REPLACE ADD-REMOVE,
    equipped SET TO DEFAULT
        DEFAULT VALUE BOOLEAN FALSE
    GET,
    assignedCktPckType GET-REPLACE,
    equipHolderAddress GET,
    alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE,
```

}

OPERATIONS

CREATE {

```
    with-reference-object,
    with-automatic-instance-naming
```

}

DELETE

NOTIFICATIONS {

```
    objectCreationReporting,
    objectDeletionReporting,
    attributeChangeReporting,
    eventReporting
```

}

```

OPTIONAL ATTRIBUTES{
    currentProblemList GET,
    eventReportControlPointers GET-REPLACE ADD-REMOVE,
    inputCommandControlPointers GET-REPLACE ADD-REMOVE,
    protectionGroupPointer GET-REPLACE ADD-REMOVE,
    bootProcLoad GET-REPLACE
}
 ::= {idlcObjectClass 22}

```

```

eventReportControl M-OBJECT-CLASS
  DERIVED FROM      discriminator
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      eventReportControlId GET
    }
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
 ::= {idlcObjectClass 25}

```

```

framedPathTermination M-OBJECT-CLASS
  DERIVED FROM      terminationPoint
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    OPERATIONS
      ACTIONS {
        remove,
        restore
      }
 ::= {idlcObjectClass 27}

```

```

idlcCPPProfile M-OBJECT-CLASS
  DERIVED FROM      top
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { --see TR303 section 3.2 -- }
    ATTRIBUTES {
      idlcCPPProfileId GET,
      t308 GET-REPLACE
      SET TO DEFAULT DEFAULT VALUE 4,
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }

```

```
    }
    DELETE
  NOTIFICATIONS {
    objectCreationReporting,
    objectDeletionReporting,
    attributeChangeReporting
  }
  OPTIONAL ATTRIBUTES {
    t303 GET-REPLACE,
    t305 GET-REPLACE,
    t322 GET-REPLACE,
    t396 GET-REPLACE,
    t397 GET-REPLACE,
    t398 GET-REPLACE,
    t399 GET-REPLACE
  }
}
 ::= {idlcObjectClass 59}
```

idlcDLProfile M-OBJECT-CLASS

DERIVED FROM top

CHARACTERIZED BY

BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }

ATTRIBUTES {

idlcDLProfileId GET,

sapi GET,

maxIFrames SET TO DEFAULT

DEFAULT VALUE INTEGER 7

GET-REPLACE,

n200 SET TO DEFAULT

DEFAULT VALUE INTEGER 3

GET-REPLACE,

t200 SET TO DEFAULT

DEFAULT VALUE INTEGER 1

GET-REPLACE,

t203 SET TO DEFAULT

DEFAULT VALUE INTEGER s30

GET-REPLACE

}

OPERATIONS

CREATE {

with-reference-object,

with-automatic-instance-naming

}

DELETE

NOTIFICATIONS {

objectCreationReporting,

objectDeletionReporting,

attributeChangeReporting

}

::= {idlcObjectClass 60}

idlcDLTermination M-OBJECT-CLASS

DERIVED FROM terminationPoint

CHARACTERIZED BY

BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 --}

ATTRIBUTES {

```

    idlcDLTermId GET,
    dataLinkType SET TO DEFAULT
        DEFAULT VALUE eoc
        GET-REPLACE,
    carrierChannel GET-REPLACE,
    protectionGroupPointer GET-REPLACE,
    invalidFramesCounter GET-REPLACE,
    invalidFramesThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 15
        GET-REPLACE,
    invalidFramesTimer SET TO DEFAULT
        DEFAULT VALUE INTEGER 2
        GET-REPLACE,
    dlResetReqCounter GET-REPLACE,
    dlResetReqThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 7
        GET-REPLACE,
    dlResetReqTimer SET TO DEFAULT
        DEFAULT VALUE INTEGER 5
        GET-REPLACE,
    dlResetFailCounter GET-REPLACE,
    dlResetFailThreshold SET TO DEFAULT
        DEFAULT VALUE INTEGER 1
        GET-REPLACE,
    dlResetFailTimer SET TO DEFAULT
        DEFAULT VALUE INTEGER 10
        GET-REPLACE

```

}

OPERATIONS

CREATE {

```

    with-reference-object,
    with-automatic-instance-naming

```

}

DELETE

ACTIONS {

```

    remove,
    restore

```

}

NOTIFICATIONS {

```

    objectCreationReporting,
    objectDeletionReporting,
    attributeChangeReporting,
    eventReporting

```

}

::= {idlcObjectClass 61}

```
idlcTerminal M-OBJECT-CLASS
  DERIVED FROM    top
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      terminalId GET,
      signalingMethod GET-REPLACE
    }
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
      NOTIFICATIONS {
        objectCreationReporting,
        objectDeletionReporting,
        attributeChangeReporting,
        tsMapDiscRept
      }
    OPTIONAL ATTRIBUTES {
      ds1VTCount GET-REPLACE
    }
  ::= {idlcObjectClass 31}
```

```
isdnFramedPathTermination M-OBJECT-CLASS
  DERIVED FROM    framedPathTermination
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      isdnFramedPathId GET,
      ltOHStates GET-REPLACE,
      ntOHStates GET,
      alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE,
    }
    OPERATIONS
      CREATE {
        with-reference-object,
        with-automatic-instance-naming
      }
      DELETE
      ACTIONS {
        operateISDNLoopback,
        releaseISDNLoopback,
        generateCorruptedcrc,
        transmuteocOpcode,
        initializePMAAttributes
      }
      NOTIFICATIONS {
        eventReporting,
      }
```



```
        changeOfOverheadBitsReport
    }
OPTIONAL ATTRIBUTES {
    currentProblemList GET,
    eventReportControlPointers GET-REPLACE ADD-REMOVE,
    inputCommandControlPointers GET-REPLACE ADD-REMOVE,
    fptDefaultProfileID GET-REPLACE,
    typeOfPMData GET,
    channelSelection GET
    esHrThreshold GET-REPLACE,
    esDayThreshold GET-REPLACE,
    sesHrThreshold GET-REPLACE,
    sesDayThreshold GET-REPLACE,
    cvHrCurrent GET-REPLACE,
    cvFEHrCurrent GET-REPLACE,
    cvHrPrevious GET-REPLACE,
    cvFEHrPrevious GET-REPLACE,
    esHrCurrent GET-REPLACE,
    esFEHrCurrent GET-REPLACE,
    esHrPrevious GET-REPLACE,
    esFEHrPrevious GET-REPLACE,
    esHrHistory GET-REPLACE ADD-REMOVE,
    esFEHrHistory GET-REPLACE ADD-REMOVE,
    esDayCurrent GET-REPLACE,
    esFEDayCurrent GET-REPLACE,
    esDayPrevious GET-REPLACE,
    esFEDayPrevious GET-REPLACE,
    sesHrCurrent GET-REPLACE,
    sesFEHrCurrent GET-REPLACE,
    sesHrPrevious GET-REPLACE,
    sesFEHrPrevious GET-REPLACE,
    sesDayCurrent GET-REPLACE,
    sesFEDayCurrent GET-REPLACE,
    sesDayPrevious GET-REPLACE,
    sesFEDayPrevious GET-REPLACE
}
OPTIONAL GROUP ATTRIBUTES {
    allPMCount,
    allNePMCount
    hrlyPMCount,
    hrlyNePmCount,
    dailyPMCount,
    dailyNePmCount,
    currentPMCount,
    currentNePMCount,
    currentHrlyPMCount,
    currentNeHrlyPMCount,
    currentDailyPMCount,
    currentNeDailyPMCount,
    previousPMCount,
    previousNePMCount,
```

```
        previousHrlyPMCount ,
        previousNeHrlyPMCount ,
        previousDailyPMCount ,
        previousNeDailyPMCount ,
        historyPMCount ,
        allThreshold
    }
 ::= {idlcObjectClass 36}
```

isdnLineTermination M-OBJECT-CLASS

DERIVED FROM **lineTermination**

CHARACTERIZED BY

BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 --}

ATTRIBUTES {

isdnLineTermId GET,
alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE,
lineCircuitAddress GET

}

OPERATIONS

CREATE {

with-reference-object ,
with-automatic-instance-naming

}

DELETE

NOTIFICATIONS {

eventReporting

}

OPTIONAL ATTRIBUTES {

sealingCurrent GET-REPLACE ,
callRefValue GET,
currentProblemList GET,
eventReportControlPointers GET-REPLACE ADD-REMOVE ,
currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE

}

::= {idlcObjectClass 64}

isdnPerSystemProfile M-OBJECT-CLASS

DERIVED FROM **top**

CHARACTERIZED BY

BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 --}

ATTRIBUTES {

isdnPerSystemProfileId GET

}

OPERATIONS

CREATE {

with-reference-object ,
with-automatic-instance-naming

}

DELETE

```

        NOTIFICATIONS {
            objectCreationReporting,
            objectDeletionReporting,
            attributeChangeReporting
        }
    OPTIONAL ATTRIBUTES {
        isdnL3ErrPerDlyThresh GET-REPLACE,
        dsISESDefinition GET-REPLACE
    }
 ::= {idlcObjectClass 38}

lineTermination M-OBJECT-CLASS
    DERIVED FROM    terminationPoint
    CHARACTERIZED BY
        BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
        OPERATIONS
            ACTIONS {
                remove, -- only for inheritance purposes, no instances to be removed
                restore -- only for inheritance purposes, no instances to be restored
            }
 ::= {idlcObjectClass 39}

memory M-OBJECT-CLASS
    DERIVED FROM    top
    CHARACTERIZED BY
        BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
        ATTRIBUTES {
            memoryId GET,
            primaryServiceState GET,
            secondaryServiceState GET,
            memoryType GET,
            alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE
        }
        OPERATIONS
            CREATE {
                with-reference-object,
                with-automatic-instance-naming
            }
            DELETE
            ACTIONS {
                audit,
                memoryBackup,
                memoryRestoration,
                remove,
                restore
            }
            NOTIFICATIONS {
                eventReporting
            }

```

```
OPTIONAL ATTRIBUTES {  
    currentProblemList GET,  
    backupTime GET,  
    backupType GET,  
    versionNbr GET,  
    eventReportControlPointers GET-REPLACE ADD-REMOVE,  
    inputCommandControlPointers GET-REPLACE ADD-REMOVE,  
    auditSchedPointers GET-REPLACE ADD-REMOVE,  
    backupSchedPointers GET-REPLACE ADD-REMOVE,  
    currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE  
}  
::= {idlcObjectClass 42}
```

```
metTestAccPathTerm M-OBJECT-CLASS  
    DERIVED FROM testAccPathTerm  
    CHARACTERIZED BY  
        BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }  
        OPERATIONS  
            CREATE {  
                with-reference-object,  
                with-automatic-instance-naming  
            }  
            DELETE  
            ACTIONS {  
                connMonitorAcc,  
                loopAroundDiagTAP,  
                releaseLoopAround,  
                connSplitOutAcc  
                changeToSplitOut,  
                resetTimer,  
                changeToSplitIn  
            }  
        }  
::= {idlcObjectClass 62}
```

```
mgmtOpnsSched M-OBJECT-CLASS  
    DERIVED FROM top  
    CHARACTERIZED BY  
        BEHAVIOR DEFINITIONS { -- see TR303 section 3.2-- }  
        ATTRIBUTES {  
            managementUserID GET,  
            affectedObjectClass GET-REPLACE,  
            affectedObjectInstance GET-REPLACE ADD-REMOVE,  
            interval GET-REPLACE,  
            scheduleState SET TO DEFAULT  
                DEFAULT VALUE BOOLEAN TRUE -- active  
            GET-REPLACE,  
            beginTime GET-REPLACE,  
            endTime SET TO DEFAULT  
                DEFAULT VALUE EndTime noEnding: NULL  
        }
```

```

        GET-REPLACE
    }
    ::= {idlcObjectClass 46}

mtau M-OBJECT-CLASS
    DERIVED FROM      tau
    CHARACTERIZED BY
        BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 --}
        ATTRIBUTES {
            mtauld GET
        }
        OPERATIONS
            CREATE
                with-reference-object,
                with-automatic-instance-naming
            }
            DELETE
        OPTIONAL ATTRIBUTES {
        }
    ::= {idlcObjectClass 47}

networkElement M-OBJECT-CLASS
    DERIVED FROM      top
    CHARACTERIZED BY
        BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 --}
        ATTRIBUTES {
            networkElementId GET,
            primaryServiceState GET,
            secondaryServiceState GET,
            systemTitle GET-REPLACE,
            alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE
        }
        OPERATIONS
            CREATE {
                with-automatic-instance-naming
            }
            DELETE
        ACTIONS {
            remove,
            restore,
            activateExternalEntity,
            deactivateExternalEntity,
            bootProcessor,
            restartProcessor
        }
        NOTIFICATIONS {
            attributeChangeReporting,
            eventReporting
        }
    }

```

```
OPTIONAL ATTRIBUTES {
    vendorName GET
    systemLocation Get,
    systemClock GET-REPLACE,
    systemTimingSource GET-REPLACE,
    currentProblemList GET,
    eventReportControlPointers GET-REPLACE ADD-REMOVE,
    inputCommandControlPointers GET-REPLACE ADD-REMOVE,
    currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE,
    externalEntityType GET-REPLACE,
    externalEntityOpnState GET
    systemAlarmState GET,
    bootGenericProf GET-REPLACE
}
 ::= {idlcObjectClass 63}
```

pmIntervalProfile M-OBJECT-CLASS

```
DERIVED FROM top
CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
        pmIntervalProfileId GET,
        pmObjectClass GET-REPLACE ADD-REMOVE,
        pmAttribute GET-REPLACE ADD-REMOVE,
        intervalValue GET-REPLACE
    }
    OPERATIONS
        CREATE {
            with-reference-object,
            with-automatic-instance-naming
        }
        DELETE
    NOTIFICATIONS {
        objectCreationReporting,
        objectDeletionReporting,
        attributeChangeReporting
    }
 ::= {idlcObjectClass 51}
```

protectionGroup M-OBJECT-CLASS

```
DERIVED FROM top
CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
        protectionGroupId GET,
        protectionType GET-REPLACE,
        revertive SET TO DEFAULT
        DEFAULT VALUE BOOLEAN TRUE
        GET-REPLACE,
    }
```

```

    activateLockout SET TO DEFAULT
      DEFAULT VALUE BOOLEAN FALSE
    GET,
    numberOfProtecting SET TO DEFAULT
      DEFAULT VALUE 0
    GET,
    numberOfProtected SET TO DEFAULT
      DEFAULT VALUE 0
    GET
  }
  OPERATIONS
    CREATE {
      with-reference-object,
      with-automatic-instance-naming
    }
    DELETE
  ACTIONS {
    protectionSwitch,
    protectionRelease,
    exerciseProtectionSwitch,
    lockoutOfProtection,
    releaseLockoutOfProtection,
    protectionBridge
  }
  NOTIFICATIONS {
    objectCreationReporting,
    objectDeletionReporting,
    attributeChangeReporting,
    automaticProtectSwitchReporting
  }
  OPTIONAL ATTRIBUTES {
    switchMode GET-REPLACE,
    protectionObjectClass GET
  }
} ::= {idlcObjectClass 52}

```

```

protectionGroupUnit M-OBJECT-CLASS
  DERIVED FROM top
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS {-- see TR303 section 3.2 --}
    ATTRIBUTES {
      protectionGroupUnitId GET,
      protectionObjectPointer GET-REPLACE,
      protectionGroupUnitType GET-REPLACE,
      inhibitSwitch SET TO DEFAULT
        DEFAULT VALUE ENUMERATED notInhibited
        GET-REPLACE
    }
  OPERATIONS
    CREATE {

```

```
        with-reference-object,  
        with-automatic-instance-naming  
    }  
    DELETE  
    NOTIFICATIONS {  
        objectCreationReporting,  
        objectDeletionReporting,  
        attributeChangeReporting  
    }  
    OPTIONAL ATTRIBUTES {  
        inhibitRelease GET-REPLACE,  
        protectionObjectClass GET,  
        protectionGroupUnitNumber GET-REPLACE,  
        protectionGroupUnitState GET,  
        switchedProtectionGroupUnit GET,  
        priority GET-REPLACE,  
        protectionSwitchCondition GET  
    }  
 ::= {idlcObjectClass 53}
```

```
quarterDS0ChannelTermination M-OBJECT-CLASS  
    DERIVED FROM    channelTermination  
    CHARACTERIZED BY  
        BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }  
        ATTRIBUTES {  
            quarterDS0ChannelTermId GET  
        }  
        OPERATIONS  
            CREATE {  
                with-reference-object,  
                with-automatic-instance-naming  
            }  
            DELETE  
            ACTIONS {  
                remove,  
                restore  
            }  
 ::= {idlcObjectClass 54}
```

```
tau M-OBJECT-CLASS  
    DERIVED FROM    top  
    CHARACTERIZED BY  
        BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }  
        ATTRIBUTES {  
            primaryServiceState GET,  
            secondaryServiceState GET,  
            terminateAndLeaveCap GET,  
            alarmSeverityAssignmentList GET-REPLACE ADD-REMOVE  
        }  
 ::= {idlcObjectClass 55}
```



```

OPERATIONS
  ACTIONS {
    connLoopAroundAcc,
    initAndRestore,
    diagnose,
    remove,
    restore
  }
  NOTIFICATIONS {
    reportTAUInit,
    eventReporting,
    objectCreationReporting,
    objectDeletionReporting,
    attributeChangeReporting
  }
  OPTIONAL ATTRIBUTES {
    configurationCodeList GET-REPLACE ADD-REMOVE,
    currentProblemList GET,
    eventReportControlPointers GET-REPLACE ADD-REMOVE,
    currentAlarmSumSchedPointers GET-REPLACE ADD-REMOVE
  }
 ::= {idlcObjectClass 55}

```

terminationPoint M-OBJECT-CLASS

```

DERIVED FROM    top
CHARACTERIZED BY
  BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
  ATTRIBUTES {
    primaryServiceState GET,
    secondaryServiceState GET,
  }
  ACTIONS
  NOTIFICATIONS {
    objectCreationReporting,
    objectDeletionReporting,
    attributeChangeReporting
  }
 ::= {idlcObjectClass 56}

```

testAccPathTerm M-OBJECT-CLASS

```

DERIVED FROM    terminationPoint
CHARACTERIZED BY
  BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
  ATTRIBUTES {
    testAccPathTermId GET,
    resourceId SET TO DEFAULT
      DEFAULT VALUE ResourceId NULL
    GET
  }

```

```
OPERATIONS
  ACTIONS {
    changeToSplitFull,
    changeToMonitor,
    discTestAcc,
    remove,
    restore
  }
 ::= {idlcObjectClass 57}

testResponseCircuit M-OBJECT-CLASS
  DERIVED FROM top
  CHARACTERIZED BY
    BEHAVIOR DEFINITIONS { -- see TR303 section 3.2 -- }
    ATTRIBUTES {
      testRCId GET,
      primaryServiceState GET,
      secondaryServiceState GET,
      testAccPath GET
    }
    OPERATIONS
      ACTIONS {
        operateTermination,
        remove,
        restore
      }
      NOTIFICATIONS {
        objectCreationReporting,
        objectDeletionReporting,
        attributeChangeReporting
      }
    }
 ::= {idlcObjectClass 58}

top M-OBJECT-CLASS
  CHARACTERIZED BY
    ATTRIBUTES {
      objectClass GET
    }
 ::= {mObjectClass 1}
```

13.6.2.2 Attributes

As in the previous object definitions, in the following ASN.1 definitions, only attributes supported by the 5ESS®-2000 switch are included.

```
activateLockout ATTRIBUTE
    SINGLED-VALUED
    WITH ATTRIBUTE SYNTAX BOOLEAN
    MATCHES FOR      Equality
::= {idlcAttribute 1}
```

```
affectedObjectClass ATTRIBUTE
    SINGLED-VALUED
    WITH ATTRIBUTE SYNTAX OBJECT IDENTIFIER
    MATCHES FOR      Equality
::= {idlcAttribute 3}
```

```
affectedObjectInstances ATTRIBUTE
    SET-VALUED
    WITH ATTRIBUTE SYNTAX SET OF DistinguishedName
    MATCHES FOR      Equality
::= {idlcAttribute 4}
```

```
alarmSeverity ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX AlarmSeverity
    MATCHES FOR      Equality
::= {idlcAttribute 5}
```

```
alarmSeverityAssignmentList ATTRIBUTE
    SET-VALUED
    WITH ATTRIBUTE SYNTAX SET OF AlarmSeverityAssignment
::= {idlcAttribute 6}
```

```
allZeroCodeAllowed ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX BOOLEAN
    MATCHES FOR      Equality
::= {idlcAttribute 12}
```

```
analogLineTermId ATTRIBUTE
    SINGLE-VALUED
    WITH ATTRIBUTE SYNTAX INTEGER
    MATCHES FOR      Equality, Ordering
::= {idlcAttribute 13}
```

apsBerThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 15}

assignedCktPckType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality, Substrings
::= {idlcAttribute 16}

azLocality ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX AZLocality
MATCHES FOR Equality
::= {idlcAttribute 20}

beginTime ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BeginTime
MATCHES FOR Equality
::= {idlcAttribute 26}

bootGenericProf ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProcLoadId
MATCHES FOR Equality
::= {idlcAttribute 27}

cableLoaded ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 30}

callRefValue ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 31}

carrierChannel ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DistinguishedName

MATCHES FOR Equality
::= {idlcAttribute 32}

channelSelection ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Channel
MATCHES FOR Equality
::= {idlcAttribute 35}

circuitPackId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 37}

circuitPackType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality, Substrings
::= {idlcAttribute 38}

connectionType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ConnectionType -- note this defaults to oneWay
MATCHES FOR Equality
::= {idlcAttribute 40}

crossConnectionId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 42}

currentAlarmSumSchedPointers ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF CurrentAlarmSumScheduleId
::= {idlcAttribute 56}

currentProblemList ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF CurrentProblem
::= {idlcAttribute 59}

cvDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 60}

cvDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 62}

cvFeHrCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 76}

cvFeHrPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 78}

cvHrCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 64}

cvHrPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 66}

cvMinCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 68}

cvMinPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 70}

dataLinkType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DataLinkType

MATCHES FOR Equality
::= {idlcAttribute 84}

dataRate ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DataRate
MATCHES FOR Equality
::= {idlcAttribute 85}

ddsLineTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 89}

discriminatorConstruct ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CMISFilter
::= {idlcAttribute 98}

discriminatorState ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN -- TRUE for Active
MATCHES FOR Equality
::= {idlcAttribute 99}

dlResetFailCounter ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 100}

dlResetFailThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 101}

dlResetFailTimer ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 102}

dlResetReqCounter ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 103}

dlResetReqThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 104}

dlResetReqTimer ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 105}

dmDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 114}

dmDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 116}

dmDayThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 117}

dmMinCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 106}

dmMinHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 107}

dmMinPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 108}

dmMinThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 109}

ds0ChannelTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 118}

ds1FrameFormat ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DS1FrameFormat
MATCHES FOR Equality
::= {idlcAttribute 119}

ds1FramedPathTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 120}

ds1LineCode ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DS1LineCode
::= {idlcAttribute 121}

ds1LineTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 122}

ds1VTCount ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering

PERMITTED VALUES INTEGER-RANGE 1..28
::= {idlcAttribute 125}

ds1SESDefinition ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality
::= {idlcAttribute 126}

enableLPBK ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 127}

endTime ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX EndTime
MATCHES FOR Equality
::= {idlcAttribute 128}

equipmentFunction ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX EquipmentFunction
MATCHES FOR Equality
::= {idlcAttribute 129}

equipHolderAddress ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality
::= {idlcAttribute 130}

equipHolderId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 131}

equipmentId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX EquipmentId
MATCHES FOR Equality, Ordering, Substrings
::= {idlcAttribute 132}

equipped ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 133}

errorCorrection ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 134}

esDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 135}

esDayHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 136}

esDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 137}

esDayThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 138}

esHrCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 139}

esHrHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 140}

esHrPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 141}

esHrThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 142}

esMinCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 143}

esMinHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 144}

esMinPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 145}

esMinThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 146}

esFeDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 147}

esFeDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 149}

esFeHrCurrent ATTRIBUTE

SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 151}

esFeHrHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 152}

esFeHrPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 153}

eventReportControlId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX EventReportControlId
MATCHES FOR Equality
::= {idlcAttribute 161}

externalEntityOpnState ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ExternalEntityOpnState
::= {idlcAttribute 167}

externalEntityType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ExternalEntityType
::= {idlcAttribute 168}

fromTerminationId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DistinguishedName
MATCHES FOR Equality
::= {idlcAttribute 172}

genSigFuncCode ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX GenSigFuncCode
MATCHES FOR Equality
::= {idlcAttribute 173}

idlcCPPProfileId ATTRIBUTE

SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality,Ordering
::= {idlcAttribute 174}

idlcDLProfileId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality,Ordering
::= {idlcAttribute 175}

idlcDLTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality,Ordering
PERMITTED VALUES INTEGER-RANGE 1..4
::= {idlcAttribute 176}

inhibitPM ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 177}

inhibitRelease ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Inhibiting
::= {idlcAttribute 178}

inhibitSwitch ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Inhibiting
::= {idlcAttribute 179}

interval ATTRIBUTE
SINGLED-VALUED
WITH ATTRIBUTE SYNTAX Interval
::= {idlcAttribute 184}

intervalValue ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality,Ordering
::= {idlcAttribute 185}

invalidFramesCounter ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
PERMITTED VALUES INTEGER-RANGE 0..50
::= {idlcAttribute 186}

invalidFramesThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
PERMITTED VALUES INTEGER-RANGE 1..50
::= {idlcAttribute 187}

invalidFramesTimer ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
PERMITTED VALUES INTEGER-RANGE 1..15
::= {idlcAttribute 188}

isdnFramedPathTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality
::= {idlcAttribute 192}

isdnLineTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality
::= {idlcAttribute 193}

isdnPerSystemProfileId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality
::= {idlcAttribute 194}

lineCircuitAddress ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality, Substrings
::= {idlcAttribute 208}

locationName ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
::= {idlcAttribute 210}

ltOHStates ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX LTOHStates
MATCHES FOR Equality
::= {idlcAttribute 209}

managementUserId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX AE-Title
MATCHES FOR Equality
::= {idlcAttribute 213}

maxIFrames ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
PERMITTED VALUES INTEGER-RANGE 1..7
::= {idlcAttribute 214}

memoryId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX MemoryId
::= {idlcAttribute 216}

memoryType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX MemoryType
::= {idlcAttribute 217}

mtauId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX MtauId
MATCHES FOR Equality
::= {idlcAttribute 223}

n200 ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering

PERMITTED VALUES INTEGER-RANGE 1..10
::= {idlcAttribute 224}

networkElementId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX NetworkElementId
MATCHES FOR Equality, Ordering, Substrings
::= {idlcAttribute 226}

numberOfProtected ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 228}

numberOfProtecting ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 229}

objectClass ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF OBJECT IDENTIFIER
MATCHES FOR Equality
::= {attribute 56}

operationSystemId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality, Substrings
::= {idlcAttribute 232}

pmAttribute ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF OBJECT IDENTIFIER
MATCHES FOR Equality
::= {idlcAttribute 237}

pmIntervalProfileId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 238}

pmObjectClass ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF OBJECT IDENTIFIER
MATCHES FOR Equality
::= {idlcAttribute 239}

pmParameterList ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF AttributeId
::= {idlcAttribute 240}

primaryServiceState ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrimaryServiceState
MATCHES FOR Equality
::= {idlcAttribute 242}

problemData ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProblemData
MATCHES FOR Equality
::= {idlcAttribute 244}

problemInfo Attribute
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProblemInfo
MATCHES FOR Equality
::= {idlcAttribute 406}

problemType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProblemType
MATCHES FOR Equality
::= {idlcAttribute 245}

protectionGroupId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 247}

protectionGroupPointer ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProtectionGroupPointer

MATCHES FOR Equality
::= {idlcAttribute 248}

protectionGroupUnitId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 249}

protectionGroupUnitState ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProtectionGroupUnitState
MATCHES FOR Equality
::= {idlcAttribute 251}

protectionGroupUnitType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProtectionGroupUnitType
MATCHES FOR Equality
::= {idlcAttribute 252}

protectionObjectClass ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX OBJECT IDENTIFIER
MATCHES FOR Equality
::= {idlcAttribute 255}

protectionObjectPointer ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DistinguishedName
MATCHES FOR Equality
::= {idlcAttribute 256}

protectionSwitchCondition ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX ProtectionSwitchCondition
MATCHES FOR Equality
::= {idlcAttribute 257}

protectionType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ProtectionType
MATCHES FOR Equality
::= {idlcAttribute 258}

quarterDS0ChannelTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality
::= {idlcAttribute 277}

receiveGain ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX REAL
MATCHES FOR Equality
::= {idlcAttribute 280}

receiveImpedance ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Impedance
MATCHES FOR Equality
::= {idlcAttribute 281}

receiveTLP ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX REAL
MATCHES FOR Equality
::= {idlcAttribute 282}

redlined ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 284}

resourceId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX ResourceId
MATCHES FOR Equality
::= {idlcAttribute 289}

revertive ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 290}

robbedBitSignal ATTRIBUTE
SINGLE-VALUED

WITH ATTRIBUTE SYNTAX RobbedBitSignal
MATCHES FOR Equality
::= {idlcAttribute 293}

sapi ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
PERMITTED VALUES INTEGER-RANGE 0..1
::= {idlcAttribute 294}

scheduleState ATTRIBUTE
SINGLED-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 295}

secondaryChannel ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 297}

secondaryServiceState ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF SecondaryServiceState
MATCHES FOR Equality
::= {idlcAttribute 298}

sefsDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 299}

sefsDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 301}

sefsDayThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 302}

sefsMinCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
MATCHES FOR Equality, Ordering
::= {idlcAttribute 307}

sefsMinHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 308}

sefsMinPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 309}

sefsMinThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 310}

seriesId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality,Substrings
::= {idlcAttribute 348}

sesDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 323}

sesDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 325}

sesDayThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 326}

sesFeDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 327}

sesFeDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 329}

sesFeHrCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 331}

sesFeHrPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 333}

sesHrCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 339}

sesHrHistory ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 340}

sesHrPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 341}

sesHrThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 342}

sesMinCurrent ATTRIBUTE
SINGLE-VALUED

WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 343}

sesMinHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 344}

sesMinPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 345}

sesMinThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 346}

signalingMethod ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX SignalingMethod
MATCHES FOR Equality
::= {idlcAttribute 350}

supplierCode ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX PrintableString
MATCHES FOR Equality, Substrings
::= {idlcAttribute 351}

supportedCktPckType ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX SET OF PrintableString
MATCHES FOR Equality
::= {idlcAttribute 352}

switchedProtectionGroupUnit ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX SwitchedProtectionGroupUnit
MATCHES FOR Equality
::= {idlcAttribute 354}

systemAlarmState ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX AlarmSeverity
MATCHES FOR Equality
::= {idlcAttribute 355}

systemClock ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX GeneralizedTime
MATCHES FOR Equality
::= {idlcAttribute 356}

systemTitle ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX SystemTitle
MATCHES FOR Equality
::= {idlcAttribute 358}

t200 ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX T200s
MATCHES FOR Equality
::= {idlcAttribute 359}

t203 ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX T203
MATCHES FOR Equality
::= {idlcAttribute 362}

t303 ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX T303
MATCHES FOR Equality
::= {idlcAttribute 363}

t308 ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER 2..5
MATCHES FOR Equality
::= {idlcAttribute 365}

t396 ATTRIBUTE
SINGLE-VALUED

WITH ATTRIBUTE SYNTAX T396
MATCHES FOR Equality
::= {idlcAttribute 402}

t397 ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX T397
MATCHES FOR Equality
::= {idlcAttribute 367}

terminalId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 370}

terminateAndLeaveCap ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX BOOLEAN
MATCHES FOR Equality
::= {idlcAttribute 371}

testAccPath ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DistinguishedName
MATCHES FOR Equality
::= {idlcAttribute 373}

testAccPathTermId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality
::= {idlcAttribute 374}

testRCId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 375}

toTerminationId ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX DistinguishedName
MATCHES FOR Equality

::= {idlcAttribute 377}

transmitBalance ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Balance
MATCHES FOR Equality
::= {idlcAttribute 378}

transmitEqualization ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Equalization
MATCHES FOR Equality
::= {idlcAttribute 379}

transmitGain ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX REAL
MATCHES FOR Equality
::= {idlcAttribute 380}

transmitImpedance ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX Impedance
MATCHES FOR Equality
::= {idlcAttribute 381}

transmitTLP ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX REAL
MATCHES FOR Equality
::= {idlcAttribute 382}

uasDayCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 388}

uasDayPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 390}

uasDayThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 391}

uasMinCurrent ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 396}

uasMinHistory ATTRIBUTE
SET-VALUED
WITH ATTRIBUTE SYNTAX SET OF HistoryCountMeasure
::= {idlcAttribute 397}

uasMinPrevious ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX CountMeasure
::= {idlcAttribute 398}

uasMinThreshold ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX INTEGER
MATCHES FOR Equality, Ordering
::= {idlcAttribute 399}

vendorName ATTRIBUTE
SINGLE-VALUED
WITH ATTRIBUTE SYNTAX VendorName
MATCHES FOR Equality, Ordering, Substrings
::= {idlcAttribute 400}

END

13.6.2.2.1 Actions

As in the previous object definitions, in the following ASN.1 definitions, only actions supported by the 5ESS -2000 switch are included.

```

connLoopAroundAcc ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      ConnLoopAroundAccArg
  WITH RESULT SYNTAX     LoopAroundResults
 ::= {idlcAction 9}

connSplitOutAcc ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      NULL
  WITH RESULT SYNTAX     NULL
 ::= {idlcAction 11}

connectTRC ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      NULL
  WITH RESULT SYNTAX     AltTRCId
 ::= {idlcAction 12}

discTestAcc ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      NULL
  WITH RESULT SYNTAX     DiscTestAccResults
 ::= {idlcAction 17}

generateCorruptedcrc ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      GenerateCorruptedcrcArguments
  WITH RESULT SYNTAX     NULL
 ::= {idlcAction 21}

initAndRestore ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      NULL
  WITH RESULT SYNTAX     NULL
 ::= {idlcAction 22}

initializePMAttributes ACTION
  ACTION BEHAVIOR
  WITH DATA SYNTAX      InitializePMAttributes
  WITH RESULT SYNTAX     NULL

```

::= {idlcAction 23}

loopAroundDiagTAP ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX NULL
WITH RESULT SYNTAX NULL
::= {idlcAction 25}

operateISDNLoopback ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX LoopbackArguments
WITH RESULT SYNTAX NULL
::= {idlcAction 28}

operateLoopback ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX LpbkArguments
WITH RESULT SYNTAX NULL
::= {idlcAction 29}

operateTermination ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX OpTermArguments
WITH RESULT SYNTAX NULL
::= {idlcAction 30}

protectionSwitch ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX ProtnSwArguments
WITH RESULT SYNTAX ProtnSwResults
::= {idlcAction 33}

releaseISDNLoopback ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX LoopbackArguments
WITH RESULT SYNTAX NULL
::= {idlcAction 34}

releaseTRC ACTION
ACTION BEHAVIOR
WITH DATA SYNTAX NULL
WITH RESULT SYNTAX NULL
::= {idlcAction 35}

releaseLoopAround ACTION	
ACTION BEHAVIOR	
WITH DATA SYNTAX	NULL
WITH RESULT SYNTAX	NULL
::= {idlcAction 38}	
releaseLoopback ACTION	
ACTION BEHAVIOR	
WITH DATA SYNTAX	LpbkArguments
WITH RESULT SYNTAX	NULL
::= {idlcAction 37}	
remove ACTION	
ACTION BEHAVIOR	
WITH DATA SYNTAX	RemoveArguments
WITH RESULT SYNTAX	NULL
::= {idlcAction 39}	
resetTimer ACTION	
ACTION BEHAVIOR	
WITH DATA SYNTAX	NULL
WITH RESULT SYNTAX	NULL
::= {idlcAction 49}	
restore ACTION	
ACTION BEHAVIOR	
WITH DATA SYNTAX	RestoreArguments
WITH RESULT SYNTAX	RestoreResult
::= {idlcAction 44}	

13.6.2.2.2 Notifications

As in the previous object definitions, in the following ASN.1 definitions, only notifications supported by the 5ESS[®]-2000 switch are included.

changeOfOverheadBitsReport	NOTIFICATION
BEHAVIOR	
WITH DATA SYNTAX	ChangeOfOHBitsReptArg
::= {idlcNotification 3}	

eventReporting	NOTIFICATION
BEHAVIOR	
WITH DATA SYNTAX	EventInfo
::= {idlcNotification 4}	

13.6.2.3 Data Syntax Definitions

```

AE-Title ::= SEQUENCE {
    AP-Title,
    AE-Qualifier
}

```

AP-Title ::= ANY -- use AP-Title-Form2

AE-Qualifier ::= ANY -- use AE-Qualifier-Form2

AP-Title-Form2 ::= [1] OBJECT IDENTIFIER -- object id of Network Element object

AE-Qualifier-Form2 ::= [1] IMPLICIT INTEGER -- use integer "4", IDT-RDT TEI value

```

AlarmSeverity ::= ENUMERATED {
    clear          (0),      -- clearing of previous condition --
    indeterminate (1),      -- assigned if (2)-(5) cannot be distinguished
    warning       (2),      -- least significant
    minor         (3),
    major         (4),
    critical      (5)       -- most significant
}

```

```

AlarmSeverityAssignment ::= SEQUENCE {
    problem          [0] ProblemType,
    alarmSeverityCode [1] AlarmSeverityCode
}

```

```

AlarmSeverityCode ::= ENUMERATED {
    non-alarmed (0),
    minor       (1),
    major       (2),
    critical    (3)
}

```

```

AnalogThreshold ::= SEQUENCE {
    floor          [0] REAL OPTIONAL,
    ceiling        [1] REAL OPTIONAL,
    pendingPeriod [2] PrintableString Optional -- hh:mm:ss:ms
}

```

```
AltTRCId ::= SEQUENCE {  
    trcId          DistinguishedName OPTIONAL  
}
```

```
AssociatedEntityUnavailable ::= SET OF {  
    SEQUENCE {  
        name          Name,  
        unavailability Unavailability OPTIONAL  
    }  
}
```

```
AZLocality ::= ENUMERATED {  
    a (0),  
    z (1)  
}
```

```
Balance ::= SEQUENCE OF INTEGER
```

```
BeginTime ::= CHOICE {  
    absolute      GeneralizedTime,  
    periodic      TimeOfDay,  
    immediate     NULL -- used in M-CREATE only  
                  -- Managed system will substitute its current Generalized Time  
}
```

```
ChangeOfOHBitsReptArg ::= SEQUENCE {  
    oldstate      NTOHStates,  
    newstate      NTOHStates  
}
```

```
Channel ::= BITSTRING {  
    b1    (0), -- if bit equals zero, channel is loopbacked or digitally accessed  
    b2    (1),  
    d     (2)  
}
```

```
ConfigurationCode ::= ENUMERATED {  
    twowireA    (0), -- 2WA  
    twowireB    (1), -- 2WB  
    twowireC    (2), -- 2WC  
    fourwireAB  (3), -- 4AB  
    fourwireBA  (4), -- 4BA  
    twowireEM   (5), -- 2EM  
    fourwireMAB (6), -- MAB  
    fourwireMBA (7), -- MBA
```

```
fourwireDAB (8), -- DAB
fourwireDBA (9), -- DBA
fourwireCAB (10), -- CAB
fourwireCBA (11), -- CBA
fourwireF (12), -- 4WF
fourwireE (13), -- 4WE
}
```

```
ConnLoopAroundAccArg ::= SEQUENCE {
    terminationPointId      DistinguishedName,
    configurationCode        ConfigurationCode DEFAULT twowireA,
    testAccPathTermId       DistinguishedName OPTIONAL
}
```

```
ConnectionType ::= ENUMERATED {
    oneWay (0),
    twoWay (1)
}
```

```
CountMeasure ::= CHOICE{
    fullAccumulate [0] INTEGER,
    partialAccumulate [1] INTEGER,
    corruptedCount [2] INTEGER
}
```

```
CurrentAlarmSumScheduleID ::= CHOICE {INTEGER, PrintableString}
```

```
CurrentProblem ::= SEQUENCE {
    problem [0] ProblemType,
    problemState [1] ProblemState,
    problemData [2] ProblemData OPTIONAL
}
```

```
DS1FrameFormat ::= ENUMERATED {
    sf (0),
    esf (1),
    tldm (2),
    zbtsi (3),
    nf (4)
}
```

```
DS1LineCode ::= ENUMERATED {
    ami (0),
    amizcs (1),
    b8zs (2)
}
```

}

```
DataLinkType ::= ENUMERATED {  
    eoc      (0),  
    tmc      (1),  
    csc      (2)  
}
```

```
DataRate ::= ENUMERATED {  
    rate24      (0),  -- 2.4kb/s  
    rate48      (1),  -- 4.8kb/s  
    rate96      (2),  -- 9.6kb/s  
    rate192     (3),  -- 19.2kb/s  
    rate384     (4),  -- 38.4kb/s  
    rate560     (5)   -- 56kb/s  
}
```

```
DeactivateExternalEntityArguments ::= SEQUENCE {  
    continuousDeactivation  BOOLEAN DEFAULT TRUE,  
    externalEntityType      ExtEntityType  
}
```

```
DetectOutput ::= ENUMERATED {  
    nlcf      (0),  -- normal loop current feed  
    rlcfc     (1),  -- reverse loop current feed  
    plcf      (2),  -- positive loop current feed  
    gsti      (3),  -- ground start idle  
    ncch      (4),  -- negative coin check  
    pcch      (5),  -- positive coin check  
    nccv      (6),  -- negative coin control voltage  
    pccv      (7),  -- positive coin control voltage  
    nsrr      (8),  -- negative superimposed ringing on ring with tip grounded  
    nsrt      (9),  -- negative superimposed ringing on tip with ring grounded  
    psrr      (10), -- positive superimposed ringing on ring with tip grounded  
    psrt      (11), -- positive superimposed ringing on tip with ring grounded  
    nlpc      (12), -- normal loop current  
    rlpc      (13), -- reverse loop current  
    nlc       (14), -- no loop current  
    anyt      (15)  -- anything  
}
```

```
DiscTestAccResults ::= SEQUENCE {  
    TerminateLeaveStatus OPTIONAL  
}
```

```
End ::= ENUMERATED {
    nearEnd      (0),
    farEnd       (1)
}
```

```
EndTime ::= CHOICE {
    absolute      GeneralizedTime,
    periodic      TimeOfDay,
    noEnding      NULL -- applicable to absolute (non-period) time span
}
```

```
EntityName ::= CHOICE {
    knownObjectClass      OBJECT IDENTIFIER,
    knownObjectInstance   DistinguishedName,
    unknownEntity         NULL
}
```

```
EnvironmentalProblemType ::= CHOICE {
    sensorAlarm      [0]    SEQUENCE {
        sensorAlarmType SensorAlarmType OPTIONAL
        sensorId       INTEGER,
        sensorLocation PrintableString OPTIONAL
    }
    supportEntityAlarm [1]    SEAlarmType
}
```

```
EOCState ::= BITSTRING {
    eoca1      (0), -- address bit 1
    eoca2      (1), -- address bit 2
    eoca3      (2), -- address bit 3
    eocdm      (3), -- data/message bit
    eoci1      (4), -- information bit 1
    eoci2      (5), -- information bit 2
    eoci3      (6), -- information bit 3
    eoci4      (7), -- information bit 4
    eoci5      (8), -- information bit 5
    eoci6      (9), -- information bit 6
    eoci7      (10), -- information bit 7
    eoci8      (11) -- information bit 8
}
```

```
Equalization ::= SEQUENCE OF INTEGER
```

```
EquipmentFunction ::= ENUMERATED {
    unspecified      (0),
}
```

```
centralOfficeTerminal      (1),
remoteDigitalTerminal      (2),
automaticDigitalTerminalSystem (3),
digitalCrossConnectSystem (4),
lowBitRateVoiceTerminal    (5),
multiplexer                (6),
addDropMultiplexer        (7),
lineTerminatingEquipment  (8),
repeater                   (9),
automaticProtectionSwitchingSystem (10),
signalTransferPoint        (11),
serviceControlPoint        (12),
supervisorySystem          (13),
environmentalMonitor       (14),
timingSignalGenerator       (15),
externalControl            (16),
distantTerminal            (17)
}
```

EquipmentId ::= CHOICE {INTEGER, PrintableString}

EquipmentProblemType ::= ENUMERATED {

```
dataSetProblem            (0),
externalIFDeviceProblem   (1),
lineCardProblem           (2),
multiplexerProblem        (3),
powerProblem              (4),
processorProblem          (5),
receiverFailure           (6),
terminalProblem           (7),
timingProblem              (8),
transmitterFailure        (9),
trunkCardProblem          (10),
replaceableUnitMissing    (11),
replaceableUnitTypeMismatch (12),
backplaneFailure          (13)
}
```

EventInfo ::= SEQUENCE {

problemType		ProblemType,
alarmSeverity		AlarmSeverity,
trendIndication	[0]	TrendIndication OPTIONAL,
protectionIndication	[1]	ProtectionIndication OPTIONAL,
protectionObject	[2]	DistinguishedName OPTIONAL,
problemData	[3]	ProblemData OPTIONAL,
threshold	[4]	Threshold OPTIONAL,
monitoredAttribute	[5]	MonitoredAttribute OPTIONAL,
recordId	[6]	INTEGER OPTIONAL,

```

        correlatedRecordId    [7]    CorrelatedRecordId OPTIONAL
    }

```

```

EventReportControlId ::= CHOICE {INTEGER, PrintableString}

```

```

ExternalEntityOpnState ::= BITSTRING {
    airCompressor    (0),
    airConditioning  (1),
    engine           (2),
    fan              (3),
    generator        (4),
    heater           (5),
    light            (6),
    sprinkler        (7),
    pump             (8),
    rectifier        (9),
    dryer           (10)
}

```

```

ExternalEntityType ::= BITSTRING {
    airCompressor    (0),
    airConditioning  (1),
    engine           (2),
    fan              (3),
    generator        (4),
    heater           (5),
    light            (6),
    sprinkler        (7),
    pump             (8),
    rectifier        (9),
    dryer           (10)
}

```

```

GenSigFuncCode ::= SEQUENCE {
    numberOfWire ENUMERATED {
        wire2 (0),
        wire4 (1)
    },
    protocolCode ENUMERATED {
        rvo-i (0),    -- Loop reverse battery supervision, NE supplies
                    -- battery, 2 wire only; immediate dial outpulsing
        rvt-i (1),    -- Loop reverse battery supervision, connecting
                    -- equipment supplies batter, 2 wire only; immediate
                    -- dial outpulsing
        dx (2),       -- DX (duplex) signaling, normal signaling simplex.
        dxx (3),      -- DX (duplex) signaling, reverse signaling simplex,
                    -- 4 wire only.
    }
}

```

```

    eae    (4),    -- Type I E&M signaling, connecting equipment
              -- originates on E lead.
    eam    (5),    -- Type I E&M signaling, connecting equipment
              -- originates on M lead.
    ebe    (6),    -- Type II E&M signaling, connecting equipment
              -- originates on E lead.
    ebm    (7),    -- Type II E&M signaling, connecting equipment
              -- originates on M lead,4 wire only.
    ecm    (8),    -- Type III E&M signaling, connecting equipment
              -- originates on M lead,4 wire only.
    gs     (9),    -- Ground start current feed signaling.
    gsx    (10),   -- Ground start current feed signaling, reverse
              -- signaling simplex, 4 wire only.
    go     (11),   -- Ground start current sink signaling.
    gox    (12),   -- Ground start current sink signaling, reverse
              -- signaling simplex, 4 wire only.
    ls     (13),   -- Loop start current feed signaling.
    lsx    (14),   -- Loop start current feed signaling, reverse
              -- signaling simplex, 4 wire only.
    lo     (15),   -- Loop start current sink signaling.
    lox    (16),   -- Loop start current sink signaling, reverse
              -- signaling simplex, 4 wire only.
    ab     (17),   -- Ringdown signaling, bridge (office) side, 4 wire only.
    ac     (18),   -- Manual ringdown signaling, station side.
    acr    (19),   -- Code select ringdown signaling, station side, 4 wire only.
    lr     (20),   -- Private line automatic ringdown signaling.
    exa    (21),   -- Tandem station side signaling, 4 wire only.
    exb    (22),   -- Tandem station side (office) signaling, 4 wire only.
    no     (23),   -- Transmission only signaling, no sealing current.
    nos    (24),   -- Transmission only signaling, sealing current supplied.
    rvo-d  (25),   -- Loop reverse battery supervision, NE supplies battery,
              -- 2 wire only, delay dial outpulsing
    rvo-w  (26),   -- Loop reverse battery supervision, NE supplies battery,
              -- 2 wire only, wink start outpulsing
    rvt-d  (27),   -- Loop reverse battery supervision, connecting equipment
              -- supplies battery, 2 wire only, delay dial outpulsing
    rvt-w  (28),   -- Loop reverse battery supervision, connecting equipment
              -- supplies battery, 2 wire only, wink start outpulsing
  }
}

```

```

GenerateCorruptedcrcArguments ::= SEQUENCE {
    corruptionLocation [0]    Location,
    duration           [1]    INTEGER (1..256)
}

```

```

HistoryCountMeasure ::= SEQUENCE{
    countMeasure [0]    CountMeasure,
    age          [1]    INTEGER (2..999)
}

```


}

```
Impedance ::= ENUMERATED {
    impedance150    (0),
    impedance600    (1),
    impedance900    (2),
    impedance1200   (3)
}
```

```
Inhibiting ::= ENUMERATED {
    inhibited        (0),
    notinhibited     (1),
    notapplicable    (2)
}
```

```
InitializePMAAttributes ::= ENUMERATED {
    allPMAAttributes    (0),    -- All PM counts
    currentPMAAttributes (1)    -- All current PM counts
}
```

```
Interval ::= CHOICE {
    indefinite          NULL,
    days                [0]  INTEGER,
    hours               [1]  INTEGER,
    minutes             [2]  INTEGER,
    seconds             [3]  INTEGER
}
```

```
LTOHStates ::= BIT STRING {
    m41    (0),    -- bit M4 Frame number 1 (act)
    m42    (1),    -- bit M4 Frame number 2 (deact)
    m43    (2),    -- bit M4 Frame number 3
    m44    (3),    -- bit M4 Frame number 4
    m45    (4),    -- bit M4 Frame number 5
    m46    (5),    -- bit M4 Frame number 6
    m47    (6),    -- bit M4 Frame number 7
    m48    (7),    -- bit M4 Frame number 8
    m51    (8),    -- bit M5 Frame number 1
    m52    (9),    -- bit M5 Frame number 2
    m61    (10)   -- bit M6 Frame number 1
}
```

```
Location ::= CHOICE {
    end      End,
    line     INTEGER
}
```

}

```
LockoutMode ::= ENUMERATED {
    normal          (0), -- lockout if no unit switched on protection
    normalProtRelease (1), -- lockout and release any unit on protection if release not inhibited
    forcedProtRelease (2) -- lockout and force release any unit on protection
}
```

```
LockoutProtArguments ::= SEQUENCE {
    lockoutMode          LockoutMode,
    protectingUnitName  SET OF DistinguishedName OPTIONAL
}
```

```
LockoutProtResults ::= SEQUENCE {
    lockoutResult      BOOLEAN, -- TRUE for lockout successful
                                -- FALSE for lockout denied due to higher priority request
    switchedPGU        DistinguishedName OPTIONAL,
    psCondition        PSCondition OPTIONAL
}
```

```
LoopAroundResults ::= SEQUENCE {
    testAccPathTermId [0] DistinguishedName,
    monitorAccMode     [1] BOOLEAN DEFAULT TRUE,
    splitAccCapability [2] SplitAccCapability DEFAULT {0},
    specialCircuit      [3] BOOLEAN DEFAULT FALSE,
    terminateLeaveStatus [4] TerminateLeaveStatus OPTIONAL
}
```

```
LoopbackArguments ::= SEQUENCE {
    loopbackLocation  Location,
    channel            Channel
}
```

```
LpbkArguments ::= SEQUENCE {
    loopbackLocation [0] Location OPTIONAL,
    loopbackDirection [1] LpbkDirection OPTIONAL,
    loopbackType      [2] LpbkType OPTIONAL
}
```

```
LpbkDirection ::= ENUMERATED {
    az (0), -- from A to Z (that is, Upstream)
    za (1) -- from Z to A (that is, Downstream)
}
```

```
LpbkType ::= ENUMERATED {  
    payload      (0),  -- partial information bit pattern  
    frame        (1)   -- full bit pattern  
}
```

```
MemoryId ::= CHOICE {  
    INTEGER,  
    PrintableString  
}
```

```
MemoryType ::= ENUMERATED {  
    working      (0),  
    primary      (1),  -- primary nonvolatile backup memory  
    secondary    (2),  -- secondary nonvolatile backup memory  
    auxiliary    (3),  -- auxiliary memory  
    emergency    (4)   -- emergency memory  
}
```

```
Mode ::= ENUMERATED {  
    normal      (0),  
    forced      (1)  
}
```

```
MonitoredAttribute ::= SET OF Attribute
```

```
MtauId ::= CHOICE {  
    INTEGER,  
    PrintableString  
}
```

```
Name ::= CHOICE {  
    supporting   [3]   EntityName,  
    supported    [4]   EntityName,  
    indeterminate [5]   EntityName  
}
```

```
NetworkElementId ::= CHOICE {  
    INTEGER,  
    PrintableString  
}
```

```
NTOHStates ::= BIT STRING {  
    m41          (0),  -- bit M4 Frame number 1 (act)
```

```
m42      (1),  -- bit M4 Frame number 2 (ps1)
m43      (2),  -- bit M4 Frame number 3 (ps2)
m44      (3),  -- bit M4 Frame number 4 (ntm)
m45      (4),  -- bit M4 Frame number 5 (cs0)
m46      (5),  -- bit M4 Frame number 6
m47      (6),  -- bit M4 Frame number 7
m48      (7),  -- bit M4 Frame number 8
m51      (8),  -- bit M5 Frame number 1
m52      (9),  -- bit M5 Frame number 2
m61      (10) -- bit M6 Frame number 1 (1/nib)
}
```

ObjectClassId ::= OBJECT IDENTIFIER

```
ObjectSpecificError ::= CHOICE {
    improperCondition      [0]  SET OF Attribute,
    corruptMemoryError    [1]  SET OF AttributeId,
    alreadyInCondition     [2]  SET OF Attribute,
    associatedEntityUnavailable [3] AssociatedEntityUnavailable,
    errorDescription       [4]  PrintableString,
    containingObjectInstance [5]  ContainedInstances
}
```

```
OperationsType ::= ENUMERATED {
    auditSchedule          (0),
    backupSchedule         (1),
    currentAlmSumSchedule (2),
    diagnosticSchedule     (3),
    exerciseSchedule       (4),
    litSchedule            (5),
    mtcMeasReportSchedule (6),
    pmReportSchedule       (7),
    trunkTestSchedule      (8)
}
```

```
OpTermArguments ::= SEQUENCE {
    initTermination [0]  Terminations DEFAULT open,
    detectOutput    [1]  DetectOutput DEFAULT anyt,
    detectTermination [2] Terminations DEFAULT open
}
```

```
Overheadbit ::= BITSTRING {
    actBit      (0),
    deactBit    (1),
    ps1Bit      (2),
    ps2Bit      (3),
}
```

```

        ntmBit      (4),
        csoBit      (5)
    }

```

```

PMResults ::= SET OF SEQUENCE {
    attributeId    OBJECT IDENTIFIER,
    attributeValue ANY DEFINED BY attributeId,
    validity       Validity
}

```

```

PSCondition ::= ENUMERATED {
    lockout      (0), -- lockout of protection
    forced       (1), -- forced switch
    sigfailHP    (2), -- signal fail, higher priority
    sigfailLP    (3), -- signal fail, lower priority
    sigdegHP     (4), -- signal degrade, higher priority
    sigdegLP     (5), -- signal degrade, lower priority
    normal       (6), -- normal switch
    waittorest   (7), -- wait to restore (for revertive)
    exerciser    (8), -- exerciser
    lockon       (9), -- do not revert
    norequest    (10) -- no request
}

```

```

PrimaryServiceState ::= ENUMERATED {
    is (0),
    oos (1)
}

```

```

ProblemData ::= SEQUENCE {
    identifier [0] OBJECT IDENTIFIER, -- must be ATTPProblemData
    critical   [1] BOOLEAN DEFAULT FALSE,
    item       [2] ANY DEFINED BY identifier
}

```

```

ProblemInfo ::= SEQUENCE{
    problemText [0] PrintableString,
    serviceAffected [1] BOOLEAN OPTIONAL,
    alarmSeverity [2] AlarmSeverity,
    problemId [3] INTEGER
}

```

```

ProblemState ::= ENUMERATED {
    active-pending (0),
    active-reportable (1)
}

```

}

```
ProblemType ::= CHOICE {
    indeterminate
    equipmentProblemType      [0]
    transmissionProblemType   [1]
    environmentalProblemType   [2]
    softwareProblemType        [3]
    serviceProblemType         [4]
    thresholdAlert             [5]
    scheduledMgmtOpnsProblemType [6]
}
```

NULL,
EquipmentProblemType,
TransmissionProblemType,
EnvironmentalProblemType,
SoftwareProblemType,
INTEGER,
ThresholdAlert,
ScheduledMgmtOpnsProblemType

```
ProtectionDirection ::= ENUMERATED {
    az          (0), -- from A to Z
    za          (1), -- from Z to A
    both        (2)  -- both directions
}
```

```
ProcLoadId ::= SEQUENCE {
    procLoad      [0] PrintableString,
    versionId     [1] PrintableString
}
```

```
ProtectionGroupPointer ::= CHOICE {
    NULL,
    DistinguishedName
}
```

```
ProtectionGroupUnitState ::= ENUMERATED {
    switched      (0),
    notSwitched   (1),
    bridged       (2)
}
```

```
ProtectionGroupUnitType ::= ENUMERATED {
    protected      (0),
    protecting     (1)
}
```

```
ProtectionIndication ::= ENUMERATED {
    switchSuccessful      (0),
    switchFailed          (1),
    protectionUnitNotAvailable (2),
}
```

```

    notEquipped          (3),
    switchBackSuccessful (4),
    switchBackFailed     (5)
}

```

```

ProtectionSwitchCondition ::= ENUMERATED {
    lockoutOfProtection      (0),
    forceSwitch              (1),
    signalFailHighPriority   (2),
    signalFailLowPriority    (3),
    signalDegradeHighPriority (4),
    signalDegradeLowPriority (5),
    normalSwitch            (6),
    waitToRestore           (7),
    exerciser                (8),
    doNotRevert              (9),
    noRequest                (10)
}

```

```

ProtectionType ::= ENUMERATED {
    onePlusOne (0), -- 1+1
    oneForN    (1), -- 1:n
    mForN     (2)  -- m:n
}

```

```

ProtnSwArguments ::= SEQUENCE {
    protectionSwitchMode [0]Mode DEFAULT {0}, -- normal
    protectionSwitchDirection[1]ProtectionDirection OPTIONAL,
    protectedUnitName    [2]DistinguishedName,
    protectingUnit [3]    DistinguishedName OPTIONAL
}

```

```

ProtnSwResults ::= SEQUENCE {
    switchResult    BOOLEAN, -- TRUE for switch successful,
                    -- FALSE for switch denied due to higher priority request
    switchedPGU    DistinguishedName OPTIONAL,
    psCondition    PSCondition OPTIONAL
}

```

```

RelativeDistinguishedName ::= SET OF AttributeValueAssertion

```

```

RelLockoutProtArguments ::= SEQUENCE {
    protectingUnitName    SET OF DistinguishedName OPTIONAL
}

```

```
RemoveArguments ::= SEQUENCE {  
    mode          Mode DEFAULT normal  
}
```

```
ResourceId ::= CHOICE {  
    NULL,  
    DistinguishedName  
}
```

```
RestoreArguments ::= SEQUENCE {  
    mode          Mode DEFAULT normal  
}
```

```
RestoreResult ::= SEQUENCE {  
    restoringResult RestoringResult OPTIONAL  
}
```

```
RestoringResult ::= ENUMERATED {  
    completed      (0),  
    failedVerification (1)  
}
```

```
RobbedBitSignal ::= ENUMERATED {  
    transparent    (0),  
    a              (1),  
    ab             (2),  
    abcd          (3)  
}
```

```
SEAlarmType ::= ENUMERATED {  
    airCompressorFailure (0),  
    airConditioningFailure (1),  
    airDryerFailure (2),  
    batteryDischarging (3),  
    batteryFailure (4),  
    commercialPowerFailure (5),  
    coolingFanFailure (6),  
    engineFailure (7),  
    fuseFailure (8),  
    generatorFailure (9),  
    pumpFailure (10),  
    rectifierFailure (11),  
    rectifierHighVoltage (12),  
    rectifierLowVoltage (13),  
    ventilationSystemFailure (14),
```



```

        lowBatteryThreshold      (15)
    }

```

```

ScheduledMgmtOpnsProblemType ::= SEQUENCE {
    operationsType      OperationsType,
    scheduleId          DistinguishedName OPTIONAL,
    problem              PrintableString
}

```

```

ScheduledPerformanceMonitoringInfo ::= SET OF SEQUENCE {
    monitoredObjectInstance DistinguishedName,
    pmResults                PMResults
}

```

```

SecondaryServiceState ::= ENUMERATED {
    ts          (0),    -- object is under testing operation
    mt          (1),    -- object is under maintenance operation
    ma          (2),    -- object is under memory administration operation
    anr         (3),    -- object is not performing normal service functions
    ueq         (4),    -- object entity is unequipped
    fef         (5),    -- effectively OOS or OOS due to controlling/supporting entity failure
    busy        (6),    -- traffic sensitive entity is busy
    lpbk        (7),    -- OOS due to loopback activity
    mea         (8),    -- mismatch of equipment and attributes
    mon         (9),    -- automatically OOS due to monitored performance reached
    pwr         (10),   -- OOS due to loss of power
    sea         (11),   -- supported object entity is assigned
    act         (12),   -- active (for protecting unit of m:n or non-revertive 1:1 system)
    ccsf        (13),   -- OOS because of CCS network failure
    comb        (14),   -- load sharing redundant entity has assumed mate entity's load
    dgn         (15),   -- service affecting diagnose is running
    dsbld       (16),   -- cannot be used for incoming or outgoing traffic
    erranal     (17),   -- faulty implied by error analysis or MDII
    ex          (18),   -- service affecting exercise is running
    faf         (19),   -- OOS due to a facility failure
    fepro       (20),   -- far-end processor outage
    flt         (21),   -- fault
    frcd        (22),   -- forced
    hd          (23),   -- high and dry
    hw          (24),   -- high and wet
    inhip       (25),   -- inhibit in progress
    lkdo        (26),   -- cannot be used for outgoing traffic except test calls,
                        -- but will accept incoming traffic
    lock        (27),   -- switch with mate unit inhibited
    mtce        (28),   -- manually removed from service by maintenance user or channel
    mtcelim     (29),   -- not capable of providing normal trouble detecting functions
    nm          (30),   -- removed from service by network management operations
    pctf        (31),   -- OOS due to per-call test failure
}

```

```
    pri          (32), -- load sharing redundant (duplex) entity has dominant role over mate entities
    prtcl        (33), -- OOS due to link layer protocol violation
    sec          (34), -- load sharing redundant (duplex) entity does not have dominate role
                  -- over mate entities
    stby         (35), -- standby (for standby protection unit)
    termf        (36), -- CCS signaling terminal has failed
    tmt          (37), -- automatically removed from service as a result of traffic management fcns
    trd          (38), -- transferred - load sharing redundant entity has rotated normal load
                  -- responsibilities with a peer entity
    tstf         (39), -- routine test, diagnostic, exercise failure
    sof          (40), -- subordinate object(s) not in-service
    swtch        (41)  -- removed from service by switching system
}

```

SensorAlarmType ::= ENUMERATED {

```
    fire          (0),
    flood         (1),
    highHumidity  (2),
    highTemperature (3),
    lowFuel       (4),
    lowHumidity   (5),
    lowCablePressure (6),
    lowTemperature (7),
    lowWater      (8),
    smoke         (9),
    toxicGas      (10),
    enclouserDoorOpen (11),
    intrusionDetection (12),
    iceBuildUp     (13),
    highWind       (14)
}

```

SignalingMethod ::= ENUMERATED {

```
    abcd (0),
    tmc  (1),
    csc  (2)
}

```

SoftwareProblemType ::= ENUMERATED {

```
    storageCapacityProblem (0),
    memoryMismatch         (1),
    corruptData            (2),
    outOfCPUCycles         (3),
    sfwrEnvironmentProblem (4),
    softwareDownloadFailure (5)
}

```

```
SplitAccCapability ::= ENUMERATED {  
    simFullSplit           (0), -- simultaneous full splitting test access  
    nonsimFullSplit       (1), -- look-in, or look-out test access  
    splitOutOnly           (2)  -- look-out only test access  
}
```

```
SwitchedProtectionGroupUnit ::= CHOICE {  
    NULL,  
    DistinguishedName  
}
```

```
SystemTitle ::= CHOICE {  
    NULL,  
    AE-Title  
}
```

```
T200s ::= INTEGER {  
    ms100   (0),  
    ms150   (1),  
    ms200   (2),  
    ms250   (3),  
    ms300   (4),  
    ms350   (5)  
}
```

```
T203 ::= INTEGER {  
    s10   (0),  
    s20   (1),  
    s30   (2),  
    s40   (3),  
    s50   (4),  
    s60   (5),  
    s70   (6),  
    s80   (7),  
    s90   (8),  
    s100  (9),  
    s110  (10),  
    s120  (11),  
    s130  (12),  
    s140  (13),  
    s150  (14),  
    s160  (15),  
    s170  (16),  
    s180  (17),  
    s190  (18),  
    s200  (19),
```

```
s210      (20),  
s220      (21),  
s230      (22),  
s240      (23),  
s250      (24),  
s260      (25),  
s270      (26),  
s280      (27),  
s290      (28),  
s300      (29)  
}
```

```
T303 ::= INTEGER {  
  ms700    (0),  
  ms1200   (1),  
  ms1700   (2),  
  ms2200   (3),  
  ms2700   (4),  
  ms3200   (5),  
  ms3700   (6),  
  ms4200   (7),  
  ms4700   (8)  
}
```

```
T396 ::= INTEGER {  
  ms700    (0),  
  ms1700   (1),  
  ms2700   (2),  
  ms3700   (3),  
  ms4700   (4),  
  ms5700   (5),  
  ms6700   (6),  
  ms7700   (7),  
  ms8700   (8),  
  ms9700   (9),  
  ms10700  (10),  
  ms11700  (11),  
  ms12700  (12),  
  ms13700  (13),  
  ms14700  (14)  
}
```

```
T397 ::= INTEGER {  
  s60      (0),  
  s120     (1),  
  s180     (2)  
}
```

```

TerminateLeaveStatus ::= ENUMERATED {
    normal          (0),
    terminatedA     (1),
    terminatedB     (2),
    terminatedC     (3),
    terminatedAB    (4)
}

```

```

Terminations ::= ENUMERATED {
    open           (0), -- no termination applied to any lead of the circuit under test
    lcab           (1), -- loop closure absorptive
    lcrf          (2), -- loop closure reflective
    lcpg          (3), -- loop closure absorptive and positive ground
    lcng          (4), -- loop closure reflective and negative ground
    rngg          (5), -- ring ground
    ntpg          (6), -- negative tip ground
    ptpg          (7)  -- positive tip ground
}

```

```

Threshold ::= CHOICE {
    count          INTEGER,
    meter          AnalogThreshold
}

```

```

ThresholdAlert ::= CHOICE {-- specific enhancement for filtering of event reports
    anyThresholdAlert NULL, -- see CREATE for eventReportControl object
    specificThresholdAlert SEQUENCE {
        triggeredThreshold Attribute,
        triggeredAttribute Attribute OPTIONAL
    }
}

```

```

ThresholdMeter ::= SEQUENCE {
    duration       [0] PrintableString OPTIONAL, -- hh:mm:ss
    ceiling        [1] REAL OPTIONAL,
    floor          [2] REAL OPTIONAL
}

```

```

TimeOfDay ::= SEQUENCE {
    hour           INTEGER (0..23),
    minute         INTEGER (0..59),
    second         INTEGER (0..59)
}

```

```

TransmissionProblemType ::= ENUMERATED {

```

```
    alarmIndicationSignal (0),
    callSetUpFailure      (1),
    degradedSignal        (2),
    framingError           (3),
    lossOfFrame           (4),
    lossOfPointer         (5),
    lossOfSignal          (6)
}
```

```
TrendIndication ::= ENUMERATED {
    lessSevere      (0),
    noChange        (1),
    moreSevere      (2)
}
```

```
Unavailability ::= CHOICE {
    improperCondition SET OF Attribute,
    busy              [6] NULL, -- unknown entity would not have SST to indicate busy
    failure           [7] NULL
}
```

```
Validity ::= ENUMERATED {
    full      (0),
    partial   (1),
    corrupted (2)
}
```

```
VendorName ::= CHOICE {
    INTEGER,
    PrintableString
}
```

END

13.6.3 CMISE DEFINITIONS USED IN TR303

The CMIP protocol used in TR303 is based on the 1991 ISO/IEC 9596-1 specification. This section includes the definitions for the CMIP data units exchanged between the peer TR303 CMISEs. The PDUs are specified using ASN.1 and ROSE macros defined in ISO/IEC 9072-1.

-- Common Management Information Protocol (CMIP)

-- Remote Operations definitions

IMPORTS OPERATION, ERROR FROM Remote-Operation-Notation {joint-iso-ccitt remoteOperations(4)
notation(0) }

-- Remote Operations Service definitions

InvokeIDType FROM Remote-Operations-APDUs {joint-iso-ccitt remoteOperations(4)
apdus(1) }

-- Directory Service definitions

DistinguishedName, RDNSequence FROM InformationFramework {joint-iso-ccitt ds(5) modules(1) informationFramework(1) };

RDNSequence ::= SEQUENCE OF RelativeDistinguishedName

DistinguishedName ::= SEQUENCE OF RelativeDistinguishedName

RelativeDistinguishedName ::= SET OF AttributeValueAssertion

AttributeValueAssertion ::= SEQUENCE {
attributeType AttributeType,
attributeValue ANY
}

AttributeType ::= OBJECT IDENTIFIER

-- CMISE operations

-- in the following operations, the argument type is mandatory in the corresponding ROSE APDU

-- Action operations (M-ACTION)

m-Action OPERATION

ARGUMENT ActionArgument
::= localValue 6

m-ActionConfirmed OPERATION

ARGUMENT ActionArgument
RESULT ActionResult -- this result is conditional; for conditions see
-- ISO/IEC 9595 subclause 8.3.3.2.9

ERRORS {

accessDenied, classInstanceConflict, complexityLimitation, invalidScope,
invalidArgumentValue, invalidFilter, noSuchAction, noSuchArgument,
noSuchObjectClass, noSuchObjectInstance, processingFailure, syncNotSupported

}

```
LINKED {      m-Linke-Reply }  
 ::= localValue 7
```

m-CancelGet OPERATION

ARGUMENT

GetInvokeID InvokeIDType

RESULT

ERRORS {

mistypedOperation, noSuchInvokeID, processingFailure

}

```
 ::= localValue 10
```

-- Create operation (M-CREATE)

m-Create OPERATION

ARGUMENT CreateArgument

RESULT CreateResult -- this result is conditional; for conditions see
-- ISO/IEC 9595 subclause 8.3.4.1.3

ERRORS {

accessDenied, classInstanceConflict, duplicateManagedObjectInstance,
invalidAttributeValue, invalidObjectInstance, missingAttributeValue,
noSuchAttribute, noSuchObjectClass, noSuchObjectInstance, noSuchReferenceObject,
processingFailure

}

```
 ::= localValue 8
```

-- Delete operation (M-DELETE)

m-Delete OPERATION

ARGUMENT DeleteArgument

RESULT DeleteResult -- this result is conditional; for conditions see
-- Iso/IEC 9595 subclause 8.3.5.2.8

ERRORS {

accessDenied, classInstanceConflict, complexityLimitation, invalidFilter,
invalidScope, noSuchObjectClass, noSuchObjectInstance, processingFailure,
syncNotSupported

}

LINKED { m-Linked-Reply }

```
 ::= localValue 9
```

-- Event Reporting operations (M-EVENT-REPORT)

m-EventReport OPERATION

ARGUMENT EventReportArgument
 ::= localValue 0

m-EventReport-Confirmed OPERATION

ARGUMENT EventReportArgument
 RESULT EventReportResult -- optional
 ERRORS {
 invalidArgumentValue, noSuchArgument, noSuchEventType, noSuchObjectClass,
 noSuchObjectInstance, processingFailure
 }
 ::= localValue 1

-- Get operation (M-GET)

m-Get OPERATION

ARGUMENT GetArgument
 RESULT GetResult -- this result is conditional; for conditions see
 -- ISO/IEC 9595 subclause 8.3.1.2.8
 ERRORS {
 accessDenied, classInstanceConflict, complexityLimitation, getListError,
 invalidFilter, invalidScope, noSuchObjectClass, noSuchObjectInstance,
 processingFailure, syncNotSupported
 }
 LINKED { m-Linked-Reply }
 ::= localValue 3

-- Linked Operation to M-GET, M-SET (Confirmed), M-ACTION (Confirmed), and M-DELETE

m-Linked-Reply OPERATION

ARGUMENT LinkedReplyArgument
 ::= localValue 2

-- Set operations (M-SET)

m-Set OPERATION

ARGUMENT SetArgument
 ::= localValue 4

m-Set-Confirmed OPERATION

ARGUMENT SetArgument
 RESULT SetResult -- this result is conditional; for conditions see
 -- ISO/IEC 9595 subclause 8.3.2.2.9
 ERRORS {

```
accessDenied, classInstanceConflict, complexityLimitation, invalidFilter,
invalidScope, noSuchObjectClass, noSuchObjectInstance, processingFailure,
setListError, syncNotSupported
}
LINKED { m-Linked-Reply }
 ::= localValue 5

-- CMIS error definitions
-- in the following errors, unless otherwise indicated, the parameter type is
-- mandatory in the corresponding ROSE APDU

accessDenied ERROR
 ::= localValue 2

classInstanceConflict ERROR
    PARAMETER BaseManagedObjectId
 ::= localValue 19

complexityLimitation ERROR
    PARAMETER ComplexityLimitation -- optional
 ::= localValue 20

duplicateManagedObjectInstance ERROR
    PARAMETER ObjectInstance
 ::= localValue 11

getListError ERROR
    PARAMETER GetListError
 ::= localValue 7

invalidArgumentValue ERROR
    PARAMETER InvalidArgumentValue
 ::= localValue 15

invalidAttributeValue ERROR
    PARAMETER Attribute
 ::= localValue 6

invalidFilter ERROR
    PARAMETER CMISFilter
 ::= localValue 4

invalidScope ERROR
    PARAMETER Scope
 ::= localValue 16

invalidObjectInstance ERROR
    PARAMETER ObjectInstance
```

::= localValue 17

missingAttributeValue ERROR
 PARAMETER AttributeId
::= localValue 18

mistypedOperation ERROR
::= localValue 21

noSuchAction ERROR
 PARAMETER NoSuchAction
::= localValue 9

noSuchArgument ERROR
 PARAMETER NoSuchArgument
::= localValue 14

noSuchAttribute ERROR
 PARAMETER AttributeId
::= localValue 5

noSuchEventType ERROR
 PARAMETER NoSuchEventType
::= localValue 13

noSuchInvokeID ERROR
 PARAMETER InvokeIDType
::=localValue 22

noSuchObjectClass ERROR
 PARAMETER ObjectClass
::= localValue 0

noSuchObjectInstance ERROR
 PARAMETER ObjectInstance
::= localValue 1

noSuchReferenceObject ERROR
 PARAMETER ObjectInstance
::= localValue 12

operationCancelled ERROR
::= localValue 23

processingFailure ERROR
 PARAMETER ProcessingFailure -- optional
::= localValue 10

setListError ERROR
 PARAMETER SetListError
::= localValue 8

```
syncNotSupported ERROR
    PARAMETER CMISSync
 ::= localValue 3
```

-- Supporting type definitions

```
AccessControl ::= EXTERNAL
```

```
ActionArgument ::= SEQUENCE {
    COMPONENTS OF BaseManagedObjectId,
    accessControl [5]    AccessControl OPTIONAL,
    synchronization [6]    IMPLICIT CMISSync DEFAULT bestEffort,
    scope [7]    Scope DEFAULT baseObject,
    filter    CMISFilter DEFAULT and {},
    actionInfo [12]    IMPLICIT ActionInfo
}
```

```
ActionError ::= SEQUENCE {
    managedObjectClass    ObjectClass OPTIONAL,
    managedObjectInstance    ObjectInstance OPTIONAL,
    currentTime [5]    IMPLICIT GeneralizedTime OPTIONAL,
    actionErrorInfo [6]    ActionErrorInfo
}
```

```
ActionErrorInfo ::= SEQUENCE {
    errorStatus    ENUMERATED {
        accessDenied (2),
        noSuchAction (9),
        noSuchArgument (14),
        invalidArgumentType (15)
    },
    errorInfo    CHOICE {
        actionType    ActionTypeId,
        actionArgument [0]    NoSuchArgument,
        argumentValue [1]    InvalidArgumentValue,
    }
}
```

```
ActionInfo ::= SEQUENCE {
    actionType    ActionTypeId,
    actionInfoArg [4]    ANY DEFINED BY actionType OPTIONAL
}
```

```
ActionReply ::= SEQUENCE {
    actionType    ActionTypeId,
    actionReplyInfo [4]    ANY DEFINED BY actionType
}
```

```

ActionResult ::= SEQUENCE {
    managedObjectClass          ObjectClass OPTIONAL,
    managedObjectInstance      ObjectInstance OPTIONAL,
    currentTime                 [5]    IMPLICIT GeneralizedTime OPTIONAL,
    actionReply                 [6]    IMPLICIT ActionReply OPTIONAL
}

ActionTypeId ::= CHOICE {
    globalForm    [2]    IMPLICIT OBJECT IDENTIFIER,
    localForm    [3]    IMPLICIT INTEGER
}

Attribute ::= SEQUENCE {
    attributeId    AttributeId,
    attributeValue ANY DEFINED BY attributeId
}

AttributeError ::= SEQUENCE {
    errorStatus    ENUMERATED {
        accessDenied        (2),
        noSuchAttribute     (5),
        invalidAttributeValue (6),
        invalidOperation    (24),
        invalidOperator     (25)
    },
    modifyOperator [2] IMPLICIT ModifyOperator OPTIONAL,
    attributeId    AttributeId,
    attributeValue ANY DEFINED BY attributeId OPTIONAL -- absent for setToDefault
}

AttributeId ::= CHOICE {
    globalForm    [0]    IMPLICIT OBJECT IDENTIFIER,
    localForm    [1]    IMPLICIT INTEGER
}

AttributeIdError ::= SEQUENCE {
    errorStatus    ENUMERATED {
        accessDenied        (2),
        noSuchAttribute     (5)
    },
    attributeId    AttributeId
}

AttributeIdList ::= SET OF AttributeId

BaseManagedObjectId ::= SEQUENCE {
    baseManagedObjectClass    ObjectClass,
    baseManagedObjectInstance ObjectInstance
}

CMISFilter ::= CHOICE {

```

```

        item          [8]    FilterItem,
        and           [9]    IMPLICIT SET OF CMISFilter,
        or           [10]   IMPLICIT SET OF CMISFilter,
        not          [11]   CMISFilter
    }

CMISSync ::= ENUMERATED {
    bestEffort      (0),
    atomic         (1)
}

ComplexityLimitation ::= SET {
    scope          [0]    Scope OPTIONAL,
    filter         [1]    CMISFilter OPTIONAL,
    sync          [2]    CMISSync OPTIONAL
}

CreateArgument ::= SEQUENCE {
    managedObjectClass      ObjectClass,
    instanceChoice          CHOICE {
        managedObjectInstance      ObjectInstance,
        superiorObjectInstance     [8]  ObjectInstance
    } OPTIONAL,
    accessControl           [5]    AccessControl OPTIONAL,
    referenceObjectInstance [6]    ObjectInstance OPTIONAL,
    attributeList          [7]    IMPLICIT SET OF Attribute OPTIONAL
}

CreateResult ::= SEQUENCE {
    managedObjectClass      ObjectClass OPTIONAL,
    managedObjectInstance   ObjectInstance OPTIONAL,
    -- shall be returned if omitted from CreateArgument
    currentTime            [5]    IMPLICIT GeneralizedTime OPTIONAL,
    attributeList          [6]    IMPLICIT SET OF Attribute OPTIONAL
}

DeleteArgument ::= SEQUENCE {
    COMPONENTS OF BaseManagedObjectId,
    accessControl          [5]    AccessControl OPTIONAL,
    synchronization       [6]    IMPLICIT CMISSync DEFAULT bestEffort,
    scope                 [7]    Scope DEFAULT baseObject,
    filter                 CMISFilter DEFAULT and{}
}

DeleteError ::= SEQUENCE {
    managedObjectClass      ObjectClass OPTIONAL,
    managedObjectInstance   ObjectInstance OPTIONAL,
    currentTime            [5]    IMPLICIT GeneralizedTime OPTIONAL,
    deleteErrorInfo        [6]    ENUMERATED {
        accessDenied (2)
    }
}

```

}

```

DeleteResult ::= SEQUENCE {
    managedObjectClass      ObjectClass OPTIONAL,
    managedObjectInstance   ObjectInstance OPTIONAL,
    currentTime              [5] IMPLICIT GeneralizedTime OPTIONAL
}

```

```

EventReply ::= SEQUENCE {
    eventType                EventTypeId,
    eventReplyInfo          [8] ANY DEFINED BY eventType OPTIONAL
}

```

```

EventReportArgument ::= SEQUENCE {
    managedObjectClass      ObjectClass,
    managedObjectInstance   ObjectInstance,
    eventTime                [5] IMPLICIT GeneralizedTime OPTIONAL,
    eventType                EventTypeId,
    eventInfo                [8] ANY DEFINED BY eventType OPTIONAL
}

```

```

EventReportResult ::= SEQUENCE {
    managedObjectClass      ObjectClass OPTIONAL,
    managedObjectInstance   ObjectInstance OPTIONAL,
    currentTime              [5] IMPLICIT GeneralizedTime OPTIONAL,
    eventReply              EventReply OPTIONAL
}

```

```

EventTypeId ::= CHOICE {
    globalForm              [0] IMPLICIT OBJECT IDENTIFIER,
    localForm                [1] IMPLICIT INTEGER
}

```

```

FilterItem ::= CHOICE {
    equality                 [0] IMPLICIT Attribute,
    substrings              [1] IMPLICIT SEQUENCE OF CHOICE {
        initialString      [0] IMPLICIT SEQUENCE {
            attributeId AttributeId,
            string          ANY DEFINED BY attributeId
        },
        anyString           [1] IMPLICIT SEQUENCE {
            attributeId AttributeId,
            string          ANY DEFINED BY attributeId
        },
        finalString        [2] IMPLICIT SEQUENCE {
            attributeId AttributeId,
            string          ANY DEFINED BY attributeId
        }
    },
    greaterOrEqual          [2] IMPLICIT Attribute,-- asserted value >= attribute value
    lessOrEqual             [3] IMPLICIT Attribute,-- asserted value <= attribute value
}

```

```
    present          [4]    AttributeId,  
    subsetOf        [5]    IMPLICIT Attribute,-- asserted value is a subset of attribute value  
    supersetOf      [6]    IMPLICIT Attribute,-- asserted value is a superset of attribute value  
    nonNullSetIntersection [7]IMPLICIT Attribute  
}
```

```
GetArgument ::= SEQUENCE {  
    COMPONENTS OF BaseManagedObjectId,  
    accessControl    [5]    AccessControl OPTIONAL,  
    synchronization [6]    IMPLICIT CMISync DEFAULT bestEffort,  
    scope            [7]    Scope DEFAULT baseObject,  
    filter           [7]    CMISFilter DEFAULT and {},  
    attributeIdList [12]   IMPLICIT AttributeIdList OPTIONAL  
}
```

```
GetInfoStatus ::= CHOICE {  
    attributeIdError [0]    IMPLICIT AttributeIdError,  
    attribute        [1]    IMPLICIT Attribute  
}
```

```
GetListError ::= SEQUENCE {  
    managedObjectClass          ObjectClass OPTIONAL,  
    managedObjectInstance      ObjectInstance OPTIONAL,  
    currentTime                 [5]    IMPLICIT GeneralizedTime OPTIONAL,  
    getInfoList                 [6]    IMPLICIT SET OF GetInfoStatus  
}
```

```
GetResult ::= SEQUENCE {  
    managedObjectClass          ObjectClass OPTIONAL,  
    managedObjectInstance      ObjectInstance OPTIONAL,  
    currentTime                 [5]    IMPLICIT GeneralizedTime OPTIONAL,  
    attributeList               [6]    IMPLICIT SET OF Attribute  
}
```

```
InvalidArgumentValue ::= CHOICE {  
    actionValue [0]    IMPLICIT ActionInfo,  
    eventValue  [1]    IMPLICIT SEQUENCE {  
        eventType      EventTypeId,  
        eventInfo      [8]    ANY DEFINED BY eventType OPTIONAL  
    }  
}
```

```
LinkedReplyArgument ::= CHOICE {  
    getResult      [0]    IMPLICIT GetResult,  
    getListError  [1]    IMPLICIT GetListError,  
    setResult     [2]    IMPLICIT SetResult,  
    setListError  [3]    IMPLICIT SetListError,  
    actionResult  [4]    IMPLICIT ActionResult,  
    processingFailure [5]    IMPLICIT ProcessingFailure,  
    deleteResult [6]    IMPLICIT DeleteResult,  
    actionError   [7]    IMPLICIT ActionError,  
}
```



```

        deleteError      [8]    IMPLICIT DeleteError
    }

ModifyOperator ::= INTEGER {
    replace              (0),
    addValues            (1),
    removeValues        (2),
    setToDefault         (3)
}

NoSuchAction ::= SEQUENCE {
    managedObjectClass   ObjectClass,
    actionType           ActionTypeId
}

NoSuchArgument ::= CHOICE {
    actionId             [0]    IMPLICIT SEQUENCE {
        managedObjectClass ObjectClass OPTIONAL,
        actionType         ActionTypeId
    },
    eventId              [1]    IMPLICIT SEQUENCE {
        managedObjectClass ObjectClass OPTIONAL,
        eventType         EventTypeId
    }
}

NoSuchEventType ::= SEQUENCE {
    managedObjectClass   ObjectClass,
    eventType            EventTypeId
}

ObjectClass ::= CHOICE {
    globalForm           [0]    IMPLICIT OBJECT IDENTIFIER,
    localForm            [1]    IMPLICIT INTEGER
}

ObjectInstance ::= CHOICE {
    distinguishedName    [2]    IMPLICIT DistinguishedName,
    nonSpecificForm      [3]    IMPLICIT OCTET STRING,
    localDistinguishedName [4]    IMPLICIT RDNSequence
}

-- localDistinguishedName is that portion of the distinguished name that is
-- necessary to unambiguously identify the managed object within the
-- context of communication between the open systems

ProcessingFailure ::= SEQUENCE {
    managedObjectClass   ObjectClass,
    managedObjectInstance ObjectInstance OPTIONAL,
    specificErrorInfo    [5]    SpecificErrorInfo
}

```

```
-- Identifier added to first member of CHOICE.
Scope ::= CHOICE {
    scopeType          INTEGER {
        baseObject     (0),
        firstLevelOnly (1),
        wholeSubtree   (2)
    },
    individualLevels [1] IMPLICIT INTEGER, -- POSITIVE integer indicates the level to be
                                           -- selected
    baseToNthLevel [2] IMPLICIT INTEGER -- POSITIVE integer N indicates that the range of
                                           -- levels (0 - N) is to be selected
    -- with individualLevels and baseToNthLevel, a value of 0 has the same semantics as baseObject
    -- with individualLevels, a value of 1 has the same semantics as firstLevelOnly
}

SetArgument ::= SEQUENCE {
    COMPONENTS OF BaseManagedObjectId,
    accessControl [5] AccessControl OPTIONAL,
    synchronization [6] IMPLICIT CMISync DEFAULT bestEffort,
    scope [7] Scope DEFAULT baseObject,
    filter CMISFilter DEFAULT and{},
    modificationList [12] IMPLICIT SET OF SEQUENCE {
        modifyOperator [2] IMPLICIT ModifyOperator DEFAULT replace,
        attributeId AttributeId,
        attributeValue ANY DEFINED BY attributeId OPTIONAL
    }
}

SetInfoStatus ::= CHOICE {
    attributeError [0] IMPLICIT AttributeError,
    attribute [1] IMPLICIT Attribute
}

SetListError ::= SEQUENCE {
    managedObjectClass ObjectClass OPTIONAL,
    managedObjectInstance ObjectInstance OPTIONAL,
    currentTime [5] IMPLICIT GeneralizedTime OPTIONAL,
    setInfoList [6] IMPLICIT SET OF SetInfoStatus
}

SetResult ::= SEQUENCE {
    managedObjectClass ObjectClass OPTIONAL,
    managedObjectInstance ObjectInstance OPTIONAL,
    currentTime [5] IMPLICIT GeneralizedTime OPTIONAL,
    attributeList [6] IMPLICIT SET OF Attribute OPTIONAL
}

SpecificErrorInfo ::= SEQUENCE {
    errorId OBJECT IDENTIFIER
    errorInfo ANY DEFINED BY errorId
}
```

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14. MOCS SUPPLEMENT

14.1 SECTION OVERVIEW

This supplement provides detailed conformance information for the Lucent Technologies 5ESS®-2000 switch TR-303 interface. The MCS and MOCS proformas have been reproduced from Bellcore document *MCS and MOCS Proformas for IDLC TR-NWT-000303*, SR-NWT-002411, Issue 1, August 1992.

14.1.1 MANAGEMENT CONFORMANCE SUMMARY

The date of the statement is 6-1-93. The implementation identification is Lucent Technologies 5ESS®-2000 switch IDT-RDT interface. Conformance is claimed by the following document:

Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface*, TR-NWT-000303
Issue 2, December 1992
Supplement 3, March 1990
Revision 1, August 1992

The following is the Technical Corrigenda:

Bellcore document *Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface*, TR-NWT-000303
Issue 2, December 1992
Supplement 3, March 1990
Revision 1, August 1992

14.1.2 SET OF MANAGED OBJECT CLASSES FOR IDT-RDT COMMUNICATIONS

As specified in the Bellcore MCS Proforma SR-NWT-002411 and in line with CCITT standards, the following common notations are used for the status column:

c conditional [Refer to TR303 Issue 1, Supplement 3,
Revision 1 for the specifics of the conditions]
m mandatory
o optional
x prohibited
n/a not applicable

From SR-NWT-002411, the following common notations are used for the support column:

Ig the item is ignored (that is, processed syntactically but not semantically)
N not implemented
Y implemented
N/A not applicable

The following notations are used by Lucent Technologies for the additional information column:

- P used for RDT provisioning by the 5ESS®-2000 switch
- L used for line termination status administration
- T used to support testing from the 5ESS®-2000 switch
- M used by the 5ESS®-2000 switch for performance monitoring
- A used for alarms reports, surveillance by the 5ESS®-2000 switch
- S used to support path protection switch
- F used to support facility protection switch

DOCUMENT CONTAINING THE OBJECT CLASS DEFINITION	REFERENCE OF MOCS PROFORMA	MANAGED OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT	ADDITIONAL INFORMATION
TR303 Iss.1 Sup.3 Rev.1	SR2411 § 3.6	alarmRecord	n/a	N/A	
	SR2411 § 3.7	alertingCadence	n/a	N/A	
	SR2411 § 3.8	analogLineTermination	n/a	Y	PLT
	SR2411 § 3.9	auditSchedule	n/a	N/A	
	SR2411 § 3.10	backupSchedule	n/a	N/A	
	SR2411 § 3.11	channelTermination*	n/a	Y	
	SR2411 § 3.12	channelUnitTest	n/a	N/A	
	SR2411 § 3.13	circuitPack	n/a	Ig	
	SR2411 § 3.14	crossConnection	n/a	Y	P
	SR2411 § 3.15	currentAlarmSumSched	n/a	N/A	
	SR2411 § 3.16	ddsLineTermination	n/a	Y	P
	SR2411 § 3.17	ds0ChannelTermination	n/a	Y	P
	SR2411 § 3.18	ds1FramedPathTermination	n/a	Y	MA
	SR2411 § 3.19	ds1LineTermination	n/a	Y	T
	SR2411 § 3.20	ds1LineThDefProfile	n/a	N/A	
	SR2411 § 3.21	ds1PathThDefProfile	n/a	N/A	
	SR2411 § 3.22	databaseCaptureBuffer	n/a	N/A	
	SR2411 § 3.6	alarmRecord	n/a	N/A	
	SR2411 § 3.23	databaseChangeReport	n/a	N/A	
	SR2411 § 3.24	dgnSched	n/a	N/A	
	SR2411 § 3.25	discriminator*	n/a	Y	
	SR2411 § 3.26	equipment	n/a	Y	A
	SR2411 § 3.27	equipmentHolder	n/a	Y	A
	SR2411 § 3.28	eventLog	n/a	N/A	
	SR2411 § 3.29	eventRecord	n/a	N/A	
	SR2411 § 3.30	eventReportControl	n/a	Y	PM
	SR2411 § 3.32	framedPathTermination*	n/a	Y	
	SR2411 § 3.33	idlcCPPProfile	n/a	Y	P
	SR2411 § 3.34	idlcDLProfile	n/a	Y	P
	SR2411 § 3.35	idlcDLTermination	n/a	Ig	
	SR2411 § 3.36	idlcTerminal	n/a	Ig	
	SR2411 § 3.37	isdn3DS0FramedPathTermination	n/a	N/A	
	SR2411 § 3.31	exerciseSched	n/a	N/A	
	SR2411 § 3.38	isdnFramedPathTermination	n/a	Y	PLTM
	SR2411 § 3.39	isdnFPTDefaultProfile	n/a	N/A	
	SR2411 § 3.40	isdnLineTermination	n/a	Y	P
	SR2411 § 3.41	isdnPerSystemProfile	n/a	Y	PM
	SR2411 § 3.42	inputCommand	n/a	N/A	
	SR2411 § 3.43	inputCommandControl	n/a	N/A	
	SR2411 § 3.44	lineTermination*	n/a	Y	
SR2411 § 3.45	lineThDefProfile*	n/a	N/A		
SR2411 § 3.46	log	n/a	N/A		
SR2411 § 3.47	mgmtOpnSched*	n/a	Y		
SR2411 § 3.48	memory	n/a	Y	A	

See Footnote at end of table.

DOCUMENT CONTAINING THE OBJECT CLASS DEFINITION	REFERENCE OF MOCS PROFORMA	MANAGED OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT	ADDITIONAL INFORMATION
TR303 Iss.1 Sup.3 Rev.1 (Contd)	SR2411 § 3.49	messageLog	n/a	N/A	
	SR2411 § 3.50	messageRecord	n/a	N/A	
	SR2411 § 3.51	metTestAccPathTerm	n/a	Y	T
	SR2411 § 3.52	mtau	n/a	Y	T
	SR2411 § 3.53	networkElement	n/a	Y	PA
	SR2411 § 3.54	pmIntervalProfile	n/a	Y	P
	SR2411 § 3.55	pathThDefProfile*	n/a	N/A	
	SR2411 § 3.56	perfMonReportSched	n/a	Ig	
	SR2411 § 3.57	protectionGroup	m	Y	S
	SR2411 § 3.58	protectionGroupUnit	n/a	Y	S
	SR2411 § 3.59	quarterDS0ChannelTermination	n/a	Y	P
	SR2411 § 3.60	terminationPoint*	n/a	Y	
	SR2411 § 3.61	testAccPathTerm*	n/a	Y	
	SR2411 § 3.62	testAccessUnit*	n/a	Y	
SR2411 § 3.63	trc	n/a	Y	T	

* Managed object class for inheritance purpose only.

14.1.3 MOCS PROFORMAS

The following Managed Object Conformance Statements (MOCS) give conformance information for the Lucent Technologies 5ESS®-2000 switch implementation of Bellcore TR-NWT-000303 Supplement 3 for all TR303 objects implemented on the 5ESS®-2000 switch.

The MOCS information contained in the remainder of this supplement reflects the EOC messages that the 5ESS®-2000 switch transmits to the RDT. As an specific example, the 5ESS®-2000 switch both creates and gets analogLineTermination objects, but only gets ds1LineTermination objects, expecting these objects to be created by the RDT. The MOCS forms have been filled in such that "crt" and "get" are supported for analogLineTermination, but only "get" for ds1LineTermination.

From Bellcore MOCS Proforma SR-NWT-002411, the following notations are used for the status column:

- c conditional
- m mandatory
- o optional
- o.N support of at least one of N choices is required
- x prohibited
- n/a not applicable

From SR-NWT-002411, the following notations are used for the support column:

- Ig the item is ignored (that is, processed syntactically but not semantically)
- N not implemented
- Y implemented
- N/A not applicable

From SR-NWT-002411, the following abbreviations (first two columns) are used for the attribute support tables:

crt	SetByCreate	5ESS®-2000 switch sets this attribute in M-CREATE
get	Get	5ESS®-2000 switch uses this attribute in M-GET, and processes these attributes in response to M-GET
rep	Replace	5ESS®-2000 switch replaces attribute value in RDT object
add	Add	5ESS®-2000 switch adds attribute value to RDT object
rem	Remove	5ESS®-2000 switch removes attribute value from RDT object
dfi	SetToDefault	5ESS®-2000 switch requests the RDT to set the attribute to its default value

From SR-NWT-002411, the following tables are captioned as:

TABLE (3 or 4 letter prefix indicating type table) (object class label)(sequential table numbering)

The association between the prefix and the type of tables is:

NAMA	table of name binding definitions for the object class.
NAMB	table of creation and deletion rules for the object class
ATT	table of attributes and their data syntaxes for the object class, excluding inherited attributes and their data syntaxes
GRP	table of attribute groups for the object class, excluding inherited attribute groups
ACT	table of actions and their data syntaxes for the object class, excluding inherited actions and their data syntaxes
NOT	table of notifications and their data syntaxes for the object class, excluding inherited notifications and their data syntaxes
PAR	table of parameters and their data syntaxes for the object class, excluding inherited parameters and their data syntaxes

14.2 ANALOG LINE TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
analogLineTermination	idlcObjectClass 3

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS for inherited Attributes, Name Binding, Actions, Notifications, etc., for their status.

14.2.1 NAME BINDING

NAMAanalogLineTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	analogLineTermination-equipment	idlcNameBinding 4	equipment	c	N
2	analogLineTermination-networkElement	idlcNameBinding 5	networkElement	c	Y

NAMBanalogLineTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	*
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	N	
1.3	Create specific error support	x		
2	Delete Support	m	Y	†
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
*	The 5ESS®-2000 switch also supports inherent creation of analog lines in the RDT at system turnup.			
†	If Redlined is TRUE, object can be deleted only with proper access control.			

14.2.2 ATTRIBUTES

ATTanalogLineTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			o	get	rep	add	rem	dfi	
1	analogLineTermId	idlcAttribute 13	o	m	x	x	x	x	
			N	N					
2	genSigFuncCode	idlcAttribute 173	m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1	GenSigFuncCode		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.1	numberOfWire		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.1.1	NumberOfWire		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.1.1.1	wire2		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.1.1.2	wire4		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2	protocolCode		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.2.1	ProtocolCode		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.2.1.1	rvo-i		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.2	rvt-i		m	m	m	x	x	m	
			Y	Y	Y			Y	
2.1.2.1.3	dx		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.4	dxx		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.5	eae		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.6	eam		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.7	ebe		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.8	ebm		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.9	ecm		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.10	gs		m	m	m	x	x	m	
			Y	Y	Y				
2.1.2.1.11	gsx		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.12	go		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.13	gox		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.14	ls		m	m	m	x	x	m	
			Y	Y	Y			Y	

ATTanalogLineTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
2.1.2.1.15	lsx		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.16	lo		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.17	lox		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.18	ab		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.19	ac		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.20	acr		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.21	lr		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.22	exa		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.23	exb		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.24	no		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.25	nos		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.26	rvo-d		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.27	rvo-w		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.28	rvt-d		m	m	m	x	x	m	
			N	Y	N			N	
2.1.2.1.29	rvt-w		m	m	m	x	x	m	
			N	Y	N			N	
3	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
			Y	N	N	N	N		*
3.1	AlarmSeverityAssignment		m	m	m	m	m	x	
			N						
3.1.1	problem		m	m	m	m	m	x	
3.1.1.1	ProblemType		m	m	m	m	m	x	
3.1.1.1.1	indeterminate		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.2	equipmentProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
3.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
* Empty list created.									

ATTanalogLineTermination3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS SUPPORT						ADDITIONAL INFORMATION
			cr	get	rep	add	rem	dfi	
3.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
3.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
3.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
3.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
3.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
3.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
3.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
3.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
3.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
3.1.1.1.3	transmissionProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
3.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
3.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
3.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
3.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
3.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
3.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
3.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
3.1.1.1.4	environmentalProblemType		0.35	0.35	0.35	0.35	0.35	x	

ATTanalogLineTermination4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
3.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
3.1.1.1.4.1.1	supportEntityAlarm		0.37	0.37	0.37	0.37	0.37	x	
3.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
3.1.1.1.4.1.2	sensorAlarm		0.37	0.37	0.37	0.37	0.37	x	
3.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
3.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	

ATTanalogLineTermination5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
3.1.1.1.5	softwareProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
3.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
3.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
3.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
3.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	

ATTanalogLineTermination6 — ATTRIBUTE SUPPORT								
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS					ADDITIONAL INFORMATION
			SUPPORT					
			crt	get	rep	add	rem	dfll
3.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x
3.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x
3.1.1.1.6	serviceProblemType		o.35	p.35	o.35	o.35	o.35	x
3.1.1.1.7	thresholdAlert		o.35	p.35	o.35	o.35	o.35	x
3.1.1.1.7.1	ThresholdAlert		p.114	m	o.114	p.114	p.114	x
3.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x
3.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x
3.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x
3.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x
3.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x
3.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x
3.1.1.1.8	scheduledMgmtOpnsProblemType		o.35	p.35	o.35	o.35	o.35	x
3.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x
3.1.1.1.8.1.1	operationsType		m	m	m	m	m	x
3.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x
3.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x
3.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x
3.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x

ATTanalogLineTermination7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfi
3.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
3.1.1.1.8.1.3	problem		m	m	m	m	m	x	
3.1.2	alarmSeverityCode		m	m	m	m	m	x	
3.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
3.1.2.1.1	non-alarmed		m	m	m	m	m	x	
3.1.2.1.2	minor		m	m	m	m	m	x	
3.1.2.1.3	major		m	m	m	m	m	x	
3.1.2.1.4	critical		m	m	m	m	m	x	
4	lineCircuitAddress	idlcAttribute 208	o N	m N	x	x	x	x	*
5	currentProblemList	idlcAttribute 59	c(5 Y	c(5 Y	x	x	x	x	†
5.1	CurrentProblem		o N	m Ig	x	x	x	x	
5.1.1	problem		o	m	x	x	x	x	
5.1.1.1	ProblemType		o	m	x	x	x	x	
5.1.1.1.1	indeterminate		0.55	0.55	x	x	x	x	
5.1.1.1.2	equipmentProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
5.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
5.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
5.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	

* Value set by RDT in M-create result.
† Empty list created.
The 5ESS®-2000 does not specifically get the current problem list for an analog line termination, but might receive this in response to a multi-getusing scope/filtering; if received, the information in the problem list is ignored.
(5 If the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE n/a.

ATTanalogLineTermination8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
5.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
5.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
5.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
5.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
5.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
5.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
5.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
5.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
5.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
5.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
5.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
5.1.1.1.3	transmissionProblemType		o.55	o.55	x	x	x	x	
5.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
5.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
5.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
5.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
5.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
5.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
5.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
5.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
5.1.1.1.4	environmentalProblemType		o.55	o.55	x	x	x	x	
5.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
5.1.1.1.4.1.1	supportEntityAlarm		o.57	o.57	x	x	x	x	

ATTanalogLineTermination9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
5.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	
5.1.1.1.4.1.2	sensorAlarm		0.57	0.57	x	x	x	x	
5.1.1.1.4.1.2.1	SensorAlarmList		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	x	x	x	x	
5.1.1.1.4.1.2.1.1.1	SensorAlarmType		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	

ATTanalogLineTermination10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
5.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
5.1.1.1.5	softwareProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
5.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
5.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
5.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
5.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
5.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
5.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
5.1.1.1.6	serviceProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.7	thresholdAlert		0.55	0.55	x	x	x	x	

ATTanalogLineTermination11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	addr	rem		dfll
5.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
5.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
5.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
5.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
5.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
5.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
5.1.1.1.7.1.2.2.1	Attribute		o	m	x	x	x	x	
5.1.1.1.8	scheduledMgmtOpnsProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
5.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
5.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.6	litSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	
5.1.1.1.8.1.2.1	DistinguishedName		o	m	x	x	x	x	
5.1.1.1.8.1.3	problem		o	m	x	x	x	x	
5.1.2	problemState		o	m	x	x	x	x	
5.1.2.1	ProblemState		o	m	x	x	x	x	
5.1.2.1.1	active-pending		o	m	x	x	x	x	

ATTanalogLineTermination12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfi
5.1.2.1.2	active-reportable		o	m	x	x	x	x	
5.1.3	problemData		o	o	x	x	x	x	
5.1.3.1	ProblemData		o	m	x	x	x	x	
5.1.3.1.1	identifier		o	m	x	x	x	x	
5.1.3.1.2	critical		o	m	x	x	x	x	
5.1.3.1.3	item		o	m	x	x	x	x	
5.1.3.1.3.1	identifier		o	m	x	x	x	x	
6	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
6.1	EventReportControlId		m	m	m	m	m	x	
6.1.1	INTEGER		0.63	0.63	0.63	0.63	0.63	x	
6.1.2	PrintableString		0.63	0.63	0.63	0.63	0.63	x	
7	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x	
			N	N	N	N	N		
7.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x	
7.1.1	INTEGER		0.73	0.73	0.73	0.73	0.73	x	
7.1.2	PrintableString		0.73	0.73	0.73	0.73	0.73	x	
8	robbedBitSignal	idlcAttribute 293	o	o	o	x	x	x	
			N	N	N				
8.1	RobbedBitSignal		m	m	m	x	x	x	
8.1.1	transparent		m	m	m	x	x	x	
8.1.2	a		m	m	m	x	x	x	
8.1.3	ab		m	m	m	x	x	x	
8.1.4	abcd		m	m	m	x	x	x	
9	callRefValue	idlcAttribute 31	c(9)	c(9)	x	x	x	x	
			Y	N					
* Expect callRefValue equal to analogLineTermId (9 IF RDT THEN m ELSE n/a								*	

ATTanalogLineTermination13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
10	terminateLeaveStatus	idlcAttribute 372	o	o	o	x	x	x	
			N	N	N				
10.1	TerminateLeaveStatus		m	m	m	x	x	x	
10.1.1	normal		m	m	m	x	x	x	
10.1.2	terminatedA		m	m	m	x	x	x	
10.1.3	terminatedB		m	m	m	x	x	x	
10.1.4	terminatedC		m	m	m	x	x	x	
10.1.5	terminatedAB		m	m	m	x	x	x	
11	redlined	idlcAttribute 284	c(11	c(11	c(11	x	x	x	*
			Y	N	N				
12	cableLoaded	idlcAttribute 30	o	o	o	x	x	x	
			N	N	N				
13	transmitEqualization	idlcAttribute 379	o	o	o	x	x	x	
			N	N	N				
13.1	Equalization		m	m	m	x	x	x	
14	receiveEqualization	idlcAttribute 279	o	o	o	x	x	x	
			N	N	N				
14.1	Equalization		m	m	m	x	x	x	
15	transmitTLP	idlcAttribute 382	o	o	o	x	x	x	
			N	N	N				
16	receiveTLP	idlcAttribute 282	o	o	o	x	x	x	
			N	N	N				
17	transmitBalance	idlcAttribute 378	o	o	o	x	x	x	
			N	N	N				
17.1	Balance		m	m	m	x	x	x	
18	receiveBalance	idlcAttribute 278	o	o	o	x	x	x	
			N	N	N				
18.1	Balance		m	m	m	x	x	x	
19.1.1	impedance150		m	m	m	x	x	x	
19.1.2	impedance600		m	m	m	x	x	x	
19.1.3	impedance900		m	m	m	x	x	x	
19.1.4	impedance1200		m	m	m	x	x	x	
* Created as FALSE (11 If RDT, THEN m ELSE n/a									

ATTanalogLineTermination14 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF analogLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 3	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
20	receiveImpedance	idlcAttribute 281	o	o	o	x	x	x	
			N	N	N				
20.1	Impedance		m	m	m	x	x	x	
20.1.1	impedance150		m	m	m	x	x	x	
20.1.2	impedance600		m	m	m	x	x	x	
20.1.3	impedance900		m	m	m	x	x	x	
20.1.4	impedance1200		m	m	m	x	x	x	
21	enableLPBK	idlcAttribute 127	o	o	o	x	x	x	
			N	N	N				
22	flashDetection	idlcAttribute 171	c(22	c(22	c(22	x	x	x	
									*
* CSC not supported									
(22 If the Common Signaling Channel is used, THEN RDT m ELSE n/a.									

14.2.3 ATTRIBUTE GROUPS

No attribute group is supported for *analogLineTermination* object class.

14.2.4 ACTIONS

ACTanalogLineTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	connectTRC	idlcAction 12	m	Y	*
2	releaseTRC	idlcAction 35	m	Y	†
* Used to support testing from the 5ESS®-2000 switch.					
† Used to support testing from the 5ESS®-2000 switch.					

14.2.5 NOTIFICATIONS

The 5ESS®-2000 switch expects to receive eventReporting notifications from the RDT and uses this information for analog line administration. In the following table, the conformance information reflects the attributes that are used by the 5ESS®-2000 switch - other attributes are ignored.

The 5ESS®-2000 switch does not generate eventReporting notifications to the RDT.

NOTanalogLineTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	Y	*
1.1	EventInfo		m		Y	
1.1.1	problemType		m		Y	
1.1.1.1	ProblemType		m		Y	
1.1.1.1.1	indeterminate		o.15		Ig	
1.1.1.1.2	equipmentProblemType		o.15		Ig	
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.15		Ig	
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.15		Ig	
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.6			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTanalogLineTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.6			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.15			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.15		Y	*
1.1.1.1.7	thresholdAlert		o.15			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.15		Ig	
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			

* Used by RDT to report change of service state.

NOTanalogLineTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m		Ig	
1.1.2.1	AlarmSeverity		m			
1.1.2.1.1	clear		m			
1.1.2.1.2	indeterminate		m			
1.1.2.1.3	warning		m			
1.1.2.1.4	minor		m			
1.1.2.1.5	major		m			
1.1.2.1.6	critical		m			
1.1.3	trendIndication		o		Ig	
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o		Ig	
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o		Ig	
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o		Ig	
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o		Ig	
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		0.25			
1.1.7.1.2	AnalogThreshold		0.25			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o		Y	*

* Used with serviceProblemType, contains service state data.

14.2.6 PARAMETERS

PARanalogLineTermination — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	

See Footnotes on next page.

PARanalogLineTermination — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses for analog lines.
† If object specific errors are received, only the error type is considered.
‡ The 5ESS®-2000 switch includes the error description in craft reports.

14.3 CHANNEL TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
channelTermination	idlcObjectClass 6

Are all mandatory features of the class supported? Yes No

Note: Refer to *terminationPoint* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.3.1 ATTRIBUTES

No other attribute is supported for *channelTermination* object class.

14.3.2 ATTRIBUTE GROUPS

No other attribute group is supported for *channelTermination* object class.

14.3.3 ACTIONS

No other action is supported for *channelTermination* object class.

14.3.4 NOTIFICATIONS

No other notification is supported for *channelTermination* object class.

14.3.5 PARAMETERS

No other parameter is supported for *channelTermination* object class.

14.4 CIRCUIT PACK

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
circuitPack	idlcObjectClass 8

Are all mandatory features of the class supported? Yes No

14.4.1 NAME BINDING

NAMAcircuitPack — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	circuitPack-equipmentHolder	idlcNameBinding 13	equipmentHolder	c	Y

NAMBcircuitPack — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	x		*
1.1	With Reference Object	x		
1.2	With automatic instance naming	x		
1.3	Create specific error support	x		
2	Delete Support	x		†
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

* The 5ESS®-2000 switch assumes that circuitPack objects are automatically created in the RDT when the pack is installed.
 † The 5ESS®-2000 switch assumes that circuitPack objects are automatically deleted in the RDT when the pack is removed.

14.4.2 ATTRIBUTES

ATTcircuitPack1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF attributes of circuitPack	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 8	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	circuitPackId	idlcAttribute 37	x	m	x	x	x	x	*
				N					
2	primaryServiceState	idlcAttribute 242	x	m	x	x	x	x	
				N					
2.1	PrimaryServiceState		x	m	x	x	x	x	
2.1.1	is		x	m	x	x	x	x	
2.1.2	oos		x	m	x	x	x	x	
3	secondaryServiceState	idlcAttribute 298	x	m	x	x	x	x	
				N					
3.1	SecondaryServiceState		x	m	x	x	x	x	
3.1.1	ts		x	m	x	x	x	x	
3.1.2	mt		x	m	x	x	x	x	
3.1.3	ma		x	m	x	x	x	x	
3.1.4	anr		x	m	x	x	x	x	
3.1.5	ueq		x	m	x	x	x	x	
3.1.6	fef		x	m	x	x	x	x	
3.1.7	busy		x	m	x	x	x	x	
3.1.8	lpbk		x	m	x	x	x	x	
3.1.9	mea		x	m	x	x	x	x	
3.1.10	mon		x	m	x	x	x	x	
3.1.11	pwr		x	m	x	x	x	x	
3.1.12	sea		x	m	x	x	x	x	
3.1.13	act		x	m	x	x	x	x	
3.1.14	ccsf		x	m	x	x	x	x	
3.1.15	comb		x	m	x	x	x	x	
3.1.16	dgn		x	m	x	x	x	x	

* The 5ESS®-2000 switch never reads circuit pack attributes.

ATTcircuitPack2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF attributes of circuitPack	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObject Class 8	STATUS						ADDITIONAL INFOMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.17	dsbld		x	m	x	x	x	x	
3.1.18	erranal		x	m	x	x	x	x	
3.1.19	ex		x	m	x	x	x	x	
3.1.20	faf		x	m	x	x	x	x	
3.1.21	fepro		x	m	x	x	x	x	
3.1.22	flt		x	m	x	x	x	x	
3.1.23	frcd		x	m	x	x	x	x	
3.1.24	hd		x	m	x	x	x	x	
3.1.25	hw		x	m	x	x	x	x	
3.1.26	inhip		x	m	x	x	x	x	
3.1.27	lkdo		x	m	x	x	x	x	
3.1.28	lock		x	m	x	x	x	x	
3.1.29	mtce		x	m	x	x	x	x	
3.1.30	mtcelim		x	m	x	x	x	x	
3.1.31	nm		x	m	x	x	x	x	
3.1.32	pctf		x	m	x	x	x	x	
3.1.33	pri		x	m	x	x	x	x	
3.1.34	prtcl		x	m	x	x	x	x	
3.1.35	sec		x	m	x	x	x	x	
3.1.36	stby		x	m	x	x	x	x	
3.1.37	termf		x	m	x	x	x	x	
3.1.38	tmt		x	m	x	x	x	x	
3.1.39	trd		x	m	x	x	x	x	

ATTcircuitPack3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF attributes of circuitPack	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 8	STATUS						ADDITIONAL INFOMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.40	tstf		x	m	x	x	x	x	
3.1.41	sof		x	m	x	x	x	x	
3.1.42	swtch		x	m	x	x	x	x	
4	circuitPackType	idlcAttribute 38	x	m	x	x	x	x	
				N					
5	equipHolderAddress	idlcAttribute 130	x	m	x	x	x	x	
				N					
6	seriesId	idlcAttribute 348	x	m	x	x	x	x	
				N					
7	supplierCode	idlcAttribute 351	x	o	x	x	x	x	
				N					
8	appliedPatches	idlcAttribute 14	x	o	x	x	x	x	
				N					
8.1	PatchId		x	m	x	x	x	x	
8.1.1	patchId		x	m	x	x	x	x	
8.1.2	versionId		x	m	x	x	x	x	
9	currentProcLoad	idlcAttribute 58	x	o	x	x	x	x	
				N					
9.1	CurrentProcLoad		x	m	x	x	x	x	
9.1.1	ProcLoadId		x	m	x	x	x	x	
9.1.1.1	procLoad		x	m	x	x	x	x	
9.1.1.2	versionId		x	m	x	x	x	x	

14.4.3 ATTRIBUTE GROUPS

No other attribute group is supported for *circuitPack* object class.

14.4.4 ACTIONS

ACTcircuitPack1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE / FIELD NAME LABEL	VALUE OF ACTION / FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	N	
1.1	RemoveArguments		m		
1.1.1	mode		m		
1.1.1.1	Mode		m		
1.1.1.1.1	normal		m		
1.1.1.1.2	forced		m		
2	restore	idlcAction 44	m	N	
2.1	RestoreArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
2.2	RestoreResult		o		
2.2.1	RestoringResult		o		
2.2.1.1	RestoringResult		m		
2.2.1.1.1	completed		m		
2.2.1.1.2	failedVerification		m		
3	diagnose	idlcAction 15	o	N	
3.1	DiagnoseArguments		m		
3.1.1	diagnosisId		m		
3.1.2	phases		m		
3.1.3	iteration		m		
3.1.4	normalTermination		m		
3.1.5	reportFailOnly		m		
3.1.6	reportSummaryOnly		m		
3.1.7	affectedPort		o		
3.2	DiagnoseResults		m		
3.2.1	DiagnosisResult		m		
3.2.1.1	phase		m		
3.2.1.2	iteration		m		
3.2.1.3	fail		m		
3.2.1.4	expectedValue		o		
3.2.1.5	actualValue		o		
4	diagnoseLineUnit	idlcAction 16	c(4	N	
4.1	DiagLineUnitArg		m		
4.1.1	affectedPort		o		
4.2	DiagnoseLineUnitResult		m		
4.2.1	result		m		
5	applyPatch	idlcAction 2	c(s	N	
5.1	PatchId		m		
5.1.1	patchId		m		
5.1.2	versionId		m		
(4 If ISDN circuit pack, THEN m ELSE n/a					
(s If Software loadable circuit pack, THEN m ELSE n/a					

ACTcircuitPack2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE / FIELD NAME LABEL	VALUE OF ACTION / FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
6	removePatch	idlcAction 41	c(s	N	
6.1	PatchId		m		
6.1.1	patchId		m		
6.1.2	versionId		m		
7	bootProcessor	idlcAction 4	c(s	N	
7.1	BootProcLoad		m		
7.1.1	ProcLoadId		m		
7.1.1.1	procLoad		m		
7.1.1.2	versionId		m		
8	restartProcessor	idlcAction 43	c(s	N	
8.1	RestartArg		m		
8.1.1	restartMode		o		
8.1.1.1	RestartMode		m		
8.1.1.1.1	warm		m		
8.1.1.1.2	cold		m		
(s If Software loadable circuit pack, THEN m ELSE n/a					

14.4.5 NOTIFICATIONS

The 5ESS®-2000 switch does not process notifications from circuit pack objects.

NOTcircuitPack1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	Ig	
1.1	EventInfo		m			
1.1.1	problemType		m			
1.1.1.1	ProblemType		m			
1.1.1.1.1	indeterminate		o.15			
1.1.1.1.2	equipmentProblemType		o.15			
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.15			
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.15			
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.17			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			

NOTcircuitPack2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.17			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.15			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.15			
1.1.1.1.7	thresholdAlert		o.15			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.15			
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			

NOTcircuitPack3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m			
1.1.2.1	AlarmSeverity		m			
1.1.2.1.1	clear		m			
1.1.2.1.2	indeterminate		m			
1.1.2.1.3	warning		m			
1.1.2.1.4	minor		m			
1.1.2.1.5	major		m			
1.1.2.1.6	critical		m			
1.1.3	trendIndication		o			
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o			
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o			
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o			
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			

NOTcircuitPack4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.7	threshold		o			
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		o.75			
1.1.7.1.2	AnalogThreshold		o.75			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o			
2	objectCreationReporting	idlcNotification 5	m	N	Ig	
2.1	CreateInfo		m			
2.1.1	NULL		o.12			
2.1.2	AdditionalInfo		o.12			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	objectDeletionReporting	idlcNotification 6	m	N	Ig	
3.1	DeleteInfo		m			
3.1.1	NULL		o.22			
3.1.2	AdditionalInfo		o.22			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	attributeChangeReportng	idlcNotification 1	m	N	Ig	
4.1	AttributeChangeInfo		m			
4.1.1	AttributeChange		m			
4.1.1.1	AttributeChange		m			
4.1.1.1.1	AttributeChangeList		m			
4.1.1.1.1.1	attributeId		m			
4.1.1.1.1.2	oldAttributeValue		o			
4.1.1.1.1.2.1	attributeId		m			
4.1.1.1.1.3	newAttributeValue		m			
4.1.1.1.1.3.1	attributeId		m			
4.1.1.1.1.4	modificationInd		m			
4.1.1.1.1.4.1	Modification		m			
4.1.1.1.1.4.1.1	replace		m			
4.1.1.1.1.4.1.2	add		m			
4.1.1.1.1.4.1.3	remove		m			
4.1.1.1.1.4.1.4	setToDefault		m			
4.1.1.1.1.4.1.5	internalOperation		m			
4.1.2	AdditionalInfo		o			
4.1.2.1	AdditionalInfo		m			
4.1.2.1.1	objectClass		m			
4.1.2.1.2	info		m			
4.1.2.1.2.1	objectClass		m			

14.4.6 PARAMETERS

PARcircuitPack — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
See Footnotes on next page.					

PARcircuitPack — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch does not send object specific errors with responses for analog lines.					
† If object specific errors are received, only the error type is considered.					
‡ The 5ESS®-2000 switch includes the error description in craft reports.					

14.5 CROSS CONNECTION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
crossConnection	idlcObjectClass 10

Are all mandatory features of the class supported? Yes No

14.5.1 NAME BINDING

NAMAcrossConnection — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	crossConnection-equipment	idlc-NameBinding 14	equipment	c	N
2	crossConnection-idlcTerminal	idlcNameBinding 15	idlcTerminal	c	N
3	crossConnection-networkElement	idlcNameBinding 16	networkElement	c	Y

NAMBcrossConnection — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	*
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	Y	
1.3	Create specific error support	x		
2	Delete Support	m	Y	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch creates cross connection objects for ISDN D channel, ISDN provisioned packet B channels, line terminations to DS0 channel termination for "nailed up" and "hair pinned" nonswitched services.				

14.5.2 ATTRIBUTES

ATTcrossConnection1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF crossConnection	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 10	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	df	
1	crossConnectionId	idlcAttribute 42	o	m	x	x	x	x	
			N	N					
2	fromTerminationId	idlcAttribute 172	m	m	m	x	x	x	
			Y	Y	N				
2.1	DistinguishedName		m	m	m	x	x	x	
			Y	Y					
3	toTerminationId	idlcAttribute 377	m	m	m	x	x	x	
			Y	Y	N				
3.1	DistinguishedName		m	m	m	x	x	x	
			Y	Y					
4	primaryServiceState	idlcAttribute 242	m	m	x	x	x	x	
			Y	N					
4.1	PrimaryServiceState		m	m	x	x	x	x	
			Y						
4.1.1	is		m	m	x	x	x	x	
			Y						
4.1.2	oos		m	m	x	x	x	x	
			N						
5	secondaryServiceState	idlcAttribute 298	m	m	x	x	x	x	
			Y	N					
5.1	SecondaryServiceState		m	m	x	x	x	x	
			N						
5.1.1	ts		o	m	x	x	x	x	
5.1.2	mt		o	m	x	x	x	x	
5.1.3	ma		o	m	x	x	x	x	
5.1.4	anr		o	m	x	x	x	x	
5.1.5	ueq		o	m	x	x	x	x	
5.1.6	fef		o	m	x	x	x	x	
5.1.7	busy		o	m	x	x	x	x	
5.1.8	lpbk		o	m	x	x	x	x	
5.1.9	mea		o	m	x	x	x	x	
5.1.10	mon		o	m	x	x	x	x	
5.1.11	pwr		o	m	x	x	x	x	
5.1.12	sea		o	m	x	x	x	x	
5.1.13	act		o	m	x	x	x	x	

ATTcrossConnection2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF crossConnection	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 10	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.14	ccsf		o	m	x	x	x	x	
5.1.15	comb		o	m	x	x	x	x	
5.1.16	dgn		o	m	x	x	x	x	
5.1.17	dsbld		o	m	x	x	x	x	
5.1.18	erranal		o	m	x	x	x	x	
5.1.19	ex		o	m	x	x	x	x	
5.1.20	faf		o	m	x	x	x	x	
5.1.21	fepro		o	m	x	x	x	x	
5.1.22	flt		o	m	x	x	x	x	
5.1.23	frcd		o	m	x	x	x	x	
5.1.24	hd		o	m	x	x	x	x	
5.1.25	hw		o	m	x	x	x	x	
5.1.26	inhip		o	m	x	x	x	x	
5.1.27	lkdo		o	m	x	x	x	x	
5.1.28	lock		o	m	x	x	x	x	
5.1.29	mtce		o	m	x	x	x	x	
5.1.30	mtcelim		o	m	x	x	x	x	
5.1.31	nm		o	m	x	x	x	x	
5.1.32	pctf		o	m	x	x	x	x	
5.1.33	pri		o	m	x	x	x	x	
5.1.34	prtcl		o	m	x	x	x	x	
5.1.35	sec		o	m	x	x	x	x	
5.1.36	stby		o	m	x	x	x	x	
5.1.37	termf		o	m	x	x	x	x	

ATTcrossConnection3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF crossConnection	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 10	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
5.1.38	tmt		o	m	x	x	x	x	
5.1.39	trd		o	m	x	x	x	x	
5.1.40	tstf		o	m	x	x	x	x	
5.1.41	sof		o	m	x	x	x	x	
5.1.42	swtch		o	m	x	x	x	x	
6	connectionType	idlcAttribute 40	m	m	m	x	x	m	
6.1	ConnectionType		Y	N	N				
6.1.1	oneWay		m	m	m	x	x	m	
6.1.2	twoWay		N						
7	redlined	idlcAttribute 284	m	m	m	x	x	x	
			Y	N	N				*
* Created as FALSE									

14.5.3 ATTRIBUTE GROUPS

No other attribute group is supported for *crossConnection* object class.

14.5.4 ACTIONS

ACTcrossConnection1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	roll		na	N	
2	remove	idlcAction 39	m	N	
2.1	RemoveArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
3	restore	idlcAction 44	m	N	
3.1	RestoreArguments		m		
3.1.1	mode		m		
3.1.1.1	Mode		m		
3.1.1.1.1	normal		m		
3.1.1.1.2	forced		m		
3.2	RestoreResult		o		
3.2.1	RestoringResult		o		
3.2.1.1	RestoringResult		m		
3.2.1.1.1	completed		m		
3.2.1.1.2	failedVerification		m		

14.5.5 NOTIFICATIONS

NOTcrossConnection — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	Ig	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	Ig	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	Ig	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.5.6 PARAMETERS

PARcrossConnection — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Y	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡

* The 5ESS®-2000 switch does not send object specific errors for cross connections.
† If object specific errors are received, only the error type is considered.
‡ The 5ESS®-2000 switch includes the error description craft reports.

14.6 DDS LINE TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL:FOR CLASS	VALUE OF OBJECT IDENTIFIER
ddsLineTermination	idlcObjectClass 13

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.6.1 NAME BINDING

NAMAddsLineTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	ddsLineTermination-equipment	idlcNameBinding 24	equipment	c	N
2	ddsLineTermination-networkElement	idlcNameBinding 25	networkElement	c	Y

NAMBddsLineTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch does not provision ddsLineTermination objects, expecting them to be provisioned by a supervisory system.				

14.6.2 ATTRIBUTES

ATTddsLineTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	ddsLineTermId	idlcAttribute 89	o	m	x	x	x	x	
			N	N					
2	dataRate	idlcAttribute 85	m	m	m	x	x	x	
			N	N	N				
2.1	DataRate		m	m	m	x	x	x	
2.1.1	rate24		m	m	m	x	x	x	
2.1.2	rate48		m	m	m	x	x	x	
2.1.3	rate96		m	m	m	x	x	x	
2.1.4	rate192		m	m	m	x	x	x	
2.1.5	rate384		m	m	m	x	x	x	
2.1.6	rate560		m	m	m	x	x	x	
3	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
			N	N	N	N	N		
3.1	AlarmSeverityAssignment		m	m	m	m	m	x	
3.1.1	problem		m	m	m	m	m	x	
3.1.1.1	ProblemType		m	m	m	m	m	x	
3.1.1.1.1	indeterminate		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.2	equipmentProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
3.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
3.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
3.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
3.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
3.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	

ATTddsLineTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
3.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
3.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
3.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
3.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
3.1.1.1.3	transmissionProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
3.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
3.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
3.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
3.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
3.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
3.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
3.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
3.1.1.1.4	environmentalProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
3.1.1.1.4.1.1	supportEntityAlarm		0.37	0.37	0.37	0.37	0.37	x	
3.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	

ATTddsLineTermination3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
3.1.1.1.4.1.2	sensorAlarm		0.37	0.37	0.37	0.37	0.37	x	
3.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
3.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	

ATTddsLineTermination4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfll
3.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
3.1.1.1.5	softwareProblemType		o.35	p.35	o.35	o.35	o.35	x	
3.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
3.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
3.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
3.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
3.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
3.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
3.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
3.1.1.1.6	serviceProblemType		o.35	p.35	o.35	o.35	o.35	x	
3.1.1.1.7	thresholdAlert		o.35	p.35	o.35	o.35	o.35	x	
3.1.1.1.7.1	ThresholdAlert		o.114	m	o.114	p.114	p.114	x	
3.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
3.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
3.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
3.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
3.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
3.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
3.1.1.1.8	scheduledMgmtOpnsProblemType		o.35	p.35	o.35	o.35	o.35	x	

ATTddsLineTermination5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfi
3.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
3.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
3.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
3.1.1.1.8.1.2.1	DistinguishedName		m						
3.1.1.1.8.1.3	problem		m	m	m	m	m	x	
3.1.2	alarmSeverityCode		m	m	m	m	m	x	
3.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
3.1.2.1.1	non-alarmed		m	m	m	m	m	x	
3.1.2.1.2	minor		m	m	m	m	m	x	
3.1.2.1.3	major		m	m	m	m	m	x	
3.1.2.1.4	critical		m	m	m	m	m	x	
4	lineCircuitAddress	idlcAttribute 208	o	m	x	x	x	x	
			N	N					
5	currentProblemList	idlcAttribute 59	c(5	c(5	x	x	x	x	
			N	N					
5.1	CurrentProblem		o	m	x	x	x	x	
(5 IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE n/a									

ATTddsLineTermination6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
5.1.1	problem		o	m	x	x	x	x	
5.1.1.1	ProblemType		o	m	x	x	x	x	
5.1.1.1.1	indeterminate		o.55	o.55	x	x	x	x	
5.1.1.1.2	equipmentProblemType		o.55	o.55	x	x	x	x	
5.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
5.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
5.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
5.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
5.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
5.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
5.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
5.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
5.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
5.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
5.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
5.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
5.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
5.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
5.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
5.1.1.1.3	transmissionProblemType		o.55	o.55	x	x	x	x	
5.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
5.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
5.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
5.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	

ATTddsLineTermination7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS				ADDITIONAL INFORMATION		
			SUPPORT						
			crt	get	rep	add		rem	dfi
5.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
5.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
5.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
5.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
5.1.1.1.4	environmentalProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
5.1.1.1.4.1.1	supportEntityAlarm		0.57	0.57	x	x	x	x	
5.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	

ATTddsLineTermination8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.1.1.4.1.2	sensorAlarm		0.57	0.57	x	x	x	x	
5.1.1.1.4.1.2.1	SensorAlarmList		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1	sensorAlarmType		0	o	x	x	x	x	
5.1.1.1.4.1.2.1.1.1	SensorAlarmType		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.1	fire		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.2	flood		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.3	highHumidity		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.4	highTemperature		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.5	lowFuel		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.6	lowHumidity		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.7	lowCablePressure		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.8	lowTemperature		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.9	lowWater		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.10	smoke		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.11	toxicGas		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.13	intrusionDetection		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.14	iceBuildUp		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.15	highWind		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.2	sensorId		0	m	x	x	x	x	
5.1.1.1.4.1.2.1.3	sensorLocation		0	o	x	x	x	x	
5.1.1.1.5	softwareProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.5.1	SoftwareProblemType		0	m	x	x	x	x	
5.1.1.1.5.1.1	storageCapacityProblem		0	m	x	x	x	x	

ATTddsLineTermination9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfi
5.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
5.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
5.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
5.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
5.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
5.1.1.1.6	serviceProblemType		o.55	o.55	x	x	x	x	
5.1.1.1.7	thresholdAlert		o.55	o.55	x	x	x	x	
5.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
5.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
5.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
5.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
5.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
5.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
5.1.1.1.7.1.2.2.1	Attribute		o	m	x	x	x	x	
5.1.1.1.8	scheduledMgmtOpnsProblemType		o.55	o.55	x	x	x	x	
5.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
5.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
5.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.6	litSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	

ATTddsLineTermination10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
5.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	
5.1.1.1.8.1.2.1	DistinguishedName		m						
5.1.1.1.8.1.3	problem		o	m	x	x	x	x	
5.1.2	problemState		o	m	x	x	x	x	
5.1.2.1	ProblemState		o	m	x	x	x	x	
5.1.2.1.1	active-pending		o	m	x	x	x	x	
5.1.2.1.2	active-reportable		o	m	x	x	x	x	
5.1.3	problemData		o	o	x	x	x	x	
5.1.3.1	ProblemData		o	m	x	x	x	x	
5.1.3.1.1	identifier		o	m	x	x	x	x	
5.1.3.1.2	critical		o	m	x	x	x	x	
5.1.3.1.3	item		o	m	x	x	x	x	
5.1.3.1.3.1	identifier		o	m	x	x	x	x	
6	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
6.1	EventReportControlId		m	m	m	m	m	x	
6.1.1	INTEGER		0.63	0.63	0.63	0.63	0.63	x	
6.1.2	PrintableString		0.63	0.63	0.63	0.63	0.63	x	
7	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x	
			N	N	N	N	N		
7.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x	
7.1.1	INTEGER		0.73	0.73	0.73	0.73	0.73	x	
7.1.2	PrintableString		0.73	0.73	0.73	0.73	0.73	x	
8	enableLPBK	idlcAttribute 127	o	o	o	x	x	x	
			N	N	N				
9	secondaryChannel	idlcAttribute 297	o	o	o	x	x	x	
			N	N	N				

ATTddsLineTermination11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ddsLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 13	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
10	errorCorrection	idlcAttribute 134	o	o	o	x	x	x	
			N	N	N				
11	callRefValue	idlcAttribute 31	c(11	c(11	x	x	x	x	
			N	N					
12	redlined	idlcAttribute 284	o	o	o	x	x	x	
			N	N	N				
13	allZeroCodeAllowed	idlcAttribute 12	o	o	o	x	x	x	
			N	N	N				
(11 IF RDT THEN m ELSE n/a									

14.6.3 ATTRIBUTE GROUPS

No other attribute group is supported for *ddsLineTermination* object class.

14.6.4 ACTIONS

No other action is supported for *ddsLineTermination* object class.

14.6.5 NOTIFICATIONS

NOTddsLineTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	N	*
1.1	EventInfo		m			
1.1.1	problemType		m			
1.1.1.1	ProblemType		m			
1.1.1.1.1	indeterminate		o.14			
1.1.1.1.2	equipmentProblemType		o.14			
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.14			
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.14			
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.16			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.16			
* No notifications are expected for DDS line terminations						

NOTddsLineTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.14			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.14			
1.1.1.1.7	thresholdAlert		o.14			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.14			
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			

NOTddsLineTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m			
1.1.2.1	AlarmSeverity		m			
1.1.2.1.1	clear		m			
1.1.2.1.2	indeterminate		m			
1.1.2.1.3	warning		m			
1.1.2.1.4	minor		m			
1.1.2.1.5	major		m			
1.1.2.1.6	critical		m			
1.1.3	trendIndication		o			
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o			
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o			
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o			
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o			
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		o.74			
1.1.7.1.2	AnalogThreshold		o.74			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o			

14.6.6 PARAMETERS

No other parameter is supported for *ddsLineTermination* object class.

14.7 DISCRIMINATOR

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
discriminator	idlcObjectClass 15

Are all mandatory features of the class supported? Yes No

14.7.1 ATTRIBUTES

ATTdiscriminator1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF discriminator	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 15	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
1	discriminatorConstruct	idlcAttribute 98	m	m	m	x	x	x	
			Y	N	Y				
1.1	CMISFilter		m	m	m	x	x	x	*
			Y	N	Y				
2	beginTime	idlcAttribute 26	m	m	m	x	x	x	†
			Y	N	N				
2.1	BeginTime		m	m	m	x	x	x	
			N						
2.1.1	absolute		0.23	0.23	0.23	x	x	x	
2.1.2	periodic		0.23	0.23	0.23	x	x	x	
2.1.2.1	TimeOfDay		m	m	m	x	x	x	
2.1.2.1.1	hour		m	m	m	x	x	x	
<p>* The filter for DS1 PM alerts is: not {ds1FramedPathTermId PRESENT}</p> <p>The filter for DSL PM alerts is: not{and {isdnFramedPathTermId PRESENT}, {problemType EQUALITY CHOICE{ThresholdAlert, anyThresholdAlert}}</p> <p>Using the following extension ThresholdAlert ::= CHOICE{ anyThresholdAlert NULL, specificThresholdAlert SEQUENCE { triggeredThreshold Attribute, triggeredAttribute Attribute OPTIONAL } }</p> <p>† beginTime = NULL</p>									

ATTdiscriminator2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF discriminator	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 15	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
2.1.2.1.2	minute		m	m	m	x	x	x	
2.1.2.1.3	second		m	m	m	x	x	x	
2.1.3	immediate		o.23	o.23	o.23	x	x	x	
3	discriminatorState	idlcAttribute 99	m	m	m	x	x	m	
			Y	N	Y			N	
4	endTime	idlcAttribute 128	m	m	m	x	x	m	*
			Y	N	N			N	
4.1	EndTime		m	m	m	x	x	m	
			N						
4.1.1	absolute		o.43	o.43	o.43	x	x	o.43	
4.1.2	periodic		o.43	o.43	o.43	x	x	o.43	
4.1.2.1	TimeOfDay		m	m	m	x	x	m	
4.1.2.1.1	hour		m	m	m	x	x	m	
4.1.2.1.2	minute		m	m	m	x	x	m	
4.1.2.1.3	second		m	m	m	x	x	m	
4.1.3	noEnding		o.43	o.43	o.43	x	x	o.43	
5	managementUserId	idlcAttribute 213	m	m	m	x	x	x	
			Y	N	N				
5.1	AE-Title		m	m	m	x	x	x	†
			Y						
* endTime = NULL									
† RT/network element									

14.7.2 ATTRIBUTE GROUPS

No other attribute group is supported for *discriminator* object class.

14.7.3 ACTIONS

No other action is supported for *discriminator* object class.

14.7.4 NOTIFICATIONS

No other notification is supported for *discriminator* object class.

14.7.5 PARAMETERS

No other parameter is supported for *discriminator* object class.

14.8 DS0 CHANNEL TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
ds0ChannelTermination	idlcObjectClass 16

Are all mandatory features of the class supported? Yes No

Note: Refer to *channelTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.8.1 NAME BINDING

NAMAds0ChannelTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	ds0ChannelTermination-ddsLineTermination	idlcNameBinding 105	ddsLineTermination	c	Y
2	ds0ChannelTermination-ds1FramedPathTermination	idlcNameBinding 29	ds1FramedPathTermination	c	Y
3	ds0ChannelTermination-isdn3DS0FramedPathTermination	idlcNameBinding 30	isdn3DS0FramedPathTermination	c	N
4	ds0ChannelTermination-isdnFramedPathTermination	idlcNameBinding 31	isdnFramedPathTermination	c	Y

NAMBds0ChannelTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	*
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	N	
1.3	Create specific error support	x		
2	Delete Support	m	Y	†
2.1	Only if no contained objects	m	N	
2.2	Delete contained objects	x		
2.3	Delete specific error support	m	N	

* DS0 channel terminations associated with an ISDN framed path termination are created by the 5ESS®-2000 switch as needed. DS0 channel terminations associated with DS1 framed path terminations are not created by the 5ESS®-2000 switch, and must be created inherently by the RDT or a supervisory system.

† Only DS0 channel terminations associated with an ISDN framed path termination are deleted.

14.8.2 ATTRIBUTES

ATTds0ChannelTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds0ChannelTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 16	STATUS						ADDITIONAL INFOMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	ds0ChannelTermId	idlcAttribute 118	o	m	x	x	x	x	
			N	N					
2	robbedBitSignal	idlcAttribute 293	o	o	o	x	x	x	
			N	N	N				
2.1	RobbedBitSignal		m	m	m	x	x	x	
2.1.1	transparent		m	m	m	x	x	x	
2.1.2	a		m	m	m	x	x	x	
2.1.3	ab		m	m	m	x	x	x	
2.1.4	abcd		m	m	m	x	x	x	
3	disconnectTC	idlcAttribute 91	o	o	o	x	x	x	
			N	N	N				
3.1	TrunkCondition		m	m	m	x	x	x	
4	disconnectIW	idlcAttribute 90	o	o	o	x	x	x	
			N	N	N				
4.1	InsertionWord		m	m	m	x	x	x	
4.1.1	user-defined		o.43	o.43	o.43	x	x	x	
4.1.2	std-code		o.43	o.43	o.43	x	x	x	
4.1.2.1	StdCode		m	m	m	x	x	x	
4.1.2.1.1	trb		m	m	m	x	x	x	
4.1.2.1.2	mux		m	m	m	x	x	x	
5	troubleTC	idlcAttribute 385	o	o	o	x	x	x	
			N	N	N				
5.1	TrunkCondition		m	m	m	x	x	x	
6	troubleIW	idlcAttribute 384	o	o	o	x	x	x	
			N	N	N				
6.1	InsertionWord		m	m	m	x	x	x	
6.1.1	user-defined		o.63	o.63	o.63	x	x	x	

ATTds0ChannelTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds0ChannelTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 16	STATUS SUPPORT						ADDITIONAL INFOMATION
			crt	get	rep	add	rem	dfi	
			6.1.2	std-code		o.63	o.63	o.63	
6.1.2.1	StdCode		m	m	m	x	x	x	
6.1.2.1.1	trb		m	m	m	x	x	x	
6.1.2.1.2	mux		m	m	m	x	x	x	
7	chanIdentification	idlcAttribute 34	o	o	x	x	x	x	
7.1	ChanIdentification		N	N					
7.1.1	timeSlot		o	m	x	x	x	x	
7.1.2	channelType		o	m	x	x	x	x	
7.1.2.1	ChannelType		o	m	x	x	x	x	
7.1.2.1.1	b1		o	m	x	x	x	x	
7.1.2.1.2	b2		o	m	x	x	x	x	
7.1.2.1.3	d		o	m	x	x	x	x	
8	farEndAddress	idlcAttribute 169	c(8	c(8	c(8	x	x	x	
8.1	DistinguishedName		N	N	N				
			m	m	m	x	x	x	

(8 IF Integrated Network Access (INA) using a DS0 cross connect between the IDT and the RDT is in the IDLC system THEN m ELSE na

14.8.3 ATTRIBUTE GROUPS

No other attribute group is supported for *ds0ChannelTermination* object class.

14.8.4 ACTIONS

ACTds0ChannelTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	N	*
1.1	RemoveArguments		m		
1.1.1	mode		m		
1.1.1.1	Mode		m		
1.1.1.1.1	normal		m		
1.1.1.1.2	forced		m		
2	restore	idlcAction 44	m	N	
2.1	RestoreArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
2.2	RestoreResult		o		
2.2.1	RestoringResult		o		
2.2.1.1	RestoringResult		m		
2.2.1.1.1	completed		m		
2.2.1.1.2	failedVerification		m		
* The 5ESS®-2000 switch does not remove/restore DS0 channel terminations.					

14.8.5 NOTIFICATIONS

No other notification is supported for *ds0ChannelTermination* object class.

14.8.6 PARAMETERS

PARds0ChannelTermination — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	

See Footnotes on next page.

PARds0ChannelTermination — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch does not send object specific errors with responses for DS0 channels.					
† If object specific errors are received, only the error type is considered.					
‡ The 5ESS®-2000 switch includes the error description in craft reports.					

14.9 DS1 FRAMED PATH TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
ds1FramedPathTermination	idlcObjectClass 17

Are all mandatory features of the class supported? Yes No

Note: Refer to *framedPathTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.9.1 NAME BINDING

NAMAds1FramedPathTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	ds1FramedPathTermination-ds1LineTermination	idlcNameBinding 32	ds1LineTermination	c	Y

NAMBds1FramedPathTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	m(2.1)		
2.2	Delete contained objects	x		
2.3	Delete specific error support	m		
* The 5ESS®-2000 switch expects that ds1FramedPathTermination objects are either created inherently or by a supervisory system.				
(2.1 IF associated protectionGroupUnit object instance is not deleted THEN x ELSE m.				

14.9.2 ATTRIBUTES

ATTds1FramedPathTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			o	get	rep	add	rem	dfi	
1	ds1FramedPathTermId	idlcAttribute 120	o	m	x	x	x	x	*
			N	N					
2	ds1FrameFormat	idlcAttribute 119	m	m	m	x	x	x	
			N	N	N				
3	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
			N	N	N	N	N		
3.1	AlarmSeverityAssignment		m	m	m	m	m	x	
3.1.1	problem		m	m	m	m	m	x	
3.1.1.1	ProblemType		m	m	m	m	m	x	
3.1.1.1.1	indeterminate		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.2	equipmentProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
3.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
3.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
3.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
3.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
3.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
3.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
3.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
3.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
3.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
3.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	

* Must be equal to ds1Line TerminationId of the containing object.

ATTds1FramedPathTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.1.1.3	transmissionProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
3.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
3.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
3.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
3.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
3.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
3.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
3.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
3.1.1.1.4	environmentalProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
3.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
3.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	

ATTds1FramedPathTermination3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
3.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
3.1.1.1.4.1.2	sensorAlarm		0.7	0.7	0.7	0.7	0.7	x	
3.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
3.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	

ATTds1FramedPathTermination4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	df	
3.1.1.1.4.1.2.1.1.1.14	IceBuildUp		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
3.1.1.1.5	softwareProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
3.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
3.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
3.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
3.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
3.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
3.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
3.1.1.1.6	serviceProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.7	thresholdAlert		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
3.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
3.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
3.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
3.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
3.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
3.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
3.1.1.1.8	scheduledMgmtOpnsProblemType		0.35	0.35	0.35	0.35	0.35	x	
3.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
3.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
3.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	

ATTds1FramedPathTermination5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crf	get	rep	add	rem	dfi	
3.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
3.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
3.1.1.1.8.1.3	problem		m	m	m	m	m	x	
3.1.2	alarmSeverityCode		m	m	m	m	m	x	
3.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
3.1.2.1.1	non-alarmed		m	m	m	m	m	x	
3.1.2.1.2	minor		m	m	m	m	m	x	
3.1.2.1.3	major		m	m	m	m	m	x	
3.1.2.1.4	critical		m	m	m	m	m	x	
4	sequence	idlcAttribute 347	o	o	o	x	x	x	
			N	N	N				
4.1	Sequence		m	m	m	x	x	x	
4.1.1	d4		m	m	m	x	x	x	
4.1.2	d1d		m	m	m	x	x	x	
4.1.3	d2		m	m	m	x	x	x	

ATTds1FramedPathTermination6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cert	get	rep	add	rem	df1	
5	timingSource	idlcAttribute 376	o	o	o	x	x	x	
			N	N	N				
5.1	TimingSource		m	m	m	x	x	x	
5.1.1	internal		m	m	m	x	x	x	
5.1.2	loop		m	m	m	x	x	x	
5.1.3	through		m	m	m	x	x	x	
6	inhibitPM	idlcAttribute 177	m	m	m	x	x	x	
			N	N	N				
7	protectionGroupPointer	idlcAttribute 248	o	o	o	x	x	x	
			N	N	N				
7.1	ProtectionGroupPointer		m	m	m	x	x	x	
7.1.1	NULL		o.73	o.73	o.73	x	x	x	
7.1.2	DistinguishedName		o.73	o.73	o.73	x	x	x	
8	ds1PathThDefProfileId	idlcAttribute 124	o	o	o	x	x	x	
			N	N	N				
9	azLocality	idlcAttribute 20	o	o	o	x	x	x	
			N	N	N				
9.1	AZLocality		m	m	m	x	x	x	
9.1.1	a		m	m	m	x	x	x	
9.1.2	z		m	m	m	x	x	x	
10	apsBerThreshold	idlcAttribute 15	o	o	o	x	x	x	
			N	Y	Y				
11	currentProblemList	idlcAttribute 59	c(11	c(11	x	x	x	x	
			N	N					
11.1	CurrentProblem		o	m	x	x	x	x	
11.1.1	problem		o	m	x	x	x	x	
11.1.1.1	ProblemType		o	m	x	x	x	x	
11.1.1.1.1	indeterminate		o.115	o.115	x	x	x	x	
11.1.1.1.2	equipmentProblemType		o.115	o.115	x	x	x	x	
11.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
(11 If the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE n/a									

ATTds1FramedPathTermination7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
11.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
11.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
11.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
11.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
11.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
11.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
11.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
11.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
11.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
11.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
11.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
11.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
11.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
11.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
11.1.1.1.3	transmissionProblemType		o.115	o.115	x	x	x	x	
11.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
11.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
11.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
11.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
11.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
11.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
11.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
11.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	

ATTds1FramedPathTermination8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			o.115	o.115	rep	add	rem	dfi	
11.1.1.1.4	environmentalProblemType		o.115	o.115	x	x	x	x	
11.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
11.1.1.1.4.1.1	supportEntityAlarm		o.7	o.7	x	x	x	x	
11.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
11.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	
11.1.1.1.4.1.2	sensorAlarm		o.7	o.7	x	x	x	x	
11.1.1.1.4.1.2.1	SensorAlarmList		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	x	x	x	x	

ATTds1FramedPathTermination9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
11.1.1.1.4.1.2.1.1.1	SensorAlarmType		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
11.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
11.1.1.1.5	softwareProblemType		o.115	o.115	x	x	x	x	
11.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
11.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
11.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
11.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	

ATTds1FramedPathTermination10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	get	rep	add	rem		df
11.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
11.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
11.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
11.1.1.1.6	serviceProblemType		p.115	p.115	x	x	x	x	
11.1.1.1.7	thresholdAlert		p.115	p.115	x	x	x	x	
11.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
11.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
11.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
11.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
11.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
11.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
11.1.1.1.7.1.2.2.1	Attribute		o	m	x	x	x	x	
11.1.1.1.8	scheduledMgmtOpnsProblemType		p.115	p.115	x	x	x	x	
11.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
11.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
11.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.6	fitSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
11.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	

ATTds1FramedPathTermination11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
11.1.1.1.8.1.2.1	DistinguishedName		o	m	x	x	x	x	
11.1.1.1.8.1.3	problem		o	m	x	x	x	x	
11.1.2	problemState		o	m	x	x	x	x	
11.1.2.1	ProblemState		o	m	x	x	x	x	
11.1.2.1.1	active-pending		o	m	x	x	x	x	
11.1.2.1.2	active-reportable		o	m	x	x	x	x	
11.1.3	problemData		o	o	x	x	x	x	
11.1.3.1	ProblemData		o	m	x	x	x	x	
11.1.3.1.1	identifier		o	m	x	x	x	x	
11.1.3.1.2	critical		o	m	x	x	x	x	
11.1.3.1.3	item		o	m	x	x	x	x	
11.1.3.1.3.1	identifier		o	m	x	x	x	x	
12	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
12.1	EventReportControlId		m	m	m	m	m	x	
12.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
12.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
13	inputCommandControlPointers	idlcAttribute 181	o	o	o	o	o	x	
			N	N	N	N	N		
13.1	InputCommandControlId		m	m	m	m	m	x	
13.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
13.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
14	perfMonReportSchedPointers	idlcAttribute 236	o	o	o	o	o	x	
			N	N	N	N	N		
14.1	PMReportScheduleId		m	m	m	m	m	x	
14.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
14.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	

ATTds1FramedPathTermination12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
15	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x	
			N	N	N	N	N		
15.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x	
15.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
15.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
16	cvMinThreshold	idlcAttribute 71	o	o	o	x	x	x	
			N	N	N				
17	cvMinCurrent	idlcAttribute 68	o	o	o	x	x	x	
			N	Y	Y				
17.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
17.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
17.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
17.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
18	cvMinPrevious	idlcAttribute 70	o	o	o	x	x	x	
			N	Y	Y				
18.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
18.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
18.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
18.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
19	cvMinHistory	idlcAttribute 69	o	o	o	x	x	x	
			N	N	N				
19.1	HistoryCountMeasure		m	m	m	x	x	x	
19.1.1	countMeasure		m	m	m	x	x	x	
19.1.1.1	CountMeasure		m	m	m	x	x	x	
19.1.1.1.1	fullAccumulate		0.195	0.195	0.195	x	x	x	
19.1.1.1.2	partialAccumulate		0.195	0.195	0.195	x	x	x	
19.1.1.1.3	corruptedCount		0.195	0.195	0.195	x	x	x	
19.1.2	age		m	m	m	x	x	x	
20	cvHrThreshold	idlcAttribute 67	o	o	o	x	x	x	
			N	N	N				

ATTds1FramedPathTermination13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
21	cvHrCurrent	idlcAttribute 64	m	m	m	x	x	x	
			N	N	N				
21.1	CountMeasure		m	m	m	x	x	x	
21.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
21.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
21.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
22	cvHrPrevious	idlcAttribute 66	m	m	m	x	x	x	
			N	N	N				
22.1	CountMeasure		m	m	m	x	x	x	
22.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
22.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
22.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
23	cvHrHistory	idlcAttribute 65	o	o	o	x	x	x	
			N	N	N				
23.1	HistoryCountMeasure		m	m	m	x	x	x	
23.1.1	countMeasure		m	m	m	x	x	x	
23.1.1.1	CountMeasure		m	m	m	x	x	x	
23.1.1.1.1	fullAccumulate		0.235	0.235	0.235	x	x	x	
23.1.1.1.2	partialAccumulate		0.235	0.235	0.235	x	x	x	
23.1.1.1.3	corruptedCount		0.235	0.235	0.235	x	x	x	
23.1.2	age		m	m	m	x	x	x	
24	cvDayThreshold	idlcAttribute 63	o	o	o	x	x	x	
			N	N	N				
25	cvDayCurrent	idlcAttribute 60	m	m	m	x	x	x	
			N	Y	Y				
25.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
25.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
25.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
25.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				

ATTds1FramedPathTermination14 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
26	cvDayPrevious	idlcAttribute 62	m	m	m	x	x	x	
			N	Y	Y				
26.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
26.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
26.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
26.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
27	cvDayHistory	idlcAttribute 61	o	o	o	x	x	x	
			N	N	N				
27.1	HistoryCountMeasure		m	m	m	x	x	x	
27.1.1	countMeasure		m	m	m	x	x	x	
27.1.1.1	CountMeasure		m	m	m	x	x	x	
27.1.1.1.1	fullAccumulate		0.275	0.275	0.275	x	x	x	
27.1.1.1.2	partialAccumulate		0.275	0.275	0.275	x	x	x	
27.1.1.1.3	corruptedCount		0.275	0.275	0.275	x	x	x	
27.1.2	age		m	m	m	x	x	x	
28	cvFeMinThreshold	idlcAttribute 83	o	o	o	x	x	x	
			N	N	N				
29	cvFeMinCurrent	idlcAttribute 80	o	o	o	x	x	x	
			N	N	N				
29.1	CountMeasure		m	m	m	x	x	x	
29.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
29.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
29.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
30	cvFeMinPrevious	idlcAttribute 82	o	o	o	x	x	x	
			N	N	N				
30.1	CountMeasure		m	m	m	x	x	x	
30.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
30.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
30.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

ATTds1FramedPathTermination15 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
31	cvFeMinHistory	idlcAttribute 81	o	o	o	x	x	x	
			N	N	N				
31.1	HistoryCountMeasure		m	m	m	x	x	x	
31.1.1	countMeasure		m	m	m	x	x	x	
31.1.1.1	CountMeasure		m	m	m	x	x	x	
31.1.1.1.1	fullAccumulate		0.315	0.315	0.315	x	x	x	
31.1.1.1.2	partialAccumulate		0.315	0.315	0.315	x	x	x	
31.1.1.1.3	corruptedCount		0.315	0.315	0.315	x	x	x	
31.1.2	age		m	m	m	x	x	x	
32	cvFeHrThreshold	idlcAttribute 79	o	o	o	x	x	x	
			N	N	N				
33	cvFeHrCurrent	idlcAttribute 76	m	m	m	x	x	x	
			N	N	N				
33.1	CountMeasure		m	m	m	x	x	x	
33.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
33.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
33.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
34	cvFeHrPrevious	idlcAttribute 78	m	m	m	x	x	x	
			N	N	N				
34.1	CountMeasure		m	m	m	x	x	x	
34.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
34.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
34.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
35	cvFeHrHistory	idlcAttribute 77	o	o	o	x	x	x	
			N	N	N				
35.1	HistoryCountMeasure		m	m	m	x	x	x	
35.1.1	countMeasure		m	m	m	x	x	x	
35.1.1.1	CountMeasure		m	m	m	x	x	x	
35.1.1.1.1	fullAccumulate		0.355	0.355	0.355	x	x	x	

ATTds1FramedPathTermination16 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
35.1.1.1.2	partialAccumulate		o.355	o.355	o.355	x	x	x	
35.1.1.1.3	corruptedCount		o.355	o.355	o.355	x	x	x	
35.1.2	age		m	m	m	x	x	x	
36	cvFeDayThreshold	idlcAttribute 75	o	o	o	x	x	x	
			N	N	N				
37	cvFeDayCurrent	idlcAttribute 72	m	m	m	x	x	x	
			N	N	N				
37.1	CountMeasure		m	m	m	x	x	x	
37.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
37.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
37.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
38	cvFeDayPrevious	idlcAttribute 74	m	m	m	x	x	x	
			N	N	N				
38.1	CountMeasure		m	m	m	x	x	x	
38.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
38.1.2	PartialAccumulate		o.3	o.3	o.3	x	x	x	
38.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
39	cvFeDayHistory	idlcAttribute 73	o	o	o	x	x	x	
			N	N	N				
39.1	HistoryCountMeasure		m	m	m	x	x	x	
39.1.1	countMeasure		m	m	m	x	x	x	
39.1.1.1	CountMeasure		m	m	m	x	x	x	
39.1.1.1.1	fullAccumulate		o.395	o.395	o.395	x	x	x	
39.1.1.1.2	partialAccumulate		o.395	o.395	o.395	x	x	x	
39.1.1.1.3	corruptedCount		o.395	o.395	o.395	x	x	x	
39.1.2	age		m	m	m	x	x	x	
40	esMinThreshold	idlcAttribute 146	m	m	m	x	x	x	
			N	Y	Y				

ATTds1FramedPathTermination17 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
41	esMinCurrent	idlcAttribute 143	m	m	m	x	x	x	
			N	Y	Y				
41.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
41.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
41.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
41.1.3	corruptedCount0.3	0.3	x	x	x				
				Y	Y				
42	esMinPrevious	idlcAttribute 145	m	m	m	x	x	x	
			N	Y	Y				
42.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
42.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
42.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
42.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
43	esMinHistory	idlcAttribute 144	m	m	m	x	x	x	
			N	Y	Y				
43.1	HistoryCountMeasure		m	m	m	x	x	x	
				Y	Y				
43.1.1	countMeasure		m	m	m	x	x	x	
				Y	Y				
43.1.1.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
43.1.1.1.1	fullAccumulate		0.435	0.435	0.435	x	x	x	
				Y	Y				
43.1.1.1.2	partialAccumulate		0.435	0.435	0.435	x	x	x	
				Y	Y				
43.1.1.1.3	corruptedCount		0.435	0.435	0.435	x	x	x	
				Y	Y				
43.1.2	age		m	m	m	x	x	x	
				Y	Y				
44	esHrThreshold	idlcAttribute 142	m	m	m	x	x	x	
			N	N	N				
45	esHrCurrent	idlcAttribute 139	m	m	m	x	x	x	
			N	N	N				
45.1	CountMeasure		m	m	m	x	x	x	
45.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
45.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
45.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

ATTds1FramedPathTermination18 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
46	esHrPrevious	idlcAttribute 141	m	m	m	x	x	x	
			N	N	N				
46.1	CountMeasure		m	m	m	x	x	x	
46.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
46.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
46.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
47	esHrHistory	idlcAttribute 140	m	m	m	x	x	x	
			N	N	N				
47.1	HistoryCountMeasure		m	m	m	x	x	x	
47.1.1	countMeasure		m	m	m	x	x	x	
47.1.1.1	CountMeasure		m	m	m	x	x	x	
47.1.1.1.1	fullAccumulate		0.475	0.475	0.475	x	x	x	
47.1.1.1.2	partialAccumulate		0.475	0.475	0.475	x	x	x	
47.1.1.1.3	corruptedCount		0.475	0.475	0.475	x	x	x	
47.1.2	age		m	m	m	x	x	x	
48	esDayThreshold	idlcAttribute 138	m	m	m	x	x	x	
			N	Y	Y				
49	esDayCurrent	idlcAttribute 135	m	m	m	x	x	x	
			N	Y	Y				
49.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
49.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
49.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
49.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
50	esDayPrevious	idlcAttribute 137	m	m	m	x	x	x	
			N	Y	Y				
50.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
50.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
50.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
50.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				

ATTds1FramedPathTermination19 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
51	esDayHistory	idlcAttribute 136	m	m	m	x	x	x	
			N	N	N				
51.1	HistoryCountMeasure		m	m	m	x	x	x	
51.1.1	countMeasure		m	m	m	x	x	x	
51.1.1.1	CountMeasure		m	m	m	x	x	x	
51.1.1.1.1	fullAccumulate		0.515	0.515	0.515	x	x	x	
51.1.1.1.2	partialAccumulate		0.515	0.515	0.515	x	x	x	
51.1.1.1.3	corruptedCount		0.515	0.515	0.515	x	x	x	
51.1.2	age		m	m	m	x	x	x	
52	esFeMinThreshold	idlcAttribute 158	m	m	m	x	x	x	
			N	N	N				
53	esFeMinCurrent	idlcAttribute 155	m	m	m	x	x	x	
53.1	CountMeasure		N	N	N				
			m	m	m	x	x	x	
53.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
53.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
53.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
54	esFeMinPrevious	idlcAttribute 157	m	m	m	x	x	x	
			N	N	N				
54.1	CountMeasure		m	m	m	x	x	x	
54.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
54.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
54.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
55	esFeMinHistory	idlcAttribute 156	m	m	m	x	x	x	
			N	N	N				
55.1	HistoryCountMeasure		m	m	m	x	x	x	
55.1.1	countMeasure		m	m	m	x	x	x	
55.1.1.1	CountMeasure		m	m	m	x	x	x	

ATTds1FramedPathTermination20 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
55.1.1.1.1	fullAccumulate		0.555	0.555	0.555	x	x	x	
55.1.1.1.2	partialAccumulate		0.555	0.555	0.555	x	x	x	
55.1.1.1.3	corruptedCount		0.555	0.555	0.555	x	x	x	
55.1.2	age		m	m	m	x	x	x	
56	esFeHrThreshold	idlcAttribute 154	m	m	m	x	x	x	
			N	N	N				
57	esFeHrCurrent	idlcAttribute 151	m	m	m	x	x	x	
			N	N	N				
57.1	CountMeasure		m	m	m	x	x	x	
57.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
57.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
57.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
58	esFeHrPrevious	idlcAttribute 153	m	m	m	x	x	x	
			N	N	N				
58.1	CountMeasure		m	m	m	x	x	x	
58.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
58.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
58.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
59	esFeHrHistory	idlcAttribute 152	m	m	m	x	x	x	
			N	N	N				
59.1	HistoryCountMeasure		m	m	m	x	x	x	
59.1.1	countMeasure		m	m	m	x	x	x	
59.1.1.1	CountMeasure		m	m	m	x	x	x	
59.1.1.1.1	fullAccumulate		0.595	0.595	0.595	x	x	x	
59.1.1.1.2	partialAccumulate		0.595	0.595	0.595	x	x	x	
59.1.1.1.3	corruptedCount		0.595	0.595	0.595	x	x	x	
59.1.2	age		m	m	m	x	x	x	
60	esFeDayThreshold	idlcAttribute 150	m	m	m	x	x	x	
			N	N	N				

ATTds1FramedPathTermination21 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
61	esFeDayCurrent	idlcAttribute 147	m	m	m	x	x	x	
			N	N	N				
61.1	CountMeasure		m	m	m	x	x	x	
61.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
61.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
61.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
62	esFeDayPrevious	idlcAttribute 149	m	m	m	x	x	x	
			N	N	N				
62.1	CountMeasure		m	m	m	x	x	x	
62.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
62.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
62.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
63	esFeDayHistory	idlcAttribute 148	m	m	m	x	x	x	
			N	N	N				
63.1	HistoryCountMeasure		m	m	m	x	x	x	
63.1.1	countMeasure		m	m	m	x	x	x	
63.1.1.1	CountMeasure		m	m	m	x	x	x	
63.1.1.1.1	fullAccumulate		0.635	0.635	0.635	x	x	x	
63.1.1.1.2	partialAccumulate		0.635	0.635	0.635	x	x	x	
63.1.1.1.3	corruptedCount		0.635	0.635	0.635	x	x	x	
63.1.2	age		m	m	m	x	x	x	
64	lineESFeMinThreshold	idlcAttribute 206	o	o	o	x	x	x	
			N	N	N				
65	lineESFeMinCurrent	idlcAttribute 203	o	o	o	x	x	x	
			N	N	N				
66	lineESFeMinPrevious	idlcAttribute 205	o	o	o	x	x	x	
			N	N	N				
66.1	CountMeasure		m	m	m	x	x	x	
66.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
66.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	

ATTds1FramedPathTermination22 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
66.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
67	lineESFeMinHistory	idlcAttribute 204	o	o	o	x	x	x	
67.1	HistoryCountMeasure		N	N	N				
67.1.1	countMeasure		m	m	m	x	x	x	
67.1.1.1	CountMeasure		m	m	m	x	x	x	
67.1.1.1.1	fullAccumulate		o.675	o.675	o.675	x	x	x	
67.1.1.1.2	partialAccumulate		o.675	o.675	o.675	x	x	x	
67.1.1.1.3	corruptedCount		o.675	o.675	o.675	x	x	x	
67.1.2	age		m	m	m	x	x	x	
68	lineESFeHrThreshold	idlcAttribute 202	o	o	o	x	x	x	
69	lineESFeHrCurrent	idlcAttribute 199	N	N	N				
70	lineESFeHrPrevious	idlcAttribute 201	m	m	m	x	x	x	
70.1	CountMeasure		N	N	N				
70.1.1	fullAccumulate		m	m	m	x	x	x	
70.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
70.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
71	lineESFeHrHistory	idlcAttribute 200	o	o	o	x	x	x	
71.1	HistoryCountMeasure		N	N	N				
71.1.1	countMeasure		m	m	m	x	x	x	
71.1.1.1	CountMeasure		m	m	m	x	x	x	
71.1.1.1.1	fullAccumulate		o.715	o.715	o.715	x	x	x	
71.1.1.1.2	partialAccumulate		o.715	o.715	o.715	x	x	x	
71.1.1.1.3	corruptedCount		o.715	o.715	o.715	x	x	x	
71.1.2	age		m	m	m	x	x	x	

ATTds1FramedPathTermination23 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
72	lineESFeDayThreshold	idlcAttribute 198	o	o	o	x	x	x	
			N	N	N				
73	lineESFeDayCurrent	idlcAttribute 195	m	m	m	x	x	x	
			N	N	N				
74	lineESFeDayPrevious	idlcAttribute 197	m	m	m	x	x	x	
			N	N	N				
74.1	CountMeasure		m	m	m	x	x	x	
74.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
74.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
74.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
75	lineESFeDayHistory	idlcAttribute 196	o	o	o	x	x	x	
			N	N	N				
75.1	HistoryCountMeasure		m	m	m	x	x	x	
75.1.1	countMeasure		m	m	m	x	x	x	
75.1.1.1	CountMeasure		m	m	m	x	x	x	
75.1.1.1.1	fullAccumulate		0.755	0.755	0.755	x	x	x	
75.1.1.1.2	partialAccumulate		0.755	0.755	0.755	x	x	x	
75.1.1.1.3	corruptedCount		0.755	0.755	0.755	x	x	x	
75.1.2	age		m	m	m	x	x	x	
76	sesMinThreshold	idlcAttribute 346	m	m	m	x	x	x	
			N	Y	Y				
77	sesMinCurrent	idlcAttribute 343	m	m	m	x	x	x	
			N	Y	Y				
77.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
77.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
77.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
77.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
78	sesMinPrevious	idlcAttribute 345	m	m	m	x	x	x	
			N	Y	Y				
78.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
78.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				

ATTds1FramedPathTermination24 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
78.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
				Y	Y				
78.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
				Y	Y				
79	sesMinHistory	idlcAttribute 344	m	m	m	x	x	x	
			N	Y	Y				
79.1	HistoryCountMeasure		m	m	m	x	x	x	
				Y	Y				
79.1.1	countMeasure		m	m	m	x	x	x	
				Y	Y				
79.1.1.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
79.1.1.1.1	fullAccumulate		o.795	o.795	o.795	x	x	x	
				Y	Y				
79.1.1.1.2	partialAccumulate		o.795	o.795	o.795	x	x	x	
				Y	Y				
79.1.1.1.3	corruptedCount		o.795	o.795	o.795	x	x	x	
				Y	Y				
79.1.2	age		m	m	m	x	x	x	
				Y	Y				
80	sesHrThreshold	idlcAttribute 342	m	m	m	x	x	x	
			N	N	N				
81	sesHrCurrent	idlcAttribute 339	m	m	m	x	x	x	
			N	N	N				
81.1	CountMeasure		m	m	m	x	x	x	
81.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
81.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
81.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
82	sesHrPrevious	idlcAttribute 341	m	m	m	x	x	x	
			N	N	N				
82.1	CountMeasure		m	m	m	x	x	x	
82.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
82.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
82.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
83	sesHrHistory	idlcAttribute 340	m	m	m	x	x	x	
			N	N	N				
83.1	HistoryCountMeasure		m	m	m	x	x	x	
83.1.1	countMeasure		m	m	m	x	x	x	

ATTds1FramedPathTermination25 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
83.1.1.1	CountMeasure		m	m	m	x	x	x	
83.1.1.1.1	fullAccumulate		0.835	0.835	0.835	x	x	x	
83.1.1.1.2	partialAccumulate		0.835	0.835	0.835	x	x	x	
83.1.1.1.3	corruptedCount		0.835	0.835	0.835	x	x	x	
83.1.2	age		m	m	m	x	x	x	
84	sesDayThreshold	idlcAttribute 326	m N	m Y	m Y	x	x	x	
85	sesDayCurrent	idlcAttribute 323	m N	m Y	m Y	x	x	x	
85.1	CountMeasure		m	m	m	x	x	x	
85.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
85.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
85.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
86	sesDayPrevious	idlcAttribute 325	m N	m Y	m Y	x	x	x	
86.1	CountMeasure		m	m	m	x	x	x	
86.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
86.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
86.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
87	sesDayHistory	idlcAttribute 324	m N	m N	m N	x	x	x	
87.1	HistoryCountMeasure		m	m	m	x	x	x	
87.1.1	countMeasure		m	m	m	x	x	x	
87.1.1.1	CountMeasure		m	m	m	x	x	x	
87.1.1.1.1	fullAccumulate		0.875	0.875	0.875	x	x	x	
87.1.1.1.2	partialAccumulate		0.875	0.875	0.875	x	x	x	
87.1.1.1.3	corruptedCount		0.875	0.875	0.875	x	x	x	
87.1.2	age		m	m	m	x	x	x	

ATTds1FramedPathTermination26 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
88	sesFeMinThreshold	idlcAttribute 338	m	m	m	x	x	x	
			N	N	N				
89	sesFeMinCurrent	idlcAttribute 335	m	m	m	x	x	x	
			N	N	N				
89.1	CountMeasure		m	m	m	x	x	x	
89.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
89.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
89.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
90	sesFeMinPrevious	idlcAttribute 337	m	m	m	x	x	x	
			N	N	N				
90.1	CountMeasure		m	m	m	x	x	x	
90.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
90.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
90.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
91	sesFeMinHistory	idlcAttribute 336	m	m	m	x	x	x	
			N	N	N				
91.1	HistoryCountMeasure		m	m	m	x	x	x	
91.1.1	countMeasure		m	m	m	x	x	x	
91.1.1.1	CountMeasure		m	m	m	x	x	x	
91.1.1.1.1	fullAccumulate		0.915	0.915	0.915	x	x	x	
91.1.1.1.2	partialAccumulate		0.915	0.915	0.915	x	x	x	
91.1.1.1.3	corruptedCount		0.915	0.915	0.915	x	x	x	
91.1.2	age		m	m	m	x	x	x	
92	sesFeHrThreshold	idlcAttribute 334	m	m	m	x	x	x	
			N	N	N				
93	sesFeHrCurrent	idlcAttribute 331	m	m	m	x	x	x	
			N	N	N				
93.1	CountMeasure		m	m	m	x	x	x	
93.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
93.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	

ATTds1FramedPathTermination27 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
93.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
94	sesFeHrPrevious	idlcAttribute 333	m	m	m	x	x	x	
94.1	CountMeasure		N	N	N				
94.1.1	fullAccumulate		m	m	m	x	x	x	
94.1.1.1	CountMeasure								
94.1.1.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
94.1.1.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
94.1.1.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
95	sesFeHrHistory	idlcAttribute 332	m	m	m	x	x	x	
95.1	HistoryCountMeasure		N	N	N				
95.1.1	countMeasure		m	m	m	x	x	x	
95.1.1.1	CountMeasure								
95.1.1.1.1	fullAccumulate		m	m	m	x	x	x	
95.1.1.1.1.1	fullAccumulate		o.955	o.955	o.955	x	x	x	
95.1.1.1.1.2	partialAccumulate		o.955	o.955	o.955	x	x	x	
95.1.1.1.1.3	corruptedCount		o.955	o.955	o.955	x	x	x	
95.1.2	age		m	m	m	x	x	x	
96	sesFeDayThreshold	idlcAttribute 330	m	m	m	x	x	x	
97	sesFeDayCurrent	idlcAttribute 327	N	N	N				
97.1	CountMeasure		m	m	m	x	x	x	
97.1.1	fullAccumulate								
97.1.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
97.1.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
97.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
98	sesFeDayPrevious	idlcAttribute 329	m	m	m	x	x	x	
98.1	CountMeasure		N	N	N				
98.1.1	fullAccumulate		m	m	m	x	x	x	
98.1.1.1	fullAccumulate								
98.1.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	

ATTds1FramedPathTermination28 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
98.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
99	sesFeDayHistory	idlcAttribute 328	m	m	m	x	x	x	
99.1	HistoryCountMeasure		N	N	N				
99.1.1	countMeasure		m	m	m	x	x	x	
99.1.1.1	CountMeasure		m	m	m	x	x	x	
99.1.1.1.1	fullAccumulate		o.995	o.995	o.995	x	x	x	
99.1.1.1.2	partialAccumulate		o.995	o.995	o.995	x	x	x	
99.1.1.1.3	corruptedCount		o.995	o.995	o.995	x	x	x	
99.1.2	age		m	m	m	x	x	x	
100	sefsMinThreshold	idlcAttribute 310	m	m	m	x	x	x	
101	sefsMinCurrent	idlcAttribute 307	o	o	o	x	x	x	
101.1	CountMeasure		N	Y	Y				
101.1.1	fullAccumulate		m	m	m	x	x	x	
101.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
101.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
102	sefsMinPrevious	idlcAttribute 309	o	o	o	x	x	x	
102.1	CountMeasure		N	Y	Y				
102.1.1	fullAccumulate		m	m	m	x	x	x	
102.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
102.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
103	sefsMinHistory	idlcAttribute 308	o	o	o	x	x	x	
103.1	HistoryCountMeasure		N	Y	Y				
103.1.1	countMeasure		m	m	m	x	x	x	
103.1.1.1	CountMeasure		m	m	m	x	x	x	

ATTds1FramedPathTermination29 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfl	
103.1.1.1.1	fullAccumulate		o.1035	o.1035	o.1035	x	x	x	
				Y	Y				
103.1.1.1.2	partialAccumulate		o.1035	o.1035	o.1035	x	x	x	
				Y	Y				
103.1.1.1.3	corruptedCount		o.1035	o.1035	o.1035	x	x	x	
				Y	Y				
103.1.2	age		m	m	m	x	x	x	
				Y	Y				
104	sefsHrThreshold	idlcAttribute 306	o	o	o	x	x	x	
			N	N	N				
105	sefsHrCurrent	idlcAttribute 303	m	m	m	x	x	x	
			N	N	N				
105.1	CountMeasure		m	m	m	x	x	x	
105.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
105.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
105.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
106	sefsHrPrevious	idlcAttribute 305	m	m	m	x	x	x	
			N	N	N				
106.1	CountMeasure		m	m	m	x	x	x	
106.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
106.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
106.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
107	sefsHrHistory	idlcAttribute 304	o	o	o	x	x	x	
			N	N	N				
107.1	HistoryCountMeasure		m	m	m	x	x	x	
107.1.1	countMeasure		m	m	m	x	x	x	
107.1.1.1	CountMeasure		m	m	m	x	x	x	
107.1.1.1.1	fullAccumulate		o.1075	o.1075	o.1075	x	x	x	
107.1.1.1.2	partialAccumulate		o.1075	o.1075	o.1075	x	x	x	
107.1.1.1.3	corruptedCount		o.1075	o.1075	o.1075	x	x	x	
107.1.2	age		m	m	m	x	x	x	
108	sefsDayThreshold	idlcAttribute 302	o	o	o	x	x	x	
			N	Y	Y				

ATTds1FramedPathTermination30 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
109	sefsDayCurrent	idlcAttribute 299	m	m	m	x	x	x	
			N	Y	Y				
109.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
109.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
109.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
109.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
110	sefsDayPrevious	idlcAttribute 301	m	m	m	x	x	x	
			N	Y	Y				
110.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
110.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
110.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
110.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
111	sefsDayHistory	idlcAttribute 300	o	o	o	x	x	x	
			N	N	N				
111.1	HistoryCountMeasure		m	m	m	x	x	x	
111.1.1	countMeasure		m	m	m	x	x	x	
111.1.1.1	CountMeasure		m	m	m	x	x	x	
111.1.1.1.1	fullAccumulate		o.1115	o.1115	o.1115	x	x	x	
111.1.1.1.2	partialAccumulate		o.1115	o.1115	o.1115	x	x	x	
111.1.1.1.3	corruptedCount		o.1115	o.1115	o.1115	x	x	x	
111.1.2	age		m	m	m	x	x	x	
112	sefsFeMinThreshold	idlcAttribute 322	o	o	o	x	x	x	
			N	N	N				
113	sefsFeMinCurrent	idlcAttribute 319	o	o	o	x	x	x	
			N	N	N				
113.1	CountMeasure		m	m	m	x	x	x	
113.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
113.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
113.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

ATTds1FramedPathTermination31 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
114	sefsFeMinPrevious	idlcAttribute 321	o	o	o	x	x	x	
			N	N	N				
114.1	CountMeasure		m	m	m	x	x	x	
114.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
114.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
114.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
115	sefsFeMinHistory	idlcAttribute 320	o	o	o	x	x	x	
			N	N	N				
115.1	HistoryCountMeasure		m	m	m	x	x	x	
115.1.1	countMeasure		m	m	m	x	x	x	
115.1.1.1	CountMeasure		m	m	m	x	x	x	
115.1.1.1.1	fullAccumulate		o.1155	o.1155	o.1155	x	x	x	
115.1.1.1.2	partialAccumulate		o.1155	o.1155	o.1155	x	x	x	
115.1.1.1.3	corruptedCount		o.1155	o.1155	o.1155	x	x	x	
115.1.2	age		m	m	m	x	x	x	
116	sefsFeHrThreshold	idlcAttribute 318	o	o	o	x	x	x	
			N	N	N				
117	sefsFeHrCurrent	idlcAttribute 315	m	m	m	x	x	x	
			N	N	N				
117.1	CountMeasure		m	m	m	x	x	x	
117.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
117.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
117.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
118	sefsFeHrPrevious	idlcAttribute 317	m	m	m	x	x	x	
			N	N	N				
118.1	CountMeasure		m	m	m	x	x	x	
118.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
118.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
118.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	

ATTds1FramedPathTermination32 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
119	sefsFeHrHistory	idlcAttribute 316	o	o	o	x	x	x	
			N	N	N				
119.1	HistoryCountMeasure		m	m	m	x	x	x	
119.1.1	countMeasure		m	m	m	x	x	x	
119.1.1.1	CountMeasure		m	m	m	x	x	x	
119.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
119.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
119.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
119.1.2	age		m	m	m	x	x	x	
120	sefsFeDayThreshold	idlcAttribute 314	o	o	o	x	x	x	
			N	N	N				
121	sefsFeDayCurrent	idlcAttribute 311	o	o	o	x	x	x	
			N	N	N				
121.1	CountMeasure		m	m	m	x	x	x	
121.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
121.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
121.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
122	sefsFeDayPrevious	idlcAttribute 313	m	m	m	x	x	x	
			N	N	N				
122.1	CountMeasure		m	m	m	x	x	x	
122.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
122.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
122.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
123	sefsFeDayHistory	idlcAttribute 312	o	o	o	x	x	x	
			N	N	N				
123.1	HistoryCountMeasure		m	m	m	x	x	x	
123.1.1	countMeasure		m	m	m	x	x	x	
123.1.1.1	CountMeasure		m	m	m	x	x	x	
123.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	

ATTds1FramedPathTermination33 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
123.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
123.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
123.1.2	age		m	m	m	x	x	x	
124	cssMinThreshold	idlcAttribute 46	c(css N	c(css N	c(css N	x	x	x	
125	cssMinCurrent	idlcAttribute 43	c(css N	c(css N	c(css N	x	x	x	
125.1	CountMeasure		m	m	m	x	x	x	
125.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
125.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
125.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
126	cssMinPrevious	idlcAttribute 45	c(css N	c(css N	c(css N	x	x	x	
126.1	CountMeasure		m	m	m	x	x	x	
126.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
126.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
126.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
127	cssMinHistory	idlcAttribute 44	c(css N	c(css N	c(css N	x	x	x	
127.1	HistoryCountMeasure		m	m	m	x	x	x	
127.1.1	countMeasure		m	m	m	x	x	x	
127.1.1.1	CountMeasure		m	m	m	x	x	x	
127.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
127.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
127.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
127.1.2	age		m	m	m	x	x	x	
128	cssHrThreshold	idlcAttribute 50	c(css N	c(css N	c(css N	x	x	x	
(css If instance is for DS1 Framed Path Terminations associated with DS1 extensions THEN m ELSE n/a									

ATTds1FramedPathTermination34 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
129	cssHrCurrent	idlcAttribute 47	c(css N	c(css N	c(css N	x	x	x	
129.1	CountMeasure		m	m	m	x	x	x	
129.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
129.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
129.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
130	cssHrPrevious	idlcAttribute 49	c(css N	c(css N	c(css N	x	x	x	
130.1	CountMeasure		m	m	m	x	x	x	
130.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
130.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
130.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
131	cssHrHistory	idlcAttribute 48	c(css N	c(css N	c(css N	x	x	x	
131.1	HistoryCountMeasure		m	m	m	x	x	x	
131.1.1	countMeasure		m	m	m	x	x	x	
131.1.1.1	CountMeasure		m	m	m	x	x	x	
131.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
131.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
131.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
131.1.2	age		m	m	m	x	x	x	
132	cssDayThreshold	idlcAttribute 54	c(css N	c(css N	c(css N	x	x	x	
133	cssDayCurrent	idlcAttribute 51	c(css N	c(css N	c(css N	x	x	x	
133.1	CountMeasure		m	m	m	x	x	x	
133.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
133.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
133.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

(css IF instance is for DS1 Framed Path Terminations associated with DS1 extensions THEN m
ELSE n/a

ATTds1FramedPathTermination35 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
134	cssDayPrevious	idlcAttribute 53	c(css N	c(css N	c(css N	x	x	x	
134.1	CountMeasure		m	m	m	x	x	x	
134.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
134.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
134.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
135	cssDayHistory	idlcAttribute 52	c(css N	c(css N	c(css N	x	x	x	
135.1	HistoryCountMeasure		m	m	m	x	x	x	
135.1.1	countMeasure		m	m	m	x	x	x	
135.1.1.1	CountMeasure		m	m	m	x	x	x	
135.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
135.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
135.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
135.1.2	age		m	m	m	x	x	x	
136	dmMinThreshold	idlcAttribute 109	o N	o Y	o Y	x	x	x	
137	dmMinCurrent	idlcAttribute 106	o N	o Y	o Y	x	x	x	
137.1	CountMeasure		m	m	m	x	x	x	
137.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
137.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
137.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
138	dmMinPrevious	idlcAttribute 108	o N	o Y	o Y	x	x	x	
138.1	CountMeasure		m	m	m	x	x	x	
138.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
138.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
138.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

(css IF instance is for DS1 Framed Path Terminations associated with DS1 extensions THEN m ELSE n/a

ATTds1FramedPathTermination36 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
139	dmMinHistory	idlcAttribute 107	o	o	o	x	x	x	
			N	Y	Y				
139.1	HistoryCountMeasure		m	m	m	x	x	x	
				Y	Y				
139.1.1	countMeasure		m	m	m	x	x	x	
				Y	Y				
139.1.1.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
139.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
				Y	Y				
139.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
				Y	Y				
139.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
				Y	Y				
139.1.2	age		m	m	m	x	x	x	
				Y	Y				
140	dmHrThreshold	idlcAttribute 113	o	o	o	x	x	x	
			N	N	N				
141	dmHrCurrent	idlcAttribute 110	o	o	o	x	x	x	
			N	N	N				
141.1	CountMeasure		m	m	m	x	x	x	
141.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
141.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
141.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
142	dmHrPrevious	idlcAttribute 112	o	o	o	x	x	x	
			N	N	N				
142.1	CountMeasure		m	m	m	x	x	x	
142.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
142.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
142.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
143	dmHrHistory	idlcAttribute 111	o	o	o	x	x	x	
			N	N	N				
143.1	HistoryCountMeasure		m	m	m	x	x	x	
143.1.1	countMeasure		m	m	m	x	x	x	
143.1.1.1	CountMeasure		m	m	m	x	x	x	
143.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	

ATTds1FramedPathTermination37 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
143.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
143.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
143.1.2	age		m	m	m	x	x	x	
144	dmDayThreshold	idlcAttribute 117	o	o	o	x	x	x	
			N	Y	Y				
145	dmDayCurrent	idlcAttribute 114	o	o	o	x	x	x	
			N	Y	Y				
145.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
145.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
145.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
145.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
146	dmDayPrevious	idlcAttribute 116	o	o	o	x	x	x	
			N	Y	Y				
146.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
146.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
146.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
146.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
147	dmDayHistory	idlcAttribute 115	o	o	o	x	x	x	
			N	N	N				
147.1	HistoryCountMeasure		m	m	m	x	x	x	
147.1.1	countMeasure		m	m	m	x	x	x	
147.1.1.1	CountMeasure		m	m	m	x	x	x	
147.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
147.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
147.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
147.1.2	age		m	m	m	x	x	x	
148	uasMinThreshold	idlcAttribute 399	o	o	o	x	x	x	
			N	Y	Y				

ATTds1FramedPathTermination38 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
149	uasMinCurrent	idlcAttribute 396	o	o	o	x	x	x	
			N	Y	Y				
149.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
149.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
149.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
149.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
150	uasMinPrevious	idlcAttribute 398	o	o	o	x	x	x	
			N	Y	Y				
150.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
150.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
150.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
150.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
151	uasMinHistory	idlcAttribute 397	o	o	o	x	x	x	
			N	Y	Y				
151.1	HistoryCountMeasure		m	m	m	x	x	x	
				Y	Y				
151.1.1	countMeasure		m	m	m	x	x	x	
				Y	Y				
151.1.1.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
151.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
				Y	Y				
151.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
				Y	Y				
151.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
				Y	Y				
151.1.2	age		m	m	m	x	x	x	
				Y	Y				
152	uasHrThreshold	idlcAttribute 395	o	o	o	x	x	x	
			N	N	N				
153	uasHrCurrent	idlcAttribute 392	o	o	o	x	x	x	
			N	N	N				
153.1	CountMeasure		m	m	m	x	x	x	
153.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
153.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
153.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

ATTds1FramedPathTermination39 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
154	uasHrPrevious	idlcAttribute 394	o	o	o	x	x	x	
			N	N	N				
154.1	CountMeasure		m	m	m	x	x	x	
154.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
154.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
154.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
155	uasHrHistory	idlcAttribute 393	o	o	o	x	x	x	
			N	N	N				
155.1	HistoryCountMeasure		m	m	m	x	x	x	
155.1.1	countMeasure		m	m	m	x	x	x	
155.1.1.1	CountMeasure		m	m	m	x	x	x	
155.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
155.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
155.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
155.1.2	age		m	m	m	x	x	x	
156	uasDayThreshold	idlcAttribute 391	o	o	o	x	x	x	
			N	Y	Y				
157	uasDayCurrent	idlcAttribute 388	o	o	o	x	x	x	
			N	Y	Y				
157.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
157.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
157.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
157.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				
158	uasDayPrevious	idlcAttribute 390	o	o	o	x	x	x	
			N	Y	Y				
158.1	CountMeasure		m	m	m	x	x	x	
				Y	Y				
158.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
158.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
				Y	Y				
158.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
				Y	Y				

ATTds1FramedPathTermination40 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1FramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 17	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
159	uasDayHistory	idlcAttribute 389	o	o	o	x	x	x	
			N	N	N				
159.1	HistoryCountMeasure		m	m	m	x	x	x	
159.1.1	countMeasure		m	m	m	x	x	x	
159.1.1.1	CountMeasure		m	m	m	x	x	x	
159.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
159.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
159.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
159.1.2	age		m	m	m	x	x	x	

14.9.3 ATTRIBUTE GROUPS

GRPs1FramedPathTermination0 — ATTRIBUTE GROUP SUPPORT							
INDEX	ATTRIBUTE GROUP TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE GROUP	STATUS		SUPPORT		ADDITIONAL INFORMATION
			GET	SET TO DEFAULT	GET	SET TO DEFAULT	
1	pathThresholdGroup	idlcGroupAttribute 117	o	N	N	N	*
2	cvNeThresholdGroup	idlcGroupAttribute 27	o	N	N	N	
3	cvFeThresholdGroup	idlcGroupAttribute 19	o	N	N	N	
4	cvNeFeThresholdGroup	idlcGroupAttribute 30	o	N	N	N	
5	sefsNeThresholdGroup	idlcGroupAttribute 147	o	N	N	N	
6	sefsFeThresholdGroup	idlcGroupAttribute 142	o	N	N	N	
7	sefsNeFeThresholdGroup	idlcGroupAttribute 149	o	N	N	N	
8	esNeThresholdGroup	idlcGroupAttribute 62	o	N	N	N	
9	esFeThresholdGroup	idlcGroupAttribute 54	o	N	N	N	
10	lineESFeThresholdGroup	idlcGroupAttribute 75	o	N	N	N	
11	esNeFeThresholdGroup	idlcGroupAttribute 64	o	N	N	N	
12	sesNeThresholdGroup	idlcGroupAttribute 165	o	N	N	N	
13	sesFeThresholdGroup	idlcGroupAttribute 157	o	N	N	N	
14	sesNeFeThresholdGroup	idlcGroupAttribute 167	o	N	N	N	
15	uasThresholdGroup	idlcGroupAttribute 175	o	N	N	N	
16	dmThresholdGroup	idlcGroupAttribute 46	o	N	N	N	
17	cssThresholdGroup	idlcGroupAttribute 11	o	N	N	N	
18	pathHrNeThresholdGroup	idlcGroupAttribute 92	o	N	N	N	
19	pathHrFeThresholdGroup	idlcGroupAttribute 90	o	N	N	N	
20	pathHrNeFeThresholdGroup	idlcGroupAttribute 91	o	N	N	N	
21	pathDayNeThresholdGroup	idlcGroupAttribute 89	o	N	N	N	
22	pathDayFeThresholdGroup	idlcGroupAttribute 87	o	N	N	N	
23	pathDayNeFeThresholdGroup	idlcGroupAttribute 88	o	N	N	N	
24	pathMinNeThresholdGroup	idlcGroupAttribute 95	o	N	N	N	
25	pathMinFeThresholdGroup	idlcGroupAttribute 93	o	N	N	N	
26	pathMinNeFeThresholdGroup	idlcGroupAttribute 94	o	N	N	N	
27	pathPmNeFeGroup	idlcGroupAttribute 107	o	N	N	N	
28	pathPmNeGroup	idlcGroupAttribute 112	o	N	N	N	
29	pathPmFeGroup	idlcGroupAttribute 98	o	N	N	N	
30	pathPmNeFeCurrentGroup	idlcGroupAttribute 105	o	N	N	N	
31	pathPmNeFePreviousGroup	idlcGroupAttribute 111	o	N	N	N	
32	pathPmNeFeHistoryGroup	idlcGroupAttribute 108	o	N	N	N	
33	pathPmNeCurrentGroup	idlcGroupAttribute 103	o	N	N	N	
34	pathPmNePreviousGroup	idlcGroupAttribute 116	o	N	N	N	
35	pathPmNeHistoryGroup	idlcGroupAttribute 113	o	N	N	N	
36	pathPmFeCurrentGroup	idlcGroupAttribute 96	o	N	N	N	
37	pathPmFePreviousGroup	idlcGroupAttribute 102	o	N	N	N	
38	pathPmFeHistoryGroup	idlcGroupAttribute 99	o	N	N	N	
39	cvNeFeGroup	idlcGroupAttribute 29	o	N	N	N	
40	cvNeGroup	idlcGroupAttribute 22	o	N	N	N	
41	cvNeCurrentGroup	idlcGroupAttribute 20	o	N	N	N	
42	cvNePreviousGroup	idlcGroupAttribute 26	o	N	N	N	
43	cvNeHistoryGroup	idlcGroupAttribute 23	o	N	N	N	
44	cvFeGroup	idlcGroupAttribute 14	o	N	N	N	
45	cvFeCurrentGroup	idlcGroupAttribute 12	o	N	N	N	

* The 5ESS®-2000 switch does not support group attributes.

GRPs1FramedPathTermination1 — ATTRIBUTE GROUP SUPPORT							
INDEX	ATTRIBUTE GROUP TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE GROUP	STATUS		SUPPORT		ADDITIONAL INFORMATION
			GET	SET TO DEFAULT	GET	SET TO DEFAULT	
46	cvFePreviousGroup	idlcGroupAttribute 18	o	N	N	N	
47	cvFeHistoryGroup	idlcGroupAttribute 15	o	N	N	N	
48	esNeFeGroup	idlcGroupAttribute 63	o	N	N	N	
49	esNeGroup	idlcGroupAttribute 57	o	N	N	N	
50	esNeCurrentGroup	idlcGroupAttribute 55	o	N	N	N	
51	esNePreviousGroup	idlcGroupAttribute 61	o	N	N	N	
52	esNeHistoryGroup	idlcGroupAttribute 58	o	N	N	N	
53	esFeGroup	idlcGroupAttribute 49	o	N	N	N	
54	esFeCurrentGroup	idlcGroupAttribute 47	o	N	N	N	
55	esFePreviousGroup	idlcGroupAttribute 53	o	N	N	N	
56	esFeHistoryGroup	idlcGroupAttribute 50	o	N	N	N	
57	lineESFeGroup	idlcGroupAttribute 70	o	N	N	N	
58	lineESFeCurrentGroup	idlcGroupAttribute 68	o	N	N	N	
59	lineESFeDayGroup	idlcGroupAttribute 69	o	N	N	N	
60	lineESFeHistoryGroup	idlcGroupAttribute 71	o	N	N	N	
61	lineESFeHrGroup	idlcGroupAttribute 72	o	N	N	N	
62	lineESFeMinGroup	idlcGroupAttribute 73	o	N	N	N	
63	lineESFePreviousGroup	idlcGroupAttribute 74	o	N	N	N	
64	sesNeFeGroup	idlcGroupAttribute 166	o	N	N	N	
65	sesNeGroup	idlcGroupAttribute 160	o	N	N	N	
66	sesNeCurrentGroup	idlcGroupAttribute 158	o	N	N	N	
67	sesNePreviousGroup	idlcGroupAttribute 164	o	N	N	N	
68	sesNeHistoryGroup	idlcGroupAttribute 161	o	N	N	N	
69	sesFeGroup	idlcGroupAttribute 152	o	N	N	N	
70	sesFeCurrentGroup	idlcGroupAttribute 150	o	N	N	N	
71	sesFePreviousGroup	idlcGroupAttribute 156	o	N	N	N	
72	sesFeHistoryGroup	idlcGroupAttribute 153	o	N	N	N	
73	sefsNeFeGroup	idlcGroupAttribute 148	o	N	N	N	
74	sefsNeGroup	idlcGroupAttribute 144	o	N	N	N	
75	sefsNeCurrentGroup	idlcGroupAttribute 143	o	N	N	N	
76	sefsNePreviousGroup	idlcGroupAttribute 146	o	N	N	N	
77	sefsNeHistoryGroup	idlcGroupAttribute 145	o	N	N	N	
78	sefsFeGroup	idlcGroupAttribute 139	o	N	N	N	
79	sefsFeCurrentGroup	idlcGroupAttribute 138	o	N	N	N	
80	sefsFePreviousGroup	idlcGroupAttribute 141	o	N	N	N	
81	sefsFeHistoryGroup	idlcGroupAttribute 140	o	N	N	N	
82	cssGroup	idlcGroupAttribute 6	o	N	N	N	
83	cssCurrentGroup	idlcGroupAttribute 4	o	N	N	N	
84	cssPreviousGroup	idlcGroupAttribute 10	o	N	N	N	
85	cssHistoryGroup	idlcGroupAttribute 7	o	N	N	N	
86	dmGroup	idlcGroupAttribute 41	o	N	N	N	
87	dmCurrentGroup	idlcGroupAttribute 39	o	N	N	N	
88	dmPreviousGroup	idlcGroupAttribute 45	o	N	N	N	
89	dmHistoryGroup	idlcGroupAttribute 42	o	N	N	N	
90	uasGroup	idlcGroupAttribute 170	o	N	N	N	

GRPds1FramedPathTermination2 — ATTRIBUTE GROUP SUPPORT							
INDEX	ATTRIBUTE GROUP TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE GROUP	STATUS		SUPPORT		ADDITIONAL INFORMATION
			GET	SET TO DEFAULT	GET	SET TO DEFAULT	
91	uasCurrentGroup	idlcGroupAttribute 168	o	N	N	N	
92	uasPreviousGroup	idlcGroupAttribute 174	o	N	N	N	
93	uasHistoryGroup	idlcGroupAttribute 171	o	N	N	N	
94	pathPmNeFeMinGroup	idlcGroupAttribute 110	o	N	N	N	
95	pathPmNeFeHrGroup	idlcGroupAttribute 109	o	N	N	N	
96	pathPmNeFeDayGroup	idlcGroupAttribute 106	o	N	N	N	
97	cvNeMinGroup	idlcGroupAttribute 25	o	N	N	N	
98	cvNeHrGroup	idlcGroupAttribute 24	o	N	N	N	
99	cvNeDayGroup	idlcGroupAttribute 21	o	N	N	N	
100	cvFeMinGroup	idlcGroupAttribute 17	o	N	N	N	
101	cvFeHrGroup	idlcGroupAttribute 16	o	N	N	N	
102	cvFeDayGroup	idlcGroupAttribute 13	o	N	N	N	
103	esNeMinGroup	idlcGroupAttribute 60	o	N	N	N	
104	esNeHrGroup	idlcGroupAttribute 59	o	N	N	N	
105	esNeDayGroup	idlcGroupAttribute 56	o	N	N	N	
106	esFeMinGroup	idlcGroupAttribute 52	o	N	N	N	
107	esFeHrGroup	idlcGroupAttribute 51	o	N	N	N	
108	esFeDayGroup	idlcGroupAttribute 48	o	N	N	N	
109	sesNeMinGroup	idlcGroupAttribute 163	o	N	N	N	
110	sesNeHrGroup	idlcGroupAttribute 162	o	N	N	N	
111	sesNeDayGroup	idlcGroupAttribute 159	o	N	N	N	
112	sesFeMinGroup	idlcGroupAttribute 155	o	N	N	N	
113	sesFeHrGroup	idlcGroupAttribute 154	o	N	N	N	
114	sesFeDayGroup	idlcGroupAttribute 151	o	N	N	N	
115	sefsNeMinGroup	?	m	N	N	N	
116	sefsNeHrGroup	?	m	N	N	N	
117	sefsNeDayGroup	?	m	N	N	N	
118	sefsFeMinGroup	?	m	N	N	N	
119	sefsFeHrGroup	idlcGroupAttribute 139	o	N	N	N	
120	sefsFeDayGroup	?	m	N	N	N	
121	cssMinGroup	idlcGroupAttribute 9	o	N	N	N	
122	cssHrGroup	idlcGroupAttribute 8	o	N	N	N	
123	cssDayGroup	idlcGroupAttribute 5	o	N	N	N	
124	cssMinGroup	idlcGroupAttribute 9	o	N	N	N	
125	cssHrGroup	idlcGroupAttribute 8	o	N	N	N	
126	cssDayGroup	idlcGroupAttribute 5	o	N	N	N	
127	dmMinGroup	idlcGroupAttribute 44	o	N	N	N	
128	dmHrGroup	idlcGroupAttribute 43	o	N	N	N	
129	dmDayGroup	idlcGroupAttribute 40	o	N	N	N	
130	dmMinGroup	idlcGroupAttribute 44	o	N	N	N	
131	dmHrGroup	idlcGroupAttribute 43	o	N	N	N	
132	dmDayGroup	idlcGroupAttribute 40	o	N	N	N	
133	uasMinGroup	idlcGroupAttribute 173	o	N	N	N	
134	uasHrGroup	idlcGroupAttribute 172	o	N	N	N	
135	uasDayGroup	idlcGroupAttribute 169	o	N	N	N	
136	uasMinGroup	idlcGroupAttribute 173	o	N	N	N	
137	uasHrGroup	idlcGroupAttribute 172	o	N	N	N	
138	uasDayGroup	idlcGroupAttribute 169	o	N	N	N	

14.9.4 ACTIONS

No other action is supported for *ds1FramedPathTermination* object class.

14.9.5 NOTIFICATIONS

NOTds1FramedPathTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	Y	*
1.1	EventInfo		m		Y	
1.1.1	problemType		m		Y	
1.1.1.1	ProblemType		m		Y	
1.1.1.1.1	indeterminate		o.14		Ig	
1.1.1.1.2	equipmentProblemType		o.14		Ig	
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.14		Ig	
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.14		Ig	
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.6			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTds1FramedPathTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.6			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.14			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.14		lg	
1.1.1.1.7	thresholdAlert		o.14			*
1.1.1.1.7.1	ThresholdAlert		o.114		Y	
1.1.1.1.7.1.1	anyThresholdAlert		o		Y	
1.1.1.1.7.1.2	specificThresholdAlert		o		Y	
1.1.1.1.7.1.2.1	triggeredThreshold		m		Y	
1.1.1.1.7.1.2.1.1	Attribute		m		Y	
1.1.1.1.7.1.2.2	triggeredAttribute		o		Y	
1.1.1.1.7.1.2.2.1	Attribute		m		Y	
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.14		lg	
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			

* Used by RDT to report degraded DS1 performance.

NOTds1FramedPathTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule}		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m		Ig	
1.1.2.1	AlarmSeverity		m			
1.1.2.1.1	clear		m			
1.1.2.1.2	indeterminate		m			
1.1.2.1.3	warning		m			
1.1.2.1.4	minor		m			
1.1.2.1.5	major		m			
1.1.2.1.6	critical		m			
1.1.3	trendIndication		o		Ig	
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o		Ig	
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o		Ig	
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o		Ig	
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o		Ig	
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		o.74			
1.1.7.1.2	AnalogThreshold		o.74			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o		Y	*

* Contains actual PM count.

14.9.6 PARAMETERS

PARds1FramedPathTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	

See Footnotes on next page.

PARds1FramedPathTermination1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	†
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
<p>* The 5ESS®-2000 switch does not send object specific errors with responses for ds1 framed path terminations.</p> <p>† If object specific errors are received, only the error type is considered.</p> <p>‡ The 5ESS®-2000 switch includes the error description in craft reports.</p>					

14.10 DS1 LINE TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
ds1LineTermination	idlcObjectClass 18

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.10.1 NAME BINDING

NAMAds1lineTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	ds1LineTermination-equipment	idlcNameBinding 33	equipment	c	Y
2	ds1LineTermination-idlcTerminal	idlcNameBinding 34	idlcTerminal	c	Y
3	ds1LineTermination-networkElement	idlcNameBinding 35	networkElement	c	Y

NAMBds1LineTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m(2	N	
2.1	Only if no contained objects	m(2.1		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch expects that ds1LineTermination are either created inherently or by supervisory system. (2 IF this instance is a From/To end point of a Cross Connect and the crossConnect object instance is not deleted THEN x ELSE m (see behavior definition for details). (2.1 IF associated protectionGroupUnit object instance is not deleted THEN x ELSE m.				

14.10.2 ATTRIBUTES

ATTds1LineTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	g	r	a	r	d	
1	ds1LineTermId	idlcAttribute 122	o	m	x	x	x	x	
			N	N					
2	ds1LineCode	idlcAttribute 121	m	m	m	x	x	x	
			N	N					
2.1	DS1LineCode		m	m	m	x	x	x	
2.1.1	ami		m	m	m	x	x	x	
2.1.2	amizcs		m	m	m	x	x	x	
2.1.3	b8zs		m	m	m	x	x	x	
3	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
			N	N	N	N	N		
3.1	AlarmSeverityAssignment		m	m	m	m	m	x	
			N	N	N	N	N		
3.1.1	problem		m	m	m	m	m	x	
3.1.1.1	ProblemType		m	m	m	m	m	x	
3.1.1.1.1	indeterminate		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
3.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
3.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
3.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
3.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
3.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
3.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
3.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
3.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
3.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
3.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	

ATTds1LineTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
3.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
3.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
3.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
3.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
3.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
3.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
3.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
3.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
3.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
3.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
3.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
3.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
3.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	

ATTds1LineTermination3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
3.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
3.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
3.1.1.1.4.1.2	sensorAlarm		0.7	0.7	0.7	0.7	0.7	x	
3.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
3.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	

ATTds1LineTermination4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.14	IceBuildUp		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
3.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
3.1.1.1.5	softwareProblemType		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
3.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
3.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
3.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
3.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
3.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
3.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
3.1.1.1.6	serviceProblemType		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.7	thresholdAlert		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
3.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
3.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
3.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
3.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
3.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
3.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
3.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	0.5	0.5	x	
3.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
3.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
3.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	

ATTds1LineTermination5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
3.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
3.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
3.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
3.1.1.1.8.1.3	problem		m	m	m	m	m	x	
3.1.2	alarmSeverityCode		m	m	m	m	m	x	
3.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
3.1.2.1.1	non-alarmed		m	m	m	m	m	x	
3.1.2.1.2	minor		m	m	m	m	m	x	
3.1.2.1.3	major		m	m	m	m	m	x	
3.1.2.1.4	critical		m	m	m	m	m	x	
4	lineCircuitAddress	idlcAttribute 208	m	m	m	x	x	x	
			N	N	N				
5	callRefValue	idlcAttribute 31	c(5	c(5	x	x	x	x	
			N	N	N				
6	terminateLeaveStatus	idlcAttribute 372	o	o	o	x	x	x	
			N	N	N				
6.1	TerminateLeaveStatus		m	m	m	x	x	x	
6.1.1	normal		m	m	m	x	x	x	
6.1.2	terminatedA		m	m	m	x	x	x	
6.1.3	terminatedB		m	m	m	x	x	x	
(5 IF this instance is associated with DS1 extensions, THEN m ELSE na.									

ATTds1LineTermination6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	df	
6.1.4	terminatedC		m	m	m	x	x	x	
6.1.5	terminatedAB		m	m	m	x	x	x	
7	redlined	idlcAttribute 284	o	o	o	x	x	x	
			N	N	N				
8	transmitGain	idlcAttribute 380	o	o	o	x	x	x	
			N	N	N				
9	receiveGain	idlcAttribute 280	o	o	o	x	x	x	
			N	N	N				
10	lineBuildOut	idlcAttribute 207	o	o	o	x	x	x	
			N	N	N				
11	inhibitPM	idlcAttribute 177	o	o	o	x	x	x	
			N	N	N				
12	enableLPBK	idlcAttribute 127	o	o	o	x	x	x	
			N	N	N				
13	protectionGroupPointer	idlcAttribute 248	o	o	o	x	x	x	
			N	N	N				
13.1	ProtectionGroupPointer		m	m	m	x	x	x	
13.1.1	NULL		o.3	o.3	o.3	x	x	x	
13.1.2	DistinguishedName		o.3	o.3	o.3	x	x	x	
14	ds1LineThDefProfileId	idlcAttribute 123	o	o	o	x	x	x	
			N	N	N				
15	azLocality	idlcAttribute 20	o	o	o	x	x	x	
			N	N	N				
15.1	AZLocality		m	m	m	x	x	x	
15.1.1	a		m	m	m	x	x	x	
15.1.2	z		m	m	m	x	x	x	
16	currentProblemList	idlcAttribute 59	c(16)	c(16)		x	x	x	
			N	N					
16.1	CurrentProblem		o	m		x	x	x	
16.1.1	problem		o	m		x	x	x	
16.1.1.1	ProblemType		o	m		x	x	x	
16.1.1.1.1	indeterminate		o.5	o.5		x	x	x	
16.1.1.1.2	equipmentProblemType		o.5	o.5		x	x	x	
(16) If the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects, THEN RDT m ELSE na									

ATTds1LineTermination7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
16.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
16.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
16.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
16.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
16.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
16.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
16.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
16.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
16.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
16.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
16.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
16.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
16.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
16.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
16.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
16.1.1.1.3	transmissionProblemType		0.5	0.5	x	x	x	x	
16.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
16.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
16.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
16.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
16.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
16.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
16.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
16.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	

ATTds1LineTermination8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
16.1.1.1.4	environmentalProblemType		0.5	0.5	x	x	x	x	
16.1.1.1.4.1	EnvironmentalProblemType		0	m	x	x	x	x	
16.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	x	x	x	x	
16.1.1.1.4.1.1.1	SEAlarmType		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.1	airCompressorFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.2	airConditioningFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.3	airDryerFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.4	batteryDischarging		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.5	batteryFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.6	commercialPowerFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.7	coolingFanFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.8	engineFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.9	fuseFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.10	generatorFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.11	pumpFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.12	rectifierFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.13	rectifierHighVoltage		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.14	rectifierLowVoltage		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.15	ventilationSystemFailure		0	m	x	x	x	x	
16.1.1.1.4.1.1.1.16	lowBatteryThreshold		0	m	x	x	x	x	
16.1.1.1.4.1.2	sensorAlarm		0.7	0.7	x	x	x	x	
16.1.1.1.4.1.2.1	SensorAlarmList		0	m	x	x	x	x	
16.1.1.1.4.1.2.1.1	sensorAlarmType		0	0	x	x	x	x	
16.1.1.1.4.1.2.1.1.1	SensorAlarmType		0	m	x	x	x	x	

ATTds1LineTermination9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
16.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
16.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
16.1.1.1.5	softwareProblemType		0.5	0.5	x	x	x	x	
16.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
16.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
16.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
16.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
16.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
16.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	

ATTds1LineTermination10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	g	re	pa	rem		df
16.1.1.1.5.1.6	softwareDownloadFailure		0	m	x	x	x	x	
16.1.1.1.6	serviceProblemType		0.5	0.5	x	x	x	x	
16.1.1.1.7	thresholdAlert		0.5	0.5	x	x	x	x	
16.1.1.1.7.1	ThresholdAlert		0	m	x	x	x	x	
16.1.1.1.7.1.1	anyThresholdAlert		0	m	x	x	x	x	
16.1.1.1.7.1.2	specificThresholdAlert		0	m	x	x	x	x	
16.1.1.1.7.1.2.1	triggeredThreshold		0	m	x	x	x	x	
16.1.1.1.7.1.2.1.1	Attribute		0	m	x	x	x	x	
16.1.1.1.7.1.2.2	triggeredAttribute		0	0	x	x	x	x	
16.1.1.1.7.1.2.2.1	Attribute		0	m	x	x	x	x	
16.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	x	x	x	x	
16.1.1.1.8.1	ScheduledMgmtOpnsProblemType		0	m	x	x	x	x	
16.1.1.1.8.1.1	operationsType		0	m	x	x	x	x	
16.1.1.1.8.1.1.1	OperationsType		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.1	auditSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.2	backupSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.3	currentAlmSumSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.4	diagnosticSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.5	exerciseSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.6	litSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.8	pmReportSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.1.1.9	trunkTestSchedule		0	m	x	x	x	x	
16.1.1.1.8.1.2	scheduleId		0	0	x	x	x	x	
16.1.1.1.8.1.2.1	DistinguishedName		0	m	x	x	x	x	
16.1.1.1.8.1.3	problem		0	m	x	x	x	x	

ATTds1LineTermination11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
16.1.2	problemState		o	m	x	x	x	x	
16.1.2.1	ProblemState		o	m	x	x	x	x	
16.1.2.1.1	active-pending		o	m	x	x	x	x	
16.1.2.1.2	active-reportable		o	m	x	x	x	x	
16.1.3	problemData		o	o	x	x	x	x	
16.1.3.1	ProblemData		o	m	x	x	x	x	
16.1.3.1.1	identifier		o	m	x	x	x	x	
16.1.3.1.2	critical		o	m	x	x	x	x	
16.1.3.1.3	item		o	m	x	x	x	x	
16.1.3.1.3.1	identifier		o	m	x	x	x	x	
17	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
17.1	EventReportControlId		N	N	N	N	N		
17.1.1	INTEGER		m	m	m	m	m	x	
17.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
18	inputCommandControlPointers	idlcAttribute 181	o	o	o	o	o	x	
18.1	InputCommandControlId		N	N	N	N	N		
18.1.1	INTEGER		m	m	m	m	m	x	
18.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
19	perfMonReportSchedPointers	idlcAttribute 236	o	o	o	o	o	x	
19.1	PMReportScheduleId		N	N	N	N	N		
19.1.1	INTEGER		m	m	m	m	m	x	
19.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
20	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x	
20.1	CurrentAlarmSumScheduleId		N	N	N	N	N		
			m	m	m	m	m	x	

ATTds1LineTermination12 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
20.1.1	INTEGER		o.3	o.3	o.3	o.3	o.3	x		
20.1.2	PrintableString		o.3	o.3	o.3	o.3	o.3	x		
21	apsBerThreshold	idlcAttribute 15	o	o	o	x	x	x		
			N	N	N					
22	cvMinThreshold	idlcAttribute 71	o	o	o	x	x	x		
			N	N	N					
23	cvMinCurrent	idlcAttribute 68	o	o	o	x	x	x		
			N	N	N					
23.1	CountMeasure		m	m	m	x	x	x		
23.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x		
23.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x		
23.1.3	corruptedCount		o.3	o.3	o.3	x	x	x		
24	cvMinPrevious	idlcAttribute 70	o	o	o	x	x	x		
			N	N	N					
24.1	CountMeasure		m	m	m	x	x	x		
24.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x		
24.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x		
24.1.3	corruptedCount		o.3	o.3	o.3	x	x	x		
25	cvMinHistory	idlcAttribute 69	o	o	o	x	x	x		
			N	N	N					
25.1	HistoryCountMeasure		m	m	m	x	x	x		
25.1.1	countMeasure		m	m	m	x	x	x		
25.1.1.1	CountMeasure		m	m	m	x	x	x		
25.1.1.1.1	fullAccumulate		o.5	o.5	o.5	x	x	x		
25.1.1.1.2	partialAccumulate		o.5	o.5	o.5	x	x	x		
25.1.1.1.3	corruptedCount		o.5	o.5	o.5	x	x	x		
25.1.2	age		m	m	m	x	x	x		
26	cvHrThreshold	idlcAttribute 67	o	o	o	x	x	x		
			N	N	N					

ATTds1LineTermination13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
27	cvHrCurrent	idlcAttribute 64	o	o	o	x	x	x	
			N	N	N				
27.1	CountMeasure		m	m	m	x	x	x	
27.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
27.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
27.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
28	cvHrPrevious	idlcAttribute 66	o	o	o	x	x	x	
			N	N	N				
28.1	CountMeasure		m	m	m	x	x	x	
28.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
28.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
28.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
29	cvHrHistory	idlcAttribute 65	o	o	o	x	x	x	
			N	N	N				
29.1	HistoryCountMeasure		m	m	m	x	x	x	
29.1.1	countMeasure		m	m	m	x	x	x	
29.1.1.1	CountMeasure		m	m	m	x	x	x	
29.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
29.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
29.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
29.1.2	age		m	m	m	x	x	x	
30	cvDayThreshold	idlcAttribute 63	o	o	o	x	x	x	
			N	N	N				
31	cvDayCurrent	idlcAttribute 60	o	o	o	x	x	x	
			N	N	N				
31.1	CountMeasure		m	m	m	x	x	x	
31.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
31.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
31.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	

ATTds1LineTermination14 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
32	cvDayPrevious	idlcAttribute 62	o	o	o	x	x	x		
			N	N	N					
32.1	CountMeasure		m	m	m	x	x	x		
32.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
32.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
32.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
33	cvDayHistory	idlcAttribute 61	o	o	o	x	x	x		
			N	N	N					
33.1	HistoryCountMeasure		m	m	m	x	x	x		
33.1.1	countMeasure		m	m	m	x	x	x		
33.1.1.1	CountMeasure		m	m	m	x	x	x		
33.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
33.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
33.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
33.1.2	age		m	m	m	x	x	x		
34	esMinThreshold	idlcAttribute 146	o	o	o	x	x	x		
			N	N	N					
35	esMinCurrent	idlcAttribute 143	o	o	o	x	x	x		
			N	N	N					
35.1	CountMeasure		m	m	m	x	x	x		
35.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
35.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
35.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
36	esMinPrevious	idlcAttribute 145	o	o	o	x	x	x		
			N	N	N					
36.1	CountMeasure		m	m	m	x	x	x		
36.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
36.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
36.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		

ATTds1LineTermination15 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
37	esMinHistory	idlcAttribute 144	o	o	o	x	x	x	
			N	N	N				
37.1	HistoryCountMeasure		m	m	m	x	x	x	
37.1.1	countMeasure		m	m	m	x	x	x	
37.1.1.1	CountMeasure		m	m	m	x	x	x	
37.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
37.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
37.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
37.1.2	age		m	m	m	x	x	x	
38	esHrThreshold	idlcAttribute 142	o	o	o	x	x	x	
			N	N	N				
39	esHrCurrent	idlcAttribute 139	o	o	o	x	x	x	
			N	N	N				
39.1	CountMeasure		m	m	m	x	x	x	
39.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
39.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
39.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
40	esHrPrevious	idlcAttribute 141	o	o	o	x	x	x	
			N	N	N				
40.1	CountMeasure		m	m	m	x	x	x	
40.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
40.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
40.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
41	esHrHistory	idlcAttribute 140	o	o	o	x	x	x	
			N	N	N				
41.1	HistoryCountMeasure		m	m	m	x	x	x	
41.1.1	countMeasure		m	m	m	x	x	x	
41.1.1.1	CountMeasure		m	m	m	x	x	x	
41.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
41.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	

ATTds1LineTermination16 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
41.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
41.1.2	age		m	m	m	x	x	x		
42	esDayThreshold	idlcAttribute 138	o	o	o	x	x	x		
			N	N	N					
43	esDayCurrent	idlcAttribute 135	o	o	o	x	x	x		
			N	N	N					
43.1	CountMeasure		m	m	m	x	x	x		
43.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
43.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
43.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
44	esDayPrevious	idlcAttribute 137	o	o	o	x	x	x		
			N	N	N					
44.1	CountMeasure		m	m	m	x	x	x		
44.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
44.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
44.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
45	esDayHistory	idlcAttribute 136	o	o	o	x	x	x		
			N	N	N					
45.1	HistoryCountMeasure		m	m	m	x	x	x		
45.1.1	countMeasure		m	m	m	x	x	x		
45.1.1.1	CountMeasure		m	m	m	x	x	x		
45.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
45.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
45.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
45.1.2	age		m	m	m	x	x	x		
46	sesMinThreshold	idlcAttribute 346	o	o	o	x	x	x		
			N	N	N					
47	sesMinCurrent	idlcAttribute 343	o	o	o	x	x	x		
			N	N	N					
47.1	CountMeasure		m	m	m	x	x	x		

ATTds1LineTermination17 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
47.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
47.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
47.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
48	sesMinPrevious	idlcAttribute 345	o	o	o	x	x	x	
			N	N	N				
48.1	CountMeasure		m	m	m	x	x	x	
48.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
48.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
48.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
49	sesMinHistory	idlcAttribute 344	o	o	o	x	x	x	
			N	N	N				
49.1	HistoryCountMeasure		m	m	m	x	x	x	
49.1.1	countMeasure		m	m	m	x	x	x	
49.1.1.1	CountMeasure		m	m	m	x	x	x	
49.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
49.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
49.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
49.1.2	age		m	m	m	x	x	x	
50	sesHrThreshold	idlcAttribute 342	o	o	o	x	x	x	
			N	N	N				
51	sesHrCurrent	idlcAttribute 339	o	o	o	x	x	x	
			N	N	N				
51.1	CountMeasure		m	m	m	x	x	x	
51.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
51.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
51.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
52	sesHrPrevious	idlcAttribute 341	o	o	o	x	x	x	
			N	N	N				
52.1	CountMeasure		m	m	m	x	x	x	

ATTds1LineTermination18 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
52.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
52.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
52.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
53	sesHrHistory	idlcAttribute 340	o	o	o	x	x	x		
			N	N	N					
53.1	HistoryCountMeasure		m	m	m	x	x	x		
53.1.1	countMeasure		m	m	m	x	x	x		
53.1.1.1	CountMeasure		m	m	m	x	x	x		
53.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
53.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
53.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
53.1.2	age		m	m	m	x	x	x		
54	sesDayThreshold	idlcAttribute 326	o	o	o	x	x	x		
			N	N	N					
55	sesDayCurrent	idlcAttribute 323	o	o	o	x	x	x		
			N	N	N					
55.1	CountMeasure		m	m	m	x	x	x		
55.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
55.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
55.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
56	sesDayPrevious	idlcAttribute 325	o	o	o	x	x	x		
			N	N	N					
56.1	CountMeasure		m	m	m	x	x	x		
56.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
56.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
56.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
57	sesDayHistory	idlcAttribute 324	o	o	o	x	x	x		
			N	N	N					
57.1	HistoryCountMeasure		m	m	m	x	x	x		

ATTds1LineTermination19 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
57.1.1	countMeasure		m	m	m	x	x	x	
57.1.1.1	CountMeasure		m	m	m	x	x	x	
57.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
57.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
57.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
57.1.2	age		m	m	m	x	x	x	
58	dmMinThreshold	idlcAttribute 109	o	o	o	x	x	x	
			N	N	N				
59	dmMinCurrent	idlcAttribute 106	o	o	o	x	x	x	
			N	N	N				
59.1	CountMeasure		m	m	m	x	x	x	
59.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
59.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
59.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
60	dmMinPrevious	idlcAttribute 108	o	o	o	x	x	x	
			N	N	N				
60.1	CountMeasure		m	m	m	x	x	x	
60.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
60.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
60.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
61	dmMinHistory	idlcAttribute 107	o	o	o	x	x	x	
			N	N	N				
61.1	HistoryCountMeasure		m	m	m	x	x	x	
61.1.1	countMeasure		m	m	m	x	x	x	
61.1.1.1	CountMeasure		m	m	m	x	x	x	
61.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
61.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	

ATTds1LineTermination20 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
61.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
61.1.2	age		m	m	m	x	x	x		
62	dmHrThreshold	idlcAttribute 113	o	o	o	x	x	x		
			N	N	N					
63	dmHrCurrent	idlcAttribute 110	o	o	o	x	x	x		
			N	N	N					
63.1	CountMeasure		m	m	m	x	x	x		
63.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
63.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
63.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
64	dmHrPrevious	idlcAttribute 112	o	o	o	x	x	x		
			N	N	N					
64.1	CountMeasure		m	m	m	x	x	x		
64.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
64.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
64.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
65	dmHrHistory	idlcAttribute 111	o	o	o	x	x	x		
			N	N	N					
65.1	HistoryCountMeasure		m	m	m	x	x	x		
65.1.1	countMeasure		m	m	m	x	x	x		
65.1.1.1	CountMeasure		m	m	m	x	x	x		
65.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
65.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
65.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
65.1.2	age		m	m	m	x	x	x		
66	dmDayThreshold	idlcAttribute 117	o	o	o	x	x	x		
			N	N	N					
67	dmDayCurrent	idlcAttribute 114	o	o	o	x	x	x		
			N	N	N					
67.1	CountMeasure		m	m	m	x	x	x		

ATTds1LineTermination21 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
67.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
67.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
67.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
68	dmDayPrevious	idlcAttribute 116	o	o	o	x	x	x	
			N	N	N				
68.1	CountMeasure		m	m	m	x	x	x	
68.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
68.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
68.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
69	dmDayHistory	idlcAttribute 115	o	o	o	x	x	x	
			N	N	N				
69.1	HistoryCountMeasure		m	m	m	x	x	x	
69.1.1	countMeasure		m	m	m	x	x	x	
69.1.1.1	CountMeasure		m	m	m	x	x	x	
69.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
69.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
69.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
69.1.2	age		m	m	m	x	x	x	
70	uasMinThreshold	idlcAttribute 399	o	o	o	x	x	x	
			N	N	N				
71	uasMinCurrent	idlcAttribute 396	o	o	o	x	x	x	
			N	N	N				
71.1	CountMeasure		m	m	m	x	x	x	
71.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
71.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
71.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
72	uasMinPrevious	idlcAttribute 398	o	o	o	x	x	x	
			N	N	N				
72.1	CountMeasure		m	m	m	x	x	x	

ATTds1LineTermination22 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
72.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
72.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
72.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
73	uasMinHistory	idlcAttribute 397	o	o	o	x	x	x		
			N	N	N					
73.1	HistoryCountMeasure		m	m	m	x	x	x		
73.1.1	countMeasure		m	m	m	x	x	x		
73.1.1.1	CountMeasure		m	m	m	x	x	x		
73.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
73.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
73.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
73.1.2	age		m	m	m	x	x	x		
74	uasHrThreshold	idlcAttribute 395	o	o	o	x	x	x		
			N	N	N					
75	uasHrCurrent	idlcAttribute 392	o	o	o	x	x	x		
			N	N	N					
75.1	CountMeasure		m	m	m	x	x	x		
75.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
75.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
75.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
76	uasHrPrevious	idlcAttribute 394	o	o	o	x	x	x		
			N	N	N					
76.1	CountMeasure		m	m	m	x	x	x		
76.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
76.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
76.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
77	uasHrHistory	idlcAttribute 393	o	o	o	x	x	x		
			N	N	N					
77.1	HistoryCountMeasure		m	m	m	x	x	x		

ATTds1LineTermination23 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
77.1.1	countMeasure		m	m	m	x	x	x	
77.1.1.1	CountMeasure		m	m	m	x	x	x	
77.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
77.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
77.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
77.1.2	age		m	m	m	x	x	x	
78	uasDayThreshold	idlcAttribute 391	o	o	o	x	x	x	
			N	N	N				
79	uasDayCurrent	idlcAttribute 388	o	o	o	x	x	x	
			N	N	N				
79.1	CountMeasure		m	m	m	x	x	x	
79.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
79.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
79.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
80	uasDayPrevious	idlcAttribute 390	o	o	o	x	x	x	
			N	N	N				
80.1	CountMeasure		m	m	m	x	x	x	
80.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
80.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
80.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
81	uasDayHistory	idlcAttribute 389	o	o	o	x	x	x	
			N	N	N				
81.1	HistoryCountMeasure		m	m	m	x	x	x	
81.1.1	countMeasure		m	m	m	x	x	x	
81.1.1.1	CountMeasure		m	m	m	x	x	x	
81.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
81.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
81.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
81.1.2	age		m	m	m	x	x	x	

ATTds1LineTermination24 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
82	pscMinCurrent	idlcAttribute 259	o	o	o	x	x	x		
			N	N	N					
82.1	CountMeasure		m	m	m	x	x	x		
82.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
82.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
82.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
83	pscMinPrevious	idlcAttribute 261	o	o	o	x	x	x		
			N	N	N					
83.1	CountMeasure		m	m	m	x	x	x		
83.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
83.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
83.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
84	pscMinHistory	idlcAttribute 260	o	o	o	x	x	x		
			N	N	N					
84.1	HistoryCountMeasure		m	m	m	x	x	x		
84.1.1	countMeasure		m	m	m	x	x	x		
84.1.1.1	CountMeasure		m	m	m	x	x	x		
84.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
84.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
84.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
84.1.2	age		m	m	m	x	x	x		
85	pscHrCurrent	idlcAttribute 262	o	o	o	x	x	x		
			N	N	N					
85.1	CountMeasure		m	m	m	x	x	x		
85.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x		
85.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
85.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		

ATTds1LineTermination25 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
86	pscHrPrevious	idlcAttribute 264	o	o	o	x	x	x	
			N	N	N				
86.1	CountMeasure		m	m	m	x	x	x	
86.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
86.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
86.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
87	pscHrHistory	idlcAttribute 263	o	o	o	x	x	x	
			N	N	N				
87.1	HistoryCountMeasure		m	m	m	x	x	x	
87.1.1	countMeasure		m	m	m	x	x	x	
87.1.1.1	CountMeasure		m	m	m	x	x	x	
87.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
87.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
87.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
87.1.2	age		m	m	m	x	x	x	
88	pscDayCurrent	idlcAttribute 265	o	o	o	x	x	x	
			N	N	N				
88.1	CountMeasure		m	m	m	x	x	x	
88.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
88.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
88.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
89	pscDayPrevious	idlcAttribute 267	o	o	o	x	x	x	
			N	N	N				
89.1	CountMeasure		m	m	m	x	x	x	
89.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
89.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
89.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
90	pscDayHistory	idlcAttribute 266	o	o	o	x	x	x	
			N	N	N				

ATTds1LineTermination26 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
90.1	HistoryCountMeasure		m	m	m	x	x	x		
90.1.1	countMeasure		m	m	m	x	x	x		
90.1.1.1	CountMeasure		m	m	m	x	x	x		
90.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
90.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
90.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
90.1.2	age		m	m	m	x	x	x		
91	psdMinCurrent	idlcAttribute 268	o	o	o	x	x	x		
91.1	CountMeasure		N	N	N					
91.1.1	fullAccumulate		m	m	m	x	x	x		
91.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
91.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
92	psdMinPrevious	idlcAttribute 270	o	o	o	x	x	x		
92.1	CountMeasure		N	N	N					
92.1.1	fullAccumulate		m	m	m	x	x	x		
92.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x		
92.1.3	corruptedCount		0.3	0.3	0.3	x	x	x		
93	psdMinHistory	idlcAttribute 269	o	o	o	x	x	x		
93.1	HistoryCountMeasure		N	N	N					
93.1.1	countMeasure		m	m	m	x	x	x		
93.1.1.1	CountMeasure		m	m	m	x	x	x		
93.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x		
93.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x		
93.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x		
93.1.2	age		m	m	m	x	x	x		

ATTds1LineTermination27 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
94	psdHrCurrent	idlcAttribute 271	o	o	o	x	x	x	
			N	N	N				
94.1	CountMeasure		m	m	m	x	x	x	
94.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
94.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
94.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
95	psdHrPrevious	idlcAttribute 273	o	o	o	x	x	x	
			N	N	N				
95.1	CountMeasure		m	m	m	x	x	x	
95.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
95.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
95.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
96	psdHrHistory	idlcAttribute 272	o	o	o	x	x	x	
			N	N	N				
96.1	HistoryCountMeasure		m	m	m	x	x	x	
96.1.1	countMeasure		m	m	m	x	x	x	
96.1.1.1	CountMeasure		m	m	m	x	x	x	
96.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
96.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
96.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
96.1.2	age		m	m	m	x	x	x	
97	psdDayCurrent	idlcAttribute 274	o	o	o	x	x	x	
			N	N	N				
97.1	CountMeasure		m	m	m	x	x	x	
97.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
97.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
97.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
98.1	CountMeasure		m	m	m	x	x	x	

ATTds1LineTermination28 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF ds1LineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 18	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
98.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
98.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
98.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
99	psdDayHistory	idlcAttribute 275	o	o	o	x	x	x	
			N	N	N				
99.1	HistoryCountMeasure		m	m	m	x	x	x	
99.1.1	countMeasure		m	m	m	x	x	x	
99.1.1.1	CountMeasure		m	m	m	x	x	x	
99.1.1.1.1	fullAccumulate		0.5	0.5	0.5	x	x	x	
99.1.1.1.2	partialAccumulate		0.5	0.5	0.5	x	x	x	
99.1.1.1.3	corruptedCount		0.5	0.5	0.5	x	x	x	
99.1.2	age		m	m	m	x	x	x	

14.10.3 ATTRIBUTE GROUPS

GRPs1LineTermination1 — ATTRIBUTE GROUP SUPPORT							
INDEX	ATTRIBUTE GROUP TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE GROUP	STATUS		SUPPORT		ADDITIONAL INFORMATION
			GET	SET TO DEFAULT	GET	SET TO DEFAULT	
1	lineThresholdGroup	idlcGroupAttribute 86	o	N	N	N	*
2	cvNeThresholdGroup	idlcGroupAttribute 27	o	N	N	N	
3	esNeThresholdGroup	idlcGroupAttribute 62	o	N	N	N	
4	sesNeThresholdGroup	idlcGroupAttribute 165	o	N	N	N	
5	uasThresholdGroup	idlcGroupAttribute 175	o	N	N	N	
6	dmThresholdGroup	idlcGroupAttribute 46	o	N	N	N	
7	lineHrNeThresholdGroup	idlcGroupAttribute 77	o	N	N	N	
8	lineDayNeThresholdGroup	idlcGroupAttribute 76	o	N	N	N	
9	lineMinNeThresholdGroup	idlcGroupAttribute 78	o	N	N	N	
10	linePmGroup	idlcGroupAttribute 83	m	N	N	N	
11	linePmCurrentGroup	idlcGroupAttribute 82	m	N	N	N	
12	linePmPreviousGroup	idlcGroupAttribute 85	m	N	N	N	
13	linePmHistoryGroup	idlcGroupAttribute 84	m	N	N	N	
14	cvNeGroup	idlcGroupAttribute 22	o	N	N	N	
15	cvNeCurrentGroup	idlcGroupAttribute 20	o	N	N	N	
16	cvNePreviousGroup	idlcGroupAttribute 26	o	N	N	N	
17	cvNeHistoryGroup	idlcGroupAttribute 23	o	N	N	N	
18	esNeGroup	idlcGroupAttribute 57	o	N	N	N	
19	esNeCurrentGroup	idlcGroupAttribute 55	o	N	N	N	
20	esNePreviousGroup	idlcGroupAttribute 61	o	N	N	N	
21	esNeHistoryGroup	idlcGroupAttribute 58	o	N	N	N	
22	sesNeGroup	idlcGroupAttribute 160	o	N	N	N	
23	sesNeCurrentGroup	idlcGroupAttribute 158	o	N	N	N	
24	sesNePreviousGroup	idlcGroupAttribute 164	o	N	N	N	
25	sesNeHistoryGroup	idlcGroupAttribute 161	o	N	N	N	
26	dmGroup	idlcGroupAttribute 41	o	N	N	N	
27	dmCurrentGroup	idlcGroupAttribute 39	o	N	N	N	
28	dmPreviousGroup	idlcGroupAttribute 45	o	N	N	N	
29	dmHistoryGroup	idlcGroupAttribute 42	o	N	N	N	
30	uasGroup	idlcGroupAttribute 170	o	N	N	N	
31	uasCurrentGroup	idlcGroupAttribute 168	o	N	N	N	
32	uasPreviousGroup	idlcGroupAttribute 174	o	N	N	N	
33	uasHistoryGroup	idlcGroupAttribute 171	o	N	N	N	
34	pscGroup	idlcGroupAttribute 126	o	N	N	N	
35	pscCurrentGroup	idlcGroupAttribute 124	o	N	N	N	
36	pscPreviousGroup	idlcGroupAttribute 130	o	N	N	N	
37	pscHistoryGroup	idlcGroupAttribute 127	o	N	N	N	
38	psdGroup	idlcGroupAttribute 133	o	N	N	N	
39	psdCurrentGroup	idlcGroupAttribute 131	o	N	N	N	
40	psdPreviousGroup	idlcGroupAttribute 137	o	N	N	N	
41	psdHistoryGroup	idlcGroupAttribute 134	o	N	N	N	
42	linePMMinGroup	idlcGroupAttribute 81	o	N	N	N	
43	linePMHrGroup	idlcGroupAttribute 80	o	N	N	N	
44	linePMDayGroup	idlcGroupAttribute 79	o	N	N	N	
45	cvNeMinGroup	idlcGroupAttribute 25	o	N	N	N	

* The 5ESS®-2000 switch does not support group attributes.

GRPds1LineTermination2 — ATTRIBUTE GROUP SUPPORT							
INDEX	ATTRIBUTE GROUP TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE GROUP	STATUS		SUPPORT		ADDITIONAL INFORMATION
			GET	SET TO DEFAULT	GET	SET TO DEFAULT	
46	cvNeHrGroup	idlcGroupAttribute 24	o	N	N	N	
47	cvNeDayGroup	idlcGroupAttribute 21	o	N	N	N	
48	esNeMinGroup	idlcGroupAttribute 60	o	N	N	N	
49	esNeHrGroup	idlcGroupAttribute 59	o	N	N	N	
50	esNeDayGroup	idlcGroupAttribute 56	o	N	N	N	
51	sesNeMinGroup	idlcGroupAttribute 163	o	N	N	N	
52	sesNeHrGroup	idlcGroupAttribute 162	o	N	N	N	
53	sesNeDayGroup	idlcGroupAttribute 159	o	N	N	N	
54	dmMinGroup	idlcGroupAttribute 44	o	N	N	N	
55	dmHrGroup	idlcGroupAttribute 43	o	N	N	N	
56	dmDayGroup	idlcGroupAttribute 40	o	N	N	N	
57	uasMinGroup	idlcGroupAttribute 173	o	N	N	N	
58	uasHrGroup	idlcGroupAttribute 172	o	N	N	N	
59	uasDayGroup	idlcGroupAttribute 169	o	N	N	N	
60	pscMinGroup	idlcGroupAttribute 129	o	N	N	N	
61	pscHrGroup	idlcGroupAttribute 128	o	N	N	N	
62	pscDayGroup	idlcGroupAttribute 125	o	N	N	N	
63	psdMinGroup	idlcGroupAttribute 136	o	N	N	N	
64	psdHrGroup	idlcGroupAttribute 135	o	N	N	N	
65	psdDayGroup	idlcGroupAttribute 132	o	N	N	N	

14.10.4 ACTIONS

ACTds1LineTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	operateLoopback	idlcAction 29	m	Y	
1.1	LpbkArguments		m	Y	
1.1.1	loopbackLocation		o	Y	
1.1.1.1	Location		m	Y	
1.1.1.1.1	end		o.14	Y	
1.1.1.1.1.1	End		m	Y	
1.1.1.1.1.1.1	nearEnd		m	Y	
1.1.1.1.1.1.2	farEnd		m	N	
1.1.1.1.2	line		o.14	N	
1.1.2	loopbackDirection		o	Y	
1.1.2.1	LpbkDirection		m	Y	
1.1.2.1.1	az		m	N	
1.1.2.1.2	za		m	Y	
1.1.3	loopbackType		o	Y	
1.1.3.1	LpbkType		m	Y	
1.1.3.1.1	payload		m	N	
1.1.3.1.2	frame		m	Y	

ACTds1LineTermination2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	ADDITIONAL STATUS	SUPPORT	INFORMATION
2	releaseLoopback	idlcAction 37	m	Y	
2.1	LpbkArguments		m	Y	
2.1.1	loopbackLocation		o	Y	
2.1.1.1	Location		m	Y	
2.1.1.1.1	end		o.24	Y	
2.1.1.1.1.1	End		m	Y	
2.1.1.1.1.1.1	nearEnd		m	Y	
2.1.1.1.1.1.2	farEnd		m	N	
2.1.1.1.2	line		o.24	N	
2.1.2	loopbackDirection		o	Y	
2.1.2.1	LpbkDirection		m	Y	
2.1.2.1.1	az		m	N	
2.1.2.1.2	za		m	Y	
2.1.3	loopbackType		o	N	
2.1.3.1	LpbkType		m		
2.1.3.1.1	payload		m		
2.1.3.1.2	frame		m		
3	faultLocate	idlcAction 20	o	N	
3.1	FaultLocateArguments		m		
3.1.1	regeneratorA		m		
3.1.2	regeneratorZ		m		
3.1.3	flDirection		m		
3.1.3.1	FlDirection		m		
3.1.3.1.1	outgoing		m		
3.1.3.1.2	incoming		m		
3.1.3.1.3	sefl		m		
3.2	FaultLocateResults		m		
3.2.1	FaultLocateResult		m		
3.2.1.1	noise		o.33		
3.2.1.2	balance		o.33		
3.2.1.3	power		o.33		
3.2.1.4	ber		o.33		
3.2.1.5	summary		o.33		
3.2.1.5.1	Summary		m		
3.2.1.5.1.1	bad		m		
3.2.1.5.1.2	good		m		
3.2.1.5.1.3	marginal		m		

14.10.5 NOTIFICATIONS

NOTDs1LineTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	N	*
1.1	EventInfo		m			
1.1.1	problemType		m			
1.1.1.1	ProblemType		m			
1.1.1.1.1	indeterminate		o.114			
1.1.1.1.2	equipmentProblemType		o.114			
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.114			
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.114			
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.16			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			

* The 5ESS®-2000 switch discards event reports for ds1 line terminations.

NOTds1LineTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.16			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.114			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.114			
1.1.1.1.7	thresholdAlert		m			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.114			
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			

NOTDs1LineTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m			
1.1.2.1	AlarmSeverity		m			
1.1.2.1.1	clear		m			
1.1.2.1.2	indeterminate		m			
1.1.2.1.3	warning		m			
1.1.2.1.4	minor		m			
1.1.2.1.5	major		m			
1.1.2.1.6	critical		m			
1.1.3	trendIndication		o			
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o			
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o			
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o			
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o			
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		o.174			
1.1.7.1.2	AnalogThreshold		o.174			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o			

14.10.6 PARAMETERS

PARds1LineTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	

See Footnotes on next page.

PARds1LineTermination1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	†
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses for ds1 line terminations.
 † If object specific errors are received, only the error type is considered.
 ‡ The 5ESS®-2000 switch includes the error description in craft reports.

14.11 EQUIPMENT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
equipment	idlcObjectClass 21

Are all mandatory features of the class supported? Yes No

14.11.1 NAME BINDING

NAMAequipment — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	equipment-equipment	idlcNameBinding 42	equipment	c	Y
2	equipment-idlcTerminal	idlcNameBinding 43	idlcTerminal	c	Y
3	equipment-networkElement	idlcNameBinding 44	networkElement	c	Y

NAMBequipment — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	m(2.1)		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch does not provision equipment objects, expecting them to be inherently created by the RDT.				
(2.1 IF associated protectionGroupUnit object instance is not deleted THEN x ELSE m.				

14.11.2 ATTRIBUTES

ATEquipment1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
1	equipmentId	idlcAttribute 132	o	m	x	x	x	x	
			N	N					
1.1	EquipmentId		o	m	x	x	x	x	
1.1.1	INTEGER		o.13	o.13	x	x	x	x	
1.1.2	PrintableString		o.13	o.13	x	x	x	x	
2	primaryServiceState	idlcAttribute 242	o	m	x	x	x	x	
			N	N					
2.1	PrimaryServiceState		o	m	x	x	x	x	
2.1.1	is		o	m	x	x	x	x	
2.1.2	oos		o	m	x	x	x	x	
3	secondaryServiceState	idlcAttribute 298	o	m	x	x	x	x	
			N	N					
3.1	SecondaryServiceState		o	m	x	x	x	x	
3.1.1	ts		o	m	x	x	x	x	
3.1.2	mt		o	m	x	x	x	x	
3.1.3	ma		o	m	x	x	x	x	
3.1.4	anr		o	m	x	x	x	x	
3.1.5	ueq		o	m	x	x	x	x	
3.1.6	fef		o	m	x	x	x	x	
3.1.7	busy		o	m	x	x	x	x	
3.1.8	lpbk		o	m	x	x	x	x	
3.1.9	mea		o	m	x	x	x	x	
3.1.10	mon		o	m	x	x	x	x	
3.1.11	pwr		o	m	x	x	x	x	
3.1.12	sea		o	m	x	x	x	x	
3.1.13	act		o	m	x	x	x	x	
3.1.14	ccsf		o	m	x	x	x	x	

ATEquipment2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.15	comb		o	m	x	x	x	x	
3.1.16	dgn		o	m	x	x	x	x	
3.1.17	dsbld		o	m	x	x	x	x	
3.1.18	erranal		o	m	x	x	x	x	
3.1.19	ex		o	m	x	x	x	x	
3.1.20	faf		o	m	x	x	x	x	
3.1.21	fepro		o	m	x	x	x	x	
3.1.22	flt		o	m	x	x	x	x	
3.1.23	frcd		o	m	x	x	x	x	
3.1.24	hd		o	m	x	x	x	x	
3.1.25	hw		o	m	x	x	x	x	
3.1.26	inhip		o	m	x	x	x	x	
3.1.27	lkdo		o	m	x	x	x	x	
3.1.28	lock		o	m	x	x	x	x	
3.1.29	mtce		o	m	x	x	x	x	
3.1.30	mtcelim		o	m	x	x	x	x	
3.1.31	nm		o	m	x	x	x	x	
3.1.32	pctf		o	m	x	x	x	x	
3.1.33	pri		o	m	x	x	x	x	
3.1.34	prtcl		o	m	x	x	x	x	
3.1.35	sec		o	m	x	x	x	x	
3.1.36	stby		o	m	x	x	x	x	
3.1.37	termf		o	m	x	x	x	x	
3.1.38	tmt		o	m	x	x	x	x	

ATEquipment3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.39	trd		o	m	x	x	x	x	
3.1.40	tstf		o	m	x	x	x	x	
3.1.41	sof		o	m	x	x	x	x	
3.1.42	swtch		o	m	x	x	x	x	
4	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	x	x	x	
			N	N	N				
4.1	AlarmSeverityAssignment		m	m	m	x	x	x	
4.1.1	problem		m	m	m	x	x	x	
4.1.1.1	ProblemType		m	m	m	x	x	x	
4.1.1.1.1	indeterminate		0.5	0.5	0.5	x	x	x	
4.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	x	x	x	
4.1.1.1.2.1	EquipmentProblemType		m	m	m	x	x	x	
4.1.1.1.2.1.1	dataSetProblem		m	m	m	x	x	x	
4.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	x	x	x	
4.1.1.1.2.1.3	lineCardProblem		m	m	m	x	x	x	
4.1.1.1.2.1.4	multiplexerProblem		m	m	m	x	x	x	
4.1.1.1.2.1.5	powerProblem		m	m	m	x	x	x	
4.1.1.1.2.1.6	processorProblem		m	m	m	x	x	x	
4.1.1.1.2.1.7	receiverFailure		m	m	m	x	x	x	
4.1.1.1.2.1.8	terminalProblem		m	m	m	x	x	x	
4.1.1.1.2.1.9	timingProblem		m	m	m	x	x	x	
4.1.1.1.2.1.10	transmitterFailure		m	m	m	x	x	x	
4.1.1.1.2.1.11	trunkCardProblem		m	m	m	x	x	x	
4.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	x	x	x	
4.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	x	x	x	

ATEquipment4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS				ADDITIONAL INFORMATION		
			SUPPORT						
			crt	get	rep	add		rem	df1
4.1.1.1.2.1.14	backplaneFailure		m	m	m	x	x	x	
4.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	x	x	x	
4.1.1.1.3.1	TransmissionProblemType		m	m	m	x	x	x	
4.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	x	x	x	
4.1.1.1.3.1.2	callSetUpFailure		m	m	m	x	x	x	
4.1.1.1.3.1.3	degradedSignal		m	m	m	x	x	x	
4.1.1.1.3.1.4	framingError		m	m	m	x	x	x	
4.1.1.1.3.1.5	lossOfFrame		m	m	m	x	x	x	
4.1.1.1.3.1.6	lossOfPointer		m	m	m	x	x	x	
4.1.1.1.3.1.7	lossOfSignal		m	m	m	x	x	x	
4.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	x	x	x	
4.1.1.1.4.1	EnvironmentalProblemType		m	m	m	x	x	x	
4.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	x	x	x	
4.1.1.1.4.1.1.1	SEAlarmType		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.8	engineFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	x	x	x	

ATEquipment5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS				ADDITIONAL INFORMATION		
			SUPPORT						
			crt	get	rep	add		rem	df1
4.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	x	x	x	
4.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	x	x	x	
4.1.1.1.4.1.2	sensorAlarm		0.7	0.7	0.7	x	x	x	
4.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	x	x	x	
4.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	x	x	x	

ATEquipment6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	addr	rem		dfli
4.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.2	sensorId		m	m	m	x	x	x	
4.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	x	x	x	
4.1.1.1.5	softwareProblemType		0.5	0.5	0.5	x	x	x	
4.1.1.1.5.1	SoftwareProblemType		m	m	m	x	x	x	
4.1.1.1.5.1.1	storageCapacityProblem		m	m	m	x	x	x	
4.1.1.1.5.1.2	memoryMismatch		m	m	m	x	x	x	
4.1.1.1.5.1.3	corruptData		m	m	m	x	x	x	
4.1.1.1.5.1.4	outOfCPUCycles		m	m	m	x	x	x	
4.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	x	x	x	
4.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	x	x	x	
4.1.1.1.6	serviceProblemType		0.5	0.5	0.5	x	x	x	
4.1.1.1.7	thresholdAlert		0.5	0.5	0.5	x	x	x	
4.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	x	x	x	
4.1.1.1.7.1.1	anyThresholdAlert		o	m	m	x	x	x	
4.1.1.1.7.1.2	specificThresholdAlert		o	m	o	x	x	x	
4.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	x	x	x	
4.1.1.1.7.1.2.1.1	Attribute		o	m	m	x	x	x	
4.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	x	x	x	
4.1.1.1.7.1.2.2.1	Attribute		o	m	m	x	x	x	
4.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	x	x	x	
4.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	x	x	x	
4.1.1.1.8.1.1	operationsType		m	m	m	x	x	x	
4.1.1.1.8.1.1.1	OperationsType		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	x	x	x	

ATEquipment7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
4.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.6	litSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	x	x	x	
4.1.1.1.8.1.2	scheduleId		o	o	o	x	x	x	
4.1.1.1.8.1.2.1	DistinguishedName		m	m	m	x	x	x	
4.1.1.1.8.1.3	problem		m	m	m	x	x	x	
4.1.2	alarmSeverityCode		m	m	m	x	x	x	
4.1.2.1	AlarmSeverityCode		m	m	m	x	x	x	
4.1.2.1.1	non-alarmed		m	m	m	x	x	x	
4.1.2.1.2	minor		m	m	m	x	x	x	
4.1.2.1.3	major		m	m	m	x	x	x	
4.1.2.1.4	critical		m	m	m	x	x	x	
5	protectionGroupPointer	idlcAttribute 248	o	o	o	x	x	x	
5.1	ProtectionGroupPointer		N	N	N				
5.1.1	NULL		o.3	o.3	o.3	x	x	x	
5.1.2	DistinguishedName		o.3	o.3	o.3	x	x	x	
5.1.2.1	DistinguishedName		m	m	m	x	x	x	
6	equipmentFunction	idlcAttribute 129	o	o	o	x	x	x	
6.1	EquipmentFunction		N	N	N				
6.1.1	unspecified		m	m	m	x	x	x	

ATEquipment8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.2	centralOfficeTerminal		m	m	m	x	x	x	
6.1.3	remoteDigitalTerminal		m	m	m	x	x	x	
6.1.4	automatedDigitalTerminalSystem		m	m	m	x	x	x	
6.1.5	digitalCrossConnectSystem		m	m	m	x	x	x	
6.1.6	lowBitRateVoiceTerminal		m	m	m	x	x	x	
6.1.7	multiplexer		m	m	m	x	x	x	
6.1.8	addDropMultiplexer		m	m	m	x	x	x	
6.1.9	lineTerminatingEquipment		m	m	m	x	x	x	
6.1.10	repeater		m	m	m	x	x	x	
6.1.11	automaticProtectionSwitchingSystem		m	m	m	x	x	x	
6.1.12	signalTransferPoint		m	m	m	x	x	x	
6.1.13	serviceControlPoint		m	m	m	x	x	x	
6.1.14	supervisorySystem		m	m	m	x	x	x	
6.1.15	environmentMonitor		m	m	m	x	x	x	
6.1.16	timingSignalGenerator		m	m	m	x	x	x	
6.1.17	externalControl		m	m	m	x	x	x	
6.1.18	distantTerminal		m	m	m	x	x	x	
7	locationName	idlcAttribute 210	o	o	o	x	x	x	
			N	N	N				
8	vendorName	idlcAttribute 400	o	o	o	x	x	x	
			N	N	N				
8.1	VendorName		m	m	m	x	x	x	
8.1.1	INTEGER		o.3	o.3	o.3	x	x	x	
8.1.2	PrintableString		o.3	o.3	o.3	x	x	x	
9	currentProblemList	idlcAttribute 59	c(9)	c(9)	x	x	x	x	
			N	Y					
9.1	CurrentProblem		o	m	x	x	x	x	
				Y					

(9 IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects
THEN RDT m ELSE n/a

ATEquipment9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
9.1.1	problem		o	m	x	x	x	x	
				Y					
9.1.1.1	ProblemType		o	m	x	x	x	x	
				Y					
9.1.1.1.1	indeterminate		0.5	0.5	x	x	x	x	
				Ig					
9.1.1.1.2	equipmentProblemType		0.5	0.5	x	x	x	x	
				Y					
9.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
				Y					
9.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
				Y					
9.1.1.1.3	transmissionProblemType		0.5	0.5	x	x	x	x	
				Ig					
9.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
				Y					
9.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
				Y					
9.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
				Y					
9.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
				Y					

ATEquipment10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
9.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
9.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
9.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
9.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
9.1.1.1.4	environmentalProblemType		0.5	0.5	x	x	x	x	
9.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
9.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	x	x	x	x	
9.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
9.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	

ATEquipment11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
9.1.1.1.4.1.2	sensorAlarm		0.7	0.7	x	x	x	x	
				Y					
9.1.1.1.4.1.2.1	SensorAlarmList		o	m	x	x	x	x	
				Y					
9.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	x	x	x	x	
				Ig					
9.1.1.1.4.1.2.1.1.1	SensorAlarmType		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
9.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	*
				Y					
9.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
				Ig					
9.1.1.1.5	softwareProblemType		0.5	0.5	x	x	x	x	
				Ig					
9.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
9.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	

* If 1, mapped to E2 telemetry MISC 1 alarm; if 2, mapped to E2 telemetry MISC 2 alarm.

ATEquipment12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	g	re	pa	rem		df
9.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
9.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
9.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
9.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
9.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
9.1.1.1.6	serviceProblemType		0.5	0.5	x	x	x	x	
9.1.1.1.7	thresholdAlert		0.5	0.5	x	x	x	x	
9.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
9.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
9.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
9.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
9.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
9.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
9.1.1.1.7.1.2.2.1	Attribute		m	m	x	x	x	x	
9.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	x	x	x	x	
9.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
9.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
9.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.6	litSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	

ATEquipment13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
9.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
9.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	
9.1.1.1.8.1.2.1	DistinguishedName		o	m	x	x	x	x	
9.1.1.1.8.1.3	problem		o	m	x	x	x	x	
9.1.2	problemState		o	m	x	x	x	x	
				Ig					
9.1.2.1	ProblemState		o	m	x	x	x	x	
9.1.2.1.1	active-pending		o	m	x	x	x	x	
9.1.2.1.2	active-reportable		o	m	x	x	x	x	
9.1.3	problemData		o	o	x	x	x	x	
				Y					
9.1.3.1	ProblemData		o	m	x	x	x	x	
				Y					
9.1.3.1.1	identifier		o	m	x	x	x	x	
				Y					
9.1.3.1.2	critical		o	m	x	x	x	x	
				Y					
9.1.3.1.3	item		o	m	x	x	x	x	
				Y					*
9.1.3.1.3.1	identifier		o	m	x	x	x	x	
10	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
10.1	EventReportControlId		m	m	m	m	m	x	
10.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
10.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
11	inputCommandControlPointers	idlcAttribute 181	o	o	o	o	o	x	
			N	N	N	N	N		
11.1	InputCommandControlId		m	m	m	m	m	x	
11.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
11.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
12	dgnSchedPointers	idlcAttribute 95	o	o	o	o	o	x	
			N	N	N	N	N		
12.1	DgnScheduleId		m	m	m	m	m	x	
* Must be attProblemData									

ATEquipment14 — ATTRIBUTE SUPPORT										
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION	
			SUPPORT							
			crt	get	rep	add	rem	dfi		
12.1.1	INTEGER		o.3	o.3	o.3	o.3	o.3	o.3	x	
12.1.2	PrintableString		o.3	o.3	o.3	o.3	o.3	o.3	x	
13	exerciseSchedPointers	idlcAttribute 165	o	o	o	o	o	o	x	
			N	N	N	N	N	N		
13.1	ExerciseScheduleId		m	m	m	m	m	m	x	
13.1.1	INTEGER		o.3	o.3	o.3	o.3	o.3	o.3	x	
13.1.2	PrintableString		o.3	o.3	o.3	o.3	o.3	o.3	x	
14	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	o	x	
			N	N	N	N	N	N		
14.1	CurrentAlarmSumScheduleId		m	m	m	m	m	m	x	
14.1.1	INTEGER		o.3	o.3	o.3	o.3	o.3	o.3	x	
14.1.2	PrintableString		o.3	o.3	o.3	o.3	o.3	o.3	x	
15	maintMeasReportSchedPointers	idlcAttribute 212	o	o	o	o	o	o	x	
			N	N	N	N	N	N		
15.1	MMReportScheduleId		m	m	m	m	m	m	x	
15.1.1	INTEGER		o.3	o.3	o.3	o.3	o.3	o.3	x	
15.1.2	PrintableString		o.3	o.3	o.3	o.3	o.3	o.3	x	
16	externalEntityType	idlcAttribute 168	o	o	o	x	x	x	x	
			N	N	N					
16.1	ExternalEntityType		m	m	m	x	x	x	x	
16.1.1	airCompressor		m	m	m	x	x	x	x	
16.1.2	airConditioning		m	m	m	x	x	x	x	
16.1.3	engine		m	m	m	x	x	x	x	
16.1.4	fan		m	m	m	x	x	x	x	
16.1.5	generator		m	m	m	x	x	x	x	
16.1.6	heater		m	m	m	x	x	x	x	
16.1.7	light		m	m	m	x	x	x	x	
16.1.8	sprinkler		m	m	m	x	x	x	x	

ATEquipment15 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipment	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 21	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
16.1.9	pump		m	m	m	x	x	x	
16.1.10	rectifier		m	m	m	x	x	x	
16.1.11	dryer		m	m	m	x	x	x	
17	externalEntityOpnState	idlcAttribute 167	o	o	x	x	x	x	
			N	N					
17.1	ExternalEntityOpnState		o	m	x	x	x	x	
17.1.1	airCompressor		o	m	x	x	x	x	
17.1.2	airConditioning		o	m	x	x	x	x	
17.1.3	engine		o	m	x	x	x	x	
17.1.4	fan		o	m	x	x	x	x	
17.1.5	generator		o	m	x	x	x	x	
17.1.6	heater		o	m	x	x	x	x	
17.1.7	light		o	m	x	x	x	x	
17.1.8	sprinkler		o	m	x	x	x	x	
17.1.9	pump		o	m	x	x	x	x	
17.1.10	rectifier		o	m	x	x	x	x	
17.1.11	dryer		o	m	x	x	x	x	
18	bootGenericProf	idlcAttribute 27	o	o	o	x	x	x	
			N	N	N				
18.1	ProcLoadId		m	m	m	x	x	x	
18.1.1	procLoad		m	m	m	x	x	x	
18.1.2	versionId		m	m	m	x	x	x	

14.11.3 ATTRIBUTE GROUPS

No other attribute group is supported for *equipment* object class.

14.11.4 ACTIONS

ACTequipment1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	activateExternalEntity	idlcAction 1	m	N	
1.1	ActivateExternalEntityArguments		m		
1.1.1	continuousActivation		m		
1.1.2	externalEntityType		m		
1.1.2.1	ExtEntityType		m		
1.1.2.1.1	airCompressor		m		
1.1.2.1.2	airConditioning		m		
1.1.2.1.3	engine		m		
1.1.2.1.4	fan		m		
1.1.2.1.5	generator		m		
1.1.2.1.6	heater		m		
1.1.2.1.7	light		m		
1.1.2.1.8	sprinkler		m		
1.1.2.1.9	pump		m		
1.1.2.1.10	rectifier		m		
1.1.2.1.11	dryer		m		
2	deactivateExternalEntity	idlcAction 14	m	N	
2.1	DeactivateExternalEntityArguments		m		
2.1.1	continuousDeactivation		m		
2.1.2	externalEntityType		m		
2.1.2.1	ExtEntityType		m		
2.1.2.1.1	airCompressor		m		
2.1.2.1.2	airConditioning		m		
2.1.2.1.3	engine		m		
2.1.2.1.4	fan		m		
2.1.2.1.5	generator		m		
2.1.2.1.6	heater		m		
2.1.2.1.7	light		m		
2.1.2.1.8	sprinkler		m		
2.1.2.1.9	pump		m		
2.1.2.1.10	rectifier		m		
2.1.2.1.11	dryer		m		
3	diagnose	idlcAction 15	m	N	
3.1	DiagnoseArguments		m		
3.1.1	diagnosisId		m		
3.1.2	phases		m		
3.1.3	iteration		m		
3.1.4	normalTermination		m		
3.1.5	reportFailOnly		m		
3.1.6	reportSummaryOnly		m		
3.1.7	affectedPort		o		
3.2	DiagnoseResults		m		
3.2.1	DiagnosisResult		m		
3.2.1.1	phase		m		
3.2.1.2	iteration		m		

ACTequipment2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
3.2.1.3	fail		m		
3.2.1.4	expectedValue		o		
3.2.1.5	actualValue		o		
4	exercise	idlcAction 18	o	N	
4.1	ExerciseArguments		m		
4.1.1	exerciseId		m		
4.1.2	reportFailOnly		m		
4.2	ExerciseResult		m		
4.2.1	result		m		
5	remove	idlcAction 39	m	N	
5.1	RemoveArguments		m		
5.1.1	mode		m		
5.1.1.1	Mode		m		
5.1.1.1.1	normal		m		
5.1.1.1.2	forced		m		
6	restore	idlcAction 44	m	N	
6.1	RestoreArguments		m		
6.1.1	mode		m		
6.1.1.1	Mode		m		
6.1.1.1.1	normal		m		
6.1.1.1.2	forced		m		
6.2	RestoreResult		o		
6.2.1	RestoringResult		o		
6.2.1.1	RestoringResult		m		
6.2.1.1.1	completed		m		
6.2.1.1.2	failedVerification		m		
7	bootProcessor	idlcAction 4	c(s)	N	
7.1	BootProcLoad		m		
7.1.1	ProcLoadId		m		
7.1.1.1	procLoad		m		
7.1.1.2	versionId		m		
8	restartProcessor	idlcAction 43	c(s)	N	
8.1	RestartArg		m		
8.1.1	restartMode		o		
8.1.1.1	RestartMode		m		
8.1.1.1.1	warm		m		
8.1.1.1.2	cold		m		
(s IF software loadable THEN m ELSE n/a					

14.11.5 NOTIFICATIONS

NOTEquipment1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.13			
1.1.2	AdditionalInfo		o.13			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.23			
2.1.2	AdditionalInfo		o.23			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	eventReporting	idlcNotification 4	m	N	Y	*
4.1	EventInfo		Y		Y	
4.1.1	problemType		m		Y	
4.1.1.1	ProblemType		m		Y	
4.1.1.1.1	indeterminate		o.44		Ig	
4.1.1.1.2	equipmentProblemType		o.44		Y	
4.1.1.1.2.1	EquipmentProblemType		m		Y	

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTequipment2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.2.1.1	dataSetProblem		m		Y	
4.1.1.1.2.1.2	externalIFDeviceProblem		m		Y	
4.1.1.1.2.1.3	lineCardProblem		m		Y	
4.1.1.1.2.1.4	multiplexerProblem		m		Y	
4.1.1.1.2.1.5	powerProblem		m		Y	
4.1.1.1.2.1.6	processorProblem		m		Y	
4.1.1.1.2.1.7	receiverFailure		m		Y	
4.1.1.1.2.1.8	terminalProblem		m		Y	
4.1.1.1.2.1.9	timingProblem		m		Y	
4.1.1.1.2.1.10	transmitterFailure		m		Y	
4.1.1.1.2.1.11	trunkCardProblem		m		Y	
4.1.1.1.2.1.12	replaceableUnitMissing		m		Y	
4.1.1.1.2.1.13	replaceableUnitTypeMismatch		m		Y	
4.1.1.1.2.1.14	backplaneFailure		m		Y	
4.1.1.1.3	transmissionProblemType		o.44		Ig	
4.1.1.1.3.1	TransmissionProblemType		m			
4.1.1.1.3.1.1	alarmIndicationSignal		m			
4.1.1.1.3.1.2	callSetUpFailure		m			
4.1.1.1.3.1.3	degradedSignal		m			
4.1.1.1.3.1.4	framingError		m			
4.1.1.1.3.1.5	lossOfFrame		m			
4.1.1.1.3.1.6	lossOfPointer		m			
4.1.1.1.3.1.7	lossOfSignal		m			
4.1.1.1.4	environmentalProblemType		o.44		Y	
4.1.1.1.4.1	EnvironmentalProblemType		m		Y	
4.1.1.1.4.1.1	supportEntityAlarm		o.46		Ig	
4.1.1.1.4.1.1.1	SEAlarmType		m			
4.1.1.1.4.1.1.1.1	airCompressorFailure		m			
4.1.1.1.4.1.1.1.2	airConditioningFailure		m			
4.1.1.1.4.1.1.1.3	airDryerFailure		m			
4.1.1.1.4.1.1.1.4	batteryDischarging		m			
4.1.1.1.4.1.1.1.5	batteryFailure		m			
4.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
4.1.1.1.4.1.1.1.7	coolingFanFailure		m			
4.1.1.1.4.1.1.1.8	engineFailure		m			
4.1.1.1.4.1.1.1.9	fuseFailure		m			
4.1.1.1.4.1.1.1.10	generatorFailure		m			
4.1.1.1.4.1.1.1.11	pumpFailure		m			
4.1.1.1.4.1.1.1.12	rectifierFailure		m			
4.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
4.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
4.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
4.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
4.1.1.1.4.1.2	sensorAlarm		o.46		Y	
4.1.1.1.4.1.2.1	SensorAlarmList		m		Y	

NOTEquipment3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.4.1.2.1.1	sensorAlarmType		o		Ig	
4.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
4.1.1.1.4.1.2.1.1.1.1	fire		m			
4.1.1.1.4.1.2.1.1.1.2	flood		m			
4.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
4.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
4.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
4.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
4.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
4.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
4.1.1.1.4.1.2.1.1.1.9	lowWater		m			
4.1.1.1.4.1.2.1.1.1.10	smoke		m			
4.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
4.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
4.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
4.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
4.1.1.1.4.1.2.1.1.1.15	highWind		m			
4.1.1.1.4.1.2.1.2	sensorId		m		Y	*
4.1.1.1.4.1.2.1.3	sensorLocation		o		Ig	
4.1.1.1.5	softwareProblemType		o.44			
4.1.1.1.5.1	SoftwareProblemType		m			
4.1.1.1.5.1.1	storageCapacityProblem		m			
4.1.1.1.5.1.2	memoryMismatch		m			
4.1.1.1.5.1.3	corruptData		m			
4.1.1.1.5.1.4	outOfCPUCycles		m			
4.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
4.1.1.1.5.1.6	softwareDownloadFailure		m			
4.1.1.1.6	serviceProblemType		o.44		Ig	
4.1.1.1.7	thresholdAlert		o.44			
4.1.1.1.7.1	ThresholdAlert		o.114			
4.1.1.1.7.1.1	anyThresholdAlert		o			
4.1.1.1.7.1.2	specificThresholdAlert		o			
4.1.1.1.7.1.2.1	triggeredThreshold		m			
4.1.1.1.7.1.2.1.1	Attribute		m			
4.1.1.1.7.1.2.2	triggeredAttribute		o			
4.1.1.1.7.1.2.2.1	Attribute		m			
4.1.1.1.8	scheduledMgmtOpnsProblemType		o.44		Ig	
4.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
4.1.1.1.8.1.1	operationsType		m			
4.1.1.1.8.1.1.1	OperationsType		m			
4.1.1.1.8.1.1.1.1	auditSchedule		m			
4.1.1.1.8.1.1.1.2	backupSchedule		m			
4.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
4.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
4.1.1.1.8.1.1.1.5	exerciseSchedule		m			
4.1.1.1.8.1.1.1.6	litSchedule		m			
4.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			

* If 1, mapped to E2 telemetry MISC 1 alarm. If 2, mapped to E2 telemetry MISC 2 alarm.

NOTequipment4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.8.1.1.1.8	pmReportSchedule		m			
4.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
4.1.1.1.8.1.2	scheduleId		o			
4.1.1.1.8.1.2.1	DistinguishedName		m			
4.1.1.1.8.1.3	problem		m			
4.1.2	alarmSeverity		m		Y	
4.1.2.1	AlarmSeverity		m		Y	
4.1.2.1.1	clear		m		Y	
4.1.2.1.2	indeterminate		m		Y	
4.1.2.1.3	warning		m		Y	
4.1.2.1.4	minor		m		Y	
4.1.2.1.5	major		m		Y	
4.1.2.1.6	critical		m		Y	
4.1.3	trendIndication		o		Ig	
4.1.3.1	TrendIndication		m			
4.1.3.1.1	lessSevere		m			
4.1.3.1.2	noChange		m			
4.1.3.1.3	moreSevere		m			
4.1.4	protectionIndication		o		Ig	
4.1.4.1	ProtectionIndication		m			
4.1.4.1.1	switchSuccessful		m			
4.1.4.1.2	switchFailed		m			
4.1.4.1.3	protectionUnitNotAvailable		m			
4.1.4.1.4	notEquipped		m			
4.1.4.1.5	switchBackSuccessful		m			
4.1.4.1.6	switchBackFailed		m			
4.1.5	protectionObject		o		Ig	
4.1.5.1	DistinguishedName		m			
4.1.6	problemData		o		Y	
4.1.6.1	ProblemData		m		Y	
4.1.6.1.1	identifier		m		Y	
4.1.6.1.2	critical		m		Y	
4.1.6.1.3	item		m		Y	*
4.1.6.1.3.1	identifier		m			
4.1.7	threshold		o		Ig	
4.1.7.1	Threshold		m			
4.1.7.1.1	INTEGER		o.474			
4.1.7.1.2	AnalogThreshold		o.474			
4.1.7.1.2.1	AnalogThreshold		m			
4.1.7.1.2.1.1	floor		o			
4.1.7.1.2.1.2	ceiling		o			
4.1.7.1.2.1.3	pendingPeriod		o			
4.1.8	monitoredAttribute		o		Ig	
* Must be attProblemData.						

14.11.6 PARAMETERS

PARequipment1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	

See Footnotes on next page.

PARequipment1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch does not send object specific errors with responses for equipment objects. † If object specific errors are received, only the error type is considered. ‡ The 5ESS®-2000 switch includes the error description in craft reports.					

14.12 EQUIPMENT HOLDER

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
equipmentHolder	idlcObjectClass 22

Are all mandatory features of the class supported? Yes No

14.12.1 NAME BINDING

NAMAequipmentHolder — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	equipmentHolder-equipment	idlcNameBinding 45	equipment	c	Y
2	equipmentHolder-idlcTerminal	idlcNameBinding 47	idlcTerminal	c	Y
3	equipmentHolder-networkElement	idlcNameBinding 48	networkElement	c	Y
4	equipmentHolder-equipmentHolder	idlcNameBinding 46	equipmentHolder	c	Y

NAMBequipmentHolder — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	†
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	m		
<p>* The 5ESS®-2000 switch never creates equipmentHolder objects, expecting them to be inherently created by the RDT or a supervisory system.</p> <p>† The 5ESS®-2000 switch never deletes equipmentHolder objects, expecting them to be inherently created by the RDT or by a supervisory system.</p>				

14.12.2 ATTRIBUTES

ATEquipmentHolder1 — ATTRIBUTE SUPPORT								
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS					ADDITIONAL INFORMATION
			SUPPORT					
			crt	get	rep	add	rem	
1	equipHolderId	idlcAttribute 131	o	m	x	x	x	x
			N	N				
2	supportedCktPckType	idlcAttribute 352	m	m	m	m	m	x
			N	N	N	N	N	
3	equipped	idlcAttribute 133	o	m	x	x	x	m
			N	N				N
4	assignedCktPckType	idlcAttribute 16	m	m	m	x	x	x
			N	N	N			
5	equipHolderAddress	idlcAttribute 130	o	m	x	x	x	x
			N	N				
6	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x
			N	N	N	N	N	
6.1	AlarmSeverityAssignment		m	m	m	m	m	x
6.1.1	problem		m	m	m	m	m	x
6.1.1.1	ProblemType		m	m	m	m	m	x
6.1.1.1.1	indeterminate		0.65	0.65	0.65	0.65	0.65	x
6.1.1.1.2	equipmentProblemType		0.65	0.65	0.65	0.65	0.65	x
6.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x
6.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x
6.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x
6.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x
6.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x
6.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x
6.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x
6.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x
6.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x
6.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x
6.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x
6.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x
6.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x

ATEquipmentHolder2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
6.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
6.1.1.1.3	transmissionProblemType		0.65	0.65	0.65	0.65	0.65	x	
6.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
6.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
6.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
6.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
6.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
6.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
6.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
6.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
6.1.1.1.4	environmentalProblemType		0.65	0.65	0.65	0.65	0.65	x	
6.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
6.1.1.1.4.1.1	supportEntityAlarm		0.67	0.67	0.67	0.67	0.67	x	
6.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	

ATEquipmentHolder3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
6.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
6.1.1.1.4.1.2	sensorAlarm		o.67	o.67	o.67	o.67	o.67	x	
6.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
6.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	

ATEquipmentHolder4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	df	
6.1.1.1.4.1.2.1.1.1.14	IceBuildUp		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
6.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
6.1.1.1.5	softwareProblemType		o.65	o.65	o.65	o.65	o.65	x	
6.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
6.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
6.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
6.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
6.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
6.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
6.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
6.1.1.1.6	serviceProblemType		o.65	o.65	o.65	o.65	o.65	x	
6.1.1.1.7	thresholdAlert		o.65	o.65	o.65	o.65	o.65	x	
6.1.1.1.7.1	ThresholdAlert		o.114	m	o.114	o.114	o.114	x	
6.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
6.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
6.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
6.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
6.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
6.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
6.1.1.1.8	scheduledMgmtOpnsProblemType		o.65	o.65	o.65	o.65	o.65	x	
6.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
6.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
6.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	

ATEquipmentHolder5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
6.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
6.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
6.1.1.1.8.1.3	problem		m	m	m	m	m	x	
6.1.2	alarmSeverityCode		m	m	m	m	m	x	
6.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
6.1.2.1.1	non-alarmed		m	m	m	m	m	x	
6.1.2.1.2	minor		m	m	m	m	m	x	
6.1.2.1.3	major		m	m	m	m	m	x	
6.1.2.1.4	critical		m	m	m	m	m	x	
7	currentProblemList	idlcAttribute 59	c(7 N	c(7 Y	x	x	x	x	
7.1	CurrentProblem		o	m	x	x	x	x	
7.1.1	problem		o	m	x	x	x	x	
7.1.1.1	ProblemType		o	m	x	x	x	x	
7.1.1.1.1	indeterminate		x	0.75 Ig	x	x	x	x	
7.1.1.1.2	equipmentProblemType		x	0.75 Y	x	x	x	x	
7.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
(7 IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE n/a									

ATEquipmentHolder6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
7.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
				Y					
7.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
				Y					
7.1.1.1.3	transmissionProblemType		x	0.75	x	x	x	x	
				lg					
7.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
7.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
7.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
7.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
7.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
7.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
7.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
7.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
7.1.1.1.4	environmentalProblemType		x	0.75	x	x	x	x	
				lg					

ATEquipmentHolder7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
7.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
7.1.1.1.4.1.1	supportEntityAlarm		x	o.747	x	x	x	x	
7.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
7.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	
7.1.1.1.4.1.2	sensorAlarm		x	o.747	x	x	x	x	
7.1.1.1.4.1.2.1	SensorAlarmList		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	x	x	x	x	
7.1.1.1.4.1.2.1.1.1	SensorAlarmType		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	

ATEquipmentHolder8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
7.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
7.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
7.1.1.1.5	softwareProblemType		x	0.75	x	x	x	x	
7.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
7.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
7.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
7.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
7.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
7.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
7.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	

ATEquipmentHolder9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	g	re	ad	re		df
7.1.1.1.6	serviceProblemType		x	o.75	x	x	x	x	
				Ig					
7.1.1.1.7	thresholdAlert		x	o.75	x	x	x	x	
				Ig					
7.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
7.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
7.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
7.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
7.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
7.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
7.1.1.1.7.1.2.2.1	Attribute		o	m	x	x	x	x	
7.1.1.1.8	scheduledMgmtOpnsProblemType		x	o.75	x	x	x	x	
				Ig					
7.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
7.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
7.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.6	litSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
7.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	
7.1.1.1.8.1.2.1	DistinguishedName		o	m	x	x	x	x	
7.1.1.1.8.1.3	problem		o	m	x	x	x	x	
7.1.2	problemState		o	m	x	x	x	x	
				Ig					

ATEquipmentHolder10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
7.1.2.1	ProblemState		o	m	x	x	x	x	
7.1.2.1.1	active-pending		o	m	x	x	x	x	
7.1.2.1.2	active-reportable		o	m	x	x	x	x	
7.1.3	problemData		o	o	x	x	x	x	
7.1.3.1	ProblemData		o	m	x	x	x	x	
7.1.3.1.1	identifier		o	m	x	x	x	x	
7.1.3.1.2	critical		o	m	x	x	x	x	
7.1.3.1.3	item		o	m	x	x	x	x	
7.1.3.1.3.1	identifier		o	m	x	x	x	x	*
8	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
8.1	EventReportControlId		N	N	N	N	N		
8.1.1	INTEGER		m	m	m	m	m	x	
8.1.2	PrintableString		0.83	0.83	0.83	0.83	0.83	x	
9	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x	
9.1	CurrentAlarmSumScheduleId		N	N	N	N	N		
9.1.1	INTEGER		m	m	m	m	m	x	
9.1.2	PrintableString		0.93	0.93	0.93	0.93	0.93	x	
10	protectionGroupPointer	idlcAttribute 248	o	o	o	o	o	x	
10.1	ProtectionGroupPointer		N	N	N	N	N		
10.1.1	NULL		m	m	m	m	m	x	
10.1.2	DistinguishedName		0.103	0.103	0.103	0.103	0.103	x	
10.1.2.1	DistinguishedName		0.103	0.103	0.103	0.103	0.103	x	
11	bootProcLoad	idlcAttribute 28	o	o	o	x	x	x	
11.1	BootProcLoad		N	N	N				
			m	m	m	x	x	x	

* Must be attProblemData

ATEquipmentHolder11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF equipmentHolder	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 22	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
11.1.1	ProcLoadId		m	m	m	x	x	x	
11.1.1.1	procLoad		m	m	m	x	x	x	
11.1.1.2	versionId		m	m	m	x	x	x	

14.12.3 ATTRIBUTE GROUPS

No other attribute group is supported for *equipmentHolder* object class.

14.12.4 ACTIONS

No other action is supported for *equipmentHolder* object class.

14.12.5 NOTIFICATIONS

NOTEquipmentHolder1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.2			
1.1.2	AdditionalInfo		o.2			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.2			
2.1.2	AdditionalInfo		o.2			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	eventReporting	idlcNotification 4	m	N	Y	*
4.1	EventInfo		m		Y	
4.1.1	problemType		m		Y	
4.1.1.1	ProblemType		m		Y	
4.1.1.1.1	indeterminate		o.4		Ig	
4.1.1.1.2	equipmentProblemType		o.4		Y	

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTequipmentHolder2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.2.1	EquipmentProblemType		m		Y	
4.1.1.1.2.1.1	dataSetProblem		m		Y	
4.1.1.1.2.1.2	externalIFDeviceProblem		m		Y	
4.1.1.1.2.1.3	lineCardProblem		m		Y	
4.1.1.1.2.1.4	multiplexerProblem		m		Y	
4.1.1.1.2.1.5	powerProblem		m		Y	
4.1.1.1.2.1.6	processorProblem		m		Y	
4.1.1.1.2.1.7	receiverFailure		m		Y	
4.1.1.1.2.1.8	terminalProblem		m		Y	
4.1.1.1.2.1.9	timingProblem		m		Y	
4.1.1.1.2.1.10	transmitterFailure		m		Y	
4.1.1.1.2.1.11	trunkCardProblem		m		Y	
4.1.1.1.2.1.12	replaceableUnitMissing		m		Y	
4.1.1.1.2.1.13	replaceableUnitTypeMismatch		m		Y	
4.1.1.1.2.1.14	backplaneFailure		m		Y	
4.1.1.1.3	transmissionProblemType		o.4		Ig	
4.1.1.1.3.1	TransmissionProblemType		m			
4.1.1.1.3.1.1	alarmIndicationSignal		m			
4.1.1.1.3.1.2	callSetUpFailure		m			
4.1.1.1.3.1.3	degradedSignal		m			
4.1.1.1.3.1.4	framingError		m			
4.1.1.1.3.1.5	lossOfFrame		m			
4.1.1.1.3.1.6	lossOfPointer		m			
4.1.1.1.3.1.7	lossOfSignal		m			
4.1.1.1.4	environmentalProblemType		o.4		Ig	
4.1.1.1.4.1	EnvironmentalProblemType		m			
4.1.1.1.4.1.1	supportEntityAlarm		o.6			
4.1.1.1.4.1.1.1	SEAlarmType		m			
4.1.1.1.4.1.1.1.1	airCompressorFailure		m			
4.1.1.1.4.1.1.1.2	airConditioningFailure		m			
4.1.1.1.4.1.1.1.3	airDryerFailure		m			
4.1.1.1.4.1.1.1.4	batteryDischarging		m			
4.1.1.1.4.1.1.1.5	batteryFailure		m			
4.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
4.1.1.1.4.1.1.1.7	coolingFanFailure		m			
4.1.1.1.4.1.1.1.8	engineFailure		m			
4.1.1.1.4.1.1.1.9	fuseFailure		m			
4.1.1.1.4.1.1.1.10	generatorFailure		m			
4.1.1.1.4.1.1.1.11	pumpFailure		m			
4.1.1.1.4.1.1.1.12	rectifierFailure		m			
4.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
4.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
4.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
4.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
4.1.1.1.4.1.2	sensorAlarm		o.6			

NOTequipmentHolder3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.4.1.2.1	SensorAlarmList		m			
4.1.1.1.4.1.2.1.1	sensorAlarmType		o			
4.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
4.1.1.1.4.1.2.1.1.1.1	fire		m			
4.1.1.1.4.1.2.1.1.1.2	flood		m			
4.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
4.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
4.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
4.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
4.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
4.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
4.1.1.1.4.1.2.1.1.1.9	lowWater		m			
4.1.1.1.4.1.2.1.1.1.10	smoke		m			
4.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
4.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
4.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
4.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
4.1.1.1.4.1.2.1.1.1.15	highWind		m			
4.1.1.1.4.1.2.1.2	sensorId		m			
4.1.1.1.4.1.2.1.3	sensorLocation		o			
4.1.1.1.5	softwareProblemType		o.4			
4.1.1.1.5.1	SoftwareProblemType		m			
4.1.1.1.5.1.1	storageCapacityProblem		m			
4.1.1.1.5.1.2	memoryMismatch		m			
4.1.1.1.5.1.3	corruptData		m			
4.1.1.1.5.1.4	outOfCPUCycles		m			
4.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
4.1.1.1.5.1.6	softwareDownloadFailure		m			
4.1.1.1.6	serviceProblemType		o.4		Ig	
4.1.1.1.7	thresholdAlert		o.4			
4.1.1.1.7.1	ThresholdAlert		o.114			
4.1.1.1.7.1.1	anyThresholdAlert		o			
4.1.1.1.7.1.2	specificThresholdAlert		o			
4.1.1.1.7.1.2.1	triggeredThreshold		m			
4.1.1.1.7.1.2.1.1	Attribute		m			
4.1.1.1.7.1.2.2	triggeredAttribute		o			
4.1.1.1.7.1.2.2.1	Attribute		m			
4.1.1.1.8	scheduledMgmtOpnsProblemType		o.4		Ig	
4.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
4.1.1.1.8.1.1	operationsType		m			
4.1.1.1.8.1.1.1	OperationsType		m			
4.1.1.1.8.1.1.1.1	auditSchedule		m			
4.1.1.1.8.1.1.1.2	backupSchedule		m			
4.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
4.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
4.1.1.1.8.1.1.1.5	exerciseSchedule		m			
4.1.1.1.8.1.1.1.6	litSchedule		m			

NOTEquipmentHolder4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
4.1.1.1.8.1.1.1.8	pmReportSchedule		m			
4.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
4.1.1.1.8.1.2	scheduleId		o			
4.1.1.1.8.1.2.1	DistinguishedName		m			
4.1.1.1.8.1.3	problem		m			
4.1.2	alarmSeverity		m		Y	
4.1.2.1	AlarmSeverity		m		Y	
4.1.2.1.1	clear		m		Y	
4.1.2.1.2	indeterminate		m		Y	
4.1.2.1.3	warning		m		Y	
4.1.2.1.4	minor		m		Y	
4.1.2.1.5	major		m		Y	
4.1.2.1.6	critical		m		Y	
4.1.3	trendIndication		o		Ig	
4.1.3.1	TrendIndication		m			
4.1.3.1.1	lessSevere		m			
4.1.3.1.2	noChange		m			
4.1.3.1.3	moreSevere		m			
4.1.4	protectionIndication		o		Ig	
4.1.4.1	ProtectionIndication		m			
4.1.4.1.1	switchSuccessful		m			
4.1.4.1.2	switchFailed		m			
4.1.4.1.3	protectionUnitNotAvailable		m			
4.1.4.1.4	notEquipped		m			
4.1.4.1.5	switchBackSuccessful		m			
4.1.4.1.6	switchBackFailed		m			
4.1.5	protectionObject		o		Ig	
4.1.5.1	DistinguishedName		m			
4.1.6	problmData		o		Y	
4.1.6.1	ProblemData		m		Y	
4.1.6.1.1	identifier		m		Y	
4.1.6.1.2	critical		m		Y	
4.1.6.1.3	item		m		Y	*
4.1.6.1.3.1	identifier		m			
4.1.7	threshold		o		Ig	
4.1.7.1	Threshold		m			
4.1.7.1.1	INTEGER		o.4			
4.1.7.1.2	AnalogThreshold		o.4			
4.1.7.1.2.1	AnalogThreshold		m			
4.1.7.1.2.1.1	floor		o			
4.1.7.1.2.1.2	ceiling		o			
4.1.7.1.2.1.3	pendingPeriod		o			
4.1.8	monitoredAttribute		o		Ig	

* Must be attProblemData.

14.12.6 PARAMETERS

PAREquipmentHolder1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	

See Footnotes on next page.

PARequipmentHolder1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* 5ESS®-2000 switch does not send object specific errors with responses for equipmentHolder objects. † If object specific errors are received, only the error type is considered. ‡ The 5ESS®-2000 switch includes the error description in craft reports.					

14.13 EVENT REPORT CONTROL

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
eventReportControl	idlcObjectClass 25

Are all mandatory features of the class supported? Yes No

Note: Refer to *discriminator* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.13.1 NAME BINDING

NAMAeventReportControl — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	eventReportControl-equipment	idlcNameBinding 53	element	c	N
2	eventReportControl-idlcTerminal	idlcNameBinding 54	idlcTerminal	c	N
3	eventReportControl-networkElement	idlcNameBinding 55	networkElement	c	Y

NAMBeventReportControl — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	Y	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* Two instances of eventReportControl are created: one to control DS1 alerts and the other for DSL alerts				

14.13.2 ATTRIBUTES

ATEventReportControl1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE/ FIELD NAME LABEL ATTRIBUTES OF	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	eventReportControlId	idlcAttribute 161	o	m	x	x	x	x	
			Y	N					*
* Event ReportcontrolId = 1 is used to inhibit DS1 PM alerts eventReportcontrolId = 2 is used to inhibit DSL PM alerts									

14.13.3 ATTRIBUTE GROUPS

No other attribute group is supported for *eventReportControl* object class.

14.13.4 ACTIONS

No other action is supported for *eventReportControl* object class.

14.13.5 NOTIFICATIONS

No other notification is supported for *eventReportControl* object class.

14.13.6 PARAMETERS

No other parameter is supported for *eventReportControl* object class.

14.14 FRAMED PATH TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
framedPathTermination	idlcObjectClass 27

Are all mandatory features of the class supported? Yes No

Note: Refer to *terminationPoint* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.14.1 NAME BINDING

No other Name binding is supported for *framedPathTermination* object class.

14.14.2 ATTRIBUTES

No other attribute is supported for *framedPathTermination* object class.

14.14.3 ATTRIBUTE GROUPS

No other attribute group is supported for *framedPathTermination* object class.

14.14.4 ACTIONS

ACTframedPathTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	Y	*
1.1	RemoveArguments		m	Y	
1.1.1	mode		m	Y	
1.1.1.1	Mode		m	Y	
1.1.1.1.1	normal		m	N	
1.1.1.1.2	forced		m	Y	
2	restore	idlcAction 44	m	Y	†
2.1	RestoreArguments		m	Y	
2.1.1	mode		m	Y	
2.1.1.1	Mode		m	Y	
2.1.1.1.1	normal		m	N	
2.1.1.1.2	forced		m	Y	
2.2	RestoreResult		o	Y	
2.2.1	RestoringResult		o	Y	
2.2.1.1	RestoringResult		m	Y	
2.2.1.1.1	completed		m	Y	
2.2.1.1.2	failedVerification		m	Y	

* Action sent by 5ESS®-2000 switch to remove an ISDN framed path termination object.
† Action sent by 5ESS®-2000 switch to restore an ISDN framed path termination object.

14.14.5 NOTIFICATIONS

No other notification is supported for *framedPathTermination* object class.

14.14.6 PARAMETERS

PARframedPathTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	

See Footnotes on next page.

PARframedPathTermination1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* RestoreResult also used. † If object specific errors are received, only the error type is considered. ‡ 5ESS®-2000 switch includes the error description in craft reports.					

14.15 IDLC CALL PROCESSING PROFILE

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
idlcCPPProfile	idlc/ObjectClass 59

Are all mandatory features of the class supported? Yes No

14.15.1 NAME BINDING

NAMAidlcCPPProfile — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	idlcCPPProfile-idlcTerminal	idlcNameBinding 59	idlcTerminal	c	Y
2	idlcCPPProfile-networkElement	idlcNameBinding 60	networkElement	c	N

NAMBidlcCPPProfile — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch expects that one instance is inherently created at the RDT.				

14.15.2 ATTRIBUTES

ATTIdlcCPPProfile1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idlcCPPProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 59	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	idlcCPPProfileId	idlcAttribute 174	o	m	x	x	x	x	*
			N	N					
2	t308	idlcAttribute 365	m	m	m	x	x	m	†
			N	N	Y			N	
3	t303	idlcAttribute 363	c(3)	c(3)	c(3)	x	x	x	‡
					Y				
3.1	T303		m	m	m	x	x	x	
					Y				
3.1.1	ms700		m	m	m	x	x	x	
					Y				
3.1.2	ms1200		m	m	m	x	x	x	
					N				
3.1.3	ms1700		m	m	m	x	x	x	
					N				
3.1.4	ms2200		m	m	m	x	x	x	
					N				
3.1.5	ms2700		m	m	m	x	x	x	
					N				
3.1.6	ms3200		m	m	m	x	x	x	
					N				
3.1.7	ms3700		m	m	m	x	x	x	
					N				
3.1.8	ms4200		m	m	m	x	x	x	
					N				
3.1.9	ms4700		m	m	m	x	x	x	
					N				
4	t305	idlcAttribute 364	c(4)	c(4)	c(4)	x	x	x	
5	t322	idlcAttribute 366	N	N	N				
			o	o	o	x	x	x	
			N	N	N				
6	t396	idlcAttribute 402	c(6)	c(6)	c(6)	x	x	x	§
					Y				
6.1	T396		m	m	m	x	x	x	
					Y				
6.1.1	ms700		m	m	m	x	x	x	
					N				
6.1.2	ms1700		m	m	m	x	x	x	
					N				

* The 5ESS®-2000 switch uses idlcCPPProfileId = 1 set timer attribute values
† 4 seconds
‡ 700 milliseconds
§ 14.7 seconds
(3 IF RDT THEN m ELSE n/a
(4 IF IDT uses either the TMC or CSC signaling method THEN IDT m ELSE n/a
IF RDT uses the CSC signaling method THEN m ELSE n/a
(6 IF RDT uses either TMC or CSC signaling method THEN RDT m ELSE n/a

ATTIdlcCPProfile2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idlcCPProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 59	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.3	ms2700		m	m	m	x	x	x	
					N				
6.1.4	ms3700		m	m	m	x	x	x	
					N				
6.1.5	ms4700		m	m	m	x	x	x	
					N				
6.1.6	ms5700		m	m	m	x	x	x	
					N				
6.1.7	ms6700		m	m	m	x	x	x	
					N				
6.1.8	ms7700		m	m	m	x	x	x	
					N				
6.1.9	ms8700		m	m	m	x	x	x	
					N				
6.1.10	ms9700		m	m	m	x	x	x	
					N				
6.1.11	ms10700		m	m	m	x	x	x	
					N				
6.1.12	ms11700		m	m	m	x	x	x	
					N				
6.1.13	ms12700		m	m	m	x	x	x	
					N				
6.1.14	ms13700		m	m	m	x	x	x	
					N				
6.1.15	ms14700		m	m	m	x	x	x	
					Y				
7	t397	idlcAttribute 367	c(7)	c(7)	c(7)	x	x	x	
			N	N	Y				*
7.1	T397		m	m	m	x	x	x	
					Y				
7.1.1	s60		m	m	m	x	x	x	
					N				

* 120 seconds
(7 IF IDT uses CSC signaling method THEN IDT m ELSE n/a)

ATTIdlcCPPProfile3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idlcCPPProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 59	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
7.1.2	s120		m	m	m	x	x	x	
					Y				
7.1.3	s180		m	m	m	x	x	x	
					N				
8	t398	idlcAttribute 368	c(8)	c(8)	c(8)	x	x	x	
			N	N	N				
8.1	T398		m	m	m	x	x	x	
8.1.1	ms100		m	m	m	x	x	x	
8.1.2	ms150		m	m	m	x	x	x	
8.1.3	ms200		m	m	m	x	x	x	
8.1.4	ms250		m	m	m	x	x	x	
9	t399	idlcAttribute 369	c(9)	c(9)	c(9)	x	x	x	
			N	N	N				
9.1	T399		m	m	m	x	x	x	
9.1.1	ms400		m	m	m	x	x	x	
9.1.2	ms450		m	m	m	x	x	x	
9.1.3	ms500		m	m	m	x	x	x	
9.1.4	ms550		m	m	m	x	x	x	
9.1.5	ms600		m	m	m	x	x	x	
9.1.6	ms650		m	m	m	x	x	x	
9.1.7	ms700		m	m	m	x	x	x	
9.1.8	ms750		m	m	m	x	x	x	
9.1.9	ms800		m	m	m	x	x	x	
(8 IF IDT uses CSC signaling method THEN IDT m ELSE n/a (9 IF IDT uses CSC signaling method THEN IDT m ELSE n/a)									

14.15.3 ATTRIBUTE GROUPS

No other attribute group is supported for *idlcCPPProfile* object class.

14.15.4 ACTIONS

No other action is supported for *idlcCPPProfile* object class.

14.15.5 NOTIFICATIONS

NOTidlcCPPProfile1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.15.6 PARAMETERS

No other parameter is supported for *idlcCPPProfile* object class.

14.16 IDLC DATA LINK PROFILE

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
idlcDLProfile	idlcObjectClass 60

Are all mandatory features of the class supported? Yes No

14.16.1 NAME BINDING

NAMAidlcDLProfile — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	idlcDLProfile-idlcTerminal	idlcNameBinding 61	idlcTerminal	c	Y
2	idlcDLProfile-networkElement	idlcNameBinding 62	networkElement	c	N

NAMBidlcDLProfile — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

* The 5ESS®-2000 switch expects that two instances are inherently created at the RDT.

14.16.2 ATTRIBUTES

ATTidcDLProfile1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idcDLProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idcObjectClass 60	STATUS						ADDITIONAL INFOMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	idcDLProfileId	idcAttribute 175	o	m	x	x	x	x	*
			N	N					
2	sapi	idcAttribute 294	o	m	x	x	x	x	
			N	N					
3	maxIframes	idcAttribute 214	m	m	m	x	x	m	†
			N	N	Y			N	
4	n200	idcAttribute 224	m	m	m	x	x	m	†
			N	N	Y			N	
5	t200	idcAttribute 359	m	m	m	x	x	m	†
			N	N	Y			N	
5.1	T200s		m	m	m	x	x	m	
					Y				
5.1.1	ms100		m	m	m	x	x	m	
					Y				
5.1.2	ms150		m	m	m	x	x	m	
					Y				
5.1.3	ms200		m	m	m	x	x	m	
					Y				
5.1.4	ms250		m	m	m	x	x	m	
					Y				
5.1.5	ms300		m	m	m	x	x	m	
					Y				
5.1.6	ms350		m	m	m	x	x	m	
					Y				
6	t203	idcAttribute 362	m	m	m	x	x	m	†
			N	N	Y			N	
6.1	T203		m	m	m	x	x	m	
					Y				
6.1.1	s10		m	m	m	x	x	m	
					Y				
6.1.2	s20		m	m	m	x	x	m	
					Y				
6.1.3	s30		m	m	m	x	x	m	
					Y				
6.1.4	s40		m	m	m	x	x	m	
					Y				
6.1.5	s50		m	m	m	x	x	m	
					Y				
6.1.6	s60		m	m	m	x	x	m	
					Y				
6.1.7	s70		m	m	m	x	x	m	
					Y				
* The 5ESS®-2000 switch uses idcDLProfileId = 1 for SAPI 0 and idcDLProfileId = 2 for SAPI 1 † Provisionable using 5ESS®-2000 switch DB									

ATTidcDLProfile2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idlcDLProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 60	STATUS SUPPORT						ADDITIONAL INFOMATION
			crt	get	rep	add	rem	dfi	
6.1.8	s80		m	m	m	x	x	m	
					Y				
6.1.9	s90		m	m	m	x	x	m	
					Y				
6.1.10	s100		m	m	m	x	x	m	
					Y				
6.1.11	s110		m	m	m	x	x	m	
					Y				
6.1.12	s120		m	m	m	x	x	m	
					Y				
6.1.13	s130		m	m	m	x	x	m	
					Y				
6.1.14	s140		m	m	m	x	x	m	
					Y				
6.1.15	s150		m	m	m	x	x	m	
					Y				
6.1.16	s160		m	m	m	x	x	m	
					Y				
6.1.17	s170		m	m	m	x	x	m	
					Y				
6.1.18	s180		m	m	m	x	x	m	
					Y				
6.1.19	s190		m	m	m	x	x	m	
					Y				
6.1.20	s200		m	m	m	x	x	m	
					Y				
6.1.21	s210		m	m	m	x	x	m	
					Y				
6.1.22	s220		m	m	m	x	x	m	
					Y				
6.1.23	s230		m	m	m	x	x	m	
					Y				
6.1.24	s240		m	m	m	x	x	m	
					Y				
6.1.25	s250		m	m	m	x	x	m	
					Y				
6.1.26	s260		m	m	m	x	x	m	
					Y				
6.1.27	s270		m	m	m	x	x	m	
					Y				
6.1.28	s280		m	m	m	x	x	m	
					Y				
6.1.29	s290		m	m	m	x	x	m	
					Y				
6.1.30	s300		m	m	m	x	x	m	
					Y				

14.16.3 ATTRIBUTE GROUPS

No other attribute group is supported for *idlcDLProfile* object class.

14.16.4 ACTIONS

No other action is supported for *idlcDLProfile* object class.

14.16.5 NOTIFICATIONS

No other notification is supported for *idlcDLProfile* object class.

14.16.6 PARAMETERS

No other parameter is supported for *idlcDLProfile* object class.

14.17 IDLC DATA LINK TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
idlcDLTermination	idlcObjectClass 61

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.17.1 NAME BINDING

NAMAidlcDLTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	idlcDLTermination-idlcTerminal	idlcNameBinding 63	idlcTerminal	c	Y
2	idlcDLTermination-networkElement	idlcNameBinding 64	networkElement	c	N

NAMBidlcDLTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	c(2.1)		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

* The 5ESS®-2000 switch expects that four instances are inherently created at the RDT. (2.1 IF associated protectionGroupUnit object instance is not deleted THEN x ELSE m

14.17.2 ATTRIBUTES

ATTidcDLTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idlcDLTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 61	STATUS SUPPORT						ADDITIONAL INFOMATION
			crt	get	rep	add	rem	dfi	
1	idlcDLTermId	idlcAttribute 176	o	m	x	x	x	x	*
			N	N					
2	dataLinkType	idlcAttribute 84	m	m	m	x	x	m	
			N	N	N			N	
2.1	DataLinkType		m	m	m	x	x	m	
2.1.1	eoc		m	m	m	x	x	m	
2.1.2	tmc		m	m	m	x	x	m	
2.1.3	csc		m	m	m	x	x	m	
3	carrierChannel	idlcAttribute 32	m	m	m	x	x	x	
			N	N	N				
3.1	DistinguishedName		m	m	m	x	x	x	
4	protectionGroupPointer	idlcAttribute 248	m	m	m	x	x	x	
			N	N	N				
4.1	ProtectionGroupPointer		m	m	m	x	x	x	
4.1.1	NULL		o.43	o.43	o.43	x	x	x	
4.1.2	DistinguishedName		o.43	o.43	o.43	x	x	x	
4.1.2.1	DistinguishedName		m	m	m	x	x	x	
5	invalidFramesCounter	idlcAttribute 186	m	m	m	x	x	x	
			N	N	N				
6	invalidFramesThreshold	idlcAttribute 187	m	m	m	x	x	m	
			N	N	N			N	
7	invalidFramesTimer	idlcAttribute 188	m	m	m	x	x	m	
			N	N	N			N	
8	dlResetReqCounter	idlcAttribute 103	m	m	m	x	x	x	
			N	N	N				
9	dlResetReqThreshold	idlcAttribute 104	m	m	m	x	x	m	
			N	N	N			N	
10	dlResetReqTimer	idlcAttribute 105	m	m	m	x	x	m	
			N	N	N			N	
11	dlResetFailCounter	idlcAttribute 100	m	m	m	x	x	x	
			N	N	N				
12	dlResetFailThreshold	idlcAttribute 101	m	m	m	x	x	m	
			N	N	N			N	
13	dlResetFailTimer	idlcAttribute 102	m	m	m	x	x	m	
			N	N	N			N	
<p>* idlcDLTermId = 1 for primary EOC idlcDLTermId = 2 for secondary EOC idlcDLTermId = 3 for primary TMC idlcDLTermId = 4 for secondary TMC</p>									

14.17.3 ATTRIBUTE GROUPS

No other attribute group is supported for *idlcDLTermination* object class.

14.17.4 ACTIONS

ACTidlcDLTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	N	
1.1	RemoveArguments		m		
1.1.1	mode		m		
1.1.1.1	Mode		m		
1.1.1.1.1	normal		m		
1.1.1.1.2	forced		m		
2	restore	idlcAction 44	m	N	
2.1	RestoreArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
2.2	RestoreResult		o		
2.2.1	RestoringResult		o		
2.2.1.1	RestoringResult		m		
2.2.1.1.1	completed		m		
2.2.1.1.2	failedVerification		m		

14.17.5 NOTIFICATIONS

NOTidlcDLTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	eventReporting	idlcNotification 4	m	N	N	
4.1	EventInfo					
4.1.1	problemType		m			
4.1.1.1	ProblemType		m			
4.1.1.1.1	indeterminate		o.44			
4.1.1.1.2	equipmentProblemType		o.44			
4.1.1.1.2.1	EquipmentProblemType		m			

NOTIdcDLTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.2.1.1	dataSetProblem		m			
4.1.1.1.2.1.2	externalIFDeviceProblem		m			
4.1.1.1.2.1.3	lineCardProblem		m			
4.1.1.1.2.1.4	multiplexerProblem		m			
4.1.1.1.2.1.5	powerProblem		m			
4.1.1.1.2.1.6	processorProblem		m			
4.1.1.1.2.1.7	receiverFailure		m			
4.1.1.1.2.1.8	terminalProblem		m			
4.1.1.1.2.1.9	timingProblem		m			
4.1.1.1.2.1.10	transmitterFailure		m			
4.1.1.1.2.1.11	trunkCardProblem		m			
4.1.1.1.2.1.12	replaceableUnitMissing		m			
4.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
4.1.1.1.2.1.14	backplaneFailure		m			
4.1.1.1.3	transmissionProblemType		o.44			
4.1.1.1.3.1	TransmissionProblemType		m			
4.1.1.1.3.1.1	alarmIndicationSignal		m			
4.1.1.1.3.1.2	callSetUpFailure		m			
4.1.1.1.3.1.3	degradedSignal		m			
4.1.1.1.3.1.4	framingError		m			
4.1.1.1.3.1.5	lossOfFrame		m			
4.1.1.1.3.1.6	lossOfPointer		m			
4.1.1.1.3.1.7	lossOfSignal		m			
4.1.1.1.4	environmentalProblemType		o.44			
4.1.1.1.4.1	EnvironmentalProblemType		m			
4.1.1.1.4.1.1	supportEntityAlarm		o.6			
4.1.1.1.4.1.1.1	SEAlarmType		m			
4.1.1.1.4.1.1.1.1	airCompressorFailure		m			
4.1.1.1.4.1.1.1.2	airConditioningFailure		m			
4.1.1.1.4.1.1.1.3	airDryerFailure		m			
4.1.1.1.4.1.1.1.4	batteryDischarging		m			
4.1.1.1.4.1.1.1.5	batteryFailure		m			
4.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
4.1.1.1.4.1.1.1.7	coolingFanFailure		m			
4.1.1.1.4.1.1.1.8	engineFailure		m			
4.1.1.1.4.1.1.1.9	fuseFailure		m			
4.1.1.1.4.1.1.1.10	generatorFailure		m			
4.1.1.1.4.1.1.1.11	pumpFailure		m			
4.1.1.1.4.1.1.1.12	rectifierFailure		m			
4.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
4.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
4.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
4.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
4.1.1.1.4.1.2	sensorAlarm		o.6			
4.1.1.1.4.1.2.1	SensorAlarmList		m			

NOTIdlcDLTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.4.1.2.1.1	sensorAlarmType		o			
4.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
4.1.1.1.4.1.2.1.1.1.1	fire		m			
4.1.1.1.4.1.2.1.1.1.2	flood		m			
4.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
4.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
4.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
4.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
4.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
4.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
4.1.1.1.4.1.2.1.1.1.9	lowWater		m			
4.1.1.1.4.1.2.1.1.1.10	smoke		m			
4.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
4.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
4.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
4.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
4.1.1.1.4.1.2.1.1.1.15	highWind		m			
4.1.1.1.4.1.2.1.2	sensorId		m			
4.1.1.1.4.1.2.1.3	sensorLocation		o			
4.1.1.1.5	softwareProblemType		o.44			
4.1.1.1.5.1	SoftwareProblemType		m			
4.1.1.1.5.1.1	storageCapacityProblem		m			
4.1.1.1.5.1.2	memoryMismatch		m			
4.1.1.1.5.1.3	corruptData		m			
4.1.1.1.5.1.4	outOfCPUCycles		m			
4.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
4.1.1.1.5.1.6	softwareDownloadFailure		m			
4.1.1.1.6	serviceProblemType		o.44			
4.1.1.1.7	thresholdAlert		o.44			
4.1.1.1.7.1	ThresholdAlert		o.114			
4.1.1.1.7.1.1	anyThresholdAlert		o			
4.1.1.1.7.1.2	specificThresholdAlert		o			
4.1.1.1.7.1.2.1	triggeredThreshold		m			
4.1.1.1.7.1.2.1.1	Attribute		m			
4.1.1.1.7.1.2.2	triggeredAttribute		o			
4.1.1.1.7.1.2.2.1	Attribute		m			
4.1.1.1.8	scheduledMgmtOpnsProblemType		o.44			
4.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
4.1.1.1.8.1.1	operationsType		m			
4.1.1.1.8.1.1.1	OperationsType		m			
4.1.1.1.8.1.1.1.1	auditSchedule		m			
4.1.1.1.8.1.1.1.2	backupSchedule		m			
4.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
4.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
4.1.1.1.8.1.1.1.5	exerciseSchedule		m			
4.1.1.1.8.1.1.1.6	litSchedule		m			
4.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			

NOTIdcDLTermination4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.8.1.1.1.8	pmReportSchedule		m			
4.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
4.1.1.1.8.1.2	scheduleId		o			
4.1.1.1.8.1.2.1	DistinguishedName		m			
4.1.1.1.8.1.3	problem		m			
4.1.2	alarmSeverity		m			
4.1.2.1	AlarmSeverity		m			
4.1.2.1.1	clear		m			
4.1.2.1.2	indeterminate		m			
4.1.2.1.3	warning		m			
4.1.2.1.4	minor		m			
4.1.2.1.5	major		m			
4.1.2.1.6	critical		m			
4.1.3	trendIndication		o			
4.1.3.1	TrendIndication		m			
4.1.3.1.1	lessSevere		m			
4.1.3.1.2	noChange		m			
4.1.3.1.3	moreSevere		m			
4.1.4	protectionIndication		o			
4.1.4.1	ProtectionIndication		m			
4.1.4.1.1	switchSuccessful		m			
4.1.4.1.2	switchFailed		m			
4.1.4.1.3	protectionUnitNotAvailable		m			
4.1.4.1.4	notEquipped		m			
4.1.4.1.5	switchBackSuccessful		m			
4.1.4.1.6	switchBackFailed		m			
4.1.5	protectionObject		o			
4.1.5.1	DistinguishedName		m			
4.1.6	problemData		o			
4.1.6.1	ProblemData		m			
4.1.6.1.1	identifier		m			
4.1.6.1.2	critical		m			
4.1.6.1.3	item		m			
4.1.6.1.3.1	identifier		m			
4.1.7	threshold		o			
4.1.7.1	Threshold		m			
4.1.7.1.1	INTEGER		o.474			
4.1.7.1.2	AnalogThreshold		o.474			
4.1.7.1.2.1	AnalogThreshold		m			
4.1.7.1.2.1.1	floor		o			
4.1.7.1.2.1.2	ceiling		o			
4.1.7.1.2.1.3	pendingPeriod		o			
4.1.8	monitoredAttribute		o			

14.17.6 PARAMETERS

PARidcDLTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
I	objectSpecificError	idlcSpecificError 1	m	N	
1.1	ObjectSpecificError		m	Y	*
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.2	supported		o.17	Ig	
1.1.4.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	

* If object specific errors are received, only the error type is considered.

PARIdcDLTermination2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

14.18 IDLC TERMINAL

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
idlcTerminal	idlcObjectClass 31

Are all mandatory features of the class supported? Yes No

14.18.1 NAME BINDING

NAMAidlcTerminal — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	idlcTerminal-networkElement	idlcNameBinding 65	networkElement	c	Y

NAMBidlcTerminal — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	m		
2.2	Delete contained objects	x		
2.3	Delete specific error support	m		
* The 5ESS®-2000 switch expects one instance to be inherently created by the RDT.				

14.18.2 ATTRIBUTES

ATTidlcTerminal1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF idlcTerminal1	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 31	STATUS SUPPORT						ADDITIONAL INFORMATION
			o	get	rep	add	rem	dfi	
1	terminalId	idlcAttribute 370	o	m	x	x	x	x	*
			N	N					
2	signalingMethod	idlcAttribute 350	m	m	c(2)	x	x	x	
			N	N	N				
2.1	SignalingMethod		m	m	m	x	x	x	
2.1.1	abcd		m	m	m	x	x	x	
2.1.2	tmc		m	m	m	x	x	x	
2.1.3	csc		m	m	m	x	x	x	
3	ds1VTCCount	idlcAttribute 125	o	o	o	x	x	x	†
			N	N	N				

* The 5ESS®-2000 switch expects one idlcTerminal object in the RDT with terminalId = 1
 † The 5ESS®-2000 switch does not read the idlcTerminal object, instead determining the number of DS1s terminated at the IDT from internal data
 (2 IF IDT THEN m ELSE x

14.18.3 ATTRIBUTE GROUPS

No other attribute group is supported for *idlcTerminal* object class.

14.18.4 ACTIONS

No other action is supported for *idlcTerminal* object class.

14.18.5 NOTIFICATIONS

NOTidlcTerminal1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	tsMapDiscRept	idlcNotification 14	c	N	N	
4.1	TsMapDiscReptArguments		m			
4.1.1	rejectedObjectClass		m			
4.1.2	rejectionReason		m			
4.1.2.1	RejectionReason		m			
4.1.2.1.1	objectXConnected		m			
4.1.2.1.2	objectUnknown		m			

14.18.6 PARAMETERS

No other parameter is supported for *idlcTerminal* object class.

14.19 ISDN FRAMED PATH TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
isdnFramedPathTermination	idlcObjectClass 36

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.19.1 NAME BINDING

NAMAisdnFramedPathTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	isdnFramedPathTermination- isdnLineTermination	idlcNameBinding 75	isdnLineTermination	c	Y

NAMBisdnFramedPathTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	N	
1.3	Create specific error support	x		
2	Delete Support	m	Y	
2.1	Only if no contained objects	m	N	
2.2	Delete contained objects	x		
2.3	Delete specific error support	m	N	

14.19.2 ATTRIBUTES

ATTIsdnFramedPathTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			o	get	rep	add	rem	dfi	
1	isdnFramedPathTermId	idlcAttribute 192	o	m	x	x	x	x	
			N	N					
2	ltOHStates	idlcAttribute 209	m	m	m	x	x	x	
			Y	Y	N				
2.1	LTOHStates		m	m	m	x	x	x	
			Y	Y	N				
2.1.1	m41		m	m	m	x	x	x	
			Y	Y	N				
2.1.2	m42		m	m	m	x	x	x	
			Y	Y	N				
2.1.3	m43		m	m	m	x	x	x	
			Y	Y	N				
2.1.4	m44		m	m	m	x	x	x	
			Y	Y	N				
2.1.5	m45		m	m	m	x	x	x	
			Y	Y	N				
2.1.6	m46		m	m	m	x	x	x	
			Y	Y	N				
2.1.7	m47		m	m	m	x	x	x	
			Y	Y	N				
2.1.8	m48		m	m	m	x	x	x	
			Y	Y	N				
2.1.9	m51		m	m	m	x	x	x	
			Y	Y	N				
2.1.10	m52		m	m	m	x	x	x	
			Y	Y	N				
2.1.11	m61		m	m	m	x	x	x	
			Y	Y	N				
3	ntOHStates	idlcAttribute 227	o	m	x	x	x	x	
			Y	Y	N				
3.1	NTOHStates		o	m	x	x	x	x	
			Y	Y	N				
3.1.1	m41		o	m	x	x	x	x	
			Y	Y	N				
3.1.2	m42		o	m	x	x	x	x	
			Y	Y	N				
3.1.3	m43		o	m	x	x	x	x	
			Y	Y	N				
3.1.4	m44		o	m	x	x	x	x	
			Y	Y	N				
3.1.5	m45		o	m	x	x	x	x	
			Y	Y	N				
3.1.6	m46		o	m	x	x	x	x	
			Y	Y					
3.1.7	m47		o	m	x	x	x	x	
			Y	Y					
3.1.8	m48		o	m	x	x	x	x	
			Y	Y					

ATTisdnFramedPathTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	df	
3.1.9	m51		o	m	x	x	x	x	
			Y	Y					
3.1.10	m52		o	m	x	x	x	x	
			Y	Y					
3.1.11	m61		o	m	x	x	x	x	
			Y	Y					
4	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	*
			Y	N	N	N	N		
4.1	AlarmSeverityAssignment		m	m	m	m	m	x	
			N						
4.1.1	problem		m	m	m	m	m	x	
4.1.1.1	ProblemType		m	m	m	m	m	x	
4.1.1.1.1	indeterminate		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
4.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
4.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
4.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
4.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
4.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
4.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
4.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
4.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
4.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
4.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
4.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
4.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
4.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
4.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
* Empty list created.									

ATTisdnFramedPathTermination3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
4.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
4.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
4.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
4.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
4.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
4.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
4.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
4.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
4.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
4.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
4.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	

ATTisdnFramedPathTermination4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfi
4.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
4.1.1.1.4.1.2	sensorAlarm		o.7	o.7	o.7	o.7	o.7	x	
4.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
4.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	

ATTisdnFramedPathTermination5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	ge	re	ad	re		df
4.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
4.1.1.1.5	softwareProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
4.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
4.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
4.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
4.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
4.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
4.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
4.1.1.1.6	serviceProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.7	thresholdAlert		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
4.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
4.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
4.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
4.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
4.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
4.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
4.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
4.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
4.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	

ATTisdnFramedPathTermination6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
4.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
4.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
4.1.1.1.8.1.3	problem		m	m	m	m	m	x	
4.1.2	alarmSeverityCode		m	m	m	m	m	x	
4.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
4.1.2.1.1	non-alarmed		m	m	m	m	m	x	
4.1.2.1.2	minor		m	m	m	m	m	x	
4.1.2.1.3	major		m	m	m	m	m	x	
4.1.2.1.4	critical		m	m	m	m	m	x	
5	currentProblemList	idlcAttribute 59	c(5 Y	c(5 Y	x	x	x	x	*
5.1	CurrentProblem		o N	m lg	x	x	x	x	
5.1.1	problem		o	m	x	x	x	x	
5.1.1.1	ProblemType		o	m	x	x	x	x	
5.1.1.1.1	indeterminate		0.55	0.55	x	x	x	x	
5.1.1.1.2	equipmentProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
5.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
5.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
* Empty list created. (5 IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE n/a									

ATTisdnFramedPathTermination7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
5.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
5.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
5.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
5.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
5.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
5.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
5.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
5.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
5.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
5.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
5.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
5.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
5.1.1.1.3	transmissionProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
5.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
5.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
5.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
5.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
5.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
5.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
5.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
5.1.1.1.4	environmentalProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
5.1.1.1.4.1.1	supportEntityAlarm		0.57	0.57	x	x	x	x	

ATTisdnFramedPathTermination8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
5.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
5.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	
5.1.1.1.4.1.2	sensorAlarm		0.57	0.57	x	x	x	x	
5.1.1.1.4.1.2.1	SensorAlarmList		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	x	x	x	x	
5.1.1.1.4.1.2.1.1.1	SensorAlarmType		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	

ATTisdnFramedPathTermination9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
5.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
5.1.1.1.5	softwareProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
5.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
5.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
5.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
5.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
5.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
5.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
5.1.1.1.6	serviceProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.7	thresholdAlert		0.55	0.55	x	x	x	x	

ATTisdnFramedPathTermination10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	addr	rem		dfi
5.1.1.1.7.1	ThresholdAlert		0	m	x	x	x	x	
5.1.1.1.7.1.1	anyThresholdAlert		0	m	x	x	x	x	
5.1.1.1.7.1.2	specificThresholdAlert		0	m	x	x	x	x	
5.1.1.1.7.1.2.1	triggeredThreshold		0	m	x	x	x	x	
5.1.1.1.7.1.2.1.1	Attribute		0	m	x	x	x	x	
5.1.1.1.7.1.2.2	triggeredAttribute		0	o	x	x	x	x	
5.1.1.1.7.1.2.2.1	Attribute		0	m	x	x	x	x	
5.1.1.1.8	scheduledMgmtOpnsProblemType		0.55	0.55	x	x	x	x	
5.1.1.1.8.1	ScheduledMgmtOpnsProblemType		0	m	x	x	x	x	
5.1.1.1.8.1.1	operationsType		0	m	x	x	x	x	
5.1.1.1.8.1.1.1	OperationsType		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.1	auditSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.2	backupSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.3	currentAlmSumSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.4	diagnosticSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.5	exerciseSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.6	litSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.8	pmReportSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.1.1.9	trunkTestSchedule		0	m	x	x	x	x	
5.1.1.1.8.1.2	scheduleId		0	o	x	x	x	x	
5.1.1.1.8.1.2.1	DistinguishedName		0	m	x	x	x	x	
5.1.1.1.8.1.3	problem		0	m	x	x	x	x	
5.1.2	problemState		0	m	x	x	x	x	
5.1.2.1	ProblemState		0	m	x	x	x	x	
5.1.2.1.1	active-pending		0	m	x	x	x	x	

ATTisdnFramedPathTermination11 — ATTRIBUTE SUPPORT								
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS					ADDITIONAL INFORMATION
			SUPPORT					
			crt	get	rep	add	rem	
5.1.2.1.2	active-reportable		o	m	x	x	x	x
5.1.3	problemData		o	o	x	x	x	x
5.1.3.1	ProblemData		o	m	x	x	x	x
5.1.3.1.1	identifier		o	m	x	x	x	x
5.1.3.1.2	critical		o	m	x	x	x	x
5.1.3.1.3	item		o	m	x	x	x	x
5.1.3.1.3.1	identifier		o	m	x	x	x	x
6	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x
			N	N				
6.1	EventReportControlId		m	m	m	m	m	x
6.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x
6.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x
7	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x
			N	N				
7.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x
7.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x
7.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x
8	fptDefaultProfileId	idlcAttribute 170	o	o	o	x	x	x
			N	N				
9	typeOfPMDData	idlcAttribute 387	o	o	x	x	x	x
			N	N				
9.1	TypeOfPMDData		o	m	x	x	x	x
9.1.1	interimPath		o	m	x	x	x	x
9.1.2	interimSegmented		o	m	x	x	x	x
10	channelSelection	idlcAttribute 35	o	o	x	x	x	x
			Y	Y				
10.1	Channel		o	m	x	x	x	x
			Y	Y				
10.1.1	b1		o	m	x	x	x	x
			Y	Y				
10.1.2	b2		o	m	x	x	x	x
			Y	Y				
10.1.3	d		o	m	x	x	x	x
			Y	Y				

ATTisdnFramedPathTermination12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
11	esHrThreshold	idlcAttribute 142	c(s) Y	c(s) Y	c(s) Y	x	x	x	
12	esDayThreshold	idlcAttribute 138	c(s) Y	c(s) Y	c(s) Y	x	x	x	
13	sesHrThreshold	idlcAttribute 342	c(s) Y	c(s) Y	c(s) Y	x	x	x	
14	sesDayThreshold	idlcAttribute 326	c(s) Y	c(s) Y	c(s) Y	x	x	x	
15	cvHrCurrent	idlcAttribute 64	c(s(p) Y	c(s(p) Y	c(s(p) Y	x	x	x	
15.1	CountMeasure		m Y	m Y	m Y	x	x	x	
15.1.1	fullAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
15.1.2	partialAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
15.1.3	corruptedCount		o.3 Y	o.3 Y	o.3 Y	x	x	x	
16	cvFeHrCurrent	idlcAttribute 76	c(s) Y	c(s) Y	c(s) Y	x	x	x	
16.1	CountMeasure		m Y	m Y	m Y	x	x	x	
16.1.1	fullAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
16.1.2	partialAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
16.1.3	corruptedCount		o.3 Y	o.3 Y	o.3 Y	x	x	x	
17	cvHrPrevious	idlcAttribute 66	c(s(p) Y	c(s(p) Y	c(s(p) Y	x	x	x	
17.1	CountMeasure		m Y	m Y	m Y	x	x	x	
17.1.1	fullAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
17.1.2	partialAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
17.1.3	corruptedCount		o.3 Y	o.3 Y	o.3 Y	x	x	x	
18	cvFeHrPrevious	idlcAttribute 78	c(s) Y	c(s) Y	c(s) Y	x	x	x	
18.1	CountMeasure		m Y	m Y	m Y	x	x	x	
18.1.1	fullAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
18.1.2	partialAccumulate		o.3 N	o.3 Y	o.3 Y	x	x	x	
18.1.3	corruptedCount		o.3 Y	o.3 Y	o.3 Y	x	x	x	
(s IF the generic segmented performance monitoring or the interim segmented performance monitoring approach is used THEN m ELSE n/a (p IF the interim path performance monitoring approach is used THEN m ELSE n/a									

ATTisdnFramedPathTermination13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
19	esHrCurrent	idlcAttribute 139	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
19.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
19.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
19.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
19.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
20	esFeHrCurrent	idlcAttribute 151	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
20.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
20.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
20.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
20.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
21	esHrPrevious	idlcAttribute 141	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
21.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
21.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
21.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
21.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
22	esFeHrPrevious	idlcAttribute 153	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
22.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
22.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
22.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
22.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
23	esHrHistory	idlcAttribute 140	c(s(p	c(s(p	c(s(p	c(s(p	c(s(p	x	
			Y	Y	Y				*
23.1	HistoryCountMeasure		m	m	m	m	m	x	
			N	Y	Y				
23.1.1	countMeasure		m	m	m	m	m	x	
				Y	Y				
23.1.1.1	CountMeasure		m	m	m	m	m	x	
				Y	Y				

* Empty history created
(s IF the generic segmented performance monitoring or the interim segmented performance monitoring approach is used THEN m ELSE n/a
(p IF the interim path performance monitoring approach is used THEN m ELSE n/a

ATTIsdnFramedPathTermination14 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
23.1.1.1.1	fullAccumulate		0.5	0.5	0.5	0.5	0.5	x	
				Y	Y				
23.1.1.1.2	partialAccumulate		0.5	0.5	0.5	0.5	0.5	x	
				Y	Y				
23.1.1.1.3	corruptedCount		0.5	0.5	0.5	0.5	0.5	x	
				Y	Y				
23.1.2	age		m	m	m	m	m	x	
				Y	Y				
24	esFeHrHistory	idlcAttribute 152	c(s	c(s	c(s	c(s	c(s	x	*
			Y	Y	Y				
24.1	HistoryCountMeasure		m	m	m	m	m	x	
				Y	Y				
24.1.1	countMeasure		m	m	m	m	m	x	
				Y	Y				
24.1.1.1	CountMeasure		m	m	m	m	m	x	
				Y	Y				
24.1.1.1.1	fullAccumulate		0.5	0.5	0.5	0.5	0.5	x	
				Y	Y				
24.1.1.1.2	partialAccumulate		0.5	0.5	0.5	0.5	0.5	x	
				Y	Y				
24.1.1.1.3	corruptedCount		0.5	0.5	0.5	0.5	0.5	x	
				Y	Y				
24.1.2	age		m	m	m	m	m	x	
				Y	Y				
25	esDayCurrent	idlcAttribute 135	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
25.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
25.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
25.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
25.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
26	esFeDayCurrent	idlcAttribute 147	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
26.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
26.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
26.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
26.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
27	esDayPrevious	idlcAttribute 137	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
27.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
* Empty history created. (s IF the generic segmented performance monitoring or the interim segmented performance monitoring approach is used THEN m ELSE n/a (p IF the interim path performance monitoring approach is used THEN m ELSE n/a									

ATTisdnFramedPathTermination15 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnFramedPathTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 36	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
27.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
27.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
27.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
			Y	Y	Y				
28	esFeDayPrevious	idlcAttribute 149	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
28.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
28.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
28.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
28.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
			Y	Y	Y				
29	sesHrCurrent	idlcAttribute 339	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
29.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
29.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
29.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
29.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
			Y	Y	Y				
30	sesFeHrCurrent	idlcAttribute 331	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
30.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
30.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
30.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
30.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
			Y	Y	Y				
31	sesHrPrevious	idlcAttribute 341	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
31.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
31.1.1	fullAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
31.1.2	partialAccumulate		o.3	o.3	o.3	x	x	x	
			N	Y	Y				
31.1.3	corruptedCount		o.3	o.3	o.3	x	x	x	
			Y	Y	Y				
32	sesFeHrPrevious	idlcAttribute 333	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
32.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
(s	IF the generic segmented performance monitoring or the interim segmented performance monitoring approach is used THEN m ELSE n/a								
(p	IF the interim path performance monitoring approach is used THEN m ELSE n/a								

ATTisdnFramedPathTermination16 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE	STATUS SUPPORT						ADDITIONAL INFORMATION
			isdnFramedPathTermination	idlcObjectClass 36	crt	get	rep	add	
32.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
32.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
32.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
33	sesDayCurrent	idlcAttribute 323	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
33.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
33.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
33.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
33.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
34	sesFeDayCurrent	idlcAttribute 327	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
34.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
34.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
34.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
34.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
35	sesDayPrevious	idlcAttribute 325	c(s(p	c(s(p	c(s(p	x	x	x	
			Y	Y	Y				
35.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
35.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
35.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
35.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
36	sesFeDayPrevious	idlcAttribute 329	c(s	c(s	c(s	x	x	x	
			Y	Y	Y				
36.1	CountMeasure		m	m	m	x	x	x	
			Y	Y	Y				
36.1.1	fullAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
36.1.2	partialAccumulate		0.3	0.3	0.3	x	x	x	
			N	Y	Y				
36.1.3	corruptedCount		0.3	0.3	0.3	x	x	x	
			Y	Y	Y				
(s IF the generic segmented performance monitoring or the interim segmented performance monitoring approach is used THEN m ELSE n/a (p IF the interim path performance monitoring approach is used THEN m ELSE n/a									

14.19.3 ATTRIBUTE GROUPS

GRPisdnFramedPathTermination1 — ATTRIBUTE GROUP SUPPORT							
INDEX	ATTRIBUTE GROUP TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE GROUP	STATUS		SUPPORT		ADDITIONAL INFORMAION
			GET	SET TO DEFAULT	GET	SET TO DEFAULT	
1	allPMCount	idlcGroupAttribute 2	o	N	N	N	*
2	allNePMCount	idlcGroupAttribute 1	o	N	N	N	
3	hrlyPMCount	idlcGroupAttribute 67	o	N	N	N	
4	hrlyNePMCount	idlcGroupAttribute 66	o	N	N	N	
5	dailyPMCount	idlcGroupAttribute 38	o	N	N	N	
6	dailyNePMCount	idlcGroupAttribute 37	o	N	N	N	
7	currentPMCount	idlcGroupAttribute 32	o	N	N	N	
8	currentNePMCount	idlcGroupAttribute 31	o	N	N	N	
9	currentHrlyPMCount	idlcGroupAttribute 36	o	N	N	N	
10	currentNeHrlyPMCount	idlcGroupAttribute 35	o	N	N	N	
11	currentDailyPMCount	idlcGroupAttribute 34	o	N	N	N	
12	currentNeDailyPMCount	idlcGroupAttribute 33	o	N	N	N	
13	previousPMCount	idlcGroupAttribute 123	o	N	N	N	
14	previousNePMCount	idlcGroupAttribute 122	o	N	N	N	
15	previousHrlyPMCount	idlcGroupAttribute 119	o	N	N	N	
16	previousNeHrlyPMCount	idlcGroupAttribute 121	o	N	N	N	
17	previousDailyPMCount	idlcGroupAttribute 118	o	N	N	N	
18	previousNeDailyPMCount	idlcGroupAttribute 120	o	N	N	N	
19	historyPMCount	idlcGroupAttribute 65	o	N	N	N	
20	allThreshold	idlcGroupAttribute 3	o	N	N	N	

* The 5ESS®-2000 switch does not support group attributes.

14.19.4 ACTIONS

ACTisdNframedPathTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	operateISDNLoopback	idlcAction 28	m	Y	
1.1	LoopbackArguments		m	Y	
1.1.1	loopbackLocation		m	Y	
1.1.1.1	Location		m	Y	
1.1.1.1.1	end		o.14	Y	
1.1.1.1.1.1	End		m	Y	
1.1.1.1.1.1.1	nearEnd		m	Y	
1.1.1.1.1.1.2	farEnd		m	N	
1.1.1.1.2	line		o.14	Y	*
1.1.2	channel		m	Y	†
1.1.2.1	Channel		m	Y	
1.1.2.1.1	b1		m	Y	
1.1.2.1.2	b2		m	Y	
1.1.2.1.3	d		m	Y	
2	releaseISDNLoopback	idlcAction 34	m	Y	
2.1	LoopbackArguments		m	Y	
2.1.1	loopbackLocation		m	Y	
2.1.1.1	Location		m	Y	
2.1.1.1.1	end		o.14	Y	
2.1.1.1.1.1	End		m	Y	
2.1.1.1.1.1.1	nearEnd		m	Y	
2.1.1.1.1.1.2	farEnd		m	N	
2.1.1.1.2	line		o.14	Y	*
2.1.2	channel		m	Y	‡
2.1.2.1	Channel		m	Y	
2.1.2.1.1	b1		m	Y	
2.1.2.1.2	b2		m	Y	
2.1.2.1.3	d		m	Y	
3	generateCorruptedcrc	idlcAction 21	m	Y	
3.1	GenerateCorruptedcrcArguments		m	Y	
3.1.1	corruptionLocation		m	Y	
3.1.1.1	Location		m	Y	
3.1.1.1.1	end		o.34	Y	
3.1.1.1.1.1	End		m	Y	
3.1.1.1.1.1.1	nearEnd		m	Y	
3.1.1.1.1.1.2	farEnd		m	N	
3.1.1.1.2	line		o.34	Y	*
3.1.2	duration		m	Y	§
4	transmiteocOpcode	idlcAction 48	m	N	
5	initializePMAAttributes	idlcAction 23	m	Y	
5.1	InitializePMAAttributes		m	Y	
5.1.1	allPMAAttributes		m	Y	
5.1.2	currentPMAAttributes		m	Y	
* Always 0, if used † If bit set, loopback not activated ‡ If bit set, loopback not released § 1 to 256 seconds					

14.19.5 NOTIFICATIONS

NOTisdnFramedPathTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	Y	*
1.1	EventInfo		m		Y	
1.1.1	problemType		m		Y	
1.1.1.1	ProblemType		m		Y	
1.1.1.1.1	indeterminate		o.114		Ig	
1.1.1.1.2	equipmentProblemType		o.114		Ig	
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.114			
1.1.1.1.3.1	TransmissionProblemType		m		Y	
1.1.1.1.3.1.1	alarmIndicationSignal		m		Ig	
1.1.1.1.3.1.2	callSetUpFailure		m		Ig	
1.1.1.1.3.1.3	degradedSignal		m		Ig	
1.1.1.1.3.1.4	framingError		m		Ig	
1.1.1.1.3.1.5	lossOfFrame		m		Ig	
1.1.1.1.3.1.6	lossOfPointer		m		Ig	
1.1.1.1.3.1.7	lossOfSignal		m		Y	
1.1.1.1.4	environmentalProblemType		o.114		Ig	
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.6			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			
1.1.1.1.4.1.1.1.10	generatorFailure		m			

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTIsdnFramedPathTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.6			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.114			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.114		Ig	
1.1.1.1.7	thresholdAlert		m			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.114		Ig	
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			

NOTisdnFramedPathTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m		Y	
1.1.2.1	AlarmSeverity		m		Y	
1.1.2.1.1	clear		m		Y	
1.1.2.1.2	indeterminate		m		Ig	
1.1.2.1.3	warning		m		Y	
1.1.2.1.4	minor		m		Ig	
1.1.2.1.5	major		m		Ig	
1.1.2.1.6	critical		m		Ig	
1.1.3	trendIndication		o		Ig	
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o		Ig	
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o		Ig	
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o		Ig	
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o		Ig	
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		o.174			

NOTisdnFramedPathTermination4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.7.1.2	AnalogThreshold		o.174			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o		N	
2	ChangeOfOverheadBitsReport		m	N	Y	
2.1	ChangeOfOHBitsReptArg		m		Y	
2.1.1	oldState		m		Ig	
2.1.1.1	Overheadbit		m			
2.1.1.1.1	actBit		m			
2.1.1.1.2	deactBit		m			
2.1.1.1.3	ps1Bit		m			
2.1.1.1.4	ps2Bit		m			
2.1.1.1.5	ntmBit		m			
2.1.1.1.6	csoBit		m			
2.1.2	newState		m		Y	
2.1.2.1	Overheadbit		m		N	*
2.1.2.1.1	actBit		m		N	
2.1.2.1.2	deactBit		m		N	
2.1.2.1.3	ps1Bit		m		N	
2.1.2.1.4	ps2Bit		m		N	
2.1.2.1.5	ntmBit		m		N	
2.1.2.1.6	csoBit		m		N	

* The 5ESS®-2000 switch uses NTOHStates instead of Overheadbit.

14.19.6 PARAMETERS

PARisdnFramedPathTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses for ISDN framed path terminations.

† If object specific errors are received, only the error type is considered.

PARisdnFramedPathTermination2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.5	errorDescription		o.13	Y	*
1.1.5.1	PrintableString		m	Y	
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	

* The 5ESS®-2000 switch includes the error description in craft reports.

14.20 ISDN LINE TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
isdnLineTermination	idlcObjectClass 64

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.20.1 NAME BINDING

NAMAisdnLineTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	isdnLineTermination-equipment	idlcNameBinding 76	equipment	c	N
2	isdnLineTermination-networkElement	idlcNameBinding 77	networkElement	c	Y

NAMBisdnLineTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	N	
1.3	Create specific error support	x		
2	Delete Support	m	Y	
2.1	Only if no contained objects	m	N	
2.2	Delete contained objects	x		
2.3	Delete specific error support	m	N	

14.20.2 ATTRIBUTES

ATTisdnLineTermination1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	isdnLineTermId	idlcAttribute 193	o	m	x	x	x	x	
			N	N					
2	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	*
			Y	N	N	N	N		
2.1	AlarmSeverityAssignment		m	m	m	m	m	x	
			N						
2.1.1	problem		m	m	m	m	m	x	
2.1.1.1	ProblemType		m	m	m	m	m	x	
2.1.1.1.1	indeterminate		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
2.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
2.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
2.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
2.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
2.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
2.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
2.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
2.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
2.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
2.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
2.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
2.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
2.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
2.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
2.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
* Empty list created.									

ATTisdnLineTermination2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
2.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
2.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
2.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
2.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
2.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
2.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
2.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
2.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
2.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
2.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	

ATTisdnLineTermination3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
2.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
2.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
2.1.1.1.4.1.2	sensorAlarm		0.7	0.7	0.7	0.7	0.7	x	
2.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
2.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
2.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	

ATTisdnLineTermination4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfil	
2.1.1.1.5	softwareProblemType		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
2.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
2.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
2.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
2.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
2.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
2.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
2.1.1.1.6	serviceProblemType		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.7	thresholdAlert		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
2.1.1.1.7.1.1	anyThresholdAlert		0	m	m	m	m	x	
2.1.1.1.7.1.2	specificThresholdAlert		0	m	0	0	0	x	
2.1.1.1.7.1.2.1	triggeredThreshold		0	m	m	m	m	x	
2.1.1.1.7.1.2.1.1	Attribute		0	m	m	m	m	x	
2.1.1.1.7.1.2.2	triggeredAttribute		0	0	0	0	0	x	
2.1.1.1.7.1.2.2.1	Attribute		0	m	m	m	m	x	
2.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	0.5	0.5	x	
2.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
2.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
2.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	

ATTisdnLineTermination5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS SUPPORT						ADDITIONAL INFOMATION
			crt	get	rep	add	rem	dfi	
2.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
2.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
2.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
2.1.1.1.8.1.3	problem		m	m	m	m	m	x	
2.1.2	alarmSeverityCode		m	m	m	m	m	x	
2.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
2.1.2.1.1	non-alarmed		m	m	m	m	m	x	
2.1.2.1.2	minor		m	m	m	m	m	x	
2.1.2.1.3	major		m	m	m	m	m	x	
2.1.2.1.4	critical		m	m	m	m	m	x	
3	lineCircuitAddress	idlcAttribute 208	o	m	x	x	x	x	*
4	sealingCurrent	idlcAttribute 296	o	o	o	x	x	x	
4.1	SealingCurrent		m	m	m	x	x	x	
4.1.1	currentSource		m	m	m	x	x	x	
4.1.1.1	CurrentSource		m	m	m	x	x	x	
4.1.1.1.1	off		m	m	m	x	x	x	
4.1.1.1.2	constant		m	m	m	x	x	x	
4.1.1.1.3	periodic		m	m	m	x	x	x	
4.1.2	duration		o	o	o	x	x	x	
4.1.2.1	CurrentAndTime		m	m	m	x	x	x	
4.1.2.1.1	currentLevel		m	m	m	x	x	x	

* Value set by RDT in M-create result.

ATTisdnLineTermination6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
4.1.2.1.2	duration		m	m	m	x	x	x	
4.1.3	period		o	o	o	x	x	x	
4.1.3.1	CurrentAndTime		m	m	m	x	x	x	
4.1.3.1.1	currentLevel		m	m	m	x	x	x	
4.1.3.1.2	duration		m	m	m	x	x	x	
5	currentProblemList	idlcAttribute 59	c(5)	c(5)	c(5)	c(5)	c(5)	x	*
5.1	CurrentProblem		Y	Y	N	N	N		
5.1.1	problem		m	m	m	m	m	x	
5.1.1.1	problemType		N	Ig					
5.1.1.1.1	ProblemType		m	m	m	m	m	x	
5.1.1.1.1.1	indeterminate		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
5.1.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
5.1.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
5.1.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
5.1.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
* Empty list created.									
5) IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE na									

ATTisdnLineTermination7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
5.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
5.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
5.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
5.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
5.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
5.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
5.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
5.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
5.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
5.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
5.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
5.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
5.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	

ATTisdnLineTermination8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
5.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
5.1.1.1.4.1.2	sensorAlarm		0.7	0.7	0.7	0.7	0.7	x	
5.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
5.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m		
5.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	

ATTisdnLineTermination9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	get	rep	add	rem		dfi
5.1.1.1.4.1.2.1.1.1.14	IceBuildUp		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
5.1.1.1.5	softwareProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
5.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
5.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
5.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
5.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
5.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
5.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
5.1.1.1.6	serviceProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.7	thresholdAlert		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
5.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
5.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
5.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
5.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
5.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
5.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
5.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
5.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
5.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	

ATTisdnLineTermination10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnLineTermination	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 64	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
5.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
5.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
5.1.1.1.8.1.3	problem		m	m	m	m	m	x	
5.1.2	problemState		m	m	m	m	m	x	
5.1.2.1	ProblemState		m	m	m	m	m	x	
5.1.2.1.1	active-pending		m	m	m	m	m	x	
5.1.2.1.2	active-reportable		m	m	m	m	m	x	
5.1.3	problemData		o	o	o	o	o	x	
5.1.3.1	ProblemData		m	m	m	m	m	x	
5.1.3.1.1	identifier		m	m	m	m	m	x	
5.1.3.1.2	critical		m	m	m	m	m	x	
5.1.3.1.3	item		m	m	m	m	m	x	
5.1.3.1.3.1	identifier		m	m	m	m	m	x	
6	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
6.1	EventReportControlId		m	m	m	m	m	x	
6.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	

ATTisdnLineTermination11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF <i>isdnLineTermination</i>	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE <i>idlcObjectClass 64</i>	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			<i>crt</i>	<i>get</i>	<i>rep</i>	<i>add</i>	<i>rem</i>	<i>dfi</i>	
6.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
7	currentAlarmSumSchedPointers	<i>idlcAttribute 56</i>	0	0	0	0	0	x	
			N	N	N	N	N		
7.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x	
7.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
7.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
8	callRefValue	<i>idlcAttribute 31</i>	m	m	x	x	x	x	*
			Y	N	N				

* Expect callRefValue equal to *isdnTermId*.

14.20.3 ATTRIBUTE GROUPS

No other attribute group is supported for *isdnLineTermination* object class.

14.20.4 ACTIONS

No other action is supported for *isdnLineTermination* object class.

14.20.5 NOTIFICATIONS

NOTisdnLineTermination1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idlcNotification 4	m	N	Y	*
1.1	EventInfo		m		Y	
1.1.1	problemType		m		Y	
1.1.1.1	ProblemType		m		Y	
1.1.1.1.1	indeterminate		o.14		Ig	
1.1.1.1.2	equipmentProblemType		o.15		Ig	
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalIFDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.15		Ig	
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.15		Ig	
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.6			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTIsdnLineTermination2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.6			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.15			
1.1.1.1.5.1	SoftwareProblemType		m			
1.1.1.1.5.1.1	storageCapacityProblem		m			
1.1.1.1.5.1.2	memoryMismatch		m			
1.1.1.1.5.1.3	corruptData		m			
1.1.1.1.5.1.4	outOfCPUCycles		m			
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
1.1.1.1.5.1.6	softwareDownloadFailure		m			
1.1.1.1.6	serviceProblemType		o.15		Y	*

* Used by RDT to report change of service state.

NOTisdnLineTermination3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.7	thresholdAlert		o.15			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.15		Ig	
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m		Ig	
1.1.2.1	AlarmSeverity		m			
1.1.2.1.1	clear		m			
1.1.2.1.2	indeterminate		m			
1.1.2.1.3	warning		m			
1.1.2.1.4	minor		m			
1.1.2.1.5	major		m			
1.1.2.1.6	critical		m			
1.1.3	trendIndication		o		Ig	
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o		Ig	
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			

NOTisdnLineTermination4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.5	protectionObject		o		Ig	
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o		Ig	
1.1.6.1	ProblemData		m			
1.1.6.1.1	identifier		m			
1.1.6.1.2	critical		m			
1.1.6.1.3	item		m			
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o		Ig	
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		0.25			
1.1.7.1.2	AnalogThreshold		0.25			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o		Y	*

* Used with serviceProblemType, contains service state data.

14.20.6 PARAMETERS

PARisdnLineTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	

* The 5ESS®.2000 switch does not send object specific errors with responses for ISDN line terminations.

† If object specific errors are received, only the error type is considered.

PARisdnLineTermination2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.5	errorDescription		o.13	Y	*
1.1.5.1	PrintableString		m	Y	
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

14.21 ISDN PER SYSTEM PROFILE

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
isdnPerSystemProfile	idlcObjectClass 38

Are all mandatory features of the class supported? Yes No

14.21.1 NAME BINDING

NAMAisdnPerSystemProfile — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	isdnPerSystemProfile-equipment	idlcNameBinding 78	equipment	c	N
2	isdnPerSystemProfile-networkElement	idlcNameBinding 79	networkElement	c	Y

NAMBisdnPerSystemProfile — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	N	
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

14.21.2 ATTRIBUTES

ATTisdnPerSystemProfile1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF isdnPerSystemProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 38	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	isdnPerSystemProfileId	idlcAttribute 194	o	m	x	x	x	x	
			N	N					
2	isdnL3ErrPerDlyThresh		n/a	n/a	n/a	x	x	x	
			N	N	N				
3	dslSESDefinition	idlcAttribute 126	o	o	o	x	x	x	
			Y	N	Y				

14.21.3 ATTRIBUTE GROUPS

No other attribute group is supported for *isdnPerSystemProfile* object class.

14.21.4 ACTIONS

No other action is supported for *isdnPerSystemProfile* object class.

14.21.5 NOTIFICATIONS

NOTisdnPerSystemProfile1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.2			
1.1.2	AdditionalInfo		o.2			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.2			
2.1.2	AdditionalInfo		o.2			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.21.6 PARAMETERS

No other parameter is supported for *isdnPer:SystemProfile* object class.

14.22 LINE TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
lineTermination	idlcObjectClass 39

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.22.1 ATTRIBUTES

No other attribute is supported for *lineTermination* object class.

14.22.2 ATTRIBUTE GROUPS

No other attribute group is supported for *lineTermination* object class.

14.22.3 ACTIONS

ACTlineTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	Y	*
1.1	RemoveArguments		m	Y	
1.1.1	mode		m	Y	
1.1.1.1	Mode		m	Y	
1.1.1.1.1	normal		m	N	
1.1.1.1.2	forced		m	Y	
2	restore	idlcAction 44	m	Y	†
2.1	RestoreArguments		m	Y	
2.1.1	mode		m	Y	
2.1.1.1	Mode		m	Y	
2.1.1.1.1	normal		m	N	
2.1.1.1.2	forced		m	Y	
2.2	RestoreResult		o	Y	
2.2.1	RestoringResult		o	Y	
2.2.1.1	RestoringResult		m	Y	
2.2.1.1.1	completed		m	Y	
2.2.1.1.2	failedVerification		m	Y	
* Action sent by 5ESS®-2000 switch to remove analogLineTermination or isdnFramedPathTermination only.					
† Action sent by 5ESS®-2000 switch to restore analogLineTermination or isdnFramedPathTermination only.					

14.22.4 NOTIFICATIONS

No other notification is supported for *lineTermination* object class.

14.22.5 PARAMETERS

PARlineTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
I	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.2	supported		o.17	Ig	
1.1.4.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	

See Footnotes on next page.

PARlineTermination1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* RestoreResult also used. † If object specific errors are received, only the error type is considered. ‡ The 5ESS®-2000 switch includes the error description in craft reports.					

14.23 MANAGEMENT OPERATIONS SCHEDULE

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
mgmtOpnsSched	idlcObjectClass 46

Are all mandatory features of the class supported? Yes No

14.23.1 NAME BINDING

No other name binding is supported for *mgmtOpnsSched* object class.

14.23.2 ATTRIBUTES

ATTmgmtOpnsSched1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF mgmtOpnsSchemgmtOpnsSched	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 46	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
1	managementUserId	idlcAttribute 213	o	m	x	x	x	x	
			Y	N					
1.1	AE-Title		o	m	x	x	x	x	
			Y	N					
2	affectedObjectClass	idlcAttribute 3	m	m	m	x	x	x	
			Y	N					
2.1	OBJECT IDENTIFIER		m	m	m	x	x	x	
			Y	N	N				
3	affectedObjectInstances	idlcAttribute 4	m	m	m	m	m	x	
			Y	N	N	N	N		
3.1	DistinguishedName		m	m	m	m	m	x	*
			Y						
4	interval	idlcAttribute 184	m	m	m	x	x	x	
			Y	N	N				
4.1	Interval		m	m	m	x	x	x	
			Y						
4.1.1	indefinite		0.43	0.43	0.43	x	x	x	
			N	N	N				
4.1.2	days		0.43	0.43	0.43	x	x	x	
			N	N	N				
4.1.3	hours		0.43	0.43	0.43	x	x	x	†
			Y	N	N				
4.1.4	minutes		0.43	0.43	0.43	x	x	x	‡
			Y	N	N				
* Empty RDN									
† ISDN framed path terminations 1 hour									
‡ DS1 framed path terminations 15 minutes									

ATTmgmtOpnsSched2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF mgmtOpnsSched	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 46	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
4.1.5	seconds		0.43	0.43	0.43	x	x	x	
			N	N	N				
5	scheduleState	idlcAttribute 295	m	m	m	x	x	m	*
			Y	N	N			N	
6	beginTime	idlcAttribute 26	m	m	m	x	x	x	
			Y	N	N				
6.1	BeginTime		m	m	m	x	x	x	
			Y	N	N				
6.1.1	absolute		0.63	0.63	0.63	x	x	x	
			N						
6.1.2	periodic		0.63	0.63	0.63	x	x	x	
			Y						
6.1.2.1	TimeOfDay		m	m	m	x	x	x	
			Y						
6.1.2.1.1	hour		m	m	m	x	x	x	†
			Y						
6.1.2.1.2	minute		m	m	m	x	x	x	‡
			Y						
6.1.2.1.3	second		m	m	m	x	x	x	§
			Y						
6.1.3	immediate		0.63	0.63	0.63	x	x	x	
			N						
7	endTime	idlcAttribute 128	m	m	m	x	x	m	
			Y						
7.1	EndTime		m	m	m	x	x	m	
			Y						
7.1.1	absolute		0.3	0.3	0.3	x	x	0.3	
			N						
7.1.2	periodic		0.3	0.3	0.3	x	x	0.3	
			Y						
7.1.2.1	TimeOfDay		m	m	m	x	x	m	
			Y						
7.1.2.1.1	hour		m	m	m	x	x	m	⊥
			Y						
7.1.2.1.2	minute		m	m	m	x	x	m	**
			Y						
7.1.2.1.3	second		m	m	m	x	x	m	††
			Y						
7.1.3	noEnding		0.3	0.3	0.3	x	x	0.3	

* isdn FPT - TRUE DS1 FPT - FALSE
† 0 hours
‡ 0 minutes
§ 0 seconds
⊥ 23 hours
** 59 minutes
†† 59 seconds

14.23.3 ATTRIBUTE GROUPS

No other attribute group is supported for *mgmtOpnsSched* object class.

14.23.4 ACTIONS

No other action is supported for *mgmtOpnsSched* object class.

14.23.5 NOTIFICATIONS

No other notification is supported for *mgmtOpnsSched* object class.

14.23.6 PARAMETERS

No other parameter is supported for *mgmtOpnsSched* object class.

14.24 MEMORY

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
memory	idlcObjectClass 42

Are all mandatory features of the class supported? Yes No

14.24.1 NAME BINDING

NAMAmemory — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	memory-equipment	idlcNameBinding 80	equipment	c	Y
2	memory-idlcTerminal	idlcNameBinding 81	idlcTerminal	c	Y
3	memory-networkElement	idlcNameBinding 82	networkElement	c	Y

NAMBmemory — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

* The 5ESS®-2000 switch does not provision memory objects, expecting them to be inherently created by the RDT.

14.24.2 ATTRIBUTES

ATTmemory1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
1	memoryId	idlcAttribute 216	o	m	x	x	x	x	*
			N	N					
1.1	MemoryId		o	m	x	x	x	x	
1.1.1	INTEGER		o.13	o.13	x	x	x	x	
1.1.2	PrintableString		o.13	o.13	x	x	x	x	
2	primaryServiceState	idlcAttribute 242	o	m	x	x	x	x	
			N	N					
2.1	PrimaryServiceState		o	m	x	x	x	x	
2.1.1	is		o	m	x	x	x	x	
2.1.2	oos		o	m	x	x	x	x	
3	secondaryServiceState	idlcAttribute 298	o	m	x	x	x	x	
			N	N					
3.1	SecondaryServiceState		o	m	x	x	x	x	
3.1.1	ts		o	m	x	x	x	x	
3.1.2	mt		o	m	x	x	x	x	
3.1.3	ma		o	m	x	x	x	x	
3.1.4	anr		o	m	x	x	x	x	
3.1.5	ueq		o	m	x	x	x	x	
3.1.6	fef		o	m	x	x	x	x	
3.1.7	busy		o	m	x	x	x	x	
3.1.8	lpbk		o	m	x	x	x	x	
3.1.9	mea		o	m	x	x	x	x	
3.1.10	mon		o	m	x	x	x	x	
3.1.11	pwr		o	m	x	x	x	x	
3.1.12	sea		o	m	x	x	x	x	
3.1.13	act		o	m	x	x	x	x	
* Memory read with filter: and {currentProblemList PRESENT}, {currentProblemList NOT = {}}									

ATTmemory2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.14	ccsf		o	m	x	x	x	x	
3.1.15	comb		o	m	x	x	x	x	
3.1.16	dgn		o	m	x	x	x	x	
3.1.17	dsbld		o	m	x	x	x	x	
3.1.18	erranal		o	m	x	x	x	x	
3.1.19	ex		o	m	x	x	x	x	
3.1.20	faf		o	m	x	x	x	x	
3.1.21	fepro		o	m	x	x	x	x	
3.1.22	flt		o	m	x	x	x	x	
3.1.23	frcd		o	m	x	x	x	x	
3.1.24	hd		o	m	x	x	x	x	
3.1.25	hw		o	m	x	x	x	x	
3.1.26	inhip		o	m	x	x	x	x	
3.1.27	lkdo		o	m	x	x	x	x	
3.1.28	lock		o	m	x	x	x	x	
3.1.29	mtce		o	m	x	x	x	x	
3.1.30	mtcelim		o	m	x	x	x	x	
3.1.31	nm		o	m	x	x	x	x	
3.1.32	pctf		o	m	x	x	x	x	
3.1.33	pri		o	m	x	x	x	x	
3.1.34	prtcl		o	m	x	x	x	x	
3.1.35	sec		o	m	x	x	x	x	
3.1.36	stby		o	m	x	x	x	x	
3.1.37	termf		o	m	x	x	x	x	

ATTmemory3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.38	tmt		o	m	x	x	x	x	
3.1.39	trd		o	m	x	x	x	x	
3.1.40	tstf		o	m	x	x	x	x	
3.1.41	sof		o	m	x	x	x	x	
3.1.42	swtch		o	m	x	x	x	x	
4	memoryType	idlcAttribute 217	o	m	x	x	x	x	
			N	N					
4.1	MemoryType		o	m	x	x	x	x	
4.1.1	working		o	m	x	x	x	x	
4.1.2	primary		o	m	x	x	x	x	
4.1.3	secondary		o	m	x	x	x	x	
4.1.4	auxiliary		o	m	x	x	x	x	
4.1.5	emergency		o	m	x	x	x	x	
5	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
			N	N	N	N	N		
5.1	AlarmSeverityAssignment		m	m	m	m	m	x	
5.1.1	problem		m	m	m	m	m	x	
5.1.1.1	ProblemType		m	m	m	m	m	x	
5.1.1.1.1	indeterminate		0.515	0.515	0.515	0.515	0.515	x	
5.1.1.1.2	equipmentProblemType		0.515	0.515	0.515	0.515	0.515	x	
5.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
5.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
5.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
5.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
5.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
5.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	

ATTmemory4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
5.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
5.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
5.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
5.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
5.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
5.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
5.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
5.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
5.1.1.1.3	transmissionProblemType		0.515	0.515	0.515	0.515	0.515	x	
5.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
5.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
5.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
5.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
5.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
5.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
5.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
5.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
5.1.1.1.4	environmentalProblemType		0.515	0.515	0.515	0.515	0.515	x	
5.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
5.1.1.1.4.1.1	supportEntityAlarm		0.57	0.57	0.57	0.57	0.57	x	
5.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	

ATTmemory5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
5.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
5.1.1.1.4.1.2	sensorAlarm		0.57	0.57	0.57	0.57	0.57	x	
5.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
5.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	

ATTmemory6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfil
5.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
5.1.1.1.5	softwareProblemType		o.515	o.515	o.515	o.515	o.515	x	
5.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
5.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
5.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
5.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
5.1.1.1.5.1.4	outOfCpUCycles		m	m	m	m	m	x	
5.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
5.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
5.1.1.1.6	serviceProblemType		o.515	o.515	o.515	o.515	o.515	x	
5.1.1.1.7	thresholdAlert		o.515	o.515	o.515	o.515	o.515	x	
5.1.1.1.7.1	ThresholdAlert		o.114	m	o.114	o.114	o.114	x	
5.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	

ATTmemory7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfli
5.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
5.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
5.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
5.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
5.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
5.1.1.1.8	scheduledMgmtOpnsProblemType		o.515	o.515	o.515	o.515	o.515	x	
5.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
5.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
5.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.7	ntceMeasReportSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
5.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
5.1.1.1.8.1.3	problem		m	m	m	m	m	x	
5.1.2	alarmSeverityCode		m	m	m	m	m	x	
5.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
5.1.2.1.1	non-alarmed		m	m	m	m	m	x	
5.1.2.1.2	minor		m	m	m	m	m	x	
5.1.2.1.3	major		m	m	m	m	m	x	
5.1.2.1.4	critical		m	m	m	m	m	x	

ATTmemory8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6	currentProblemList	idlcAttribute 59	c(6 N	c(6 Y	x N	x	x	x	
6.1	CurrentProblem		o	m	x	x	x	x	
				Y					
6.1.1	problem		o	m	x	x	x	x	
				Y					
6.1.1.1	ProblemType		o	m	x	x	x	x	
				Y					
6.1.1.1.1	indeterminate		o.65	o.65	x	x	x	x	
				Ig					
6.1.1.1.2	equipmentProblemType		o.65	o.65	x	x	x	x	
				Ig					
6.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
6.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
6.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
6.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
6.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
6.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
6.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
6.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
6.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
6.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
6.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
6.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
6.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	
6.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
6.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
6.1.1.1.3	transmissionProblemType		o.65	o.65	x	x	x	x	
				Ig					
6.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
6.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	

(6 IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects
THEN RDT m ELSE n/a

ATTmemory9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
6.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
6.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
6.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
6.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
6.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
6.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
6.1.1.1.4	environmentalProblemType		0.65	0.65	x	x	x	x	
6.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
6.1.1.1.4.1.1	supportEntityAlarm		0.67	0.67	x	x	x	x	
6.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.10	generatorFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.11	pumpFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.12	rectifierFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.13	rectifierHighVoltage		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.14	rectifierLowVoltage		o	m	x	x	x	x	

ATTmemory10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.4.1.1.1.15	ventilationSystemFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.16	lowBatteryThreshold		o	m	x	x	x	x	
6.1.1.1.4.1.2	sensorAlarm		o.67	o.67	x	x	x	x	
6.1.1.1.4.1.2.1	SensorAlarmList		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	x	x	x	x	
6.1.1.1.4.1.2.1.1.1	SensorAlarmType		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.1	fire		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.2	flood		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.3	highHumidity		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.4	highTemperature		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.5	lowFuel		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.6	lowHumidity		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.7	lowCablePressure		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.8	lowTemperature		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.9	lowWater		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.10	smoke		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.11	toxicGas		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.13	intrusionDetection		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.14	iceBuildUp		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
6.1.1.1.5	softwareProblemType		o.65	o.65	x	x	x	x	
				Y					

ATTmemory11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	addr	rem		dfll
6.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
				Y					
6.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
				Y					
6.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	*
				Y					
6.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	†
				Y					
6.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
				Y					
6.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
				Y					
6.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
				Y					
6.1.1.1.6	serviceProblemType		o.65	o.65	x	x	x	x	
				Ig					
6.1.1.1.7	thresholdAlert		o.65	o.65	x	x	x	x	
				Ig					
6.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
6.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
6.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
6.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
6.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
6.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
6.1.1.1.7.1.2.2.1	Attribute		o	m	x	x	x	x	
6.1.1.1.8	scheduledMgmtOpnsProblemType		o.65	o.65	x	x	x	x	
				Ig					
6.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
6.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
6.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	

* RDT memory is in a non-recoverable, invalid state, which probably takes a manual operation to clear; 5ESS®-2000 switch prohibits provisioning until alarm clears.
† RDT memory is in a recoverable, but invalid state; 5ESS®-2000 switch re-provisions the RDT.

ATTmemory12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.6	litSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	
6.1.1.1.8.1.2.1	DistinguishedName		o	m	x	x	x	x	
6.1.1.1.8.1.3	problem		o	m	x	x	x	x	
6.1.2	problemState		o	m	x	x	x	x	
				lg					
6.1.2.1	ProblemState		o	m	x	x	x	x	
6.1.2.1.1	active-pending		o	m	x	x	x	x	
6.1.2.1.2	active-reportable		o	m	x	x	x	x	
6.1.3	problemData		o	o	x	x	x	x	
				Y					
6.1.3.1	ProblemData		o	m	x	x	x	x	
				Y					
6.1.3.1.1	identifier		o	m	x	x	x	x	
				Y					
6.1.3.1.2	critical		o	m	x	x	x	x	
				Y					
6.1.3.1.3	item		o	m	x	x	x	x	*
				Y					
6.1.3.1.3.1	identifier		o	m	x	x	x	x	
7	backupTime	idlcAttribute 21	o	o	x	x	x	x	
			N	N					
8	backupType	idlcAttribute 22	o	o	x	x	x	x	
			N	N					
8.1	BackupType		o	m	x	x	x	x	

* Must be attProblemData; printable string included in alarm.

ATTmemory13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF memory	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 42	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
8.1.1	full		o	m	x	x	x	x	
8.1.2	incremental		o	m	x	x	x	x	
9	versionNumber	idlcAttribute 401	o	o	x	x	x	x	
			N	N					
10	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N	N	
10.1	EventReportControlId		m	m	m	m	m	x	
10.1.1	INTEGER		o.103	o.103	o.103	o.103	o.103	x	
10.1.2	PrintableString		o.103	o.103	o.103	o.103	o.103	x	
11	inputCommandControlPointers	idlcAttribute 181	o	o	o	o	o	x	
			N	N	N	N	N	N	
11.1	InputCommandControlId		m	m	m	m	m	x	
11.1.1	INTEGER		o.113	o.113	o.113	o.113	o.113	x	
11.1.2	PrintableString		o.113	o.113	o.113	o.113	o.113	x	
12	auditSchedPointers	idlcAttribute 17	o	o	o	o	o	x	
			N	N	N	N	N	N	
12.1	AuditScheduleId		m	m	m	m	m	x	
12.1.1	INTEGER		o.123	o.123	o.123	o.123	o.123	x	
12.1.2	PrintableString		o.123	o.123	o.123	o.123	o.123	x	
13	backupSchedPointers	idlcAttribute 23	o	o	o	o	o	x	
			N	N	N	N	N	N	
13.1	BackupScheduleId		m	m	m	m	m	x	
13.1.1	INTEGER		o.133	o.133	o.133	o.133	o.133	x	
13.1.2	PrintableString		o.133	o.133	o.133	o.133	o.133	x	
14	currentAlarmSumSchedPointers	idlcAttribute 56	o	o	o	o	o	x	
			N	N	N	N	N	N	
14.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x	
14.1.1	INTEGER		o.143	o.143	o.143	o.143	o.143	x	
14.1.2	PrintableString		o.143	o.143	o.143	o.143	o.143	x	

14.24.3 ATTRIBUTE GROUPS

No other attribute group is supported for *memory* object class.

14.24.4 ACTIONS

ACTmemory1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	audit	idlcAction 3	m	N	
1.1	AuditType		m		
1.2	AuditResult		m		
1.2.1	numberOfInconsistency		m		
1.2.2	inconsistency		o		
1.2.2.1	Inconsistency		m		
1.2.2.1.1	phase		m		
1.2.2.1.2	description		m		
2	memoryBackup	idlcAction 26	m	N	
2.1	MemoryCopyArguments		m		
2.1.1	copyType		m		
2.1.1.1	CopyType		m		
2.1.1.1.1	incremental		m		
2.1.1.1.2	full		m		
2.1.2	memoryUsage		m		
2.1.2.1	MemoryUsage		m		
2.1.2.1.1	all		m		
2.1.2.1.2	program		m		
2.1.2.1.3	data		m		
2.1.2.1.4	provisionedData		m		
3	memoryRestoration	idlcAction 27	m	N	
3.1	MemoryCopyArguments		m		
3.1.1	copyType		m		
3.1.1.1	CopyType		m		
3.1.1.1.1	incremental		m		
3.1.1.1.2	full		m		
3.1.2	memoryUsage		m		
3.1.2.1	MemoryUsage		m		
3.1.2.1.1	all		m		
3.1.2.1.2	program		m		
3.1.2.1.3	data		m		
3.1.2.1.4	provisionedData		m		
4	remove	idlcAction 39	m	N	
4.1	RemoveArguments		m		
4.1.1	mode		m		
4.1.1.1	Mode		m		
4.1.1.1.1	normal		m		
4.1.1.1.2	forced		m		
5	restore	idlcAction 44	m	N	
5.1	RestoreArguments		m		
5.1.1	mode		m		
5.1.1.1	Mode		m		
5.1.1.1.1	normal		m		
5.1.1.1.2	forced		m		
5.2	RestoreResult		o		
5.2.1	RestoringResult		o		
5.2.1.1	RestoringResult		m		
5.2.1.1.1	completed		m		
5.2.1.1.2	failedVerification		m		

14.24.5 NOTIFICATIONS

NOTmemory1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	eventReporting	idleNotification 4	m	N	Y	*
1.1	EventInfo				Y	
1.1.1	problemType		m		Y	
1.1.1.1	ProblemType		m		Y	
1.1.1.1.1	indeterminate		o.14		Ig	
1.1.1.1.2	equipmentProblemType		o.14		Ig	
1.1.1.1.2.1	EquipmentProblemType		m			
1.1.1.1.2.1.1	dataSetProblem		m			
1.1.1.1.2.1.2	externalFDDeviceProblem		m			
1.1.1.1.2.1.3	lineCardProblem		m			
1.1.1.1.2.1.4	multiplexerProblem		m			
1.1.1.1.2.1.5	powerProblem		m			
1.1.1.1.2.1.6	processorProblem		m			
1.1.1.1.2.1.7	receiverFailure		m			
1.1.1.1.2.1.8	terminalProblem		m			
1.1.1.1.2.1.9	timingProblem		m			
1.1.1.1.2.1.10	transmitterFailure		m			
1.1.1.1.2.1.11	trunkCardProblem		m			
1.1.1.1.2.1.12	replaceableUnitMissing		m			
1.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
1.1.1.1.2.1.14	backplaneFailure		m			
1.1.1.1.3	transmissionProblemType		o.14		Ig	
1.1.1.1.3.1	TransmissionProblemType		m			
1.1.1.1.3.1.1	alarmIndicationSignal		m			
1.1.1.1.3.1.2	callSetUpFailure		m			
1.1.1.1.3.1.3	degradedSignal		m			
1.1.1.1.3.1.4	framingError		m			
1.1.1.1.3.1.5	lossOfFrame		m			
1.1.1.1.3.1.6	lossOfPointer		m			
1.1.1.1.3.1.7	lossOfSignal		m			
1.1.1.1.4	environmentalProblemType		o.14		Ig	
1.1.1.1.4.1	EnvironmentalProblemType		m			
1.1.1.1.4.1.1	supportEntityAlarm		o.6			
1.1.1.1.4.1.1.1	SEAlarmType		m			
1.1.1.1.4.1.1.1.1	airCompressorFailure		m			
1.1.1.1.4.1.1.1.2	airConditioningFailure		m			
1.1.1.1.4.1.1.1.3	airDryerFailure		m			
1.1.1.1.4.1.1.1.4	batteryDischarging		m			
1.1.1.1.4.1.1.1.5	batteryFailure		m			
1.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
1.1.1.1.4.1.1.1.7	coolingFanFailure		m			
1.1.1.1.4.1.1.1.8	engineFailure		m			
1.1.1.1.4.1.1.1.9	fuseFailure		m			

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTmemory2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.4.1.1.1.10	generatorFailure		m			
1.1.1.1.4.1.1.1.11	pumpFailure		m			
1.1.1.1.4.1.1.1.12	rectifierFailure		m			
1.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
1.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
1.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
1.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
1.1.1.1.4.1.2	sensorAlarm		o.6			
1.1.1.1.4.1.2.1	SensorAlarmList		m			
1.1.1.1.4.1.2.1.1	sensorAlarmType		o			
1.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
1.1.1.1.4.1.2.1.1.1.1	fire		m			
1.1.1.1.4.1.2.1.1.1.2	flood		m			
1.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
1.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
1.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
1.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
1.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
1.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
1.1.1.1.4.1.2.1.1.1.9	lowWater		m			
1.1.1.1.4.1.2.1.1.1.10	smoke		m			
1.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
1.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
1.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
1.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
1.1.1.1.4.1.2.1.1.1.15	highWind		m			
1.1.1.1.4.1.2.1.2	sensorId		m			
1.1.1.1.4.1.2.1.3	sensorLocation		o			
1.1.1.1.5	softwareProblemType		o.14		Y	
1.1.1.1.5.1	SoftwareProblemType		m		Y	
1.1.1.1.5.1.1	storageCapacityProblem		m		Y	
1.1.1.1.5.1.2	memoryMismatch		m		Y	*
1.1.1.1.5.1.3	corruptData		m		Y	†
1.1.1.1.5.1.4	outOfCPCycles		m		Y	
1.1.1.1.5.1.5	sfwrEnvironmentProblem		m		Y	
1.1.1.1.5.1.6	softwareDownloadFailure		m		Y	
1.1.1.1.6	serviceProblemType		o.14		Ig	
1.1.1.1.7	thresholdAlert		o.14			
1.1.1.1.7.1	ThresholdAlert		o.114			
1.1.1.1.7.1.1	anyThresholdAlert		o			
1.1.1.1.7.1.2	specificThresholdAlert		o			
1.1.1.1.7.1.2.1	triggeredThreshold		m			
1.1.1.1.7.1.2.1.1	Attribute		m			
1.1.1.1.7.1.2.2	triggeredAttribute		o			
1.1.1.1.7.1.2.2.1	Attribute		m			

* The RDT memory is in a non-recoverable, invalid state, which probably takes a manual operation to clear. The 5ESS®-2000 switch inhibits provisioning until alarm clears.
† The RDT memory is in a recoverable, but invalid state; 5ESS®-2000 switch re-provisions the RDT.

NOTmemory3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.1.1.8	scheduledMgmtOpnsProblemType		o.14			
1.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
1.1.1.1.8.1.1	operationsType		m			
1.1.1.1.8.1.1.1	OperationsType		m			
1.1.1.1.8.1.1.1.1	auditSchedule		m			
1.1.1.1.8.1.1.1.2	backupSchedule		m			
1.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
1.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
1.1.1.1.8.1.1.1.5	exerciseSchedule		m			
1.1.1.1.8.1.1.1.6	litSchedule		m			
1.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
1.1.1.1.8.1.1.1.8	pmReportSchedule		m			
1.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
1.1.1.1.8.1.2	scheduleId		o			
1.1.1.1.8.1.2.1	DistinguishedName		m			
1.1.1.1.8.1.3	problem		m			
1.1.2	alarmSeverity		m		Y	
1.1.2.1	AlarmSeverity		m		Y	
1.1.2.1.1	clear		m		Y	
1.1.2.1.2	indeterminate		m		Y	
1.1.2.1.3	warning		m		Y	
1.1.2.1.4	minor		m		Y	
1.1.2.1.5	major		m		Y	
1.1.2.1.6	critical		m		Y	
1.1.3	trendIndication		o		Ig	
1.1.3.1	TrendIndication		m			
1.1.3.1.1	lessSevere		m			
1.1.3.1.2	noChange		m			
1.1.3.1.3	moreSevere		m			
1.1.4	protectionIndication		o		Ig	
1.1.4.1	ProtectionIndication		m			
1.1.4.1.1	switchSuccessful		m			
1.1.4.1.2	switchFailed		m			
1.1.4.1.3	protectionUnitNotAvailable		m			
1.1.4.1.4	notEquipped		m			
1.1.4.1.5	switchBackSuccessful		m			
1.1.4.1.6	switchBackFailed		m			
1.1.5	protectionObject		o		Ig	
1.1.5.1	DistinguishedName		m			
1.1.6	problemData		o		Y	
1.1.6.1	ProblemData		m		Y	
1.1.6.1.1	identifier		m		Y	
1.1.6.1.2	critical		m		Y	
1.1.6.1.3	item		m		Y	*

* Must be attProblemData; printable string included in alarm.

NOTmemory4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1.1.6.1.3.1	identifier		m			
1.1.7	threshold		o		Ig	
1.1.7.1	Threshold		m			
1.1.7.1.1	INTEGER		o.174			
1.1.7.1.2	AnalogThreshold		o.174			
1.1.7.1.2.1	AnalogThreshold		m			
1.1.7.1.2.1.1	floor		o			
1.1.7.1.2.1.2	ceiling		o			
1.1.7.1.2.1.3	pendingPeriod		o			
1.1.8	monitoredAttribute		o		Ig	

14.24.6 PARAMETERS

PARmemory1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.2	supported		o.17	Ig	
1.1.4.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	

See Footnotes on next page.

PARmemory1 — PARAMETER SUPPORT (Contd)					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	‡
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch does not send object specific errors with responses for memory objects. † If object specific errors are received, only the error type is considered. ‡ The 5ESS®-2000 switch includes the error description in craft reports.					

14.25 METALLIC TEST ACCESS PATH TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
metTestAccPathTerm	idlcObjectClass 62

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.25.1 NAME BINDING

NAMAmetTestAccPathTerm — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	metTestAccPathTerm-mtau	idlcNameBinding 89	mtau	c	Y

NAMBmetTestAccPathTerm — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

* The 5ESS®-2000 switch does not create metTestAccPathTerm - one instance with id = 1 must be inherently created by the RDT or explicitly created by a supervisory system.

14.25.2 ATTRIBUTES

No other attribute is supported for *metTestAccPathTerm* object class.

14.25.3 ATTRIBUTE GROUPS

No other attribute group is supported for *metTestAccPathTerm* object class.

14.25.4 ACTIONS

ACTmetTestAccPathTerm1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	connMonitorAcc	idlcAction 10	m	N	
2	loopAroundDiagTAP	idlcAction 25	m	Y	
3	releaseLoopAround	idlcAction 38	m	Y	
4	connSplitOutAcc	idlcAction 11	o	Y	
5	changeToSplitOut	idlcAction 8	o	N	
6	changeToSplitIn	idlcAction 7	o	N	
7	resetTimer	idlcAction 49	m	Y	

14.25.5 NOTIFICATIONS

No other notification is supported for *metTestAccPathTerm* object class.

14.25.6 PARAMETERS

PARmetTestAccPathTerm1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses.
† If object specific errors are received, only the error type is considered.

PARmetTestAccPathTerm2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

14.26 METALLIC TEST ACCESS UNIT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
mtau	idlcObjectClass 47

Are all mandatory features of the class supported? Yes No

Note: Refer to *lineTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

The following table has new statuses as indicated:

INHERITED ATTRIBUTES									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF attributes of tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
6	currentProblemList	idlcAttribute 59	c(6 N	c(6 N	x	x	x	x	
(6 IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE na									

14.26.1 NAME BINDING

NAMAmtau — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	mtau-equipment	idlcNameBinding 87	equipment	c	N
2	mtau-networkElement	idlcNameBinding 88	networkElement	c	Y

NAMBmtau — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	m		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch does not create mtau objects - one instance with id = 1 must be inherently created by the RDT or explicitly created by a supervisory system.				

14.26.2 ATTRIBUTES

ATTmtau1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF mtau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 47	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	g	r	a	r	d	
1	mtauId	idlcAttribute 223	o	m	x	x	x	x	
			N	N					
1.1	MtauId		o	m	x	x	x	x	
1.1.1	INTEGER		0.3	0.3	x	x	x	x	
1.1.2	PrintableString		0.3	0.3	x	x	x	x	

14.26.3 ATTRIBUTE GROUPS

No other attribute group is supported for *mtau* object class.

14.26.4 ACTIONS

No other action is supported for *mtau* object class.

14.26.5 NOTIFICATIONS

No other notification is supported for *mtau* object class.

14.26.6 PARAMETERS

No other parameter is supported for *mtau* object class.

14.27 NETWORK ELEMENT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
networkElement	idlcObjectClass 63

Are all mandatory features of the class supported? Yes No

14.27.1 NAME BINDING

NAMAnetworkElement — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	networkElement-network	idlcNameBinding 90	network	c	Y

NAMBnetworkElement — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	x		*
1.1	With Reference Object	x		
1.2	With automatic instance naming	x		
1.3	Create specific error support	x		
2	Delete Support	x		
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* One instance is inherently created by the RDT.				

14.27.2 ATTRIBUTES

ATTnetworkElement1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	networkElementId	idlcAttribute 226	x	m	x	x	x	x	
				N					
1.1	NetworkElementId		x	m	x	x	x	x	
1.1.1	INTEGER		x	0.3	x	x	x	x	
1.1.2	PrintableString		x	0.3	x	x	x	x	
2	primaryServiceState	idlcAttribute 242	x	m	x	x	x	x	
				N					
2.1	PrimaryServiceState		x	m	x	x	x	x	
2.1.1	is		x	m	x	x	x	x	
2.1.2	oos		x	m	x	x	x	x	
3	secondaryServiceState	idlcAttribute 298	x	m	x	x	x	x	
				N					
3.1	SecondaryServiceState		x	m	x	x	x	x	
3.1.1	ts		x	m	x	x	x	x	
3.1.2	mt		x	m	x	x	x	x	
3.1.3	ma		x	m	x	x	x	x	
3.1.4	anr		x	m	x	x	x	x	
3.1.5	ueq		x	m	x	x	x	x	
3.1.6	fef		x	m	x	x	x	x	
3.1.7	busy		x	m	x	x	x	x	
3.1.8	lpbk		x	m	x	x	x	x	
3.1.9	mea		x	m	x	x	x	x	
3.1.10	mon		x	m	x	x	x	x	
3.1.11	pwr		x	m	x	x	x	x	
3.1.12	sea		x	m	x	x	x	x	
3.1.13	act		x	m	x	x	x	x	
3.1.14	ccsf		x	m	x	x	x	x	

ATTnetworkElement2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.15	comb		x	m	x	x	x	x	
3.1.16	dgn		x	m	x	x	x	x	
3.1.17	dsbld		x	m	x	x	x	x	
3.1.18	erranal		x	m	x	x	x	x	
3.1.19	ex		x	m	x	x	x	x	
3.1.20	faf		x	m	x	x	x	x	
3.1.21	fepro		x	m	x	x	x	x	
3.1.22	flt		x	m	x	x	x	x	
3.1.23	frcd		x	m	x	x	x	x	
3.1.24	hd		x	m	x	x	x	x	
3.1.25	hw		x	m	x	x	x	x	
3.1.26	inhip		x	m	x	x	x	x	
3.1.27	lkdo		x	m	x	x	x	x	
3.1.28	lock		x	m	x	x	x	x	
3.1.29	mtce		x	m	x	x	x	x	
3.1.30	mtcelim		x	m	x	x	x	x	
3.1.31	nm		x	m	x	x	x	x	
3.1.32	pctf		x	m	x	x	x	x	
3.1.33	pri		x	m	x	x	x	x	
3.1.34	prtcl		x	m	x	x	x	x	
3.1.35	sec		x	m	x	x	x	x	
3.1.36	stby		x	m	x	x	x	x	
3.1.37	termf		x	m	x	x	x	x	
3.1.38	tmt		x	m	x	x	x	x	

ATTnetworkElement3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.39	trd		x	m	x	x	x	x	
3.1.40	tstf		x	m	x	x	x	x	
3.1.41	sof		x	m	x	x	x	x	
3.1.42	swtch		x	m	x	x	x	x	
4	systemTitle	idlcAttribute 358	m	m	m	x	x	x	
				N					
4.1	SystemTitle		m	m	m	x	x	x	
4.1.1	NULL		0.3	0.3	0.3	x	x	x	
4.1.2	AE-Title		0.3	0.3	0.3	x	x	x	
5	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
				N					
5.1	AlarmSeverityAssignment		m	m	m	m	m	x	
5.1.1	problem		m	m	m	m	m	x	
5.1.1.1	ProblemType		m	m	m	m	m	x	
5.1.1.1.1	indeterminate		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
5.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
5.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
5.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
5.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
5.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
5.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
5.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
5.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
5.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	

ATTnetworkElement4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
5.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
5.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
5.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
5.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
5.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
5.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	
5.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
5.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
5.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
5.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
5.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
5.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
5.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
5.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
5.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
5.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	

ATTnetworkElement5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
5.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
5.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
5.1.1.1.4.1.2	sensorAlarm		o.7	o.7	o.7	o.7	o.7	x	
5.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
5.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	

ATTnetworkElement6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfll
5.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
5.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	
5.1.1.1.5	softwareProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
5.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
5.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
5.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
5.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
5.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
5.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
5.1.1.1.6	serviceProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.7	thresholdAlert		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
5.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
5.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
5.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
5.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
5.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
5.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
5.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	0.5	0.5	x	
5.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	

ATTnetworkElement7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
5.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
5.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
5.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
5.1.1.1.8.1.3	problem		m	m	m	m	m	x	
5.1.2	alarmSeverityCode		m	m	m	m	m	x	
5.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
5.1.2.1.1	non-alarmed		m	m	m	m	m	x	
5.1.2.1.2	minor		m	m	m	m	m	x	
5.1.2.1.3	major		m	m	m	m	m	x	
5.1.2.1.4	critical		m	m	m	m	m	x	
6	vendorName	idlcAttribute 400	x	o	x	x	x	x	
6.1	VendorName		x	m	x	x	x	x	
6.1.1	INTEGER		x	0.3	x	x	x	x	
6.1.2	PrintableString		x	0.3	x	x	x	x	

ATTnetworkElement8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS SUPPORT					ADDITIONAL INFORMATION	
			crt	get	rep	add	rem		dfi
7	systemLocation	idlcAttribute 357	x	o	x	x	x	x	
				N					
8	systemClock	idlcAttribute 356	c(8	c(8	c(8	x	x	x	
			N	N	Y				
9	systemTimingSource	idlcAttribute 403	o	o	o	x	x	x	
			N	N					
9.1	SystemTimingSource		m	m	m	x	x	x	
9.1.1	primaryTimingSource		m	m	m	x	x	x	
9.1.1.1	SystemTiming		m	m	m	x	x	x	
9.1.1.1.1	sourceType		m	m	m	x	x	x	
9.1.1.1.1.1	SourceType		m	m	m	x	x	x	
9.1.1.1.1.1.1	internalTimingSource		m	m	m	x	x	x	
9.1.1.1.1.1.2	remoteTimingSource		m	m	m	x	x	x	
9.1.1.1.1.1.3	slavedTimingTerminationSignal		m	m	m	x	x	x	
9.1.1.1.2	sourceID		o	o	o	x	x	x	
9.1.1.1.2.1	ObjectInstance		m	m	m	x	x	x	
9.1.2	secondaryTimingSource		o	o	o	x	x	x	
9.1.2.1	SystemTiming		m	m	m	x	x	x	
9.1.2.1.1	sourceType		m	m	m	x	x	x	
9.1.2.1.1.1	SourceType		m	m	m	x	x	x	
9.1.2.1.1.1.1	internalTimingSource		m	m	m	x	x	x	
9.1.2.1.1.1.2	remoteTimingSource		m	m	m	x	x	x	
9.1.2.1.1.1.3	slavedTimingTerminationSignal		m	m	m	x	x	x	
9.1.2.1.2	sourceID		o	o	o	x	x	x	
9.1.2.1.2.1	ObjectInstance		m	m	m	x	x	x	
10	currentProblemList	idlcAttribute 59	x	c(10	x	x	x	x	
				Y					
(8	IF RDT THEN m ELSE n/a								
(10	IF the capability to log alarms/events is not provided using the eventRecord or alarmRecord objects THEN RDT m ELSE n/a								

ATTnetworkElement9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
10.1	CurrentProblem		x	m	x	x	x	x	*
				lg					
10.1.1	problem		x	m	x	x	x	x	
10.1.1.1	ProblemType		x	m	x	x	x	x	
10.1.1.1.1	indeterminate		x	0.5	x	x	x	x	
10.1.1.1.2	equipmentProblemType		x	0.5	x	x	x	x	
10.1.1.1.2.1	EquipmentProblemType		x	m	x	x	x	x	
10.1.1.1.2.1.1	dataSetProblem		x	m	x	x	x	x	
10.1.1.1.2.1.2	externalIFDeviceProblem		x	m	x	x	x	x	
10.1.1.1.2.1.3	lineCardProblem		x	m	x	x	x	x	
10.1.1.1.2.1.4	multiplexerProblem		x	m	x	x	x	x	
10.1.1.1.2.1.5	powerProblem		x	m	x	x	x	x	
10.1.1.1.2.1.6	processorProblem		x	m	x	x	x	x	
10.1.1.1.2.1.7	receiverFailure		x	m	x	x	x	x	
10.1.1.1.2.1.8	terminalProblem		x	m	x	x	x	x	
10.1.1.1.2.1.9	timingProblem		x	m	x	x	x	x	
10.1.1.1.2.1.10	transmitterFailure		x	m	x	x	x	x	
10.1.1.1.2.1.11	trunkCardProblem		x	m	x	x	x	x	
10.1.1.1.2.1.12	replaceableUnitMissing		x	m	x	x	x	x	
10.1.1.1.2.1.13	replaceableUnitTypeMismatch		x	m	x	x	x	x	
10.1.1.1.2.1.14	backplaneFailure		x	m	x	x	x	x	
10.1.1.1.3	transmissionProblemType		x	0.5	x	x	x	x	
10.1.1.1.3.1	TransmissionProblemType		x	m	x	x	x	x	
10.1.1.1.3.1.1	alarmIndicationSignal		x	m	x	x	x	x	
10.1.1.1.3.1.2	callSetUpFailure		x	m	x	x	x	x	
* The 5ESS®-2000 doesn't specifically get this attribute for this object class, but might receive this in response to a multi-get. The information in the problem list is ignored.									

ATTnetworkElement10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
10.1.1.1.3.1.3	degradedSignal		x	m	x	x	x	x	
10.1.1.1.3.1.4	framingError		x	m	x	x	x	x	
10.1.1.1.3.1.5	lossOfFrame		x	m	x	x	x	x	
10.1.1.1.3.1.6	lossOfPointer		x	m	x	x	x	x	
10.1.1.1.3.1.7	lossOfSignal		x	m	x	x	x	x	
10.1.1.1.4	environmentalProblemType		x	0.5	x	x	x	x	
10.1.1.1.4.1	EnvironmentalProblemType		x	m	x	x	x	x	
10.1.1.1.4.1.1	supportEntityAlarm		x	0.7	x	x	x	x	
10.1.1.1.4.1.1.1	SEAlarmType		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.1	airCompressorFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.2	airConditioningFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.3	airDryerFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.4	batteryDischarging		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.5	batteryFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.6	commercialPowerFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.7	coolingFanFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.8	engineFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.9	fuseFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.10	generatorFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.11	pumpFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.12	rectifierFailure		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.13	rectifierHighVoltage		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.14	rectifierLowVoltage		x	m	x	x	x	x	
10.1.1.1.4.1.1.1.15	ventilationSystemFailure		x	m	x	x	x	x	

ATTnetworkElement11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	df	
10.1.1.1.4.1.1.1.16	lowBatteryThreshold		x	m	x	x	x	x	
10.1.1.1.4.1.2	sensorAlarm		x	0.7	x	x	x	x	
10.1.1.1.4.1.2.1	SensorAlarmList		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1	sensorAlarmType		x	0	x	x	x	x	
10.1.1.1.4.1.2.1.1.1	SensorAlarmType		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.1	fire		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.2	flood		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.3	highHumidity		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.4	highTemperature		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.5	lowFuel		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.6	lowHumidity		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.7	lowCablePressure		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.8	lowTemperature		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.9	lowWater		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.10	smoke		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.11	toxicGas		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.13	intrusionDetection		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.14	iceBuildUp		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.1.1.15	highWind		x	m	x	x	x	x	
10.1.1.1.4.1.2.1.2	sensorId		x	m	x	x	x	x	*
10.1.1.1.4.1.2.1.3	sensorLocation		x	0	x	x	x	x	
10.1.1.1.5	softwareProblemType		x	0.5	x	x	x	x	

* If 1, mapped to E2 telemetry MISC1 alarm light; if 2, mapped to E2 telemetry MISC2 alarm light.

ATTnetworkElement12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	g	re	pa	rem		df
I0.1.1.1.5.1	SoftwareProblemType		x	m	x	x	x	x	
I0.1.1.1.5.1.1	storageCapacityProblem		x	m	x	x	x	x	
I0.1.1.1.5.1.2	memoryMismatch		x	m	x	x	x	x	
I0.1.1.1.5.1.3	corruptData		x	m	x	x	x	x	
I0.1.1.1.5.1.4	outOfCPUCycles		x	m	x	x	x	x	
I0.1.1.1.5.1.5	sfwrEnvironmentProblem		x	m	x	x	x	x	
I0.1.1.1.5.1.6	softwareDownloadFailure		x	m	x	x	x	x	
I0.1.1.1.6	serviceProblemType		x	0.5	x	x	x	x	
I0.1.1.1.7	thresholdAlert		x	0.5	x	x	x	x	
I0.1.1.1.7.1	ThresholdAlert		x	m	x	x	x	x	
I0.1.1.1.7.1.1	anyThresholdAlert		x	m	x	x	x	x	
I0.1.1.1.7.1.2	specificThresholdAlert		x	m	x	x	x	x	
I0.1.1.1.7.1.2.1	triggeredThreshold		x	m	x	x	x	x	
I0.1.1.1.7.1.2.1.1	Attribute		x	m	x	x	x	x	
I0.1.1.1.7.1.2.2	triggeredAttribute		x	0	x	x	x	x	
I0.1.1.1.7.1.2.2.1	Attribute		x	m	x	x	x	x	
I0.1.1.1.8	scheduledMgmtOpnsProblemType		x	0.5	x	x	x	x	
I0.1.1.1.8.1	ScheduledMgmtOpnsProblemType		x	m	x	x	x	x	
I0.1.1.1.8.1.1	operationsType		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1	OperationsType		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1.1	auditSchedule		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1.2	backupSchedule		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1.3	currentAlmSumSchedule		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1.4	diagnosticSchedule		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1.5	exerciseSchedule		x	m	x	x	x	x	
I0.1.1.1.8.1.1.1.6	litSchedule		x	m	x	x	x	x	

ATTnetworkElement13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
10.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		x	m	x	x	x	x	
10.1.1.1.8.1.1.1.8	pmReportSchedule		x	m	x	x	x	x	
10.1.1.1.8.1.1.1.9	trunkTestSchedule		x	m	x	x	x	x	
10.1.1.1.8.1.2	scheduleId		x	o	x	x	x	x	
10.1.1.1.8.1.2.1	DistinguishedName		x	m	x	x	x	x	
10.1.1.1.8.1.3	problem		x	m	x	x	x	x	
10.1.2	problemState		x	m	x	x	x	x	
10.1.2.1	ProblemState		x	m	x	x	x	x	
10.1.2.1.1	active-pending		x	m	x	x	x	x	
10.1.2.1.2	active-reportable		x	m	x	x	x	x	
10.1.3	problemData		x	o	x	x	x	x	*
10.1.3.1	ProblemData		x	m	x	x	x	x	
10.1.3.1.1	identifier		x	m	x	x	x	x	
10.1.3.1.2	critical		x	m	x	x	x	x	
10.1.3.1.3	item		x	m	x	x	x	x	
10.1.3.1.3.1	identifier		x	m	x	x	x	x	
11	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
11.1	EventReportControlId		m	m	m	m	m	x	
11.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
11.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
12	inputCommandControlPointers	idlcAttribute 181	o	o	o	o	o	x	
			N	N	N	N	N		
12.1	InputCommandControlId		m	m	m	m	m	x	
12.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	

* Must be attProblemData; printable string included in alarm.

ATTnetworkElement14 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		dfi
12.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
13	currentAlarmSumSchedPointers	idlcAttribute 56	0	0	0	0	0	x	
			N	N	N	N	N		
13.1	CurrentAlarmSumScheduleId		m	m	m	m	m	x	
13.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
13.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
14	externalEntityType	idlcAttribute 168	c(a	c(a	c(a	x	x	x	
			N	N	N				
14.1	ExternalEntityType		m	m	m	x	x	x	
14.1.1	airCompressor		m	m	m	x	x	x	
14.1.2	airConditioning		m	m	m	x	x	x	
14.1.3	engine		m	m	m	x	x	x	
14.1.4	fan		m	m	m	x	x	x	
14.1.5	generator		m	m	m	x	x	x	
14.1.6	heater		m	m	m	x	x	x	
14.1.7	light		m	m	m	x	x	x	
14.1.8	sprinkler		m	m	m	x	x	x	
14.1.9	pump		m	m	m	x	x	x	
14.1.10	rectifier		m	m	m	x	x	x	
14.1.11	dryer		m	m	m	x	x	x	
15	externalEntityOpnState	idlcAttribute 167	x	c(a	x	x	x	x	
				N					
15.1	ExternalEntityOpnState		x	m	x	x	x	x	
15.1.1	airCompressor		x	m	x	x	x	x	
15.1.2	airConditioning		x	m	x	x	x	x	
15.1.3	engine		x	m	x	x	x	x	
15.1.4	fan		x	m	x	x	x	x	

(a IF RDT THEN m ELSE n/a

ATTnetworkElement15 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF networkElement	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 63	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
15.1.5	generator		x	m	x	x	x	x	
15.1.6	heater		x	m	x	x	x	x	
15.1.7	light		x	m	x	x	x	x	
15.1.8	sprinkler		x	m	x	x	x	x	
15.1.9	pump		x	m	x	x	x	x	
15.1.10	rectifier		x	m	x	x	x	x	
15.1.11	dryer		x	m	x	x	x	x	
16	systemAlarmState	idlcAttribute 355	x	o	x	x	x	x	
			N	Y					
16.1	AlarmSeverity		x	m	x	x	x	x	
				Y					
16.1.1	clear		x	m	x	x	x	x	
				Y					
16.1.2	indeterminate		x	m	x	x	x	x	
				Y					
16.1.3	warning		x	m	x	x	x	x	
				Y					
16.1.4	minor		x	m	x	x	x	x	
				Y					
16.1.5	major		x	m	x	x	x	x	
				Y					
16.1.6	critical		x	m	x	x	x	x	
				Y					
17	bootGenericProf	idlcAttribute 27	o	o	o	x	x	x	
			N	N	N				
17.1	ProcLoadId		m	m	m	x	x	x	
17.1.1	procLoad		m	m	m	x	x	x	
17.1.2	versionId		m	m	m	x	x	x	

14.27.3 ATTRIBUTE GROUPS

No other attribute group is supported for *networkElement* object class.

14.27.4 ACTIONS

ACTnetworkElement1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	N	
1.1	RemoveArguments		m		
1.1.1	mode		m		
1.1.1.1	Mode		m		
1.1.1.1.1	normal		m		
1.1.1.1.2	forced		m		
2	restore	idlcAction 44	m	N	
2.1	RestoreArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
2.2	RestoreResult		o		
2.2.1	RestoringResult		o		
2.2.1.1	RestoringResult		m		
2.2.1.1.1	completed		m		
2.2.1.1.2	failedVerification		m		
3	activateExternalEntity	idlcAction 1	c(a	N	
3.1	ActivateExternalEntityArguments		m		
3.1.1	continuousActivation		m		
3.1.2	externalEntityType		m		
3.1.2.1	ExtEntityType		m		
3.1.2.1.1	airCompressor		m		
3.1.2.1.2	airConditioning		m		
3.1.2.1.3	engine		m		
3.1.2.1.4	fan		m		
3.1.2.1.5	generator		m		
3.1.2.1.6	heater		m		
3.1.2.1.7	light		m		
3.1.2.1.8	sprinkler		m		
3.1.2.1.9	pump		m		
3.1.2.1.10	rectifier		m		
3.1.2.1.11	dryer		m		
4	deactivateExternalEntity	idlcAction 14	c(a	N	
4.1	DeactivateExternalEntityArguments		m		
4.1.1	continuousDeactivation		m		
4.1.2	externalEntityType		m		
4.1.2.1	ExtEntityType		m		
4.1.2.1.1	airCompressor		m		
4.1.2.1.2	airConditioning		m		
4.1.2.1.3	engine		m		
4.1.2.1.4	fan		m		
4.1.2.1.5	generator		m		
4.1.2.1.6	heater		m		
4.1.2.1.7	light		m		
(a IF RDT THEN m ELSE n/a					

ACTnetworkElement2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
4.1.2.1.8	sprinkler		m		
4.1.2.1.9	pump		m		
4.1.2.1.10	rectifier		m		
4.1.2.1.11	dryer		m		
5	bootProcessor	idlcAction 4	m	N	
5.1	BootProcLoad		m		
5.1.1	ProcLoadId		m		
5.1.1.1	procLoad		m		
5.1.1.2	versionId		m		
6	restartProcessor	idlcAction 43	m	N	
6.1	RestartArg		m		
6.1.1	restartMode		o		
6.1.1.1	RestartMode		m		
6.1.1.1.1	warm		m		
6.1.1.1.2	cold		m		

14.27.5 NOTIFICATIONS

NOTnetworkElement1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	attributeChangeReporting	idlcNotification 1	m	N	N	
1.1	AttributeChangeInfo		m			
1.1.1	AttributeChange		m			
1.1.1.1	AttributeChange		m			
1.1.1.1.1	AttributeChangeList		m			
1.1.1.1.1.1	attributeId		m			
1.1.1.1.1.2	oldAttributeValue		o			
1.1.1.1.1.2.1	attributeId		m			
1.1.1.1.1.3	newAttributeValue		m			
1.1.1.1.1.3.1	attributeId		m			
1.1.1.1.1.4	modificationInd		m			
1.1.1.1.1.4.1	Modification		m			
1.1.1.1.1.4.1.1	replace		m			
1.1.1.1.1.4.1.2	add		m			
1.1.1.1.1.4.1.3	remove		m			
1.1.1.1.1.4.1.4	setDefault		m			
1.1.1.1.1.4.1.5	internalOperation		m			
1.1.2	AdditionalInfo		o			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	eventReporting	idlcNotification 4	m	N	Y	*
2.1	EventInfo		m		Y	
2.1.1	problemType		m		Ig	
2.1.1.1	ProblemType		m			
2.1.1.1.1	indeterminate		o.4			
2.1.1.1.2	equipmentProblemType		o.4			
2.1.1.1.2.1	EquipmentProblemType		m			
2.1.1.1.2.1.1	dataSetProblem		m			
2.1.1.1.2.1.2	externalIFDeviceProblem		m			
2.1.1.1.2.1.3	lineCardProblem		m			
2.1.1.1.2.1.4	multiplexerProblem		m			
2.1.1.1.2.1.5	powerProblem		m			
2.1.1.1.2.1.6	processorProblem		m			
2.1.1.1.2.1.7	receiverFailure		m			
2.1.1.1.2.1.8	terminalProblem		m			
2.1.1.1.2.1.9	timingProblem		m			
2.1.1.1.2.1.10	transmitterFailure		m			
2.1.1.1.2.1.11	trunkCardProblem		m			
2.1.1.1.2.1.12	replaceableUnitMissing		m			
2.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
2.1.1.1.2.1.14	backplaneFailure		m			

* The 5ESS®-2000 switch processes a confirmed eventReport, but does not return result message.

NOTnetworkElement2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
2.1.1.1.3	transmissionProblemType		o.4			
2.1.1.1.3.1	TransmissionProblemType		m			
2.1.1.1.3.1.1	alarmIndicationSignal		m			
2.1.1.1.3.1.2	callSetUpFailure		m			
2.1.1.1.3.1.3	degradedSignal		m			
2.1.1.1.3.1.4	framingError		m			
2.1.1.1.3.1.5	lossOfFrame		m			
2.1.1.1.3.1.6	lossOfPointer		m			
2.1.1.1.3.1.7	lossOfSignal		m			
2.1.1.1.4	environmentalProblemType		o.4			
2.1.1.1.4.1	EnvironmentalProblemType		m			
2.1.1.1.4.1.1	supportEntityAlarm		o.6			
2.1.1.1.4.1.1.1	SEAlarmType		m			
2.1.1.1.4.1.1.1.1	airCompressorFailure		m			
2.1.1.1.4.1.1.1.2	airConditioningFailure		m			
2.1.1.1.4.1.1.1.3	airDryerFailure		m			
2.1.1.1.4.1.1.1.4	batteryDischarging		m			
2.1.1.1.4.1.1.1.5	batteryFailure		m			
2.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
2.1.1.1.4.1.1.1.7	coolingFanFailure		m			
2.1.1.1.4.1.1.1.8	engineFailure		m			
2.1.1.1.4.1.1.1.9	fuseFailure		m			
2.1.1.1.4.1.1.1.10	generatorFailure		m			
2.1.1.1.4.1.1.1.11	pumpFailure		m			
2.1.1.1.4.1.1.1.12	rectifierFailure		m			
2.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
2.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
2.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
2.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
2.1.1.1.4.1.2	sensorAlarm		o.6			
2.1.1.1.4.1.2.1	SensorAlarmList		m			
2.1.1.1.4.1.2.1.1	sensorAlarmType		o			
2.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
2.1.1.1.4.1.2.1.1.1.1	fire		m			
2.1.1.1.4.1.2.1.1.1.2	flood		m			
2.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
2.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
2.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
2.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
2.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
2.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
2.1.1.1.4.1.2.1.1.1.9	lowWater		m			
2.1.1.1.4.1.2.1.1.1.10	smoke		m			
2.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
2.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			

NOTnetworkElement3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
2.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
2.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
2.1.1.1.4.1.2.1.1.1.15	highWind		m			
2.1.1.1.4.1.2.1.2	sensorId		m			*
2.1.1.1.4.1.2.1.3	sensorLocation		o			
2.1.1.1.5	softwareProblemType		o.4			
2.1.1.1.5.1	SoftwareProblemType		m			
2.1.1.1.5.1.1	storageCapacityProblem		m			
2.1.1.1.5.1.2	memoryMismatch		m			†
2.1.1.1.5.1.3	corruptData		m			‡
2.1.1.1.5.1.4	outOfCPUCycles		m			
2.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
2.1.1.1.5.1.6	softwareDownloadFailure		m			
2.1.1.1.6	serviceProblemType		o.4			
2.1.1.1.7	thresholdAlert		o.4			
2.1.1.1.7.1	ThresholdAlert		o.114			
2.1.1.1.7.1.1	anyThresholdAlert		o			
2.1.1.1.7.1.2	specificThresholdAlert		o			
2.1.1.1.7.1.2.1	triggeredThreshold		m			
2.1.1.1.7.1.2.1.1	Attribute		m			
2.1.1.1.7.1.2.2	triggeredAttribute		o			
2.1.1.1.7.1.2.2.1	Attribute		m			
2.1.1.1.8	scheduledMgmtOpnsProblemType		o.4			
2.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
2.1.1.1.8.1.1	operationsType		m			
2.1.1.1.8.1.1.1	OperationsType		m			
2.1.1.1.8.1.1.1.1	auditSchedule		m			
2.1.1.1.8.1.1.1.2	backupSchedule		m			
2.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
2.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
2.1.1.1.8.1.1.1.5	exerciseSchedule		m			
2.1.1.1.8.1.1.1.6	litSchedule		m			
2.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
2.1.1.1.8.1.1.1.8	pmReportSchedule		m			
2.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
2.1.1.1.8.1.2	scheduleId		o			
2.1.1.1.8.1.2.1	DistinguishedName		m			
2.1.1.1.8.1.3	problem		m			
2.1.2	alarmSeverity		m		Y	
2.1.2.1	AlarmSeverity		m		Y	

* If 1, mapped to E2 telemetry MISC1 alarm light; if 2, mapped to E2 telemetry MISC2 alarm light.
† RDT memory is in a non-recoverable, invalid state, which probably takes a manual operation to clear 5ESS®-2000 switch prohibits provisioning until alarm clears.
‡ RDT memory is in a recoverable, but invalid state 5ESS®-2000 switch re-provisions the RDT.

NOTnetworkElement4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
2.1.2.1.1	clear		m		Y	
2.1.2.1.2	indeterminate		m		Y	
2.1.2.1.3	warning		m		Y	
2.1.2.1.4	minor		m		Y	
2.1.2.1.5	major		m		Y	
2.1.2.1.6	critical		m		Y	
2.1.3	trendIndication		o		Ig	
2.1.3.1	TrendIndication		m			
2.1.3.1.1	lessSevere		m			
2.1.3.1.2	noChange		m			
2.1.3.1.3	moreSevere		m			
2.1.4	protectionIndication		o		Ig	
2.1.4.1	ProtectionIndication		m			
2.1.4.1.1	switchSuccessful		m			
2.1.4.1.2	switchFailed		m			
2.1.4.1.3	protectionUnitNotAvailable		m			
2.1.4.1.4	notEquipped		m			
2.1.4.1.5	switchBackSuccessful		m			
2.1.4.1.6	switchBackFailed		m			
2.1.5	protectionObject		o		Ig	
2.1.5.1	DistinguishedName		m			
2.1.6	problemData		o		Ig	
2.1.6.1	ProblemData		m			
2.1.6.1.1	identifier		m			
2.1.6.1.2	critical		m			
2.1.6.1.3	item		m			
2.1.6.1.3.1	identifier		m			
2.1.7	threshold		o		Ig	
2.1.7.1	Threshold		m			
2.1.7.1.1	INTEGER		o.4			
2.1.7.1.2	AnalogThreshold		o.4			
2.1.7.1.2.1	AnalogThreshold		m			
2.1.7.1.2.1.1	floor		o			
2.1.7.1.2.1.2	ceiling		o			
2.1.7.1.2.1.3	pendingPeriod		o			
2.1.8	monitoredAttribute		o		Ig	

14.27.6 PARAMETERS

PARnetworkElement1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses for network element objects.
† If object specific errors are received, only the error type is considered.

PARnetworkElement2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

14.28 PERFORMANCE MONITORING INTERVAL PROFILE

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
pmIntervalProfile	idlcObjectClass 51

Are all mandatory features of the class supported? Yes No

14.28.1 NAME BINDING

NAMApmIntervalProfile — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	pmIntervalProfile-equipment	idlcNameBinding 94	equipment	c	N
2	pmIntervalProfile-idlcTerminal	idlcNameBinding 95	idlcTerminal	c	N
3	pmIntervalProfile-networkElement	idlcNameBinding 96	networkElement	c	Y

NAMBpmIntervalProfile — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch expects instances of pmIntervalProfile to be inherently created by the RDT or by a supervisory system.				

14.28.2 ATTRIBUTES

ATTpmIntervalProfile1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF pmIntervalProfile	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 51	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	pmIntervalProfileId	idlcAttribute 238	o	m	x	x	x	x	
			N	N					
2	pmObjectClass	idlcAttribute 239	m	m	m	m	m	x	
			N	N	N	N	N		
2.1	OBJECT IDENTIFIER		m	m	m	m	m	x	
3	pmAttribute	idlcAttribute 237	m	m	m	m	m	x	
			N	N	N	N	N		
3.1	OBJECT IDENTIFIER		m	m	m	m	m	x	
4	intervalValue	idlcAttribute 185	c(4	m	c(4	x	x	x	
			N	N	Y				
(4 IF provisionable PM interval THEN m ELSE x									

14.28.3 ATTRIBUTE GROUPS

No other attribute group is supported for *pmIntervalProfile* object class.

14.28.4 ACTIONS

No other action is supported for *pmIntervalProfile* object class.

14.28.5 NOTIFICATIONS

NOTpmIntervalProfile1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.2			
1.1.2	AdditionalInfo		o.2			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.2			
2.1.2	AdditionalInfo		o.2			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.28.6 PARAMETERS

No other parameter is supported for *pmIntervalProfile* object class.

14.29 PROTECTION GROUP

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
protectionGroup	idlcObjectClass 52

Are all mandatory features of the class supported? Yes No

14.29.1 NAME BINDING

NAMAprotectionGroup — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	protectionGroup-equipment	idlcNameBinding 97	equipment	c	N
2	protectionGroup-idlcTerminal	idlcNameBinding 98	idlcTerminal	c	Y
3	protectionGroup-networkElement	idlcNameBinding 99	networkElement	c	N

NAMBprotectionGroup — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	m		
2.2	Delete contained objects	x		
2.3	Delete specific error support	m		
* The 5ESS®-2000 switch expects instances of this object to be inherently created by the RDT or by a supervisory system.				

14.29.2 ATTRIBUTES

ATTprotectionGroup1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF protectionGroup	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 52	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	protectionGroupId	idlcAttribute 247	o	m	x	x	x	x	
			N	N					
2	protectionType	idlcAttribute 258	m	m	m	x	x	x	
			N	N	N				
2.1	ProtectionType		m	m	m	x	x	x	
2.1.1	onePlusOne		m	m	m	x	x	x	
2.1.2	oneForN		m	m	m	x	x	x	
2.1.3	mForN		m	m	m	x	x	x	
3	revertiveidlcAttribute 290	m	m	m	x	x	m		
			N	N	N			N	
4	activateLockout	idlcAttribute 1	o	m	x	x	x	m	
			N	N				N	
5	numberOfProtecting	idlcAttribute 229	o	m	x	x	x	m	
			N	N				N	
6	numberOfProtected	idlcAttribute 228	o	m	x	x	x	m	
			N	N				N	
7	switchMode	idlcAttribute 353	o	o	o	x	x	x	
			N	N	N				
7.1	SwitchMode		m	m	m	x	x	x	
7.1.1	bidirectional		m	m	m	x	x	x	
7.1.2	unidirectional		m	m	m	x	x	x	
8	protectionObjectClass	idlcAttribute 255	o	o	x	x	x	x	
			N	N					
8.1	OBJECT IDENTIFIER		o	m	x	x	x	x	

14.29.3 ATTRIBUTE GROUPS

No other attribute group is supported for *protectionGroup* object class.

14.29.4 ACTIONS

ACTprotectionGroup1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	protectionSwitch	idlcAction 33	m	Y	
1.1	ProtSwArguments		m	Y	
1.1.1	protectionSwitchMode		m	Y	
1.1.1.1	Mode		m	Y	
1.1.1.1.1	normal		m	Y	
1.1.1.1.2	forced		m	Y	
1.1.2	protectionSwitchDirection		o	N	
1.1.2.1	ProtectionDirection		m		
1.1.2.1.1	az		m		
1.1.2.1.2	za		m		
1.1.2.1.3	both		m		
1.1.3	protectedUnit		m	Y	
1.1.3.1	DistinguishedName		m	Y	
1.1.4	protectingUnit		o	N	
1.1.4.1	DistinguishedName		m		
1.2	ProtSwResults		m	Y	
1.2.1	switchResult		m	Y	
1.2.2	switchedPGU		o	N	
1.2.2.1	DistinguishedName		m		
1.2.3	psCondition		o	N	
1.2.3.1	PSCcondition		m		
1.2.3.1.1	lockout		m		
1.2.3.1.2	forced		m		
1.2.3.1.3	sigfailHP		m		
1.2.3.1.4	sigfailLP		m		
1.2.3.1.5	sigdegHP		m		
1.2.3.1.6	sigdegLP		m		
1.2.3.1.7	normal		m		
1.2.3.1.8	waittorest		m		
1.2.3.1.9	exerciser		m		
1.2.3.1.10	lockon		m		
1.2.3.1.11	norequest		m		
2	protectionRelease	idlcAction 32	m	N	
2.1	ProtRlsArguments		m		
2.1.1	protectionReleaseMode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
2.1.2	protectionReleaseDirection		o		
2.1.2.1	ProtectionDirection		m		
2.1.2.1.1	az		m		
2.1.2.1.2	za		m		
2.1.2.1.3	both		m		
2.1.3	protectedUnit		o		
2.1.3.1	DistinguishedName		m		

ACTprotectionGroup2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
2.1.4	protectingUnit		o		
2.1.4.1	DistinguishedName		m		
3	exerciseProtectionSwitching	idlcAction 19	o	N	
3.1	ExerciseProtnSwArguments		m		
3.1.1	protectionSwitchDirection		o		
3.1.1.1	ProtectionDirection		m		
3.1.1.1.1	az		m		
3.1.1.1.2	za		m		
3.1.1.1.3	both		m		
3.1.2	reportFailOnly		m		
3.1.3	protectedUnitName		m		
3.1.3.1	DistinguishedName		m		
3.1.4	protectingUnitName		o		
3.1.4.1	DistinguishedName		m		
3.2	ExerciseProtnSwResult		m		
3.2.1	expsresult		o		
3.2.1.1	ExPSResult		m		
3.2.1.1.1	successful		m		
3.2.1.1.2	unsuccFailNEBridge		m		
3.2.1.1.3	unsuccFailFEBridge		m		
3.2.1.1.4	unseccHigherPriority		m		
3.2.2	switchedPGU		o		
3.2.2.1	DistinguishedName		m		
3.2.3	psCondition		o		
3.2.3.1	PSCcondition		m		
3.2.3.1.1	lockout		m		
3.2.3.1.2	forced		m		
3.2.3.1.3	sigfailHP		m		
3.2.3.1.4	sigfailLP		m		
3.2.3.1.5	sigdegHP		m		
3.2.3.1.6	sigdegLP		m		
3.2.3.1.7	normal		m		
3.2.3.1.8	waittorest		m		
3.2.3.1.9	exerciser		m		
3.2.3.1.10	lockon		m		
3.2.3.1.11	norequest		m		
4	lockoutOffProtection	idlcAction 24	m	N	
4.1	LockoutProtArguments		m		
4.1.1	lockoutMode		m		
4.1.1.1	LockoutMode		m		
4.1.1.1.1	normal		m		
4.1.1.1.2	normalProtRelease		m		
4.1.1.1.3	forcedProtRelease		m		
4.1.2	protectingUnitName		o		
4.1.2.1	DistinguishedName		m		

ACTprotectionGroup3 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
4.2	LockoutProtResults		m		
4.2.1	lockoutResult		m		
4.2.2	switchedPGU		o		
4.2.2.1	DistinguishedName		m		
4.2.3	psCondition		o		
4.2.3.1	PSCcondition		m		
4.2.3.1.1	lockout		m		
4.2.3.1.2	forced		m		
4.2.3.1.3	sigfailHP		m		
4.2.3.1.4	sigfailLP		m		
4.2.3.1.5	sigdegHP		m		
4.2.3.1.6	sigdegLP		m		
4.2.3.1.7	normal		m		
4.2.3.1.8	waittorest		m		
4.2.3.1.9	exerciser		m		
4.2.3.1.10	lockon		m		
4.2.3.1.11	norequest		m		
5	releaseLockoutOfProtection	idlcAction 36	m	N	
5.1	RelLockoutProtArguments		m		
5.1.1	protectingUnitName		o		
5.1.1.1	DistinguishedName		m		
6	protectionBridge	idlcAction 31	c(6)	N	
6.1	ProtBridgeArguments		m		
6.1.1	protectedUnit		m		
6.1.1.1	DistinguishedName		m		
6.1.2	protectingUnit		m		
6.1.2.1	DistinguishedName		m		
6.2	ProtBridgeResults		m		
6.2.1	bridgeResult		m		
6.2.2	switchedProtectedUnit		o		
6.2.2.1	DistinguishedName		m		
6.2.3	psCondition		o		
6.2.3.1	PSCcondition		m		
6.2.3.1.1	lockout		m		
6.2.3.1.2	forced		m		
6.2.3.1.3	sigfailHP		m		
6.2.3.1.4	sigfailLP		m		
6.2.3.1.5	sigdegHP		m		
6.2.3.1.6	sigdegLP		m		
6.2.3.1.7	normal		m		
6.2.3.1.8	waittorest		m		
6.2.3.1.9	exerciser		m		
6.2.3.1.10	lockon		m		
6.2.3.1.11	norequest		m		
(6 IF SONET base IDLC THEN m ELSE na					

14.29.5 NOTIFICATIONS

NOTprotectionGroup1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	automaticProtectionSwitchReporting	idlcNotification 2	m	N	N	
4.1	ProtectionSwitchInfo		m			
4.1.1	psCondition		m			
4.1.1.1	PSCondition		m			
4.1.1.1.1	lockout		m			
4.1.1.1.2	forced		m			
4.1.1.1.3	sigfailHP		m			

NOTprotectionGroup2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
4.1.1.1.4	sigfailLP		m			
4.1.1.1.5	sigdegHP		m			
4.1.1.1.6	sigdegLP		m			
4.1.1.1.7	normal		m			
4.1.1.1.8	waittorest		m			
4.1.1.1.9	exerciser		m			
4.1.1.1.10	lockon		m			
4.1.1.1.11	norequest		m			
4.1.2	psdirection		o			
4.1.2.1	ProtectionDirection		m			
4.1.2.1.1	az		m			
4.1.2.1.2	za		m			
4.1.2.1.3	both		m			
4.1.3	protectingUnit		o			
4.1.3.1	DistinguishedName		m			
4.1.4	protectedUnit		o			
4.1.4.1	DistinguishedName		m			

14.29.6 PARAMETERS

PARprotectionGroup1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
I	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.2	supported		o.17	Ig	
1.1.4.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses for protection group objects.
† If object specific errors are received, only the error type is considered.

PARprotectionGroup2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	

* The 5ESS®-2000 switch includes the error description in craft reports.

14.30 PROTECTION GROUP UNIT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
protectionGroupUnit	idlcObjectClass 53

Are all mandatory features of the class supported? Yes No

14.30.1 NAME BINDING

NAMAprotectionGroupUnit — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	protectionGroupUnit-protectionGroup	idlcNameBinding 100	protectionGroup	c	Y

NAMBprotectionGroupUnit — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		
* The 5ESS®-2000 switch expects instances of this object to be inherently created by the RDT or by a supervisory system.				

14.30.2 ATTRIBUTES

ATTprotectionGroupUnit1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF protectionGroupUnit	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 53	STATUS SUPPORT						ADDITIONAL INFORMATION
			o	get	rep	add	rem	dfi	
1	protectionGroupId	idlcAttribute 249	o	m	x	x	x	x	
			N	N					
2	protectionObjectPointer	idlcAttribute 256	m	m	m	x	x	x	
			N	Y	N				
2.1	DistinguishedName		m	m	m	x	x	x	
				Y					
3	protectionGroupUnitType	idlcAttribute 252	m	m	m	x	x	x	
			N	Y	N				
3.1	ProtectionGroupUnitType		m	m	m	x	x	x	
				Y					
3.1.1	protected		m	m	m	x	x	x	
				Y					
3.1.2	protecting		m	m	m	x	x	x	
				Y					
4	inhibitSwitch	idlcAttribute 179	m	m	m	x	x	m	
			N	Y	N			N	
4.1	Inhibiting		m	m	m	x	x	m	
				Y					
4.1.1	inhibited		m	m	m	x	x	m	
				Y					
4.1.2	notInhibited		m	m	m	x	x	m	
				Y					
4.1.3	notApplicable		m	m	m	x	x	m	
				Y					
5	inhibitRelease	idlcAttribute 178	o	o	o	x	x	x	
			N	N	N				
5.1	Inhibiting		m	m	m	x	x	x	
5.1.1	inhibited		m	m	m	x	x	x	
5.1.2	notInhibited		m	m	m	x	x	x	
5.1.3	notApplicable		m	m	m	x	x	x	
6	protectionObjectClass	idlcAttribute 255	o	c(6	x	x	x	x	
			N	N					
6.1	OBJECT IDENTIFIER		o	m	x	x	x	x	
7	protectionGroupUnitNumber	idlcAttribute 250	c(7	c(7	c(7	x	x	x	
			N	N	N				
8	protectionGroupUnitState	idlcAttribute 251	o	o	x	x	x	x	
			N	N					
8.1	ProtectionGroupUnitState		o	m	x	x	x	x	
8.1.1	switched		o	m	x	x	x	x	
8.1.2	notSwitched		o	m	x	x	x	x	
(6	IF protectionGroup object instance contains protectionGroupUnit object instances of different object classes THEN m ELSE na								
(7	IF not DS1-based IDLC systems THEN m ELSE na								

ATTprotectionGroupUnit2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF protectionGroupUnit	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 53	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
8.1.3	bridged		o	m	x	x	x	x	
9	switchedProtectionGroupUnit	idlcAttribute 354	o	o	x	x	x	x	
			N	Y					
9.1	SwitchedProtectionGroupUnit		o	m	x	x	x	x	
				Y					
9.1.1	NULL		0.93	0.93	x	x	x	x	
				Y					
9.1.2	DistinguishedName		0.93	0.93	x	x	x	x	
				Y					
10	priority	idlcAttribute 243	o	o	o	x	x	x	
			N	N	N				
11	protectionSwitchCondition	idlcAttribute 257	o	c(11	x	x	x	x	
			N	N					
11.1	ProtectionSwitchCondition		o	m	x	x	x	x	
11.1.1	lockoutOfProtection		o	m	x	x	x	x	
11.1.2	forceSwitch		o	m	x	x	x	x	
11.1.3	signalFailHighPriority		o	m	x	x	x	x	
11.1.4	signalFailLowPriority		o	m	x	x	x	x	
11.1.5	signalDegradeHighPriority		o	m	x	x	x	x	
11.1.6	signalDegradeLowPriority		o	m	x	x	x	x	
11.1.7	normalSwitch		o	m	x	x	x	x	
11.1.8	waitToRestore		o	m	x	x	x	x	
11.1.9	exerciser		o	m	x	x	x	x	
11.1.10	doNotRevert		o	m	x	x	x	x	
11.1.11	noRequest		o	m	x	x	x	x	
(11 IF revertive protection Scheme THEN o ELSE na									

14.30.3 ATTRIBUTE GROUPS

No other attribute group is supported for *protectionGroupUnit* object class.

14.30.4 ACTIONS

No other action is supported for *protectionGroupUnit* object class.

14.30.5 NOTIFICATIONS

NOTprotectionGroupUnit1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	object	CreationReporting	idlcNotification 5	m	N	N
1.1	CreateInfo		m			
1.1.1	NULL		o.2			
1.1.2	AdditionalInfo		o.2			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.2			
2.1.2	AdditionalInfo		o.2			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.30.6 PARAMETERS

No other parameter is supported for *protectionGroupUnit* object class.

14.31 QUARTER DS0 CHANNEL TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
quarterDS0ChannelTermination	idlcObjectClass 54

Are all mandatory features of the class supported? Yes No

Note: Refer to *channelTermination* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.31.1 NAME BINDING

NAMAquarterDS0ChannelTermination — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	quarterDS0ChannelTermination-ds0ChannelTermination	idlcNameBinding 101	ds0ChannelTermination	c	Y
2	quarterDS0ChannelTermination-isdnFramedPathTermination	idlcNameBinding 102	isdnFramedPathTermination	c	Y

NAMBquarterDS0ChannelTermination — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	Y	
1.1	With Reference Object	m	N	
1.2	With automatic instance naming	m	N	
1.3	Create specific error support	x		
2	Delete Support	m	Y	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

14.31.2 ATTRIBUTES

ATTquarterDS0ChannelTermination1 — ATTRIBUTE SUPPORT								
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE	STATUS					ADDITIONAL INFORMATION
			SUPPORT					
			crt	get	rep	add	rem	
1	quarterDS0ChannelTermId	idlcAttribute 277	o	m	x	x	x	x
			N	N				

14.31.3 ATTRIBUTE GROUPS

No other attribute group is supported for *quarterDS0ChannelTermination* object class.

14.31.4 ACTIONS

ACTquarterDS0ChannelTermination1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	remove	idlcAction 39	m	N	
1.1	RemoveArguments		m		
1.1.1	mode		m		
1.1.1.1	Mode		m		
1.1.1.1.1	normal		m		
1.1.1.1.2	forced		m		
2	restore	idlcAction 44	m	N	
2.1	RestoreArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		
2.1.1.1.2	forced		m		
2.2	RestoreResult		o		
2.2.1	RestoringResult		o		
2.2.1.1	RestoringResult		m		
2.2.1.1.1	completed		m		
2.2.1.1.2	failedVerification		m		

14.31.5 NOTIFICATIONS

No other notification is supported for *quarterDS0ChannelTermination* object class

14.31.6 PARAMETERS

PARquarterDS0ChannelTermination1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	objectSpecificError	idlcSpecificError 1	m	Y	
1.1	ObjectSpecificError		m	Y	
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Y	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	

PARquarterDS0ChannelTermination2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

14.32 TERMINATION POINT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
terminationPoint	idlcObjectClass 56

Are all mandatory features of the class supported? Yes No

14.32.1 ATTRIBUTES

ATTterminationPoint1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF terminationPoint	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 56	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	primaryServiceState	idlcAttribute 242	o	m	x	x	x	x	
			Y	Y					
1.1	PrimaryServiceState		o	m	x	x	x	x	
			Y	Y					
1.1.1	is		o	m	x	x	x	x	*
			Y	Y					
1.1.2	oos		o	m	x	x	x	x	
			N	Y					
2	secondaryServiceState	idlcAttribute 298	o	m	x	x	x	x	
			Y	Y					†
2.1	SecondaryServiceState		o	m	x	x	x	x	
			N	Y					
2.1.1	ts		o	m	x	x	x	x	
				Y					
2.1.2	mt		o	m	x	x	x	x	
				Y					
2.1.3	ma		o	m	x	x	x	x	
				Y					
2.1.4	anr		o	m	x	x	x	x	
				Y					
2.1.5	ueq		o	m	x	x	x	x	
				Y					
2.1.6	fef		o	m	x	x	x	x	
				Y					
2.1.7	busy		o	m	x	x	x	x	
				Y					
2.1.8	lpbk		o	m	x	x	x	x	
				Y					
2.1.9	mea		o	m	x	x	x	x	
				Y					
2.1.10	mon		o	m	x	x	x	x	
				Y					
2.1.11	pwr		o	m	x	x	x	x	
				Y					
2.1.12	sea		o	m	x	x	x	x	
				Y					
2.1.13	act		o	m	x	x	x	x	
				Y					
2.1.14	ccsf		o	m	x	x	x	x	
				Y					
2.1.15	comb		o	m	x	x	x	x	
				Y					
2.1.16	dgn		o	m	x	x	x	x	
				Y					
2.1.17	dsbld		o	m	x	x	x	x	
				Y					
2.1.18	erranal		o	m	x	x	x	x	
				Y					
* Line termination objects always created as in-service.									
† Empty list created.									

ATTterminationPoint2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF terminationPoint	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 56	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
2.1.19	ex		o	m	x	x	x	x	
				Y					
2.1.20	faf		o	m	x	x	x	x	
				Y					
2.1.21	fevro		o	m	x	x	x	x	
				Y					
2.1.22	flt		o	m	x	x	x	x	
				Y					
2.1.23	frcd		o	m	x	x	x	x	
				Y					
2.1.24	hd		o	m	x	x	x	x	
				Y					
2.1.25	hw		o	m	x	x	x	x	
				Y					
2.1.26	inhip		o	m	x	x	x	x	
				Y					
2.1.27	lkdo		o	m	x	x	x	x	
				Y					
2.1.28	lock		o	m	x	x	x	x	
				Y					
2.1.29	mtce		o	m	x	x	x	x	
				Y					
2.1.30	mtcelim		o	m	x	x	x	x	
				Y					
2.1.31	nm		o	m	x	x	x	x	
				Y					
2.1.32	pctf		o	m	x	x	x	x	
				Y					
2.1.33	pri		o	m	x	x	x	x	
				Y					
2.1.34	prtcl		o	m	x	x	x	x	
				Y					
2.1.35	sec		o	m	x	x	x	x	
				Y					
2.1.36	stby		o	m	x	x	x	x	
				Y					
2.1.37	termf		o	m	x	x	x	x	
				Y					
2.1.38	tmt		o	m	x	x	x	x	
				Y					
2.1.39	trd		o	m	x	x	x	x	
				Y					
2.1.40	tstf		o	m	x	x	x	x	
				Y					
2.1.41	sof		o	m	x	x	x	x	
				Y					
2.1.42	swtch		o	m	x	x	x	x	
				Y					

14.32.2 ATTRIBUTE GROUPS

No other attribute group is supported for *terminationPoint* object class.

14.32.3 ACTIONS

No other action is supported for *terminationPoint* object class.

14.32.4 NOTIFICATIONS

NOTterminationPoint1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setToDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.32.5 PARAMETERS

No other parameter is supported for *terminationPoint* object class.

14.33 TEST ACCESS PATH TERMINATION

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
testAccPathTerm	idlcObjectClass 57

Are all mandatory features of the class supported? Yes No

Note: Refer to *terminationPoint* object class MOCS proforma for inherited Attributes, Name Binding, Actions, Notifications, etc., for their statuses.

14.33.1 ATTRIBUTES

ATTtestAccPathTerm1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF testAccPathTerm	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 57	STATUS SUPPORT						ADDITIONAL INFORMATION
			crt	get	rep	add	rem	dfi	
			1	testAccPathTermId	idlcAttribute 374	o	m	x	
			N	N					
2	resourceId	idlcAttribute 289	o	m	x	x	x	m	
			N	N				N	
2.1	ResourceId		o	m	x	x	x	m	
2.1.1	NULL		0.23	0.23	x	x	x	0.23	
2.1.2	DistinguishedName		0.23	0.23	x	x	x	0.23	

14.33.2 ATTRIBUTE GROUPS

No other attribute group is supported for *testAccPathTerm* object class.

14.33.3 ACTIONS

ACTtestAccPathTerm1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	changeToSplitFull	idlcAction 6	m	N	
2	changeToMonitor	idlcAction 5	m	N	
3	discTestAcc	idlcAction 17	m	Y	
4	remove	idlcAction 39	m	N	
4.1	RemoveArguments		m		
4.1.1	mode		m		
4.1.1.1	Mode		m		
4.1.1.1.1	normal		m		
4.1.1.1.2	forced		m		
5	restore	idlcAction 44	m	N	
5.1	RestoreArguments		m		
5.1.1	mode		m		
5.1.1.1	Mode		m		
5.1.1.1.1	normal		m		
5.1.1.1.2	forced		m		
5.2	RestoreResult		o		
5.2.1	RestoringResult		o		
5.2.1.1	RestoringResult		m		
5.2.1.1.1	completed		m		
5.2.1.1.2	failedVerification		m		

14.33.4 NOTIFICATIONS

No other notification is supported for *testAccPathTerm* object class.

14.33.5 PARAMETERS

No other parameter is supported for *testAccPathTerm* object class.

14.34 TEST ACCESS UNIT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
tau	idlcObjectClass 55

Are all mandatory features of the class supported? Yes No

14.34.1 ATTRIBUTES

ATTtau1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	ge	re	ad	re	df	
1	primaryServiceState	idlcAttribute 242	o	m	x	x	x	x	
			N	N					
1.1	PrimaryServiceState		o	m	x	x	x	x	
1.1.1	is		o	m	x	x	x	x	
1.1.2	oos		o	m	x	x	x	x	
2	secondaryServiceState	idlcAttribute 298	o	m	x	x	x	x	
			N	N					
2.1	SecondaryServiceState		o	m	x	x	x	x	
2.1.1	ts		o	m	x	x	x	x	
2.1.2	mt		o	m	x	x	x	x	
2.1.3	ma		o	m	x	x	x	x	
2.1.4	anr		o	m	x	x	x	x	
2.1.5	ueq		o	m	x	x	x	x	
2.1.6	fef		o	m	x	x	x	x	
2.1.7	busy		o	m	x	x	x	x	
2.1.8	lpbk		o	m	x	x	x	x	
2.1.9	mea		o	m	x	x	x	x	
2.1.10	mon		o	m	x	x	x	x	
2.1.11	pwr		o	m	x	x	x	x	
2.1.12	sea		o	m	x	x	x	x	
2.1.13	act		o	m	x	x	x	x	
2.1.14	ccsf		o	m	x	x	x	x	
2.1.15	comb		o	m	x	x	x	x	
2.1.16	dgn		o	m	x	x	x	x	
2.1.17	dsbld		o	m	x	x	x	x	
2.1.18	erranal		o	m	x	x	x	x	

ATTtau2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
2.1.19	ex		o	m	x	x	x	x	
2.1.20	faf		o	m	x	x	x	x	
2.1.21	fepro		o	m	x	x	x	x	
2.1.22	flt		o	m	x	x	x	x	
2.1.23	frcd		o	m	x	x	x	x	
2.1.24	hd		o	m	x	x	x	x	
2.1.25	hw		o	m	x	x	x	x	
2.1.26	inhip		o	m	x	x	x	x	
2.1.27	lkdo		o	m	x	x	x	x	
2.1.28	lock		o	m	x	x	x	x	
2.1.29	mtce		o	m	x	x	x	x	
2.1.30	mtcelim		o	m	x	x	x	x	
2.1.31	nm		o	m	x	x	x	x	
2.1.32	pctf		o	m	x	x	x	x	
2.1.33	pri		o	m	x	x	x	x	
2.1.34	prtcl		o	m	x	x	x	x	
2.1.35	sec		o	m	x	x	x	x	
2.1.36	stby		o	m	x	x	x	x	
2.1.37	termf		o	m	x	x	x	x	
2.1.38	tmt		o	m	x	x	x	x	
2.1.39	trd		o	m	x	x	x	x	
2.1.40	tstf		o	m	x	x	x	x	
2.1.41	sof		o	m	x	x	x	x	
2.1.42	swtch		o	m	x	x	x	x	

ATTtau3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	get	rep	add	rem	dfi	
3	terminateAndLeaveCap	idlcAttribute 371	o	m	x	x	x	x	
			N	N					
4	alarmSeverityAssignmentList	idlcAttribute 6	m	m	m	m	m	x	
			N	N	N	N	N		
4.1	AlarmSeverityAssignment		m	m	m	m	m	x	
4.1.1	problem		m	m	m	m	m	x	
4.1.1.1	ProblemType		m	m	m	m	m	x	
4.1.1.1.1	indeterminate		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.2	equipmentProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.2.1	EquipmentProblemType		m	m	m	m	m	x	
4.1.1.1.2.1.1	dataSetProblem		m	m	m	m	m	x	
4.1.1.1.2.1.2	externalIFDeviceProblem		m	m	m	m	m	x	
4.1.1.1.2.1.3	lineCardProblem		m	m	m	m	m	x	
4.1.1.1.2.1.4	multiplexerProblem		m	m	m	m	m	x	
4.1.1.1.2.1.5	powerProblem		m	m	m	m	m	x	
4.1.1.1.2.1.6	processorProblem		m	m	m	m	m	x	
4.1.1.1.2.1.7	receiverFailure		m	m	m	m	m	x	
4.1.1.1.2.1.8	terminalProblem		m	m	m	m	m	x	
4.1.1.1.2.1.9	timingProblem		m	m	m	m	m	x	
4.1.1.1.2.1.10	transmitterFailure		m	m	m	m	m	x	
4.1.1.1.2.1.11	trunkCardProblem		m	m	m	m	m	x	
4.1.1.1.2.1.12	replaceableUnitMissing		m	m	m	m	m	x	
4.1.1.1.2.1.13	replaceableUnitTypeMismatch		m	m	m	m	m	x	
4.1.1.1.2.1.14	backplaneFailure		m	m	m	m	m	x	
4.1.1.1.3	transmissionProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.3.1	TransmissionProblemType		m	m	m	m	m	x	

ATTtau4 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
4.1.1.1.3.1.1	alarmIndicationSignal		m	m	m	m	m	x	
4.1.1.1.3.1.2	callSetUpFailure		m	m	m	m	m	x	
4.1.1.1.3.1.3	degradedSignal		m	m	m	m	m	x	
4.1.1.1.3.1.4	framingError		m	m	m	m	m	x	
4.1.1.1.3.1.5	lossOfFrame		m	m	m	m	m	x	
4.1.1.1.3.1.6	lossOfPointer		m	m	m	m	m	x	
4.1.1.1.3.1.7	lossOfSignal		m	m	m	m	m	x	
4.1.1.1.4	environmentalProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.4.1	EnvironmentalProblemType		m	m	m	m	m	x	
4.1.1.1.4.1.1	supportEntityAlarm		0.7	0.7	0.7	0.7	0.7	x	
4.1.1.1.4.1.1.1	SEAlarmType		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.1	airCompressorFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.2	airConditioningFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.3	airDryerFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.4	batteryDischarging		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.5	batteryFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.6	commercialPowerFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.7	coolingFanFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.8	engineFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.9	fuseFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.10	generatorFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.11	pumpFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.12	rectifierFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.13	rectifierHighVoltage		m	m	m	m	m	x	

ATTtau5 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			crt	get	rep	add	rem		df1
4.1.1.1.4.1.1.1.14	rectifierLowVoltage		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.15	ventilationSystemFailure		m	m	m	m	m	x	
4.1.1.1.4.1.1.1.16	lowBatteryThreshold		m	m	m	m	m	x	
4.1.1.1.4.1.2	sensorAlarm		0.7	0.7	0.7	0.7	0.7	x	
4.1.1.1.4.1.2.1	SensorAlarmList		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1	sensorAlarmType		o	o	o	o	o	x	
4.1.1.1.4.1.2.1.1.1	SensorAlarmType		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.1	fire		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.2	flood		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.3	highHumidity		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.4	highTemperature		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.5	lowFuel		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.6	lowHumidity		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.8	lowTemperature		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.9	lowWater		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.10	smoke		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.11	toxicGas		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.1.1.15	highWind		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.2	sensorId		m	m	m	m	m	x	
4.1.1.1.4.1.2.1.3	sensorLocation		o	o	o	o	o	x	

ATTtau6 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	g	re	ad	re		df
4.1.1.1.5	softwareProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.5.1	SoftwareProblemType		m	m	m	m	m	x	
4.1.1.1.5.1.1	storageCapacityProblem		m	m	m	m	m	x	
4.1.1.1.5.1.2	memoryMismatch		m	m	m	m	m	x	
4.1.1.1.5.1.3	corruptData		m	m	m	m	m	x	
4.1.1.1.5.1.4	outOfCPUCycles		m	m	m	m	m	x	
4.1.1.1.5.1.5	sfwrEnvironmentProblem		m	m	m	m	m	x	
4.1.1.1.5.1.6	softwareDownloadFailure		m	m	m	m	m	x	
4.1.1.1.6	serviceProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.7	thresholdAlert		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.7.1	ThresholdAlert		0.114	m	0.114	0.114	0.114	x	
4.1.1.1.7.1.1	anyThresholdAlert		o	m	m	m	m	x	
4.1.1.1.7.1.2	specificThresholdAlert		o	m	o	o	o	x	
4.1.1.1.7.1.2.1	triggeredThreshold		o	m	m	m	m	x	
4.1.1.1.7.1.2.1.1	Attribute		o	m	m	m	m	x	
4.1.1.1.7.1.2.2	triggeredAttribute		o	o	o	o	o	x	
4.1.1.1.7.1.2.2.1	Attribute		o	m	m	m	m	x	
4.1.1.1.8	scheduledMgmtOpnsProblemType		0.5	0.5	0.5	0.5	0.5	x	
4.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m	m	m	m	m	x	
4.1.1.1.8.1.1	operationsType		m	m	m	m	m	x	
4.1.1.1.8.1.1.1	OperationsType		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.1	auditSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.2	backupSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.4	diagnosticSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.5	exerciseSchedule		m	m	m	m	m	x	

ATTtau7 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
4.1.1.1.8.1.1.1.6	litSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.8	pmReportSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.1.1.9	trunkTestSchedule		m	m	m	m	m	x	
4.1.1.1.8.1.2	scheduleId		o	o	o	o	o	x	
4.1.1.1.8.1.2.1	DistinguishedName		m	m	m	m	m	x	
4.1.1.1.8.1.3	problem		m	m	m	m	m	x	
4.1.2	alarmSeverityCode		m	m	m	m	m	x	
4.1.2.1	AlarmSeverityCode		m	m	m	m	m	x	
4.1.2.1.1	non-alarmed		m	m	m	m	m	x	
4.1.2.1.2	minor		m	m	m	m	m	x	
4.1.2.1.3	major		m	m	m	m	m	x	
4.1.2.1.4	critical		m	m	m	m	m	x	
5	configurationCodeList	idlcAttribute 39	o	o	o	o	o	x	
5.1	ConfigurationCode		N	N	N	N	N		
5.1.1	twowireA		m	m	m	m	m	x	
5.1.2	twowireB		m	m	m	m	m	x	
5.1.3	twowireC		m	m	m	m	m	x	
5.1.4	fourwireAB		m	m	m	m	m	x	
5.1.5	fourwireBA		m	m	m	m	m	x	
5.1.6	twowireEM		m	m	m	m	m	x	
5.1.7	fourwireMAB		m	m	m	m	m	x	
5.1.8	fourwireMBA		m	m	m	m	m	x	
5.1.9	fourwireDAB		m	m	m	m	m	x	

ATTtau8 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
5.1.10	fourwireDBA		m	m	m	m	m	x	
5.1.11	fourwireCAB		m	m	m	m	m	x	
5.1.12	fourwireCBA		m	m	m	m	m	x	
5.1.13	fourwireF		m	m	m	m	m	x	
5.1.14	fourwireE		m	m	m	m	m	x	
6	currentProblemList	idlcAttribute 59	o	o	x	x	x	x	
			N	N					
6.1	CurrentProblem		o	m	x	x	x	x	
6.1.1	problem		o	m	x	x	x	x	
6.1.1.1	ProblemType		o	m	x	x	x	x	
6.1.1.1.1	indeterminate		0.65	0.65	x	x	x	x	
6.1.1.1.2	equipmentProblemType		0.65	0.65	x	x	x	x	
6.1.1.1.2.1	EquipmentProblemType		o	m	x	x	x	x	
6.1.1.1.2.1.1	dataSetProblem		o	m	x	x	x	x	
6.1.1.1.2.1.2	externalIFDeviceProblem		o	m	x	x	x	x	
6.1.1.1.2.1.3	lineCardProblem		o	m	x	x	x	x	
6.1.1.1.2.1.4	multiplexerProblem		o	m	x	x	x	x	
6.1.1.1.2.1.5	powerProblem		o	m	x	x	x	x	
6.1.1.1.2.1.6	processorProblem		o	m	x	x	x	x	
6.1.1.1.2.1.7	receiverFailure		o	m	x	x	x	x	
6.1.1.1.2.1.8	terminalProblem		o	m	x	x	x	x	
6.1.1.1.2.1.9	timingProblem		o	m	x	x	x	x	
6.1.1.1.2.1.10	transmitterFailure		o	m	x	x	x	x	
6.1.1.1.2.1.11	trunkCardProblem		o	m	x	x	x	x	
6.1.1.1.2.1.12	replaceableUnitMissing		o	m	x	x	x	x	

ATTtau9 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.2.1.13	replaceableUnitTypeMismatch		o	m	x	x	x	x	
6.1.1.1.2.1.14	backplaneFailure		o	m	x	x	x	x	
6.1.1.1.3	transmissionProblemType		o.65	o.65	x	x	x	x	
6.1.1.1.3.1	TransmissionProblemType		o	m	x	x	x	x	
6.1.1.1.3.1.1	alarmIndicationSignal		o	m	x	x	x	x	
6.1.1.1.3.1.2	callSetUpFailure		o	m	x	x	x	x	
6.1.1.1.3.1.3	degradedSignal		o	m	x	x	x	x	
6.1.1.1.3.1.4	framingError		o	m	x	x	x	x	
6.1.1.1.3.1.5	lossOfFrame		o	m	x	x	x	x	
6.1.1.1.3.1.6	lossOfPointer		o	m	x	x	x	x	
6.1.1.1.3.1.7	lossOfSignal		o	m	x	x	x	x	
6.1.1.1.4	environmentalProblemType		o.65	o.65	x	x	x	x	
6.1.1.1.4.1	EnvironmentalProblemType		o	m	x	x	x	x	
6.1.1.1.4.1.1	supportEntityAlarm		o.67	o.67	x	x	x	x	
6.1.1.1.4.1.1.1	SEAlarmType		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.1	airCompressorFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.2	airConditioningFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.3	airDryerFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.4	batteryDischarging		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.5	batteryFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.6	commercialPowerFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.7	coolingFanFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.8	engineFailure		o	m	x	x	x	x	
6.1.1.1.4.1.1.1.9	fuseFailure		o	m	x	x	x	x	

ATTtau10 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
6.1.1.1.4.1.1.1.10	generatorFailure		0	m	x	x	x	x	
6.1.1.1.4.1.1.1.11	pumpFailure		0	m	x	x	x	x	
6.1.1.1.4.1.1.1.12	rectifierFailure		0	m	x	x	x	x	
6.1.1.1.4.1.1.1.13	rectifierHighVoltage		0	m	x	x	x	x	
6.1.1.1.4.1.1.1.14	rectifierLowVoltage		0	m	x	x	x	x	
6.1.1.1.4.1.1.1.15	ventilationSystemFailure		0	m	x	x	x	x	
6.1.1.1.4.1.1.1.16	lowBatteryThreshold		0	m	x	x	x	x	
6.1.1.1.4.1.2	sensorAlarm		0.67	0.67	x	x	x	x	
6.1.1.1.4.1.2.1	SensorAlarmList		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1	sensorAlarmType		0	o	x	x	x	x	
6.1.1.1.4.1.2.1.1.1	SensorAlarmType		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.1	fire		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.2	flood		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.3	highHumidity		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.4	highTemperature		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.5	lowFuel		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.6	lowHumidity		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.7	lowCablePressure		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.8	lowTemperature		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.9	lowWater		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.10	smoke		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.11	toxicGas		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		0	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.13	intrusionDetection		0	m	x	x	x	x	

ATTtau11 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS					ADDITIONAL INFORMATION	
			SUPPORT						
			cr	get	rep	addr	rem		df
6.1.1.1.4.1.2.1.1.1.14	IceBuildUp		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.1.1.15	highWind		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.2	sensorId		o	m	x	x	x	x	
6.1.1.1.4.1.2.1.3	sensorLocation		o	o	x	x	x	x	
6.1.1.1.5	softwareProblemType		p.65	p.65	x	x	x	x	
6.1.1.1.5.1	SoftwareProblemType		o	m	x	x	x	x	
6.1.1.1.5.1.1	storageCapacityProblem		o	m	x	x	x	x	
6.1.1.1.5.1.2	memoryMismatch		o	m	x	x	x	x	
6.1.1.1.5.1.3	corruptData		o	m	x	x	x	x	
6.1.1.1.5.1.4	outOfCPUCycles		o	m	x	x	x	x	
6.1.1.1.5.1.5	sfwrEnvironmentProblem		o	m	x	x	x	x	
6.1.1.1.5.1.6	softwareDownloadFailure		o	m	x	x	x	x	
6.1.1.1.6	serviceProblemType		p.65	p.65	x	x	x	x	
6.1.1.1.7	thresholdAlert		p.65	p.65	x	x	x	x	
6.1.1.1.7.1	ThresholdAlert		o	m	x	x	x	x	
6.1.1.1.7.1.1	anyThresholdAlert		o	m	x	x	x	x	
6.1.1.1.7.1.2	specificThresholdAlert		o	m	x	x	x	x	
6.1.1.1.7.1.2.1	triggeredThreshold		o	m	x	x	x	x	
6.1.1.1.7.1.2.1.1	Attribute		o	m	x	x	x	x	
6.1.1.1.7.1.2.2	triggeredAttribute		o	o	x	x	x	x	
6.1.1.1.7.1.2.2.1	Attribute		o	m	x	x	x	x	
6.1.1.1.8	scheduledMgmtOpnsProblemType		p.65	p.65	x	x	x	x	
6.1.1.1.8.1	ScheduledMgmtOpnsProblemType		o	m	x	x	x	x	
6.1.1.1.8.1.1	operationsType		o	m	x	x	x	x	
6.1.1.1.8.1.1.1	OperationsType		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.1	auditSchedule		o	m	x	x	x	x	

ATTtau12 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	df1	
6.1.1.1.8.1.1.1.2	backupSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.3	currentAlmSumSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.4	diagnosticSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.5	exerciseSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.6	litSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.8	pmReportSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.1.1.9	trunkTestSchedule		o	m	x	x	x	x	
6.1.1.1.8.1.2	scheduleId		o	o	x	x	x	x	
6.1.1.1.8.1.2.1	DistinguishedName		o	m	x	x	x	x	
6.1.1.1.8.1.3	problem		o	m	x	x	x	x	
6.1.2	problemState		o	m	x	x	x	x	
6.1.2.1	ProblemState		o	m	x	x	x	x	
6.1.2.1.1	active-pending		o	m	x	x	x	x	
6.1.2.1.2	active-reportable		o	m	x	x	x	x	
6.1.3	problemData		o	o	x	x	x	x	
6.1.3.1	ProblemData		o	m	x	x	x	x	
6.1.3.1.1	identifier		o	m	x	x	x	x	
6.1.3.1.2	critical		o	m	x	x	x	x	
6.1.3.1.3	item		o	m	x	x	x	x	
6.1.3.1.3.1	identifier		o	m	x	x	x	x	
7	eventReportControlPointers	idlcAttribute 162	o	o	o	o	o	x	
			N	N	N	N	N		
7.1	EventReportControlId		m	m	m	m	m	x	
7.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	

ATTtau13 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF tau	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 55	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			cr	ge	re	ad	re	df	
7.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	
8	currentAlarmSumSchedPointers	idlcAttribute 56	0	0	0	0	0	x	
8.1	CurrentAlarmSumScheduleId		N	N	N	N	N		
			m	m	m	m	m	x	
8.1.1	INTEGER		0.3	0.3	0.3	0.3	0.3	x	
8.1.2	PrintableString		0.3	0.3	0.3	0.3	0.3	x	

14.34.2 ATTRIBUTE GROUPS

No other attribute group is supported for *tau* object class.

14.34.3 ACTIONS

ACTtau1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	connLoopAroundAcc	idlcAction 9	m	Y	
1.1	ConnLoopAroundAccArg		m	Y	
1.1.1	terminationPointId		m	Y	
1.1.1.1	DistinguishedName		m	Y	
1.1.2	configurationCode		m	Y	
1.1.2.1	ConfigurationCode		m	Y	
1.1.2.1.1	twowireA		m	Y	
1.1.2.1.2	twowireB		m	N	
1.1.2.1.3	twowireC		m	N	
1.1.2.1.4	fourwireAB		m	N	
1.1.2.1.5	fourwireBA		m	N	
1.1.2.1.6	twowireEM		m	N	
1.1.2.1.7	fourwireMAB		m	N	
1.1.2.1.8	fourwireMBA		m	N	
1.1.2.1.9	fourwireDAB		m	N	
1.1.2.1.10	fourwireDBA		m	N	
1.1.2.1.11	fourwireCAB		m	N	
1.1.2.1.12	fourwireCBA		m	N	
1.1.2.1.13	fourwireF		m	N	
1.1.2.1.14	fourwireE		m	N	
1.1.3	testAccPathTermId		o	Y	
1.1.3.1	DistinguishedName		m	Y	
1.2	LoopAroundResults		m	Ig	
1.2.1	testAccPathTermId		m		
1.2.1.1	DistinguishedName		m		
1.2.2	monitorAccMode		m		
1.2.3	splitAccCapability		m		
1.2.3.1	SplitAccCapability		m		
1.2.3.1.1	simFullSplit		m		
1.2.3.1.2	nonsimFullSplit		m		
1.2.3.1.3	splitOutOnly		m		
1.2.4	specialCircuit		m		
1.2.5	terminateLeaveStatus		o		
1.2.5.1	TerminateLeaveStatus		m		
1.2.5.1.1	normal		m		
1.2.5.1.2	terminatedA		m		
1.2.5.1.3	terminatedB		m		
1.2.5.1.4	terminatedC		m		
1.2.5.1.5	terminatedAB		m		
2	initAndRestore	idlcAction 22	m	N	
3	diagnose	idlcAction 15	m	N	
3.1	DiagnoseArguments		m		
3.1.1	diagnosisId		m		
3.1.2	phases		m		
3.1.3	iteration		m		

ACTtau2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
3.1.4	normalTermination		m		
3.1.5	reportFailOnly		m		
3.1.6	reportSummaryOnly		m		
3.1.7	affectedPort		o		
3.2	DiagnoseResults		m		
3.2.1	DiagnosisResult		m		
3.2.1.1	phase		m		
3.2.1.2	iteration		m		
3.2.1.3	fail		m		
3.2.1.4	expectedValue		o		
3.2.1.5	actualValue		o		
4	remove	idlcAction 39	m	N	
4.1	RemoveArguments		m		
4.1.1	mode		m		
4.1.1.1	Mode		m		
4.1.1.1.1	normal		m		
4.1.1.1.2	forced		m		
5	restore	idlcAction 44	m	N	
5.1	RestoreArguments		m		
5.1.1	mode		m		
5.1.1.1	Mode		m		
5.1.1.1.1	normal		m		
5.1.1.1.2	forced		m		
5.2	RestoreResult		o		
5.2.1	RestoringResult		o		
5.2.1.1	RestoringResult		m		
5.2.1.1.1	completed		m		
5.2.1.1.2	failedVerification		m		

14.34.4 NOTIFICATIONS

NOTtau1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	reportTAUInit	idlcNotification 7	m	N	N	
2	eventReporting	idlcNotification 4	m	N	N	
2.1	EventInfo		m			
2.1.1	problemType		m			
2.1.1.1	ProblemType		m			
2.1.1.1.1	indeterminate		o.4			
2.1.1.1.2	equipmentProblemType		o.4			
2.1.1.1.2.1	EquipmentProblemType		m			
2.1.1.1.2.1.1	dataSetProblem		m			
2.1.1.1.2.1.2	externalIFDeviceProblem		m			
2.1.1.1.2.1.3	lineCardProblem		m			
2.1.1.1.2.1.4	multiplexerProblem		m			
2.1.1.1.2.1.5	powerProblem		m			
2.1.1.1.2.1.6	processorProblem		m			
2.1.1.1.2.1.7	receiverFailure		m			
2.1.1.1.2.1.8	terminalProblem		m			
2.1.1.1.2.1.9	timingProblem		m			
2.1.1.1.2.1.10	transmitterFailure		m			
2.1.1.1.2.1.11	trunkCardProblem		m			
2.1.1.1.2.1.12	replaceableUnitMissing		m			
2.1.1.1.2.1.13	replaceableUnitTypeMismatch		m			
2.1.1.1.2.1.14	backplaneFailure		m			
2.1.1.1.3	transmissionProblemType		o.4			
2.1.1.1.3.1	TransmissionProblemType		m			
2.1.1.1.3.1.1	alarmIndicationSignal		m			
2.1.1.1.3.1.2	callSetUpFailure		m			
2.1.1.1.3.1.3	degradedSignal		m			
2.1.1.1.3.1.4	framingError		m			
2.1.1.1.3.1.5	lossOfFrame		m			
2.1.1.1.3.1.6	lossOfPointer		m			
2.1.1.1.3.1.7	lossOfSignal		m			
2.1.1.1.4	environmentalProblemType		o.4			
2.1.1.1.4.1	EnvironmentalProblemType		m			
2.1.1.1.4.1.1	supportEntityAlarm		o.6			
2.1.1.1.4.1.1.1	SEAlarmType		m			
2.1.1.1.4.1.1.1.1	airCompressorFailure		m			
2.1.1.1.4.1.1.1.2	airConditioningFailure		m			
2.1.1.1.4.1.1.1.3	airDryerFailure		m			
2.1.1.1.4.1.1.1.4	batteryDischarging		m			
2.1.1.1.4.1.1.1.5	batteryFailure		m			
2.1.1.1.4.1.1.1.6	commercialPowerFailure		m			
2.1.1.1.4.1.1.1.7	coolingFanFailure		m			
2.1.1.1.4.1.1.1.8	engineFailure		m			
2.1.1.1.4.1.1.1.9	fuseFailure		m			
2.1.1.1.4.1.1.1.10	generatorFailure		m			

NOTtau2 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
2.1.1.1.4.1.1.1.11	pumpFailure		m			
2.1.1.1.4.1.1.1.12	rectifierFailure		m			
2.1.1.1.4.1.1.1.13	rectifierHighVoltage		m			
2.1.1.1.4.1.1.1.14	rectifierLowVoltage		m			
2.1.1.1.4.1.1.1.15	ventilationSystemFailure		m			
2.1.1.1.4.1.1.1.16	lowBatteryThreshold		m			
2.1.1.1.4.1.2	sensorAlarm		o.6			
2.1.1.1.4.1.2.1	SensorAlarmList		m			
2.1.1.1.4.1.2.1.1	sensorAlarmType		o			
2.1.1.1.4.1.2.1.1.1	SensorAlarmType		m			
2.1.1.1.4.1.2.1.1.1.1	fire		m			
2.1.1.1.4.1.2.1.1.1.2	flood		m			
2.1.1.1.4.1.2.1.1.1.3	highHumidity		m			
2.1.1.1.4.1.2.1.1.1.4	highTemperature		m			
2.1.1.1.4.1.2.1.1.1.5	lowFuel		m			
2.1.1.1.4.1.2.1.1.1.6	lowHumidity		m			
2.1.1.1.4.1.2.1.1.1.7	lowCablePressure		m			
2.1.1.1.4.1.2.1.1.1.8	lowTemperature		m			
2.1.1.1.4.1.2.1.1.1.9	lowWater		m			
2.1.1.1.4.1.2.1.1.1.10	smoke		m			
2.1.1.1.4.1.2.1.1.1.11	toxicGas		m			
2.1.1.1.4.1.2.1.1.1.12	enclosureDoorOpen		m			
2.1.1.1.4.1.2.1.1.1.13	intrusionDetection		m			
2.1.1.1.4.1.2.1.1.1.14	iceBuildUp		m			
2.1.1.1.4.1.2.1.1.1.15	highWind		m			
2.1.1.1.4.1.2.1.2	sensorID		m			
2.1.1.1.4.1.2.1.3	sensorLocation		o			
2.1.1.1.5	softwareProblemType		o.4			
2.1.1.1.5.1	SoftwareProblemType		m			
2.1.1.1.5.1.1	storageCapacityProblem		m			
2.1.1.1.5.1.2	memoryMismatch		m			
2.1.1.1.5.1.3	corruptData		m			
2.1.1.1.5.1.4	outOfCPUCycles		m			
2.1.1.1.5.1.5	sfwrEnvironmentProblem		m			
2.1.1.1.5.1.6	softwareDownloadFailure		m			
2.1.1.1.6	serviceProblemType		o.4			
2.1.1.1.7	thresholdAlert		o.4			
2.1.1.1.7.1	ThresholdAlert		o.114			
2.1.1.1.7.1.1	anyThresholdAlert		o			
2.1.1.1.7.1.2	specificThresholdAlert		o			
2.1.1.1.7.1.2.1	triggeredThreshold		m			
2.1.1.1.7.1.2.1.1	Attribute		m			
2.1.1.1.7.1.2.2	triggeredAttribute		o			
2.1.1.1.7.1.2.2.1	Attribute		m			

NOTtau3 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
2.1.1.1.8	scheduledMgmtOpnsProblemType		o.4			
2.1.1.1.8.1	ScheduledMgmtOpnsProblemType		m			
2.1.1.1.8.1.1	operationsType		m			
2.1.1.1.8.1.1.1	OperationsType		m			
2.1.1.1.8.1.1.1.1	auditSchedule		m			
2.1.1.1.8.1.1.1.2	backupSchedule		m			
2.1.1.1.8.1.1.1.3	currentAlmSumSchedule		m			
2.1.1.1.8.1.1.1.4	diagnosticSchedule		m			
2.1.1.1.8.1.1.1.5	exerciseSchedule		m			
2.1.1.1.8.1.1.1.6	litSchedule		m			
2.1.1.1.8.1.1.1.7	mtceMeasReportSchedule		m			
2.1.1.1.8.1.1.1.8	pmReportSchedule		m			
2.1.1.1.8.1.1.1.9	trunkTestSchedule		m			
2.1.1.1.8.1.2	scheduleId		o			
2.1.1.1.8.1.2.1	DistinguishedName		m			
2.1.1.1.8.1.3	problem		m			
2.1.2	alarmSeverity		m			
2.1.2.1	AlarmSeverity		m			
2.1.2.1.1	clear		m			
2.1.2.1.2	indeterminate		m			
2.1.2.1.3	warning		m			
2.1.2.1.4	minor		m			
2.1.2.1.5	major		m			
2.1.2.1.6	critical		m			
2.1.3	trendIndication		o			
2.1.3.1	TrendIndication		m			
2.1.3.1.1	lessSevere		m			
2.1.3.1.2	noChange		m			
2.1.3.1.3	moreSevere		m			
2.1.4	protectionIndication		o			
2.1.4.1	ProtectionIndication		m			
2.1.4.1.1	switchSuccessful		m			
2.1.4.1.2	switchFailed		m			
2.1.4.1.3	protectionUnitNotAvailable		m			
2.1.4.1.4	notEquipped		m			
2.1.4.1.5	switchBackSuccessful		m			
2.1.4.1.6	switchBackFailed		m			
2.1.5	protectionObject		o			
2.1.5.1	DistinguishedName		m			
2.1.6	problemData		o			
2.1.6.1	ProblemData		m			
2.1.6.1.1	identifier		m			
2.1.6.1.2	critical		m			
2.1.6.1.3	item		m			
2.1.6.1.3.1	identifier		m			

NOTtau4 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
2.1.7	threshold		o			
2.1.7.1	Threshold		m			
2.1.7.1.1	INTEGER		o.4			
2.1.7.1.2	AnalogThreshold		o.4			
2.1.7.1.2.1	AnalogThreshold		m			
2.1.7.1.2.1.1	floor		o			
2.1.7.1.2.1.2	ceiling		o			
2.1.7.1.2.1.3	pendingPeriod		o			
2.1.8	monitoredAttribute		o			
3	objectCreationReporting	idlcNotification 5	m	N	N	
3.1	CreateInfo		m			
3.1.1	NULL		o.12			
3.1.2	AdditionalInfo		o.12			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			
4	objectDeletionReporting	idlcNotification 6	m	N	N	
4.1	DeleteInfo		m			
4.1.1	NULL		o.22			
4.1.2	AdditionalInfo		o.22			
4.1.2.1	AdditionalInfo		m			
4.1.2.1.1	objectClass		m			
4.1.2.1.2	info		m			
4.1.2.1.2.1	objectClass		m			
5	attributeChangeReporting	idlcNotification 1	m	N	N	
5.1	AttributeChangeInfo		m			
5.1.1	AttributeChange		m			
5.1.1.1	AttributeChange		m			
5.1.1.1.1	AttributeChangeList		m			
5.1.1.1.1.1	attributeId		m			
5.1.1.1.1.2	oldAttributeValue		o			
5.1.1.1.1.2.1	attributeId		m			
5.1.1.1.1.3	newAttributeValue		m			
5.1.1.1.1.3.1	attributeId		m			
5.1.1.1.1.4	modificationInd		m			
5.1.1.1.1.4.1	Modification		m			
5.1.1.1.1.4.1.1	replace		m			
5.1.1.1.1.4.1.2	add		m			
5.1.1.1.1.4.1.3	remove		m			
5.1.1.1.1.4.1.4	setToDefault		m			
5.1.1.1.1.4.1.5	internalOperation		m			
5.1.2	AdditionalInfo		o			
5.1.2.1	AdditionalInfo		m			
5.1.2.1.1	objectClass		m			
5.1.2.1.2	info		m			
5.1.2.1.2.1	objectClass		m			

14.34.5 PARAMETERS

PARTau1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
I	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.2	supported		o.17	Ig	
1.1.4.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	

* The 5ESS®-2000 switch does not send object specific errors with responses for tau objects.
† If object specific errors are received, only the error type is considered.

PARTau2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

14.35 TEST RESPONSE CIRCUIT

MANAGED OBJECT CLASS TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR CLASS
testResponseCircuit	idlcObjectClass 58

Are all mandatory features of the class supported? Yes No

14.35.1 NAME BINDING

NAMAtestResponseCircuit — Name binding support					
INDEX	NAME BINDING TEMPLATE LABEL	VALUE OF OBJECT IDENTIFIER FOR NAME BINDING	SUPERIOR OBJECT CLASS TEMPLATE LABEL	STATUS	SUPPORT
1	testResponseCircuit-equipment	idlcNameBinding 103	equipment	c	N
2	testResponseCircuit-networkElement	idlcNameBinding 104	networkElement	c	Y

NAMBtestResponseCircuit — Name binding support				
INDEX	NAME BINDING FEATURE	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	Create Support	m	N	*
1.1	With Reference Object	m		
1.2	With automatic instance naming	m		
1.3	Create specific error support	x		
2	Delete Support	m	N	
2.1	Only if no contained objects	x		
2.2	Delete contained objects	x		
2.3	Delete specific error support	x		

* The 5ESS®-2000 switch expects that instances of test response circuit objects are either created inherently by the RDT or created by a supervisory system.

14.35.2 ATTRIBUTES

ATTtestResponseCircuit1 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF testResponseCircuit	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 58	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
1	testRCId	idlcAttribute 375	o	m	x	x	x	x	
			N	N					
2	primaryServiceState	idlcAttribute 242	o	m	x	x	x	x	
			N	N					
2.1	PrimaryServiceState		o	m	x	x	x	x	
2.1.1	is		o	m	x	x	x	x	
2.1.2	oos		o	m	x	x	x	x	
3	secondaryServiceState	idlcAttribute 298	o	m	x	x	x	x	
			N	N					
3.1	SecondaryServiceState		o	m	x	x	x	x	
3.1.1	ts		o	m	x	x	x	x	
3.1.2	mt		o	m	x	x	x	x	
3.1.3	ma		o	m	x	x	x	x	
3.1.4	anr		o	m	x	x	x	x	
3.1.5	ueq		o	m	x	x	x	x	
3.1.6	fef		o	m	x	x	x	x	
3.1.7	busy		o	m	x	x	x	x	
3.1.8	lpbk		o	m	x	x	x	x	
3.1.9	mea		o	m	x	x	x	x	
3.1.10	mon		o	m	x	x	x	x	
3.1.11	pwr		o	m	x	x	x	x	
3.1.12	sea		o	m	x	x	x	x	
3.1.13	act		o	m	x	x	x	x	
3.1.14	ccsf		o	m	x	x	x	x	
3.1.15	comb		o	m	x	x	x	x	
3.1.16	dgn		o	m	x	x	x	x	
3.1.17	dsbld		o	m	x	x	x	x	

ATTtestResponseCircuit2 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF testResponseCircuit	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 58	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			crt	get	rep	add	rem	dfi	
3.1.18	erranal		o	m	x	x	x	x	
3.1.19	ex		o	m	x	x	x	x	
3.1.20	faf		o	m	x	x	x	x	
3.1.21	fepro		o	m	x	x	x	x	
3.1.22	flt		o	m	x	x	x	x	
3.1.23	frcd		o	m	x	x	x	x	
3.1.24	hd		o	m	x	x	x	x	
3.1.25	hw		o	m	x	x	x	x	
3.1.26	inhip		o	m	x	x	x	x	
3.1.27	lkdo		o	m	x	x	x	x	
3.1.28	lock		o	m	x	x	x	x	
3.1.29	mtce		o	m	x	x	x	x	
3.1.30	mtcelim		o	m	x	x	x	x	
3.1.31	nm		o	m	x	x	x	x	
3.1.32	pctf		o	m	x	x	x	x	
3.1.33	pri		o	m	x	x	x	x	
3.1.34	prtcl		o	m	x	x	x	x	
3.1.35	sec		o	m	x	x	x	x	
3.1.36	stby		o	m	x	x	x	x	
3.1.37	termf		o	m	x	x	x	x	
3.1.38	tmt		o	m	x	x	x	x	
3.1.39	trd		o	m	x	x	x	x	
3.1.40	tstf		o	m	x	x	x	x	
3.1.41	sof		o	m	x	x	x	x	

ATTtestResponseCircuit3 — ATTRIBUTE SUPPORT									
INDEX	ATTRIBUTE TEMPLATE / FIELD NAME LABEL ATTRIBUTES OF testResponseCircuit	VALUE OF OBJECT IDENTIFIER FOR ATTRIBUTE idlcObjectClass 58	STATUS						ADDITIONAL INFORMATION
			SUPPORT						
			o	get	rep	add	rem	dfi	
3.1.42	swtch		o	m	x	x	x	x	
4	testAccPath	idlcAttribute 373	o	m	x	x	x	x	
4.1	DistinguishedName		N	N					
			o	m	x	x	x	x	

14.35.3 ATTRIBUTE GROUPS

No other attribute group is supported for *testResponseCircuit* reject class.

14.35.4 ACTIONS

ACTtestResponseCircuit1 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1	operateTermination	idlcAction 30	m	Y	
1.1	OpTermArguments		m	Y	
1.1.1	initTermination		m	Y	
1.1.1.1	Terminations		m	Y	
1.1.1.1.1	open		m	Y	
1.1.1.1.2	lcab		m	N	
1.1.1.1.3	lcrf		m	N	
1.1.1.1.4	lcpG		m	N	
1.1.1.1.5	lcng		m	N	
1.1.1.1.6	rngg		m	N	
1.1.1.1.7	ntpg		m	N	
1.1.1.1.8	ptpg		m	N	
1.1.2	detectOutput		m	Y	
1.1.2.1	DetectOutput		m	Y	
1.1.2.1.1	nfc		m	N	
1.1.2.1.2	rlcf		m	N	
1.1.2.1.3	plcf		m	N	
1.1.2.1.4	gsti		m	N	
1.1.2.1.5	ncch		m	N	
1.1.2.1.6	pcch		m	N	
1.1.2.1.7	nccv		m	Y	
1.1.2.1.8	pccv		m	Y	
1.1.2.1.9	nsrr		m	Y	
1.1.2.1.10	nsrt		m	Y	
1.1.2.1.11	psrr		m	Y	
1.1.2.1.12	psrt		m	Y	
1.1.2.1.13	nlpc		m	N	
1.1.2.1.14	rlpc		m	N	
1.1.2.1.15	nlc		m	N	
1.1.2.1.16	anyt		m	Y	
1.1.3	detectTermination		m	Y	
1.1.3.1	Terminations		m	Y	
1.1.3.1.1	open		m	N	
1.1.3.1.2	lcab		m	Y	
1.1.3.1.3	lcrf		m	Y	
1.1.3.1.4	lcpG		m	Y	
1.1.3.1.5	lcng		m	Y	
1.1.3.1.6	rngg		m	N	
1.1.3.1.7	ntpg		m	N	
1.1.3.1.8	ptpg		m	N	
2	remove	idlcAction 39	m	N	
2.1	RemoveArguments		m		
2.1.1	mode		m		
2.1.1.1	Mode		m		
2.1.1.1.1	normal		m		

ACTtestResponseCircuit2 — ACTION SUPPORT					
INDEX	ACTION TYPE TEMPLATE FIELD NAME LABEL	VALUE OF ACTION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
2.1.1.1.2	forced		m		
3	restore	idlcAction 44	m	N	
3.1	RestoreArguments		m		
3.1.1	mode		m		
3.1.1.1	Mode		m		
3.1.1.1.1	normal		m		
3.1.1.1.2	forced		m		
3.2	RestoreResult		o		
3.2.1	RestoringResult		o		
3.2.1.1	RestoringResult		m		
3.2.1.1.1	completed		m		
3.2.1.1.2	failedVerification		m		

14.35.5 NOTIFICATIONS

NOTtestResponseCircuit1 — NOTIFICATION SUPPORT						
INDEX	NOTIFICATION TYPE TEMPLATE/FIELD NAME LABEL	VALUE OF NOTIFICATION FIELD ATTRIBUTE TYPE IDENTIFIER	STATUS	SUPPORT		ADDITIONAL INFORMATION
				Cnf	non Cnf	
1	objectCreationReporting	idlcNotification 5	m	N	N	
1.1	CreateInfo		m			
1.1.1	NULL		o.12			
1.1.2	AdditionalInfo		o.12			
1.1.2.1	AdditionalInfo		m			
1.1.2.1.1	objectClass		m			
1.1.2.1.2	info		m			
1.1.2.1.2.1	objectClass		m			
2	objectDeletionReporting	idlcNotification 6	m	N	N	
2.1	DeleteInfo		m			
2.1.1	NULL		o.22			
2.1.2	AdditionalInfo		o.22			
2.1.2.1	AdditionalInfo		m			
2.1.2.1.1	objectClass		m			
2.1.2.1.2	info		m			
2.1.2.1.2.1	objectClass		m			
3	attributeChangeReporting	idlcNotification 1	m	N	N	
3.1	AttributeChangeInfo		m			
3.1.1	AttributeChange		m			
3.1.1.1	AttributeChange		m			
3.1.1.1.1	AttributeChangeList		m			
3.1.1.1.1.1	attributeId		m			
3.1.1.1.1.2	oldAttributeValue		o			
3.1.1.1.1.2.1	attributeId		m			
3.1.1.1.1.3	newAttributeValue		m			
3.1.1.1.1.3.1	attributeId		m			
3.1.1.1.1.4	modificationInd		m			
3.1.1.1.1.4.1	Modification		m			
3.1.1.1.1.4.1.1	replace		m			
3.1.1.1.1.4.1.2	add		m			
3.1.1.1.1.4.1.3	remove		m			
3.1.1.1.1.4.1.4	setDefault		m			
3.1.1.1.1.4.1.5	internalOperation		m			
3.1.2	AdditionalInfo		o			
3.1.2.1	AdditionalInfo		m			
3.1.2.1.1	objectClass		m			
3.1.2.1.2	info		m			
3.1.2.1.2.1	objectClass		m			

14.35.6 PARAMETERS

PARtestResponseCircuit1 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
I	objectSpecificError	idlcSpecificError 1	m	Y	*
1.1	ObjectSpecificError		m	Y	†
1.1.1	improperCondition		o.13	Y	
1.1.1.1	Attribute		m	Ig	
1.1.2	corruptedMemoryError		o.13	Y	
1.1.2.1	AttributeId		m	Ig	
1.1.3	alreadyInCondition		o.13	Y	
1.1.3.1	Attribute		m	Ig	
1.1.4	associatedEntityUnavailable		o.13	Y	
1.1.4.1	AEUnavailable		m	Ig	
1.1.4.1.1	name		m	Ig	
1.1.4.1.1.1	Name		m	Ig	
1.1.4.1.1.1.1	supporting		o.17	Ig	
1.1.4.1.1.1.1.1	EntityName		m	Ig	
1.1.4.1.1.1.1.1.1	knownObjectClass		o.19	Ig	
1.1.4.1.1.1.1.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.1.1.2	knownObjectInstance		o.19	Ig	
1.1.4.1.1.1.1.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.1.1.3	unknownEntity		o.19	Ig	
1.1.4.1.1.1.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.2	supported		o.17	Ig	
1.1.4.1.1.1.2.1	EntityName		m	Ig	
1.1.4.1.1.1.2.1.1	knownObjectClass		o.29	Ig	
1.1.4.1.1.1.2.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.2.1.2	knownObjectInstance		o.29	Ig	
1.1.4.1.1.1.2.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.2.1.3	unknownEntity		o.29	Ig	
1.1.4.1.1.1.2.1.3.1	NULL		m	Ig	
1.1.4.1.1.1.3	indeterminate		o.17	Ig	
1.1.4.1.1.1.3.1	EntityName		m	Ig	
1.1.4.1.1.1.3.1.1	knownObjectClass		o.39	Ig	
1.1.4.1.1.1.3.1.1.1	OBJECT IDENTIFIER		m	Ig	
1.1.4.1.1.1.3.1.2	knownObjectInstance		o.39	Ig	
1.1.4.1.1.1.3.1.2.1	DistinguishName		m	Ig	
1.1.4.1.1.1.3.1.3	unknownEntity		o.39	Ig	
1.1.4.1.1.1.3.1.3.1	NULL		m	Ig	
1.1.4.1.2	unavailability		o	Ig	
1.1.4.1.2.1	Unavailability		m	Ig	
1.1.4.1.2.1.1	improperCondition		o.27	Ig	
1.1.4.1.2.1.1.1	Attribute		m	Ig	
1.1.4.1.2.1.2	busy		o.27	Ig	
1.1.4.1.2.1.2.1	NULL		m	Ig	
* The 5ESS®-2000 switch does not send object specific errors with responses for test response circuits.					
† If object specific errors are received, only the error type is considered.					

PARtestResponseCircuit2 — PARAMETER SUPPORT					
INDEX	PARAMETER TEMPLATE LABEL	VALUE OF PARAMETER IDENTIFIER	STATUS	SUPPORT	ADDITIONAL INFORMATION
1.1.4.1.2.1.3	failure		o.27	Ig	
1.1.4.1.2.1.3.1	NULL		m	Ig	
1.1.5	errorDescription		o.13	Y	
1.1.5.1	PrintableString		m	Y	*
1.1.6	containingObjectInstances		o.13	Y	
1.1.6.1	ContainingInstances		m	Ig	
1.1.6.1.1	objectInstance		o	Ig	
1.1.6.1.1.1	ObjectInstance		m	Ig	
* The 5ESS®-2000 switch includes the error description in craft reports.					

GL. GLOSSARY

ACO	Alarm Cut Off
ACSR	Automatic Customer Station Rearrangements
AIS	Alarm Indication Signal
ALE	Automatic Line Evaluation
ALIT	Automatic Line Insulation Test
AMA	Automatic Message Accounting
AMI	Alternate Mark Inversion
ANI	Automatic Number Identification
APDU	Application Protocol Data Unit
ARS	Automatic Route Selection
ARSB	Automated Repair Service Bureau
ASN	Abstract Syntax Notation
ASN.1	Abstract Syntax Notation One
B8ZS	Bipolar with 8 Zero Substitution
BCI	Blocked Call Indication
BCU	Bank Control Unit
BER	Bit Error Rate
BOC	Bell Operating Company
BPV	Bipolar Violation
BRCS	Business and Residence Custom Services

BRI	Basic Rate Interface
BRITE	Basic Rate Interface Transmission Extension
CAMA	Centralized Automatic Message Accounting
CAROT	Centralized Automated Reporting On Trunks
CCITT	International Telegraph and Telephone Consultative Committee
CCS	Common Channel Signaling, or Hundred Call Seconds
CFA	Carrier Failure Alarm
CGA	Carrier Group Alarm
CI	Corruption Indicator
CID	Craft Interface Device
CIU	Craft Interface Unit
CL	Customer Location
CO	Central Office
COT	Central Office Terminal
CPE	Customer Premises Equipment
CRC	Cyclic Redundancy Code on the IDT/RDT link
crc	cyclic redundancy code on RDT/CPE ISDN link
CSC	Common Signaling Channel
CSR	Customer Station Rearrangement
CTTU	Centralized Trunk Test Unit
CTU	Channel Test Unit

CU	Channel Unit
CV	Coding Violation
DACS	Digital Access Cross-Connect System
dB	Decibels
DCA	Dynamic Channel Assignment
DCN	Data Communications Network
DCTU	Directly Connected Test Unit
DDS	Digital Data Service
DEN	Digital Equipment Number
DFI	Digital Facility Interface
DID	Direct Inward Dialing
DLC	Digital Loop Carrier
DM	Degraded Minute
DN	Directory Number
DNE	Digital Network Element
DOPS	Digital Office Provisioning System
DP	Dial Pulse
DS0	Digital Signal Level 0—64 Kbits/sec channel
DS1	Digital Signal Level 1—1.544 Mbits/sec
DS3	Digital Signal Level 3—44.736 Mbits/sec
DSL	Digital Subscriber Line/Loop

DSX	Digital Signal Cross-Connect
DTAU	Digital Test Access Unit
DTMF	Dual Tone Multifrequency
EDSX	Electronic Digital Cross-Connect System
EOC	Embedded Operations Channel on the IDT/RDT link
eoc	embedded operations channel on the RDT/CPE ISDN link
EPGTC	Emulated Pair Gain Test Controller
EQPOTS	Equivalent POTS
ES	Errored Second(s)
ESF	Extended Superframe
FCA	Fixed Channel Assignment
FCR	Frequency Controlled Ringing
FEBE	Far-End Block Error
FELP	Far-End Loop
FFER	Frame Format Error Rate alarm
FID	Facility Identifier
FITH	Fiber-in-the-Loop
FLS	Frame Loss Second
FM	Facilities Management
FMAC	Facility Maintenance and Administration Center
FSR	Frequency Selective Ringing

FXO	Foreign Exchange Originating
FXS	Foreign Exchange Station
FXSLS	Foreign Exchange Station Loop-Start
Hz	Hertz
I	Information (frame)
ICLID	Individual Calling Line Identification
ID	Identifier, Identification
IDC	Information Distribution Company
IDCU	Integrated Digital Carrier Unit
IDLC	Integrated Digital Loop Carrier
IDP	Individualized Dialing Plan
IDT	Integrated Digital Terminal
ILAS	ISDN Line Assignment System
ILEN	IDCU Line Equipment Number
IMLT	Integrated Mechanized Loop Testing
INWATS	Inward WATS
IOP	Input/Output Port
IPM	Interruptions Per Minute
ISDN	Integrated Services Digital Network
ISLC	Integrated Subscriber Loop Carrier
ISTF	Integrated Services Test Function

kb	Kilobits
kbps	Kilobits Per Second
LAPD	Link Access Protocol D-Channel
LATA	Local Access and Transport Area
LBRV	Low Bit Rate Voice
LC	Loop Closure
LCF	Loop Current Feed
LCFO	Loop Current Feed Open
LDS	Local Digital Switch
LEC	Local Exchange Carrier
LIU	Line Interface Unit
LMC	Loop Maintenance Center
LMOS	Loop Maintenance Operations System
LNSW	Locally Nonswitched
LO	Loop Open
LOF	Loss of Frame
LSI	Loop Side Interface
LSSGR	LATA Switching Systems Generic Requirements
LTP	Line Trunk Peripheral (cabinet)
LTS	Loop Test System
mA	milliampere

MAP	Maintenance and Administration Position
MC	Maintenance Center
MCC	Master Control Center, or Maintenance Control Center
MCTU	Module Controller and TSI Unit
MDF	Main Distributing Frame
MDII	Machine-Detected Interoffice Irregularity
MDR	Message Detail Recording
MF	Multifrequency
MHz	Megahertz
MLHG	Multiline Hunt Group
MLT	Mechanized Loop Testing
MMSU	Modular Metallic Services Unit
MP	Multiparty
MS	Main Station
msec	Millisecond
MTB	Metallic Test Bus
MTP	Metallic Test Path
MUX	Multiplexer
MXU	Multiplex Unit
NCT	Network Control and Timing
ndl	New Data Link

NEBS	Network Equipment—Building System
NT	Network Termination
NT1	Network Termination at Layer 1
ntm	Network Termination Test Mode Indicator Bit
NTPG	Negative Tip Party Ground
NTT	No-Test Trunk
OA&M	Operations, Administration and Maintenance
OE	Office Equipment
OIM	Operations Interface Module
OOF	Out-of-Frame
OOS	Out of Service, Out of Synchronization
OPS	Off Premises Station
ORM	Optically Remoted Module
OS	Operations System
PBX	Private Branch Exchange
PGTC	Pair Gain Test Controller
PH	Protocol Handler
POTS	Plain Old Telephone Service
PPS	Packets Per Second
PSU	Packet Switch Unit
PTPG	Positive Tip Party Ground

RBOCs	Regional Bell Operating Companies
RC	Recent Change
RDT	Remote Digital Terminal
RLCF	Reverse Loop Current Feed
RMAS	Remote Memory Administration System
RMU	Remote Measurement Unit
ROP	Receive-Only Printer
RP	Revertive Pulsing
RSM	Remote Switching Module
RTU	Remote Testing Unit
SAPI	Service Access Point Identifier
SARTS	Switched Access Remote Test System
SCC	Switching Control Center
SCCS	Switching Control Center System
SCI	S-Channel Interface
SDFI	Subscriber Digital Facility Interface
SEFS	Severely Errored Frame Second
SES	Severely Errored Second(s)
SID	Site Identifier, Source Identifier
SLB	Subscriber Line Busy
SLUS	Subscriber Line Usage Studies

SM	Switching Module
SMP	Switching Module Processor
SS	Controlled Slip Second
SSC	Special Services Center
TA	Technical Advisory
TAI	Test Access Interface
TAU	Time Assignment Unit
TBCU	Test Bus Control Unit
TC	Trunk Conditioning
TCA	Threshold Crossing Alert
TDM	Time Division Multiplexer
TEI	Terminal End-Point Identifier
TG	Tip Ground
TIRKS	Trunks Integrated Records Keeping System
TLWS	Trunk and Line Work Station
TMC	Time-Slot Management Channel
TMT	Transmission Maintenance Terminal
TR	Technical Reference
TR303	TR-NWT-000303
TR64	TR-TSY-000064
TS	Time-Slot

TSC	Test System Controller
TSI	Time-Slot Interchanger
TSIU	Time-Slot Interchanger Unit
TSS	Time-Slot Set
TTF	Transmission Test Facility
UAS	Unavailable Second
UDLC	Universal Digital Loop Carrier
UNICODE	Universal Trunk Out-of-Service Code
UOS	Universal Operations Systems
VF	Voice Frequency
Vfy	Verify
WATS	Wide Area Telephone Service
XTC	Extended Test Controller
ZBTSI	Zero Byte Time-Slot Interchange
ZCS	Zero Code Suppression

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