

Lucent Technologies
Bell Labs Innovations



DACS II
Release 8.2.3 MML
1.544 Mb/s Interface
Quick Reference Guide

365-353-233
Issue 1
February 1998

Copyright © 1999 Lucent Technologies
All Rights Reserved
Printed in U.S.A

Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Mandatory Information

Security Statement

In rare instances, unauthorized individuals make connections to the telecommunications network through the use of remote access features. In such event, applicable tariffs require that the customer pay all network charges for traffic. Lucent Technologies cannot be responsible for such charges, and will not make any allowance or give any credit for charges that result from unauthorized access.

Acknowledgements

This document was developed by the Lucent Technologies Customer Training and Information Products Organization.

Documentation Ordering Information

The ordering number for this document is Lucent Technologies 365-353-233. To order this document, call the Lucent Technologies Customer Information Center in Indianapolis, Indiana, on 1-888-582-3688. For more ordering information, refer to "How to Order Documentation" in the section "About this Document."

Technical Support Telephone Number

The Lucent Technologies Regional Technical Assistance Center (RTAC) provides a technical assistance telephone number which is staffed 24 hours a day. For technical assistance, simply call 1-800-225-RTAC.

Documentation Support Telephone Number

Lucent Technologies provides a telephone number for you to report errors or to ask questions about the information in this document. The support telephone numbers are:

Outside North Carolina - 1-800-334-0404
Inside North Carolina - 1-910-727-6681.

Developed by The Lucent Technologies Customer Training & Information Products Organization

How Are We Doing?

Document Title: DACS II Release 8.2.3 MML 1.544 Mb/s Interface Quick Reference Guide

Document No.: 365-353-233

Issue 1

Date: February 1998

Lucent Technologies welcomes your feedback on this document.

1. Please rate the effectiveness of this document in the following areas:

	Excellent	Good	Fair	Poor	Not Applicable
Ease of Use					////////////////////
Clarity					////////////////////
Completeness					////////////////////
Accuracy					////////////////////
Organization					////////////////////
Appearance					////////////////////
Examples					
Illustrations					
Overall Satisfaction					////////////////////

2. Feel free to write any comments below or on an attached sheet.

If we may contact you concerning your comments, please complete the following:

Name: _____ Telephone Number: _____

Company/Organization: _____ Date: _____

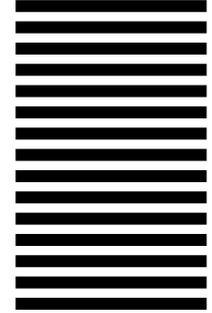
Address: _____

When you have completed this form, please return to the address on the back or Fax to: 910-727-3043.

Lucent Technologies
Bell Labs Innovations



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 1999 GREENSBORO, N.C.

POSTAGE WILL BE PAID BY ADDRESSEE

DOCUMENTATION SERVICES
2400 Reynolda Road
Winston-Salem, NC 27199-2029



Contents

About This Document	i
■ Purpose	vii
■ Intended Audiences	vii
■ How to Use This Document	vii
■ Contents	viii
■ Conventions Used	x
■ Related Documentation	x
■ How to Order Documentation	xiv
■ How to Comment on This Document	xvi
■ Electronic Documentation	xvi

1	Link/Login/Logoff Commands	1-1
----------	-----------------------------------	-----

2	Provisioning Commands	2-1
----------	------------------------------	-----

3	Performance Monitoring Commands	3-1
----------	--	-----

4	Cross-Connect Commands	4-1
----------	-------------------------------	-----

About This Document

Purpose

The *DACS II Quick Reference Guide* provides a listing and syntax for input commands used by the craft personnel involved in the daily operation and maintenance of the Digital Access and Cross-connect System II.

Intended Audiences

This document is for reference by a technician or craftsperson who already understands the commands and needs a reminder of syntax.

How to Use This Document

There are two ways to access the information in this document:

- This index in the back of the manual
- The overall table of contents in the front of the manual.

Before you use this document, you should have completed the DACS II Operation and Maintenance course (TR3521). If you were not able to take the training course, you should carefully study the information in the *DACS II Operation and Maintenance Manual*. You should also become familiar with the reasons that a command could be denied; this information is presented in Chapter 1 of the *DACS II Operation and Maintenance Manual* and under the appropriate command in the *DACS II Command and Message Manual*.

Contents

■ Chapter 1 - Link/Login/Logoff Commands

This chapter contains commands for adding user logins, logging in and logging off the DACS II, changing link provisioning options, and connecting data communications equipment to the DACS II.

■ Chapter 2 - Provisioning Commands

This chapter contains the commands to provision Network Processing Modules (NPMs), Network Processing Circuits (NPCs), Timing References, and Administrative Links.

■ Chapter 3 - Performance Monitoring Commands

This chapter contains commands for setting threshold values for certain parameters that are used to monitor the performance of the transmission lines that are connected to the DACS II.

■ Chapter 4 - Cross-connect Commands

This chapter contains the commands to establish various types of 64 kbit/s, Clear-DS1, and Channelized DS1 cross-connections, and to disconnect these cross-connections.

■ Chapter 5 - Macro and Map Commands

This chapter contains the commands to create, activate, change, and delete macro files and cross-connection maps.

■ **Chapter 6 - Roll Commands**

This chapter contains the commands to perform and disconnect the various facility and DS0 circuit rolls.

■ **Chapter 7 - Change Commands**

This chapter contains the commands to perform changes to various cross-connections, circuit and alarm parameters, NPC types and other options.

■ **Chapter 8 - Remove Commands**

This chapter contains the commands to remove links, NPCs, units, and TSIs.

■ **Chapter 9 - Restore Commands**

This chapter contains the commands to restore links, NPCs, units, and TSIs.

■ **Chapter 10 - Test Access Commands**

This chapter contains the commands to establish test ports and 64 kbit/s test connections.

■ **Chapter 11 - Subrate Commands**

This chapter contains the commands for creating subrate cross-connections and disconnections, establishing subrate channel, and creating and deleting subrate test access connections.

■ **Chapter 12 - Troubleshooting**

This chapter contains commands for isolating and clearing various DACS II troubles.

■ **Chapter 13 - Miscellaneous Commands**

This chapter contains miscellaneous DACS II commands.

■ Chapter 14 - Denial Codes

This chapter lists the denial codes and their meanings. This information is useful in determining problems with the DACS II.

Conventions Used

This manual uses special fonts for the user to differentiate computer input/output. The **constant width font** indicates message formats, keywords, letter representations of parameters, parameter values, and messages as they would appear on a DACS II terminal screen.

Related Documentation

The following documents support the DACS II system:

- DACS II Installation Manual:
 - IPH903 (DACS II CEF)
 - IPH903I (DACS II ESBF)

Audience: Customers planning to install the equipment

Content: Customer installation instructions.

- DACS II Release 7.0 Product Description Manuals:
 - 365-353-085 (24 Channel)
 - 365-353-086 (30 Channel)

Audience: Network planners, engineers, and others that need to know how the DACS II works and fits into the network

Content: Features, applications, and description and other reference information.

- **DACS II Release 8.2.3 Operation and Maintenance Manuals:**

- 365-353-221 (PDS)
- 365-353-231 (MML)
- 365-353-241 (PDS 2.048-Mb/s Interface)
- 365-353-251 (MML 2.048-Mb/s Interface)

Audience: End-user maintenance personnel

Contents: Procedures to operate and maintain the DACS II.

- **DACS II Release 8.2.3 Command and Message Manuals:**

- 365-353-222 (PDS)
- 365-353-232 (MML)
- 365-353-242 (PDS 2.048-Mb/s Interface)
- 365-353-252 (MML 2.048-Mb/s Interface)

Audience: End-user maintenance personnel

Content: Description of each software input message and its response along with a description of each system output report.

- **DACS II Release 8.2.3 Quick Reference Guides:**

- 365-353-223 (PDS)
- 365-353-233 (MML)
- 365-353-243 (PDS 2.048-Mb/s)
- 365-353-253 (MML 2.048-Mb/s)

Audience: End-user maintenance personnel

Content: Abbreviated list of system commands and parameters.

- DACS II Release 8.2.3 Software Release Description:

- Comcode C108460080

Audience: End-user maintenance personnel

Content: Upgrade procedures for the new software release, status of problems fixed in previous releases, and operating issues for the specified software release.

- X.50/X.57 Subrate Application
Release 1.0.3 for DACS II
Release 1.0.4 for DACS II ISX
MML 2.048 Mbit/s Interface
User's Manual

- 365-350-101 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the X.50/X.57 Subrate application on the DACS II or DACS II ISX. Commands and messages describing how to perform subrate cross-connects and subrate test access are included.

- DDS Subrate and MJU Application
Release 1.0.4 for DACS II
Release 1.0.5 for DACS II ISX
User's Manual

- 365-350-110 (PDS),

- 365-350-111 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the DDS Subrate and MJU application on the DACS II or DACS II ISX. Commands and messages describing how to perform DDS subrate cross-connects, subrate test access, and subrate MJU operations are included.

- Digital Multipoint Bridge (DMB)
DSP Platform Application
Release 1.0.2 for DACS II
Release 1.0.3 for DACS II ISX
User's Manual
 - 365-353-144 (PDS)
 - 365-353-154 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the DMB application on the DACS II or DACS II ISX. Commands and messages describing how to perform DMB cross-connects and DMB test access operations are included.

How to Order Documentation

To order additional copies of this document, send or call in an order as follows:

- To order by Mail:

Lucent Technologies
Customer Information Center
Attention: Order Entry Section
2855 N. Franklin Road
P. O. Box 19901
Indianapolis, IN 46219

- To order by Telephone (Monday through Friday);

Within the United States of America:

1-888-LUCENT-8 (7:30 a.m. to 6:30 p.m. EST)
(1-888-582-3688)

FAX within the United States of America:

1-317-322-6484

Australia and all European countries:

Toll 317-322-6416

Far East, North America, and other:

Toll 317-322-6646

FAX for all international:

Toll 317-322-6699

Regional Bell Operating Companies and Bell Operating Companies must process orders through their company documentation coordinator.

For commercial customers, a check, money order, purchase order number, or charge card number (*VISA*^{*} bank card, *American Express*[†] credit card services, or *Master Card*[‡] bank card) is required with all orders. Checks must be made payable to Lucent Technologies.

Lucent Technologies entities should use Form IND 1-80.80 FA, available through the Customer Information Center.

One-time orders include a binder (if applicable) and the document contents for the current issue in effect at the time of order. After placing a one-time order, you can request a standing order for any document revisions *of that software release*. Documents for new software releases do *not* go to standing-order customers. You will only get those documents if you order the new software release.

* Registered trademark of VISA International Service Association

† Registered trademark of American Express Company

‡ Registered trademark of Mastercard International Incorporated

How to Comment on This Document

A feedback form is located at the beginning of this publication, immediately after the title page. Please fill out the feedback form and return it (postage free) to the address on the back.

If the feedback form is missing, send comment on this publication to:

Lucent Technologies
DACS II Documentation Coordinator
Attn: Tabatha Wright
Room 1B-320
101 Crawfords Corner Road
Holmdel, NJ 07733-3030 USA

Electronic Documentation

Documentation for DACS II is now available in electronic form, on CD-ROM (compact disk, read-only memory). CD-ROM has many advantages over traditional paper documentation, including cost savings, search and retrieve capability, and the assurance of the most current documentation.

CD-ROM is available by annual subscription (on standing order).

- To order, call your Technical Information Resource Manager, your Lucent Technologies Account Executive, or the Lucent Technologies Customer Information Center (1-888-582-3688).
- For pricing information, contact your Lucent Technologies Network Systems Account Executive or the Lucent Technologies Customer Information Center (1-888-582-3688).
- For technical information, call Lucent Technologies Documentation Support (1-800-334-0404).

Link/Login/Logoff Commands

1

[1.38301] Change User Password

```
CHG-LGN::::[<old password>:<new password>];
```

If the user is on a Snider protocol administrative link, the command is entered as follows:

```
CHG-LGN;
```

DACS II will then prompt the user for the old and new password:

```
OLD PASSWD: (user enters the old password)
```

```
NEW PASSWD: (user enters the new password)
```

```
PASSWD: (user re-enters the new password for verification)
```

[I.36101] Add User

If the command is entered on a Snider link:

```
CRTE-LGN::::<user id>[,NEW];
```

DACS II generates the message below and a dialog is started:

```
PASSWD: (The frame administrator enters user password.)
```

```
REENTER PASSWD: (The frame administrator again enters the user password.)
```

Note that the user password is not echoed by DACS II.

If the command is entered on an X.25 link:

```
CRTE-LGN::::<user id>,<user password>;
```

No dialog is initiated by DACS II.

[I.37101] Delete User

```
DLT-LGN::::<user id>;
```

[I.36007] Add TABS Link Parameters

```
ED-PRMTR-LINK::j::APPL-{ASCS|ASCD|PM}[ ,L2AD-aa][ ,POLL-ttt];
```

[I.36003] Add Link, X.25, Protocol, Data Link, Layer Parameters

```
ED-PRMTR-LINK::j::[K-b][ ,T1-eee][ ,T3-ggg][ ,N2-aa]\  
[ ,FRMAD-{A|B}];
```

[.36001] Add Link, Protocol, Baud

```
ED-PRMTR-LINK::j::PTCOL-{S|X|T|M}[ ,BAUD-bb][ ,ALM-k]\
[ ,BS-e][ ,ENQ-q][ ,XON-x]:[INIT];
```

If the link protocol is Snider, enter the following command:

```
ED-PRMTR-LINK::j::PTCOL-S[ ,BAUD-bb][ ,ALM-k][ ,BS-e]\
[ ,ENQ-q][ ,XON-x]:[INIT];
```

If the link protocol is X.25, enter the following command:

```
ED-PRMTR-LINK::j::PTCOL-X[ ,ALM-k]:[INIT];
```

If the link protocol is TABS, enter the following command line:

```
ED-PRMTR-LINK::j::PTCOL-T[ ,BAUD-bb][ ,ALM-k]:[INIT];
```

If the link protocol is Modified Snider, enter the following command:

```
ED-PRMTR-LINK::j::PTCOL-M[ ,ALM-k]:[INIT];
```

[.36005] Add X.25 Link Parameters

```
ED-PRMTR-LINK::l[mm]::[W-c][ ,P-ddd][ ,T20-iii][ ,T22-jjj]\
[ ,T23-kkk][ ,T25-lll][ ,T26-mmm][ ,R20-nn][ ,R22-p][ ,R23-qq]\
[ ,R25-r][ ,DBIT-v][ ,VC-ppss&-gghh];
```

[I.39001] Log On To DACS II

```
LGN-USER::::<user id>[,<user password>];
```

If the user is on a Snider administrative link, the command is entered as follows:

```
LGN-USER::::<user id>;
```

DACS II will then prompt for the following:

```
PASSWD: (user enters the user password)
```

[I.39101] Log Off User or Link

```
LGT-{TERM|USER}::::{1[mm][,INCL]|<user id>};
```

[I.38401] Change User/Link Screening

```
SET-PRVG-{TERM|USER}::::{1[mm][,INCL]|<user id>}:\
[SCR-n[,GR-a&-b&-c&-d&-e&-f]]:[{MCON|MCOFF}]:[INIT];
```

[I.36103] Add User/Link Language, NPC Addressing and Priority

```
SET-PRVG-{USER|TERM|ALL}::::{<user id>|1[mm][,INCL]}:\
[LANG-{P|M|F}]:[NP CAD-{E|X|H}]:[LEV-a&-b&-c&-d&-e&-f]:\
[{RMON|RMOFF}]:[RLK-{A|I}]:[INIT];
```

Provisioning Commands

2

[.31211] Provision a Unit

For DACS II Non-CEF frames:

```
CRTE-CNFGRN-EQPT::UNIT-q::[a[,b[,c[,d[,e [,f]]]]]]:[utxyz];
```

For DACS II CEF frames:

```
CRTE-CNFGRN-EQPT::UNIT-[q]q:::[utxyz];
```

[.31331] Provision Digital Signal Processing Unit NPC

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::mnxyz;
```

```
CRTE-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::mnxyz;
```

[I.31351] Provision Digital Signal Processing Unit NPC

```
CRTE-EQPT::NPC-[s]abc::mnxyz;
CRTE-EQPT::NPC-uv-m-np::mnxyz;
```

Caution 1: The NPC should be restored immediately (both duplicated sides, 0 and 1) using Message No. I.34351 (RST-EQPT::NPC) after being grown to avoid having both sides out of service. If this is not possible, the NPC should be degrown immediately using Message No. 32341 (DISC-EQPT::NPC).

Caution 2: The NPC and (Expanded) Time Slot Interchanger (TSI/ETSI) circuit packs must be inserted into the inactive side of DACS II. Inserting circuit packs into the active side may result in transmission "hits."

[I.31371] Provision NPC Type DS

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::DSxyz:[rr/m[&rr/m\
[...]]]:[IW-X-pq];
CRTE-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::DSxyz:[rr/m[&rr/m\
[...]]]:[IW-X-pq];
```

[I.31341] Provision ANSI NPC

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::mnxyz:[rr/m][&rr/m\
[...]:[IW-X-pq[,INCL]][,AIS-{INFO|MJ|MN}][,PL-{ENA|DSA}];
CRTE-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::mnxyz:[rr/m][&rr/m\
[...]:[IW-X-pq[,INCL]][,AIS-{INFO|MJ|MN}][,PL-{ENA|DSA}];
```

[I.31352] Provision NPC

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::[mnxyz]:[rr/m][&rr/m\
[&...]:[IW-X-pq[,INCL]][,AIS-{INFO|MJ|MN}];
CRTE-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::[mnxyz]:[rr/m\
[&rr/m][&...]:[IW-X-pq[,INCL]][,AIS-{INFO|MJ|MN}];
```

- [.31401] Provision Test-Access Group NPC
CRTE-EQPT::NPC-[s]abc::NPCTG-rrr;
CRTE-EQPT::NPC-uv-m-np::NPCTG-rrr;
- [.31381] Provision Test Port NPC
CRTE-EQPT::NPC-[s]abc::NPCTP-n;
CRTE-EQPT::NPC-uv-m-np::NPCTP-n;
- [.31101] Provision Synchronizer Time Base
CRTE-EQPT::SYNC::TBpqr;
- [.31111] Provision Clock Reference Oscillator
CRTE-EQPT::SYNC::TBpqr:TLI-3;
- [.31121] Provision Synchronizer Timing Link Interface
CRTE-EQPT::SYNC::TLI-m:{texyz,SSP-a,SRC-p|TDxyz};
- [.31421] Provision Test-Access Group
CRTE-EQPT::TG-mmm::rrr-eee[&&-fff],sss-www[&&-xxx]:[<tc>;
- [.31411] Provision Test Port
CRTE-EQPT::TP-kk::[<tc>;
- [.31321] Provision Facility Terminating Module Interface
CRTE-EQPT::UNIT-[q]q::FTMI-d:EQL-1,r;
- [.31501] Provision Multiplexer Interface Unit
CRTE-EQPT::UNIT-[q]q::MIU-c[&&-d]:[mnxyz];

- [I.31511] Provision Multiplexer
CRTE-EQPT::UNIT-[q]q::MXR-c[&&-d]:[mnxyz]:[BERM-s]
[,BERT-t][,LBO-];
- [I.32341] Deprovision NPC
DISC-EQPT::NPC-[s]abc[&&-t]def;
DISC-EQPT::NPC-uv-m-np[&&&-uv-k-qr];
- [I.32401] Deprovision Test-Access Group NPC
DISC-EQPT::NPC-[s]abc::NPCTG-rrr:[TGR];
DISC-EQPT::NPC-uv-m-np::NPCTG-rrr:[TGR];
- [I.32381] Deprovision Test Port NPC
DISC-EQPT::NPC-[s]abc::NPCTP-n:[TPR];
DISC-EQPT::NPC-uv-m-np::NPCTP-n:[TPR];
- [I.32101] Deprovision Synchronizer Time Base
DISC-EQPT::SYNC::TB;
- [I.32121] Deprovision Synchronizer Timing Link Interface
DISC-EQPT::SYNC::TLI-m:[SSP-a];
- [I.32421] Deprovision Test-Access Group
DISC-EQPT::TG-mmm[&&-nnn];
- [I.32411] Deprovision Test Port
DISC-EQPT::TP-kk;

- [I.32211] Deprovision Unit
DISC-EQPT::UNIT-[q]q;
- [I.32321] Deprovision Facility Terminating Module Interface
DISC-EQPT::UNIT-[q]q::FTMI-d;
- [I.32511] Deprovision Multiplexer Interface Unit
DISC-EQPT::UNIT-[q]q::MIU-c[&&-d];
- [I.32501] Deprovision Multiplexer
DISC-EQPT::UNIT-[q]q::MXR-c[&&-d];
- [I.27002] Test Port Release
DISC-TACC-T0:::ALL:[OOS];
- [I.37211] Delete Association of NPC with SLC® RT
DLT-PRMTR-EQPT::[DGA-[s]aaa][,DGB-[s]bbb)
[,DGC-[s]ccc][,DGD-[s]ddd][,DGP-[s]ppp]:::RT|DL}-ffff;
DLT-PRMTR-EQPT::[DGA-uv-j-ab][,DGB-uv-k-cd)
[,DGC-uv-l-ef][,DGD-uv-m-gh][,DGP-uv-j-pr]:::RT|DL}-ffff;
- [I.36021] Add Network Processing Circuit
ED-ADD-MAP::NPC-{[s]abc&&-[t]def|[s]abc
[&-[s]ghi]....[&-[t]def]};
ED-ADD-MAP::NPC-{uv-m-np&&&-wx-k-qr|uv-m-np
[&-ab-c-de]....[&-wx-k-qr]};

- [l.30101] Provision Frame
ED-PRMTR-NE:::<uid>[,FRAME-fg]:[CHAR-m];
- [l.35011] Configure Synchronizer
ENT-EQPT::SYNC-a::FPLL;
- [l.35311] Inhibit Switch MMFG
INH-SW-EQPT::UNIT-[q]q::MMFG-c[&&-d]:{PROTN|WKG};
- [l.35021] Configure Frame
INIT-SYS::FRAME;
- [l.26141] Facility Loopback Activate
OPR-LPBK-T1::[s]abc::loop:locn;
OPR-LPBK-T1::uv-m-np::loop:locn;
- [l.28101] Facility Test Signal Activate
OPR-TSIG-T1::[s]abc::test;
OPR-TSIG-T1::uv-m-np::test;
- [l.26151] Facility Loopback Release
RLS-LPBK-T1::[s]abc::loop:locn;
RLS-LPBK-T1::uv-m-np::loop:locn;
- [l.28201] Facility Test Signal Deactivate
RLS-TSIG-T1::[s]abc::test;
RLS-TSIG-T1::uv-m-np::test;

- [I.33401] Remove Facility Line Interface
 RMV-EQPT::UNIT-[q]q::FLI-k;
- [I.33411] Remove Formatter
 RMV-EQPT::UNIT-[q]q::FMT-s;
- [I.33431] Remove Multiplexer Interface Unit
 RMV-EQPT::UNIT-[q]q::MIU-c[&&-d]:[INCL];
- [I.33421] Remove MMFG
 RMV-EQPT::UNIT-[q]q::MMFG-c[&&-d]:[FRC[,INCL]];
- [I.34401] Restore Facility Line Interface
 RST-EQPT::UNIT-[q]q::FLI-k;
- [I.34411] Restore Formatter
 RST-EQPT::UNIT-[q]q::FMT-s;
- [I.34431] Restore Multiplexer Interface Unit
 RST-EQPT::UNIT-[q]q::MIU-c[&&-d]:[INCL];
- [I.34421] Restore MMFG
 RST-EQPT::UNIT-[q]q::MMFG-c[&&-d]:[INCL];

Performance Monitoring Commands

3

[I.51171] Allow DS1 Performance Monitoring Report

```
ALW-PMREPT-T1:: {NPC-[s]abc[&&- [t]def] | ALL};
```

```
ALW-PMREPT-T1:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL};
```

[I.51161] Inhibit DS1 Performance Monitoring Report

```
INH-PMREPT-T1:: {NPC-[s]abc[&&- [t]def] | ALL};
```

```
INH-PMREPT-T1:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL};
```

[I.56061] Utility Clear Hardware/Software Error Recovery Log File

```
INIT-LOG:::ERR: {HWER | SWER};
```

[I.56011] Utility Clear Counter or State of All
In-Service NPCs

```
INIT-REG:::<parameter>:ALL;
```

[I.56051] Clear Facility Performance Parameters

```
INIT-REG::NPC-[s]abc;
INIT-REG::NPC-uv-m-np;
```

[I.56001] Utility Clear Counter or State of a Single In-Service NPC or Range of In-Service NPCs

```
INIT-REG::[NPC-[s]abc[&&-[t]def]]::<parameter>:\
[ {RT|DL}-ffff];
INIT-REG::[NPC-uv-m-np[&&&-wx-k-qr]]::<parameter>:\
[ {RT|DL}-ffff];
```

[I.56071] Utility Clear DA/TA/PA NPC Parameters

```
INIT-REG-T1::{NPC-[s]abc[&&-[t]def]|ALL}::<parameter>,\
[aaaaa],[locn],[dddd],[tttt];
INIT-REG-T1::{NPC-uv-m-np[&&&-wx-k-qr]|ALL}::<parameter>,\
[aaaaa],[locn],[dddd],[tttt];
```

[I.51071] Retrieve Performance Monitoring Report Schedule

```
RTRV-PMREPT-SCHED:::{CFA,MONDAT|CFA|,MONDAT};
```

[I.56091] Query Performance Monitoring Data for DA, TA, and PA Type NPCs

```
RTRV-PM-T1::{NPC-[s]abc[&&-[t]def]|ALL}::<parameter>,\
aaaaa,[1111111111],[locn],[dddd],[tttt];
RTRV-PM-T1::{NPC-uv-m-np[&&&-wx-k-qr]|ALL}::<parameter>,\
aaaaa,[1111111111],[locn],[dddd],[tttt];
```

[.51141] Schedule DS1 Performance Monitoring Report

```
SCHED-PMREPT-T1::NPC-[s]abc[&&-[t]def]::rrrrr,ssss,nn,\
<parameter>,llllllllll,locn,aaaaa,ttttt[&&-ooooo]:\
[p[vv]][&q[vv]]];
```

```
SCHED-PMREPT-T1::NPC-uv-m-np[&&&-wx-k-qr]::rrrrr,ssss,nn,\
<parameter>,llllllllll,locn,aaaaa,ttttt[&&-ooooo]:\
[p[vv]][&q[vv]]];
```

[.51101] Utilities, Alarm Reporting

```
SET-ATTR-EQPT:::ALM-a;
```

Cross-Connect Commands

4

[1.13001] Broadcast Cross-Connections

```
CONN-BDCST-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\  
[&[t]klm-nnn&...]:<tc>:[RDLD][,{CUS|INCL}]:\  
[ {NTR|LPD|CONV} ]:[NORM];  
CONN-BDCST-T0::uv-m-np-ddd[&&-eee],wx-k-qr-jjj\  
[&ed-h-fg-nnn&...]:<tc>:[RDLD][,{CUS|INCL}]:\  
[ {NTR|LPD|CONV} ]:[NORM];
```

[1.13002] Broadcast Cross-Connection

```
CONN-BDCST-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]:\  
<tc>:[RDLD][,{CUS|INCL}]:[ {NTR|LPD|CONV} ]:[NORM];  
CONN-BDCST-T0::uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]:\  
<tc>:[RDLD][,{CUS|INCL}]:[ {NTR|LPD|CONV} ]:[NORM];
```

[1.13011] Broadcast Cross-Connection

```
CONN-BDCST-T1::[s]abc,[u]ghi[&[v]jkl][&[t]mno]\  
[...]:[RDLD][,{CUS|INCL}]:[ {NTR|LPD|CONV} ];  
CONN-BDCST-T1::uv-m-np,wx-k-qr[&ed-f-hg][&st-m-no]\  
[...]:[RDLD][,{CUS|INCL}]:[ {NTR|LPD|CONV} ];
```

[.1.13021] Broadcast Cross-Connection

```
CONN-BDCST-T1::[s]abc,[t]def::[RDLD][,{CUS|INCL}]:\
[ {NTR|LPD|CONV} ] ;
CONN-BDCST-T1::uv-m-np,wx-k-qr::[RDLD][,{CUS|INCL}]:\
[ {NTR|LPD|CONV} ] ;
```

[.1.11101] One Way Cross-Connections

```
CONN-CRS1-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]::\
<tc>:[RDLD][,{CUS|INCL}]:[ {NORM|TERM} ]:[PRIOUT] ;
CONN-CRS1-T0::uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]::\
<tc>:[RDLD][,{CUS|INCL}]:[ {NORM|TERM} ]:[PRIOUT] ;
```

[.1.11121] One Way Cross-Connections

```
CONN-CRS1-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]::\
<tc>:[RDLD][,{CUS|INCL}]:fmd,tmd:[ {NORM|TERM} ] ;
CONN-CRS1-T0::uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]::\
<tc>:[RDLD][,{CUS|INCL}]:fmd,tmd:[ {NORM|TERM} ] ;
```

[.1.11131] One-Way Non-Channelized Digital Signal Cross Connect

```
CONN-CRS1-T1::[s]abc,[t]ghi::[RDLD][,{CUS|INCL}]:\
[ {NORM|TERM} ]:[PRIOUT] ;
CONN-CRS1-T1::uv-m-np,wx-k-qr::[RDLD][,{CUS|INCL}]:\
[ {NORM|TERM} ]:[PRIOUT] ;
```

[.1.11051] Two-Way Cross-Connections

```
CONN-CRS-T0::[s]abc-ddd,[t]ghi-jjj::\
[ {PFW-abcdefg&ijklmno|NFW} ]:[ {NORM,NORM|TERM,TERM} ] ;
CONN-CRS-T0::uv-m-np-ddd,wx-k-qr-jjj::\
[ {PFW-abcdefg&ijklmno|NFW} ]:[ {NORM,NORM|TERM,TERM} ] ;
```

[.11001] Two-Way Cross-Connection

```
CONN-CRS-T0:[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]:\
<tc>:[RDLD][,{CUS|INCL}]:[AIS]:[{NORM,NORM|TERM,TERM}]:\
[PRIOUT];
```

```
CONN-CRS-T0:uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]:\
<tc>:[RDLD][,{CUS|INCL}]:[AIS]:[{NORM,NORM|TERM,TERM}]:\
[PRIOUT];
```

[.11021] Two-Way Cross-Connect From, To Multipoint Mode

```
CONN-CRS-T0:[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]:\
<tc>:[RDLD][,{CUS|INCL}]:fmd,tmd:[NTR-m]:\
[ {NORM,NORM|TERM,TERM} ];
```

```
CONN-CRS-T0:uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]:\
<tc>:[RDLD][,{CUS|INCL}]:fmd,tmd:[NTR-m]:\
[ {NORM,NORM|TERM,TERM} ];
```

[.11011] Two-Way Non-Channelized Digital Signal Cross Connection

```
CONN-CRS-T1:abc,ghi:[RDLD][,{CUS|INCL}]:\
[ {NORM,NORM|TERM,TERM} ]:[PRIOUT];
```

```
CONN-CRS-T1:uv-m-np,wx-k-qr:[RDLD][,{CUS|INCL}]:\
[ {NORM,NORM|TERM,TERM} ]:[PRIOUT];
```

[.15201] Broadcast Disconnection

```
DISC-BDCST-T0:[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]:\
[INCL]:[OOS][,DCC][,CONV];
```

```
DISC-BDCST-T0:uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]:\
[INCL]:[OOS][,DCC][,CONV];
```

[.15211] Broadcast Disconnection

```
DISC-BDCST-T0::[s]abc-ddd[&&-eee],[t]ghi-yyy\  
[&[u]klm-nnn&..]:[INCL]:[OOS][,DCC][,CONV];  
DISC-BDCST-T0::uv-m-np-ddd[&&-eee],wx-k-qr-yyy\  
[&ed-h-fg-nnn&..]:[INCL]:[OOS][,DCC][,CONV];
```

[.15221] Broadcast Disconnection

```
DISC-BDCST-T1::[s]abc,[t]ghi[&[u]jkl][&[v]mno][...]:\  
[INCL]:[OOS][,CONV];  
DISC-BDCST-T1::uv-m-np,wx-k-qr[&ed-h-fg][&op-q-rs][...]:\  
[INCL]:[OOS][,CONV];
```

[.15231] Broadcast Disconnection

```
DISC-BDCST-T1::[s]abc,[t]ghi:[INCL]:[OOS][,CONV];  
DISC-BDCST-T1::uv-m-np,wx-k-qr:[INCL]:[OOS][,CONV];
```

[.15102] One-Way Multipoint Disconnections

```
DISC-CRS1-T0::[s]abc-ddd[&&-eee],[t]ghi-yyy[&&-kkk]:\  
[INCL]:[OOS][,DCC];  
DISC-CRS1-T0::uv-m-np-ddd[&&-eee],wx-k-qr-yyy[&&-kkk]:\  
[INCL]:[OOS][,DCC];
```

[.15101] One-Way Disconnect

```
DISC-CRS1-T0::[s]abc-ddd[&&-eee],[t]ghi-yyy[&&-kkk]:\  
[INCL]:[OOS][,DCC]:[PRIOUT];  
DISC-CRS1-T0::uv-m-np-ddd[&&-eee],wx-k-qr-yyy[&&-kkk]:\  
[INCL]:[OOS][,DCC]:[PRIOUT];
```

[l.15111] One-Way Disconnect

```
DISC-CRS1-T1::[s]abc,[t]ghi::[INCL]:[OOS]:[PRIOUT];
DISC-CRS1-T1::uv-m-np,wx-k-qr::[INCL]:[OOS]:[PRIOUT];
```

[l.15002] Two-Way Disconnections

```
DISC-CRS-T0::[s]abc-ddd,[t]ghi-jjj::[INCL]:[DCC][,OOS];
DISC-CRS-T0::uv-m-np-ddd,wx-k-qr-jjj::[INCL]:[DCC][,OOS];
```

[l.15001] Disconnections, Cross-Connect Circuits

```
DISC-CRS-T0::[s]abc-ddd[&&-eee],[s]ghi-jjj[&&-kkk]::\
[INCL]:[OOS][,DCC]:[PRIOUT];
DISC-CRS-T0::uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]::\
[INCL]:[OOS][,DCC]:[PRIOUT];
```

[l.15011] Two-Way Disconnection

```
DISC-CRS-T1::[s]abc,[t]ghi::[INCL]:[OOS]:[PRIOUT];
DISC-CRS-T1::uv-m-np,wx-k-qr::[INCL]:[OOS]:[PRIOUT];
```

[l.14001] Alternate Cross-Connections

```
ED-CRS-T0::[s]abc-ddd,[t]ghi-jjj::[INCL];
ED-CRS-T0::uv-m-np-ddd,wx-k-qr-jjj::[INCL];
```

Macro and Map Commands

5

[I.39311] Stop Macro

```
ABT-PROC::::[l[mm]];
```

[I.19051] Delete Lines From Macro

```
DELETE[::{<starting line>|END}[-{<ending line>|END}]::];
```

[I.37201] Delete Macro

```
DLT-{MACRO|MAP}::::{<macro name>|<map name>}:[<user id>;
```

[I.37001] Edit Delete Map

```
ED-DLT-MAP::NPC-{[s]abc&&-[s]def|[s]\  
abc[&-[s]ghi]....[&-[t]def]};
```

```
ED-DLT-MAP::NPC-{uv-m-np&&&-wx-k-qr|uv-m-np\  
[&-ab-c-de]....[&-wx-k-qr]};
```

- [I.19001] Create or Edit a Macro or Map
ED-`{MACRO|MAP}:::{<macro name>|<map name>};`
- [I.38501] Change Macro Space
ED-PRMTR-`{MACRO|MAP}:::sss;`
- [I.19031] Create Picture Alternate Map
ED-PRMTR-MAP:::`<new map name>`,`<reference map name>`;
- [I.39301] Execute Macro
**EXC-MACRO:::`<macro name>`: [`<p1>`[`&<p2>`[`&<p3>`\
`[&...[&<p10>`]]]]];**
- [I.39201] Activate Alternate Maps
EXC-MAP:::`<map name>`: [`CLR`][`,``INCL`];
- [I.19071] Query Line Number
LINE;
- [I.19061] List Macro Contents
LIST[::`{<starting line>|END`}] [`-``{<ending line>|END`}]::];
- [I.19091] Move Macro Lines
**MOVE::`{<starting line>|END`}] [`-``{<ending line>|END`}] , \
`{<destination line>|END}`::;**
- [I.19081] Save Component Commands
SAVE;

Roll Commands

6

[l.14021] DS0 Circuit Roll - Bridge Command

```
SW-BDCST-T0::[s]abc-ddd[&&-eee],[t]ghi-yyy[&&-kkk]::\  
[INCL];
```

```
SW-BDCST-T0::uv-m-np-ddd[&&&-eee],wx-k-qr-yyy[&&&-kkk]::\  
[INCL];
```

[l.14061] Facility Roll - Bridge Command

```
SW-BDCST-T1::[s]abc,[t]ghi::[INCL];
```

```
SW-BDCST-T1::uv-m-np,wx-k-qr::[INCL];
```

[l.14041] DS0 Circuit Roll - Disconnect Command

```
SW-DISC-T0::[s]abc-ddd[&&-eee]::[OOS];
```

```
SW-DISC-T0::uv-m-np-ddd[&&&-eee]::[OOS];
```

[l.14081] Facility Roll - Disconnect Command

```
SW-DISC-T1::[s]abc::[OOS];
```

```
SW-DISC-T1::uv-m-np::[OOS];
```

[I.35001] Configure Digroup Circuits

```
SW-DX-EQPT::XC-s:[INCL];
```

[I.14031] DS0 Circuit Roll- Roll Command

```
SW-ROLL-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]::\  
[INCL]:[FRC]:[OOS];
```

```
SW-ROLL-T0::uv-m-np-ddd[&&&-eee],wx-k-qr-jjj[&&&-kkk]:\  
[INCL]:[FRC]:[OOS];
```

[I.14071] Facility Roll - Roll Command

```
SW-ROLL-T1::[s]abc,[t]ghi:[INCL]:[FRC]:[OOS]:[TWAY];
```

```
SW-ROLL-T1::uv-m-np,wx-k-qr:[INCL]:[FRC]:[OOS]:[TWAY];
```

Change Commands

7

[l.18001] Change Circuit Parameters

```
CHG-RPATH-T0::[s]abc-ddd[&[t]ghi-jjj&[u]klm-nnn&..]::\
[INCL];
```

```
CHG-RPATH-T0::uv-m-np-ddd[&wx-k-qr-jjj&ed-h-fg-nnn&..]:\
[INCL];
```

[l.18011] Change Switch, TOX

```
CHG-RPATH-T1::[s]ghi[&[t]jkl][&[v]mno][...]:[INCL];
```

```
CHG-RPATH-T1::uv-m-np[&wx-k-qr][&ed-h-fg][...]:[INCL];
```

[l.38101] Change Connectivity

```
ED-CNFGRN-EQPT::UNIT-q::a[,b[,c[,d[,e[,f]]]]];
```

[l.19581] Change Substrate Cross-Connection

```
ED-CONN-TS::[s]abc-ddd[-ff],[t]ghi-jjj[-ll];
```

```
ED-CONN-TS::uv-m-np-ddd[-ff],wx-k-qr-jjj[-ll];
```

[l.19591] Change Subrate Cross-Connection

```
ED-CONN-TS::[s]abc-ddd[-ff],[t]ghi-jjj[-ll]:MPTM;
ED-CONN-TS::uv-m-np-ddd[-ff],wx-k-qr-jjj[-ll]:MPTM;
```

[l.19501] Change Subrate Established Channel

```
ED-CRTE-TS::[s]abc-ddd[-eee],[t]ghi-jjj[-kkk]:\
[PCH-ppp]:[DCC];
ED-CRTE-TS::uv-m-np-ddd[-eee],wx-k-qr-jjj[-kkk]:\
[PCH-ppp]:[DCC];
```

[l.38201] Change/Set Options

```
ED-OPT-T1::NPC::{TYPE-mn|ALL}:rr:a,b,c;
```

[l.38221] Change NPC Options

```
ED-PRMTR-EQPT::NPC-[s]abc::rr/m[&rr/m][...];
ED-PRMTR-EQPT::NPC-uv-m-np::rr/m[&rr/m][...];
```

[l.38281] Change NPC AIS Alarm Option

```
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]ghi]::{ALMOPT|PLOPT}:\
{AIS-{INFO|MJ|MN}|PL-{ENA|DSA}};
ED-PRMTR-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::{ALMOPT|PLOPT}:\
{AIS-{INFO|MJ|MN}|PL-{ENA|DSA}};
```

[l.38211] Change NPC Type

```
ED-PRMTR-EQPT::NPC-[s]abc::mnxyz:[IW-X-pq[,INCL]];
ED-PRMTR-EQPT::NPC-uv-m-np::mnxyz:[IW-X-pq[,INCL]];
```

[I.38311] Change NPC Type for TH Type NPCs

```
ED-PRMTR-EQPT::NPC-[s]abc::mnxyz:[IW-X-pq[r]];
ED-PRMTR-EQPT::NPC-uv-m-np::mnxyz:[IW-X-pq[r]];
```

[I.38271] Change DS3U NPC Type

```
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::mnxyz:\
[IW-X-pq[,INCL]];
ED-PRMTR-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::mnxyz:\
[IW-X-pq[,INCL]];
```

[I.38324] Change NPC Frame-Word Setting

```
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::NFS-abcdefghi;
ED-PRMTR-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::NFS-abcdefghi;
```

[I.38321] Change NPC Time Slot Zero

```
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::\
TS0-abcdefgh;
ED-PRMTR-EQPT::NPC-uv-m-np[&&-uv-k-qr]::\
TS0-abcdefgh;
```

[I.38323] Change Time Slot Zero Monitor

```
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::\
TS0M-abcdefgh;
ED-PRMTR-EQPT::NPC-uv-m-np[&&-wx-k-qr]::\
TS0M-abcdefgh;
```

[I.38241] Change Options

```
ED-PRMTR-EQPT::{NPC-[s]abc|RT-ffff|DL-ffff|TYPE-mnxyz}::\
rr/m[&rr/m...];
ED-PRMTR-EQPT::{NPC-uv-m-np|RT-ffff|DL-ffff|TYPE-mnxyz}::\
rr/m[&rr/m...];
```

- [I.38351] Change Bank Number
ED-PRMTR-EQPT:::{RT|DL}-ffff:{RT|DL}-gggg;
- [I.38481] Change RT/DL
ED-PRMTR-EQPT:::{RT|DL}-ffff:{ZCS|B8ZS};
- [I.38361] Change Pwr/Misc Option or FPC RT Retrofit Status
ED-PRMTR-EQPT:::RT-ffff:[{sss|RTF}]:[SWMN-x];
- [I.35013] Configure Synchronizer
ED-PRMTR-EQPT::SYNC::{MASTER|SLAVED};
- [I.35012] Configure Synchronizer Stratum
ED-PRMTR-EQPT::SYNC::{STR2|STR3|TOLL|LOCAL};
- [I.38011] Change Priorities and/or Type, Synchronizer or NPC
ED-PRMTR-EQPT::SYNC::TLI-m:SSP-b:texyz;
ED-PRMTR-EQPT::SYNC::SRC-i/a,b[&j/c,d[&k/e,f[&l/g,h]]];
- [I.38231] Change Type, Options
ED-PRMTR-EQPT::TYPE-mnxyz::rr/m[&rr/m][...];
- [I.38111] Change FTMI Equalization
ED-PRMTR-EQPT::UNIT-[q]q::FTMI-d:EQL-l,r;
- [I.38261] Change Subrate Error Correction Location
ED-PRMTR-NE:::ECLOC:{MJU|SRM};

[I.38251] Change Hub Identification

```
ED-PRMTR-NE:::HUBID-O-ab;
```

[I.17001] Change Cross-Connect Termination Status

```
ED-PRMTR-T0:[s]abc-ddd[&&-eee],[t]ghi-jjj[&&-kkk]:\
[INCL]:{TERM|RLS}{F|T|B|L|G|A}:[NOT-[u]rst-vvv];
```

```
ED-PRMTR-T0:uv-m-np-ddd[&&-eee],wx-k-qr-jjj[&&-kkk]:\
[INCL]:{TERM|RLS}{F|T|B|L|G|A}:[NOT-ed-h-fg-vvv];
```

[I.17002] Change Circuit Parameters

```
ED-PRMTR-T0:[s]abc-ddd,[t]ghi-jjj:[INCL]:\
[TLP-snn-smm,NG-nn,ES-ee];
```

```
ED-PRMTR-T0:uv-m-np-ddd,wx-k-qr-jjj:[INCL]:\
[TLP-snn-smm,NG-nn,ES-ee];
```

[I.17011] Change Circuit Parameters

```
ED-PRMTR-T1:[s]abc,[t]ghi:[INCL]:\
{TERM|RLS}{F|T|B|A}:[NOT-[u]rst];
```

```
ED-PRMTR-T1:uv-m-np,wx-k-qr:[INCL]:\
{TERM|RLS}{F|T|B|A}:[NOT-ed-h-fg];
```

[I.38601] Change DS3 Parameters

```
ED-PRMTR-T3:UNIT-[q]q:DS3-c[&&-d]:[BERM-s]\
[,BERT-t][,LBO-<b>][,TYPE-mnxyz];
```

[I.38611] Change Unprotected Alarm Setting

```
ED-PRMTR-T3:::UNPROTALM-{ON|OFF};
```

[I.38621] Change DS1 Alarm Suppression for DS1s Within a DS3"

```
ED-PRMTR-T3:::DS1ALMDS3-{ON|OFF};
```

[I.19561] Change Terminate and Leave

```
ED-PRMTR-TS::[s]abc-ddd[-ff]::MJU-ssss:[BRi]:{TERM|RLS}m;  
ED-PRMTR-TS::uv-m-np-ddd[-ff]::MJU-ssss:[BRi]:{TERM|RLS}m;
```

[I.19551] Change Subrate Terminate and Leave

```
ED-PRMTR-TS::[s]abc-ddd[-ff]::: {TERM|RLS}m;  
ED-PRMTR-TS::uv-m-np-ddd[-ff]::: {TERM|RLS}m;
```

Remove Commands

8

[l.33231] Remove TSI (Non-CEF Only)

```
RMV-CNFGRN-EQPT::UNIT-q::CCN-s,TSIS:\
[(a[,b[,c[,d[,e[,f]]]]]]);
```

[l.33202] Remove Cross-Connect Buffer (Non-CEF Only)

```
RMV-EQPT::CCB-sf;
```

[l.33251] Remove Clock Control Interface

```
RMV-EQPT::CCI-s;
```

[l.33201] Remove Cross-Connect Network Interface

```
RMV-EQPT::CCNI-s;
```

[l.33241] Remove TSI on Cross-Connect Side (Non-CEF Only)

```
RMV-EQPT::CCN-s,TSIS;
```

[I.33261] Remove ETSI

RMV-EQPT::ETSI-sq;q;

[I.33271] Remove ETSIS All

RMV-EQPT::ETSIS,ECCN-s;

[I.33011] Remove Link

RMV-EQPT::LINK-j;

[I.33001] Remove Main Controller

RMV-EQPT::MC;

[I.33351] Remove NPCs

RMV-EQPT::NPC-[s]abc[&&-[t]def]::[SIDE-s]:[INCL];

RMV-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::[SIDE-s]:[INCL];

[I.33211] Remove PMEM or SMEM

RMV-EQPT::{PMEM|SMEM};

[I.33481] Remove RT/DL

RMV-EQPT::{RT|DL}-ffff;

[I.33101] Remove Synchronizer

RMV-EQPT::SYNC-a;

[I.33121] Remove Synchronizer's TLI or SSP

RMV-EQPT::SYNC-a::TLI-m:[SSP-b];

[I.33111] Remove Synchronizer Time Base As a Clock Reference
Oscillator

RMV-EQPT::TLI-3::CRO;

[I.33221] Remove Time Slot Interchange

RMV-EQPT::TSI-sft;

[I.33331] Remove Unit Format Converter

RMV-EQPT::UNIT-[q]q::FC-sb;

[I.33321] Remove FTMI or DSPI

RMV-EQPT::UNIT-[q]q::{FTMI-d|DSPI};

[I.33311] Remove Unit Controller

RMV-EQPT::UNIT-[q]q::UC;

Restore Commands

9

[l.34231] Restore TSI That Connects Units (Non-CEF Only)

```
RST-CNFGRN-EQPT::UNIT-q::CCN-s,TSIS:\
[[a[,b[,c[,d[,e[,f]]]]]]];
```

[l.34202] Restore Cross-Connect Buffer

```
RST-EQPT::CCB-sf;
```

[l.34251] Restore Control and Clock Interface

```
RST-EQPT::CCI-s;
```

[l.34201] Restore Cross-Connect Network Interface

```
RST-EQPT::CCNI-s;
```

[l.34261] Restore Expanded Time Slot Interchanger

```
RST-EQPT::ETSI-sqg;
```

[I.34271] Restore All ETSIS

RST-EQPT::ETSIS,ECCN-s;

[I.34011] Restore Administrative Link

RST-EQPT::LINK-j;

[I.34001] Restore Main Controller

For Normal Operations:

RST-EQPT::MC::[{MCOND|NOJRNL|FRC}];

For Installation and Product Evaluation Only,
(can be used only if the AT&T security warning feature bit is set):

RST-EQPT::MC::CLR[,ALL];

[I.34351] Restore NPCs

RST-EQPT::NPC-[s]abc[&&-[t]def]::[SIDE-s];

RST-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::[SIDE-s];

[I.34211] Restore PMEM and/or SMEM

RST-EQPT::{PMEM|SMEM}::[CLR]:[FRC]:[BKGRND];

[I.34481] Restore RT/DL

RST-EQPT::{RT|DL}-ffff;

[I.34101] Restore Synchronizer

RST-EQPT::SYNC-a;

[I.34121] Restore Synchronizer's Timing Link Interface

RST-EQPT::SYNC-a::TLI-m:[SSP-b];

[I.34111] Restore Clock Reference Oscillator

RST-EQPT::TLI-3::CRO;

[I.34221] Restore Time Slot Interchange

RST-EQPT::TSI-sft;

[I.34241] Restore Time Slot Interchanges

RST-EQPT::TSIS,CCN-s;

[I.34331] Restore Unit

RST-EQPT::UNIT-[q]q:FC-sb;

[I.34321] Restore FTMI or DSPI

RST-EQPT::UNIT-[q]q:{FTMI-d|DSPI};

[I.34311] Restore Unit Controller

RST-EQPT::UNIT-[q]q:UC;

Subrate Commands

10

[l.19661] Subrate Test Access

```
CHG-TL-TS:::kk:TERM{F|T|B};
```

[l.19221] Subrate Cross-Connection

```
CONN-CRS-TS:<xy>:[s]abc-ddd[-ff]:MJU-ssss:[RATE-rr]:\  
[MA-tttt-u]:[<branch>][,<branch>][,<branch>][,<branch>]:\  
[NORM,NORM];
```

```
CONN-CRS-TS:<xy>:uv-m-np-ddd[-ff]:MJU-ssss:[RATE-rr]:\  
[MA-tttt-u]:[<branch>][,<branch>][,<branch>][,<branch>]:\  
[NORM,NORM];
```

[l.19321] Subrate Terminated Cross-Connection

```
CONN-CRS-TS::[s]abc-ddd[-ff]:MJU-ssss:[RATE-rr]:\  
[MA-tttt-u]:<branch>[,<branch>][,<branch>][,<branch>]:\  
TERM,TERM;
```

```
CONN-CRS-TS::uv-m-np-ddd[-ff]:MJU-ssss:[RATE-rr]:\  
[MA-tttt-u]:<branch>[,<branch>][,<branch>][,<branch>]:\  
TERM,TERM;
```

[.19201] Subrate Cross-Connection

```
CONN-CRS-TS: [s]abc-ddd[-ff],[t]ghi-jjj[-11]::RATE-rr:\
[NORM,NORM];
```

```
CONN-CRS-TS: uv-m-np-ddd[-ff],wx-k-qr-jjj[-11]::RATE-rr:\
[NORM,NORM];
```

[.19211] Subrate Cross-Connection

For a DS0A Channel

```
CONN-CRS-TS: <xy>: [s]abc-ddd&&-eee[-01],\
[t]ghi-jjj&&-kkk[-01]::RATE-rr: [NORM,NORM];
```

For a DS0B Channel

```
CONN-CRS-TS: <xy>: [s]abc-ddd-ff&&-mm,\
[t]ghi-jjj-ll&&-nn:RATE-rr: [NORM,NORM];
```

For a DSOA Channel

```
CONN-CRS-TS: <xy>: uv-m-np-ddd&&-eee[-01],\
wx-k-qr-jjj&&-kkk[-01]::RATE-rr: [NORM,NORM];
```

For a DS0B Channel

```
CONN-CRS-TS: <xy>: uv-m-np-ddd-ff&&-mm,\
wx-k-qr-jjj-ll&&-nn:RATE-rr: [NORM,NORM];
```

[.19301] Subrate Terminated Cross-Connection

```
CONN-CRS-TS: <xy>: [s]abc-ddd[-ff],[t]ghi-jjj[-11]::\
RATE-rr: TERM, TERM;
```

```
CONN-CRS-TS: <xy>: uv-m-np-ddd[-ff],wx-k-qr-jjj[-11]::\
RATE-rr: TERM, TERM;
```

[.1.19311] Subrate Terminated Cross-Connection

USAGE: The following applies to a range of DS0A channels:

```
CONN-CRS-TS:[s]abc-ddd&&-eee[-01],\  
[t]ghi-jjj&&-kkk[-01]::RATE-rr:TERM,TERM;
```

USAGE: The following applies to a range of DS0B channels:

```
CONN-CRS-TS:[s]abc-ddd-ff&&-mm,\  
[t]ghi-jjj-ll&&-nn::RATE-rr:TERM,TERM;
```

USAGE: The following applies to a range of DS0A channels:

```
CONN-CRS-TS:uv-m-np-ddd&&-eee[-01],\  
wx-k-qr-jjj&&-kkk[-01]::RATE-rr:TERM,TERM;
```

USAGE: The following applies to a range of DS0B channels:

```
CONN-CRS-TS:uv-m-np-ddd-ff&&-mm,\  
wx-k-qr-jjj-ll&&-nn::RATE-rr:TERM,TERM;
```

[.1.19601] Subrate Test Access

```
CONN-TACC-TS:[s]abc-ddd[-ff]::kk:MON;  
CONN-TACC-TS:uv-m-np-ddd[-ff]::kk:MON;
```

[.1.19621] Subrate Test Access

```
CONN-TACC-TS:[s]abc-ddd[-ff]::kk:MON:MJU-ssss:[BRi];  
CONN-TACC-TS:uv-m-np-ddd[-ff]::kk:MON:MJU-ssss:[BRi];
```

[.1.19631] Subrate Split Test Access

```
CONN-TACC-TS:[s]abc-ddd[-ff]::kk:SPLT;  
CONN-TACC-TS:uv-m-np-ddd[-ff]::kk:SPLT;
```

[l.19651] Subrate Test Access Split

```
CONN-TACC-TS::[s]abc-ddd[-ff]::kk:SPLT:MJU-ssss:[BRi];
CONN-TACC-TS::uv-m-np-ddd[-ff]::kk:SPLT:MJU-ssss:[BRi];
```

[l.19101] Subrate Establish Channel

```
CRTE-CRS-TS::[s]abc-ddd[&&-eee]::{DS0A-rr|DS0B-nn}:\
[ {SEC|PCH[-ppp]}];
CRTE-CRS-TS::uv-m-np-ddd[&&-eee]::{DS0A-rr|DS0B-nn}:\
[ {SEC|PCH[-ppp]}];
```

[l.19111] Subrate Establish Channel

```
CRTE-CRS-TS::[s]abc-ddd[&&-eee]::RATE-rr:\
[ {DP|DP,PCH[-ppp]}];
CRTE-CRS-TS::uv-m-np-ddd[&&-eee]::RATE-rr:\
[ {DP|DP,PCH[-ppp]}];
```

[l.19421] Subrate Disconnection

```
DISC-CRS-TS::[s]abc-ddd[-ff]::MJU-ssss:[RATE-rr]:\
<branch>[ ,<branch>][ ,<branch>][ ,<branch>];
DISC-CRS-TS::uv-m-np-ddd[-ff]::MJU-ssss:[RATE-rr]:\
<branch>[ ,<branch>][ ,<branch>][ ,<branch>];
```

[l.19431] Subrate Disconnection

```
DISC-CRS-TS::: [s]abc-ddd[-ff]::MJU-ssss:[RATE-rr]:[ALL];
DISC-CRS-TS:::uv-m-np-ddd[-ff]::MJU-ssss:[RATE-rr]:[ALL];
```

[l.19401] Subrate Disconnection

```
DISC-CRS-TS::[s]abc-ddd[-ff],[t]ghi-jjj[-ll]::[RATE-rr];
DISC-CRS-TS::uv-m-np-ddd[-ff],wx-k-qr-jjj[-ll]::[RATE-rr];
```

[l.19411] Subrate Disconnection

```
DISC-CRS-TS::[s]abc-ddd{&&-eee[-01]|-ff&&-mm},\  
[t]ghi-jjj{&&-kkk[-01]|-ff&&-mm}:[RATE-rr];  
DISC-CRS-TS::uv-m-np-ddd{&&-eee[-01]|-ff&&-mm},\  
wx-k-qr-jjj{&&-kkk[-01]|-ll&&-nn}:[RATE-rr];
```

[l.19671] Subrate Test Access

```
DISC-TACC-TS:::kk;
```

[l.19151] Subrate Disestablish Channel

```
DLT-CRS-TS::[s]abc-ddd[&&-eee]::[PCH[-ppp]][:DCC];  
DLT-CRS-TS::uv-m-np-ddd[&&-eee]::[PCH[-ppp]][:DCC];
```

Test Access Commands

11

[l.26101] Two-Way Test Access Line Loopback

```
ALW-LPBK-T1:: {DGA|DGB|DGC|DGD|DGP}::LLB: [ {TO|FROM} ]:\
RT-ffff;
```

[l.20101] Non-Channelized Test, Monitor, Split, Loop

```
CHG-ACCMD-T1:: [s]abc [&[t]def]::<tmode>:[AIS]:[INCL];
CHG-ACCMD-T1::uv-m-np[&wx-k-qr]::<tmode>:[AIS]:[INCL];
```

[l.21011] Two-Way Test Access Monitor Test Port

```
CHG-TACC-T0:::kk:MON;
```

[l.23001] Two-Way Test Access

```
CHG-TACC-T0:::kk:SPLT;
```

[l.21031] Nx64 kbit/s Two-Way Test Access, Monitor

```
CHG-TACC-T0:::TG-mmmm:MON;
```

[I.23021] Nx64 kbit/s Two-Way Test Access, Split

CHG-TACC-T0:::TG-~~mmm~~:SPLT;

[I.20111] Non-Channelized Test FAD, Emode, Fmode

CHG-TACC-T1::[s]abc[&[t]def]:: {[<emode>][,<fmode>]}:\
[INCL];

CHG-TACC-T1::uv-m-np[&wx-k-qr]:: {[<emode>][,<fmode>]}:\
[INCL];

[I.19626] Change Test Access Time Slot

CHG-TACC-TS:::kk:MON;

[I.19656] Change Subrate Test Access Split

CHG-TACC-TS:::kk:SPLT;

[I.25101] Two-Way Test Access

CHG-TL-T0:::kk:TERM{F|T|B|L|G|A}: [NOT-[t]rst-~~vvv~~];

CHG-TL-T0:::kk:TERM{F|T|B|L|G|A}: [NOT-uv-m-np-~~vvv~~];

[I.25121] Nx64 kbit/s Two-Way Test Access,
Terminate-And-Leave-Active

CHG-TL-T0:::TG-~~mmm~~:TERM{F|T|B};

[I.24001] Two-Way Test Access, Hub

CONN-HUB-T0::[t]ghi-jjj::kk:<tc>;

CONN-HUB-T0::uv-m-np-jjj::kk:<tc>;

- [I.24021] Nx64 kbit/s Two-Way Test Access, Hub
 CONN-HUB-T0::[s]abc-ddd,[t]ghi-jjj::TG-mmm:[<tc>];
 CONN-HUB-T0::uv-m-np-ddd,wx-k-qr-jjj::TG-mmm:[<tc>;
- [I.20031] Non-Channelized Test Hub
 CONN-HUB-T1::[s]abc,[t]jkl::[INCL];
 CONN-HUB-T1::uv-m-np,wx-k-qr::[INCL];
- [I.21001] Two-Way Test Access, Monitor
 CONN-TACC-T0::[t]ghi-jjj::kk:[<tc>]:MON;
 CONN-TACC-T0::uv-m-np-jjj::kk:[<tc>]:MON;
- [I.21021] Nx64 kbit/s Two-Way Test Access, Monitor
 CONN-TACC-T0::[t]ghi-jjj[&&-kkk][&-lll&...]::TG-mmm:\
 [<tc>]:MON;
 CONN-TACC-T0::wx-k-qr-jjj[&&-kkk][&-lll&...]::TG-mmm:\
 [<tc>]:MON;
- [I.20001] Non-Channelized Test Access (Monitor, Split, or Loop)
 CONN-TACC-T1::[s]abc[&[t]def],[u]ghi[, [v]jkl]::<tmode>:\
 [AIS]:[INCL];
 CONN-TACC-T1::uv-m-np[&wx-k-qr],eg-h-ij[, jk-l-mn]::\
 <tmode>:[AIS]:[INCL];
- [I.27001] Two-Way Test Access
 DISC-TACC-T0:::kk:[OOS];

- [I.25501] Two-Way Test Access
 DISC-TACC-T0:::kk:RLS{F|T|B|L|G|A}: [NOT-[t]rst-*vvv*];
 DISC-TACC-T0:::kk:RLS{F|T|B|L|G|A}: [NOT-uv-m-np-*vvv*];
- [I.27021] Nx64 kbit/s Two-Way Test Access,
 Test-Access Group Release
 DISC-TACC-T0:::TG-*mmm*[&&-*nnn*]: [OOS];
- [I.25521] Nx64 kbit/s Two-Way Test Access,
 Terminate-And-Leave-Release
 DISC-TACC-T0:::TG-*mmm*:RLS{F|T|B};
- [I.20202] Non-Channelized Test NPC Release
 DISC-TACC-T1:::ALL: [OOS];
- [I.20201] Non-Channelized Test NPC Release
 DISC-TACC-T1:::[s]abc[&[t]def]: [OOS];
 DISC-TACC-T1:::uv-m-np[&wx-k-qr]: [OOS];
- [I.19681] Disconnect Test Access Time Slot
 DISC-TACC-TS:::{ALL|LINKS};
- [I.19666] Subrate Test Access Terminate and Leave Release
 DISC-TACC-TS:::kk:RLS{F|T|B};
- [I.26111] Two-Way Test Access Line Loopback
 INH-LPBK-T1:::{DGA|DGB|DGC|DGD|DGP}::LLB:\
 {TO|FROM}: {RT|DL}-*ffff*;

- [I.19681] Disconnect Test Access Time Slot
 DISC-TACC-TS::::{ALL|LINKS};
- [I.29001] Looped Test Access
 OPR-LPBK-T0::::kk:<tc>;
- [I.29021] Nx64 kbit/s Looped Test Access
 OPR-LPBK-T0::::TG-mmmm: [<tc>] ;
- [I.26121] Two-Way Test Access Line Loopback
 OPR-LPBK-T1:: {DGA|DGB|DGC|DGD|DGP}::LLB:RT-ffff;
- [I.20301] Non-Channelized Loop Test Access Facility
 OPR-LPBK-T1:: [s]abc::LPBKT: [INCL] ;
 OPR-LPBK-T1::uv-m-np::LPBKT: [INCL] ;
- [I.26131] Two-Way Test Access Line Loopback
 RLS-LPBK-T1:: {DGA|DGB|DGC|DGD|DGP}::LLB:RT-ffff;

Troubleshooting Commands

12

[I.41211] Diagnose Cross-Connect Buffer
DGN-EQPT::CCB-sf:: [CFT-X-vwxy];

[I.41251] Diagnostics, CCI and BT Packs
DGN-EQPT::CCI-s:: [CFT-X-vwxy];

[I.41201] Diagnose CCNI
DGN-EQPT::CCNI-s:: [CFT-X-vwxy];

[I.41031] Diagnose Communications Interface
DGN-EQPT::CI:: [CFT-X-vwxy];

[I.41261] Diagnose ETSI
DGN-EQPT::ETSI-sqq:: [CFT-X-vwxy];

- [I.41271] Diagnose All ETSIs on ECCN Side
DGN-EQPT::ETSSIS::ECCN-s:ALL;
- [I.41011] Diagnose Link
DGN-EQPT::LINK-a:: [CFT-X-vwxy] ;
- [I.41001] Diagnose Main Controller
DGN-EQPT::MC:: [CFT-X-vwxy] ;
- [I.41021] Diagnose Main Processor
DGN-EQPT::MP:: [CFT-X-vwxy] ;
- [I.41361] Diagnose Network Processing Circuits
DGN-EQPT::NPC-[s]abc&&- [t]def ;
DGN-EQPT::NPC-uv-m-np&&&-uv-k-qr ;
- [I.41351] Diagnose NPC
DGN-EQPT::NPC-[s]abc:: [SIDE-s] : [CFT-X-vwxy] ;
DGN-EQPT::NPC-uv-m-np:: [SIDE-s] : [CFT-X-vwxy] ;
- [I.41051] Diagnose Memory Card
DGN-EQPT:: { PMEM | SMEM } :: [{ CFT-X-vwxy | PROG | DBASE }] : [VERIFY] ;
- [I.41101] Diagnose Synchronizer
DGN-EQPT::SYNC-a ;
- [I.41111] Diagnose Synchronizer
DGN-EQPT::SYNC:: TLI-3 : CRO ;

- [.41121] Diagnose Synchronizer Timing Link Interface
DGN-EQPT::SYNC-a::TLI-m:[SSP-b];
- [.41241] Diagnose Time Slot Interchanges
DGN-EQPT::TSI::CCN-s:ALL;
- [.41232] Diagnose Time Slot Interchanges
DGN-EQPT::TSI::CCN-s:UNIT-q:[a[,b[,c[,d[,e[,f]]]]]]];
- [.41221] Diagnose Time Slot Interchange
DGN-EQPT::TSI-sft::[CFT-X-vwxy];
- [.41341] Diagnose DSPU
DGN-EQPT::UNIT-[q]q::DSPI:[CFT-X-vwxy];
- [.41331] Diagnose Format Converter
DGN-EQPT::UNIT-[q]q::FC-sb:[CFT-X-vwxy];
- [.41401] Diagnose FLI
DGN-EQPT::UNIT-[q]q::FLI-k:[CFT-X-vwxy];
- [.41411] Diagnose FMT
DGN-EQPT::UNIT-[q]q::FMT-s:[CFT-X-vwxy];
- [.41321] Diagnose Facility Terminating Module Interface
DGN-EQPT::UNIT-[q]q::FTMI-d:[CFT-X-vwxy];

- [I.41431] Diagnose MIU
DGN-EQPT::UNIT-[q]q::MIU-c:[CFT-X-vwxy];
- [I.41421] Diagnose MXR
DGN-EQPT::UNIT-[q]q::MXR-c:[DEV-devc:[CFT-X-vwxy]];
- [I.41311] Diagnose Unit On UC
DGN-EQPT::UNIT-[q]q::UC:[CFT-X-vwxy];
- [I.56052] Clear Power Supply or Backup Failure
INIT-REG::PWR-pp;
- [I.51081] Utility Recover Password
RST-PASSWD;
- [I.53111] Utility Query Alarms
RTRV-ALM-EQPT:<xy>;
- [I.53151] Utility Query Alarms
RTRV-ALM-EQPT:::DBASE;
- [I.81001] Query Facility Alarms
RTRV-ALM-EQPT::NPC::{CFA|CGA|LOS};
- [I.53141] Utility Query Alarms
RTRV-ALM-EQPT:::RT|DL}-ffff;

[1.56331] Query DS3 Alarms

RTRV-ALM-T3;

[1.52111] Utility Query Broadcast

RTRV-BDCST-T0::[s]abc-ddd;
RTRV-BDCST-T0::uv-m-np-ddd;

[1.52101] Query Broadcast All

RTRV-BDCST-T0::::ALL;

[1.52121] Utility Query Broadcast From

RTRV-BDCST-T1::[s]abc::FROM;
RTRV-BDCST-T1::uv-m-np::FROM;

[1.53031] Utility Query Equipment Connectivity

RTRV-CNFGRN-EQPT::UNIT::EQPD;

[1.53121] Utility Query Circuit Status, NPC

RTRV-COND-EQPT::NPC-[s]abc::CS;
RTRV-COND-EQPT::NPC-uv-m-np::CS;

[1.52011] Query Partial Cross-Connect Map

RTRV-CRS-T1::[s]abc[&&[t]def]::MAP;
RTRV-CRS-T1::uv-m-np[&&&-wx-k-qr]::MAP;

[1.52031] Query Full Cross-Connect Map

RTRV-CRS-T1::NPC::MAP;

[1.52311] Utility Query RTMAP, DLMAP

RTRV-CRS-T1:::[ffff] : {RTMAP | DLMAP} ;

[1.52511] Utility Query Far-End Subrate Channel Information

RTRV-CRS-TS::[s] abc-ddd[&&-eee] ;

RTRV-CRS-TS::uv-m-np-ddd[&&-eee] ;

[1.52531] Utility Query Circuit/Hardware Subrate Trace

RTRV-EQPT-TS::[s] abc-ddd[-ff] ::SRHDW ;

RTRV-EQPT-TS::uv-m-np-ddd[-ff] ::SRHDW ;

[1.56501] Utility Query Framing Status of Subrate Multiplexor

RTRV-EVT-TS::[[s] abc-ddd[&&-eee]] ::SROOF: [ALL] ;

RTRV-EVT-TS::[uv-m-np-ddd[&&-eee]] ::SROOF: [ALL] ;

[1.51121] Query Feature Package

RTRV-FPKG-NE ;

[1.51031] Query Date

RTRV-HDR ;

[1.51041] Utility Query Who

RTRV-HDR-NE ;

[1.56401] Utility Query Location

RTRV-LOC-EQPT::<entity>::[<arg>] ;

- [I.55011] Query Software/Hardware Error Recovery
 RTRV-LOG:::ERR:{SWER|HWER}[,{INT-mn|[DATE-[ce]yr-mo-da,]\
 TOD-hr-mn-sc}] [,TN-X-dddd][,EVENT-X-eeee]\
 [,ERCL-{HARD|TRANS|APPINT}][,ENTY-<entity>;
- [I.54121] Utility Query Macro
 RTRV-MACRO:::<name>:[<user id>;
- [I.54131] Utility Query List Macro
 RTRV-MACRO-COM:::<macro name>:[<user id>;
- [I.54101] Utility Query List Map
 RTRV-MAP-COM:::<name>:[<user id>;
- [I.54111] Utility Query NPC Map
 RTRV-MAP-EQPT::NPC::<name>:[<user id>;
- [I.51001] Retrieve Memory Status
 RTRV-MEMSTAT;
- [I.53051] Utility Query Options NPCs
 RTRV-OPT-T1::NPC::[{mn|ALL}];
- [I.51151] Query DS1 Performance Monitoring Report Schedule
 RTRV-PMSCHED-T1::{NPC-[s]abc[&&-[t]def]|ALL};
 RTRV-PMSCHED-T1::{NPC-uv-m-np[&&&-wx-k-qr]|ALL};

[I.52581] Utility Query Load

```
RTRV-PRMTR-EQPT:::LOAD:{[s]abc|TOTAL};
RTRV-PRMTR-EQPT:::LOAD:{uv-m-np|TOTAL};
```

[I.56031] Utility Query All

```
RTRV-PRMTR-EQPT::NPC::<parameter>:ALL;
```

[I.56021] Utility Query Alarm Option, AIS

```
RTRV-PRMTR-EQPT::NPC-[s]abc[&&-[v]ghi]::ALMOPT:AIS;
RTRV-PRMTR-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::ALMOPT:AIS;
```

[I.56041] Query Network Processing Circuit Parameter

```
RTRV-PRMTR-EQPT::[NPC-[s]abc[&&-[t]def]]::<parameter>:\
[ {RT|DL}-ffff ];
RTRV-PRMTR-EQPT::[NPC-uv-m-np[&&&-wx-k-qr]]::<parameter>:\
[ {RT|DL}-ffff ];
```

[I.52321] Utility Query SCDG

```
RTRV-PRMTR-EQPT::[NPC-[s]abc]::SCDG:[STATE]:\
[ {RT-ffff|DL-ffff|ALL} ];
RTRV-PRMTR-EQPT::[NPC-uv-m-np]::SCDG:[STATE]:\
[ {RT-ffff|DL-ffff|ALL} ];
```

[I.55113] Query Link Status and Protocol

```
RTRV-PRMTR-LINK::j[mm[&&jnn]];
```

[I.54211] Query Macro Attributes

```
RTRV-PRMTR-MACRO:::ATTR:[ {<user id>|ALL} ];
```

[I.54221] Utility Query Macro/Map Space
RTRV-PRMTR-**{MACRO|MAP}:::SPACE:[{<user id>|ALL|SYSTEM}];**

[I.54201] Utility Query Map
RTRV-PRMTR-**MAP:::ATTR:[{ALL|<user id>|<name>}];**

Note: Only the DACS II frame administrator can use the ALL option.

[I.51091] Utility Query Configure
RTRV-PRMTR-**NE;**

[I.51511] Query Error Correction Location
RTRV-PRMTR-**NE:::ECLOC;**

[I.51501] Utility Query Hub Identifier
RTRV-PRMTR-**NE:::HUBID;**

[I.51131] Utility Query Sequence
RTRV-PRMTR-**SQN;**

[I.52051] Utility Query From
RTRV-PRMTR-**T0::[s]abc-ddd[&&-eee]::FROM;**
RTRV-PRMTR-**T0::uv-m-np-ddd[&&-eee]::FROM;**

[I.52211] Query Channel Marks
RTRV-PRMTR-**T0::[s]abc-jjj[&&-kkk]::MARK;**
RTRV-PRMTR-**T0::uv-m-np-jjj[&&-kkk]::MARK;**

[I.52601] Query Trunk Signaling Conversion State

```
RTRV-PRMTR-T0::abc-ddd::SIGST;  
RTRV-PRMTR-T0::uv-m-np-ddd::SIGST;
```

[I.52041] Query Destination Cross-Connect

```
RTRV-PRMTR-T0::[s]abc-ddd[&&-eee]::TO;  
RTRV-PRMTR-T0::uv-m-np-ddd[&&-eee]::TO;
```

[I.52071] Utility Query From

```
RTRV-PRMTR-T1::[s]abc::FROM;  
RTRV-PRMTR-T1::uv-m-np::FROM;
```

[I.52201] Utility Query Markings

```
RTRV-PRMTR-T1::[s]abc[&&-[t]def]::MARK;  
RTRV-PRMTR-T1::uv-m-np[&&&-wx-k-qr]::MARK;
```

[I.52061] Non-Channelized Utility Query To

```
RTRV-PRMTR-T1::[s]abc::TO;  
RTRV-PRMTR-T1::uv-m-np::TO;
```

[I.53231] Query DS3 Line Build Out

```
RTRV-PRMTR-T3::::LBO;
```

[I.53221] Utility Query DS3 Bit Error Rate

```
RTRV-PRMTR-T3::[UNIT-[q]q]::BERMT;
```

[I.52521] Query Subrate Cross-Connect

```
RTRV-PRMTR-TS::[s]abc-ddd[-ff];  
RTRV-PRMTR-TS::uv-m-np-ddd[-ff];
```

- [I.54001] Query User/link Screening Option
RTRV-PRVG-{TERM|USER}::: {j[mm][&&jnn] | <user id> | ALL};
- [I.54011] Query Log
RTRV-PRVG-USER::LOG:: [ALL];
- [I.55401] Utility Query Error Source Register
RTRV-REG-EQPT::CCN-a::ESR;
- [I.55411] Query ECCN Error Source Register
RTRV-REG-EQPT::ECCN-s::ESR;
- [I.55111] Query Error Source Register Main Processor
RTRV-REG-EQPT::MP::ESR;
- [I.55601] Utility Query ESR for FTU or Subrate NPC
RTRV-REG-EQPT::NPC-[s]abc:: [SIDE-s]:ESR;
RTRV-REG-EQPT::NPC-uv-m-np:: [SIDE-s]:ESR;
- [I.55201] Utility Query Synchronizer
RTRV-REG-EQPT::SYNC-a::STR;
- [I.55321] Utility Query SSP
RTRV-REG-EQPT::SYNC-a::TLI-m:SSP-b:STR;
- [I.55311] Utility Query Timing Link Interface
RTRV-REG-EQPT::SYNC-a::TLI-m:STR;

- [.55531] Query Error Source Register
 RTRV-REG-EQPT::UNIT-[q]q::DSPI:ESR;
- [.55501] Utility Query Error Source Register
 RTRV-REG-EQPT::UNIT-[q]q::ESR;
- [.55521] Query Error Source Register
 RTRV-REG-EQPT::UNIT-[q]q::FC-sb:ESR;
- [.55801] Query Error Source Register Facility Line Interface
 RTRV-REG-EQPT::UNIT-[q]q::FLI-k:ESR;
- [.55811] Query Error Source Register Formatter
 RTRV-REG-EQPT::UNIT-[q]q::FMT-s:ESR;
- [.55511] Query Error Source Register FTMI
 RTRV-REG-EQPT::UNIT-[q]q::FTMI-d:ESR;
- [.55831] Query Error Source Register Multiplexer Interface Unit
 RTRV-REG-EQPT::UNIT-[q]q::MIU-c:ESR;
- [.55821] Query Error Source Register Multiplexer
 RTRV-REG-EQPT::UNIT-[q]q::MXR-c:ESR;
- [.55181] Query Cross-Connect Status Bus
 RTRV-REG-EQPT::XCSB::[UNIT-[q]q];

[1.55191] Utility Query Status Register

RTRV-REG-EQPT::XC-a::STR;

[1.52081] Utility Query Roll DS0

RTRV-ROLL-T0:: {NPC-[s]abc[&&-[t]def] | ALL[, UNIT-[q]q]};

RTRV-ROLL-T0:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL[, UNIT-[q]q]};

[1.52091] Utility Query Roll DS1

RTRV-ROLL-T1:: {NPC-[s]abc[&&-[t]def] | ALL[, UNIT-[q]q]};

RTRV-ROLL-T1:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL[, UNIT-[q]q]};

[1.53104] Query All Common Equipment

RTRV-STATE-COM:::ALL;

[1.53109] Utility Query Equipage, Common

RTRV-STATE-COM:::EQPD;

[1.53105] Utility Query Status Common Equipment

RTRV-STATE-COM::: {PEST | FAIL | OOS};

[1.54340] Utility Query State Alarm Cut Off

RTRV-STATE-EQPT:::ACO;

[1.53022] Utility Query Equipage of ETSIs

RTRV-STATE-EQPT::ETSI::EQPD;

[1.53201] Query Equipped Multiplexer Interface Units

RTRV-STATE-EQPT::MIU::EQPD;

[I.53211] Utility Query Equipped Multiplexers in DS3 Unit

```
RTRV-STATE-EQPT::MXR::EQPD;
```

[I.56311] Utility Query State

```
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def];
```

```
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr];
```

[I.56314] Utility Query NPC State

```
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def];
```

```
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr];
```

[I.53041] Query Equipped NPCs

```
RTRV-STATE-EQPT::NPC::EQPD[,TOTAL]:[UNIT-[q]q];
```

[I.53131] Utility Query Loopback

```
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::LPBK;
```

```
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::LPBK;
```

[I.53161] Query ANSI NPC Test Signal

```
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::TSIG;
```

```
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::TSIG;
```

[I.56321] Query NPC Time Slot Zero

```
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::TS0-s;
```

```
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::TS0-s;
```

[I.56323] Query Time Slot Zero Monitor

```
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::TS0M;
```

```
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::TS0M;
```

- [1.56301] Utility Query Synchronizer State
RTRV-STATE-EQPT::SYNC;
- [1.53001] Utility Query Synchronizer Provisioning
RTRV-STATE-EQPT::SYNC::EQPD;
- [1.53021] Utility Query Equipped TSIs
RTRV-STATE-EQPT::TSI::EQPD;
- [1.53101] Query All
RTRV-STATE-EQPT::[UNIT-[q]q]::ALL;
- [1.53011] Utility Query Equipage Status
RTRV-STATE-EQPT::UNIT::EQPD;
- [1.53108] Utility Query Entity Equipage
RTRV-STATE-EQPT::[UNIT-[q]q]::EQPD;
- [1.53071] Utility Query Equalization, Impedance
RTRV-STATE-EQPT::UNIT-[q]q::FTMI-b;
- [1.53181] Utility Query Hybrid DS3 Loopback
RTRV-STATE-EQPT::UNIT-[q]q::LPBK;
- [1.53103] Utility Query Status of Entities/Equipment
RTRV-STATE-EQPT::[UNIT-[q]q]::{PEST|FAIL|OOS};

- [I.56511] Query Unit Protection State
 RTRV-STATE-EQPT::UNIT-[q]q::PROTN;
- [I.56361] Query State Unit DS3
 RTRV-STATE-T3::UNIT-[q]q::DS3-c[&&-d];
- [I.52501] Utility Query Subrate Channels
 RTRV-STATE-TS::[s]abc-ddd[&&-eee];
 RTRV-STATE-TS::uv-m-np-ddd[&&-eee];
- [I.53091] Utility Query Test-Access Group NPC
 RTRV-TACC-T0::NPCTG-rrr[&&-sss];
- [I.53081] Utility Query Test-Access Group
 RTRV-TACC-T0::TG-mmm[&&-nnn];
- [I.53061] Utility Query Test Ports
 RTRV-TACC-T1;

Miscellaneous Commands

13

[l.55711] Abort

```
ABT-CMD;
```

[l.35301] Allow Switch of MMFG

```
ALW-SW-EQPT::UNIT-[q]q::MMFG-c[&&-d]:{PROTN|WKG};
```

[l.39411] Protection Switching

```
ALW-SW-T1::{NPC-[s]abc|xxx}::[RT-ffff]:[INCL];
```

```
ALW-SW-T1::{NPC-uv-m-np|xxx}::[RT-ffff]:[INCL];
```

[l.19041] Append Component Command

```
APPEND[::{<line number>|END}::];
```

[I.31521] Copy NPC

```
COPY-EQPT::NPC-[s]abc,[t]def[&&-[u]ghi];
COPY-EQPT::NPC-uv-m-np,wx-k-qr[&&&-gh-i-kl];
```

[I.55701] Backup Memory Transfer

```
CPY-MEM::::<from>,<to>:[PROG]:[INCL];
```

[I.37301] Delete Feature Package Identification

```
DLT-FPKG::::nnnnnnnnn;
```

[I.51021] Set Date

```
ED-DATE::::[ce]yr-mo-da:[INT-ii];
ED-DATE::::,hr-mn-sc;
```

[I.36201] Add NPC to SLC® Carrier Bank

```
ED-PRMTR-EQPT::[DGA-[s]aaa][,DGB-[s]bbb][,DGC-[s]ccc]\
[,DGD-[s]ddd][,DGP-[s]ppp]::[RT|DL]-ffff,g[g]:\
[ {sss|NDL|RTF} ];
```

```
ED-PRMTR-EQPT::[DGA-uv-j-ab][,DGB-uv-k-cd][,DGC-uv-l-ef]\
[,DGD-uv-m-gh] [,DGP-uv-j-pr]::[RT|DL]-ffff,g[g]:\
[ {sss|NDL|RTF} ];
```

[I.39421] Switch Inhibition for SLC®

```
INH-SW-T1::[NPC-[s]abc|xxx]::[RT-ffff]:[FRC]:[INCL];
INH-SW-T1::[NPC-uv-m-np|xxx]::[RT-ffff]:[FRC]:[INCL];
```

[I.51111] Alarm Cutoff

```
OPR-ACO-ALL;
```

- [I.51011] Set Daily Facility Alarm Reporting Time
 **SCHED-PMREPT-ALL:::[hr-mn-sc],\
 {CFA|FAC-X-abcdef|PRIM-X-ghij|MONDAT};**
- [I.58001] Utility Boot
 STA-LOCL-RST:::PMEM::[CLR];
- [I.35101] Switch FLI To Protection
 SW-TOPROTN-EQPT::UNIT-[q]q::FLI;
- [I.35111] Switch MMFG To Protection
 SW-TOPROTN-EQPT::UNIT-[q]q::MMFG-c:[FRC];
- [I.39401] Request PSW, USW, ALW, or INH on SLC®
 **SW-TOPROTN-T1:::{NPC-[s]abc|xxx}:::[RT-ffff]:[INCL];
 SW-TOPROTN-T1:::{NPC-uv-m-np|xxx}:::[RT-ffff]:[INCL];**
- [I.35105] Switch FLI To Service
 SW-TOWKG-EQPT::UNIT-[q]q::FLI;
- [I.35121] Switch MMFG To Service
 SW-TOWKG-EQPT::UNIT-[q]q::MMFG-c;

[I.39431] Allow Termination of Protection Switching

SW-TOWKG-T1 : { NPC - [s] abc | DGx } : [{ RT | DL } - ffff] : [INCL] ;

SW-TOWKG-T1 : { NPC - uv - m - np | DGx } : [{ RT | DL } - ffff] : [INCL] ;

[I.55731] Upgrade Frame

UPGRD - SYS ;

Denial Codes

14

mmmm *Explanation*

ENEQ CCB is not equipped
CCB not eqd, not IS, or failed or inactive side CCB not eqd or not IS
CPR is not equipped
Copy source NPC is not equipped
DSPI not equipped
DSPI not equipped, not in service, or failed
DSPI not in service or failed
DSPU is not equipped
Database corrupt
ETSI is not equipped
ETSI not equipped, not in service, or failed
FC not eqd, not IS, or failed or inactive side FC not eqd or not IS
FC not eqd, not IS, or failed or inactive side FC not eqd or not IS
FC not equipped
FTMI is not equipped
FTMI not equipped, not in service, or failed
MIU is not equipped
Mate NPC is not equipped
NPC is unequipped
NPC not equipped
NPC not provisioned as DGA
NPCTG not grown

mmmm *Explanation*

- NPCTP is not grown
- No CBTYPE NPC equipped
- No DSP unit equipped
- Not enough DSPPs are equipped
- Protection MIU is not equipped
- Protection entity is unequipped
- Reqd FMT not eqd,not IS,or failed,or inact side FMT not eqd, or not IS
- Required FLI not equipped, not in service, or failed
- Required MIU not equipped, not in service, or failed
- Required MXR not equipped, not in service, or failed
- SYNC TB is not equipped
- Service MXR is not equipped
- Subject entity is not equipped
- Sync source NPC is not equipped
- TSI not eqd, not IS, or failed or inactive side TSI not eqd or not IS
- The MXR is not grown
- The pair MXR is not equipped
- UNIT not equipped, not in service, or failed
- Unit is not equipped
- test group unequipped
- virtual SLC NPC not provisioned
- ENFE** Cross-connect not consistent with feature package
- Software does not contain Enhanced CEPT feature
- Subject NPC does not support CEPT BER feature
- ENIE** Option rr/m has not been set up on 2nd database
- Termination is not connected as indicated
- Two confs. were prev. connected or the concat. cause BRD-BBL loop
- ENRE** Corresponding NPC for FROM virtual channel is not provisioned
- Corresponding NPC for TO virtual channel is not provisioned
- Corresponding NPC for virtual channel is not provisioned
- FROM NPC is not provisioned as DGA
- Illegal connectivity specified
- NPC not provisioned for CAS
- NPC not provisioned for NSA
- Old_tape is a special install tape

mmmm *Explanation*

	<p>PMEM type no longer supported</p> <p>SMEM is a normal SMEM</p> <p>SSC circuit pack is still equipped; pull-out/remove SSC</p> <p>Subject entity is equipped</p> <p>TO NPC is not provisioned as DGA</p>
ERLC	<p>Attempt to remove DGA w/o INCL keyword or prior prot. sw. request</p> <p>Customer control or red circuit exists</p>
ICNV	<p>DGA protected; use INCL to remove, or unswitch protection</p> <p>PM scheduling report is already allowed for this entity</p> <p>PM scheduling report is already inhibited for this entity</p> <p>TS0 is crossconnected to TS0</p> <p>bit value not allowed for NPC type</p> <p>current error corrector pack type specified in command</p> <p>current hub id specified in command</p> <p>not allowed for clear 2MB</p>
IDMS	<p>Both FAC and PRIM values(keywords) are required</p> <p>INCL keyword needed to perform this command</p> <p>INCL must be specified for SRDC ckts</p> <p>SIDE must be specified for subrate NPC</p> <p>Some priority values required</p> <p>Unspecified L2 address</p>
IDNC	<p>FDL selected with width not 1</p> <p>Inconsistent or invalid circuit type for Nx64Kbit TA</p> <p>Old or new is a non-channelized type in a DS0 command</p> <p>One NPC is a non-channelized type and the other is not</p> <p>Some priority values not required</p> <p>TG width incompatible with circuit</p> <p>The two FADS entered are not associated with one another.</p> <p>incompatible HUB feature types</p> <p>inconsistent BCON width for test access</p> <p>inconsistent HUB width for specified TG</p> <p>invalid channel designation for BCON</p> <p>not all FROM channels on same NPC</p>
IDNV	<p>A locally switched channel is specified as BBL, LEG, or BRD</p> <p>A subrate circuit pack is specified in the command line</p>

mmmm *Explanation*

AIS entered for MONE/MONF/MONEF/SPLTA/SPLTB/SPLTAB
AIS invalid for cross-connection specified
AIS keyword incompatible with NPC type
Adding two digroups from one bank on same DDC
Alarm option and bank mode don't match
All NPC(s) are either not valid or not grown
Attempt to broadcast a locally switched channel
Attempt to one way cross-connect a locally switched channel
BER must not be less than 4 for Clear DS1
Bad PRIM X'efgh values
Bank id number not found
CPR circuit pack specified in the command
Can't Use LCN 0/LGN 0 - designated as a supervisory channel only
Can't delete because not all associated NPCs of the RT are entered
Command not allowed
Conference first channel doesn't match input
Conference port cannot be dropped out of conference by switch command
Conference port is not in conference circuit
Connectivity can not be specified for CEF unit
Counting sequence and operational mode don't match
Cross-connect a non Mode I channel to DCLU
Cross-connect a non SLC channel to DCLU
DGA and DGB must be specified together in the command
DGA with NDJ option is not provisioned with D4 or ESF framing format
DGA/DGP of RT/DL Mode I must be assigned to one DDC
DGC and DGD must be specified together in the command
DGP designated to bank without data link
Digroup name and bank id don't match
Digroups from same bank are added to two different FTUs
Digroups from same bank have different counting sequence
Digroups from same bank have different modes
Duplicate L2 address
Duplicate ports specified
ENQ/ACK flow control is supported only on Snider link
Error in input

mmmm *Explanation*

Framing format, digroup name & operational mode don't match
 INCL not specified and at least one NPC In Service
 IU type NPC(s) cannot be provisioned for Minor Alarm
 IW option is not allowed for new type of Clear-DS1 NPC
 Inconsistent Signaling on CEPT NPCTGs
 Inconsistent channel range width
 Invalid CEPT NPC
 Invalid CFT code
 Invalid FPI value
 Invalid FROM channel number
 Invalid MIU/MXR type specified
 Invalid NPC addressing scheme specified
 Invalid SLC Mode-III channel number
 Invalid TC specification
 Invalid TO channel number
 Invalid channel 000 cross-connection specified
 Invalid channel 031 cross-connection specified
 Invalid channel number
 Invalid circuit type
 Invalid keyword(s) combination specified
 Invalid line number
 Invalid link number specified
 Invalid poll time
 Invalid switch request for DCLU
 Leg type mismatch
 MUX or TRB invalid for cross-connection specified
 Mode I RT/DL IDs don't match for DGA/DGP on same DDC
 NAM invalid for cross-connection specified
 NDL option is specified for DGA
 NDL option is used without DGA
 NPC containing channel 000 is invalid type.
 NPC is a DGP
 NPC is channelized type
 NPC is not part of a one-way connection
 NPC number and bank id don't match

mmmm *Explanation*

NPC number and digroup name don't match
 NPC parameter only valid with TU type TLI
 NPC type is not DS type
 NPC type option Y is invalid for SLC-96 NPC
 NPC used as a timing reference
 NPC(s) actual type incompatible with TYPE keyword and/or alarm type
 No OOS keyword is given for out-of-service NPC
 No PM data available
 No mapped circuit under test; emode/fmode can't be changed.
 Number of transmitting ports does not match existing conference
 OLD and NEW Data and Parity channels partially overlap
 OLD and NEW channels cannot be the same
 OLD data channel cannot be parity channel type
 Old and new are the same NPC in a DS1 command
 One-way circuit under test; emode can't be changed.
 Operation mode and digroup name don't match
 Option not programmable for this NPC type
 PWR/MISC alarm is specified to a digroup other than DGA
 Parameter only valid with PA, PB, or PC type NPCs
 RT-DCLU cross-connect with different channel number
 RT-DCLU cross-connect with different ids
 RTF keyword and the operation mode does not match
 RTF keyword is used without DGA
 Range entered without FRC keyword
 Range not allowed for circuit type
 SC invalid for cross-connection specified
 Selectable AIS not valid for specified NPC(s) type
 Side specified for non-duplicated NPC
 Signaling processing is not activated for the channel
 Superuser logged on
 TG East/West type inconsistent with each other or circuit
 TS0 specified with width not 1
 TS16 specified for CAS TG
 TS16 specified for test with width not 1
 The RT id entered is not a retrofit one

mmmm *Explanation*

The common bit(s) is(are) not set in both FAC & PRIM
 The facility parameter not programmable for specified x or z parameter
 The parameter specified does not match with the NPC type
 The specified parameter is not applicable to operation mode of the RT
 Trunk type is not allowed in the circuit specified
 Unmatched channel range
 Unmatched channel range involving SLC Mode III termination
 Unrunnable CFT code
 Using the 24th channel of a DMI NPC
 Using the 24th channel of a T1DM NPC
 Virtual circuit is not specified for X.25 link
 XON/XOFF flow control is supported only on Snider link
 ZBTSI option is only valid with the ESF mode
 emode/fmode can't be changed under current test mode.
 x & z parameters on DSxyz are inconsistent

IDRG Command did not execute for any entity specified in the command

Ending channel is out of range
 First and Last NPCs are outside a module boundary
 First and Last NPCs are outside unit boundary
 Invalid FROM channel number range
 Invalid TO channel number range
 Invalid range for specified FROM NPC type
 Invalid range for specified NPC type
 Invalid range for specified TO NPC type
 NPC range crosses unit boundary
 OFFSET range is invalid
 Old and new chan on same NPC and within the range
 Only up to 4 historical data registers are allowed
 TG width too large for single NPCTG
 Threshold value is out of range
 Unit type (xyz) not supported
 input channel out of range (SLC not supported)

IICM Clear gateway test access disallowed.

SRDC timeslots are allocated on this NPC

IIDT AIS not entered for SPLTE/SPLTF/SPLTEF/LOOPE/LOOPF

mmmm *Explanation*

	Database conference width does not match the range in input command
	Illegal BBL BBL combination
	Illegal BBL SYM combination
	Illegal BRD BRD combination
	Illegal BRD SYM combination
	Illegal LEG LEG combination
	Illegal SYM BBL combination
	Illegal SYM BRD combination
	Invalid change from previous mode
	Invalid change parameter combinations
	Invalid input BBL as fmd in ONE-WAY command
	Invalid input BBL in terminated TWOWAY/ONEWAY command
	Invalid input BRD as tmd in ONE-WAY command
	Invalid test mode for a one-way test session
	Invalid test mode for an unmapped test session
	Invalid use of CONV keyword
	NPC is a channelized NPC
	NPC is a non-channelized NPC
	NPC is not a F-end
	NPC is not a Facility Access Digroup
	NPC is not an E-end
	NPC type mismatch
	No NPC's out of service and OOS keyword used
	No RDLD or CUS circuits and INCL keyword used
	Report interval is not an integral number of accumulation interval
	TO side is not a DMB type NPC
	This NPC type does not allow unframed Clear-DS1
	Transmission parameters in command will not change existing settings
	Trunk conditioning is invalid
IIFM	Bad FAC value entered
	Exceeded depth limit of 6 on broadcast conference concatenation
	FMC cannot be cross-connected in this format
	Invalid FROM NPC type for AIS insertion
	Invalid NPC type for AIS insertion
	Invalid TO NPC type for AIS insertion

mmmm	<i>Explanation</i>
	Try to operate a ONE-WAY conference with a TWO-WAY input command
	Try to operate a TWO-WAY conference with an ONE-WAY input command
IPNV	Accumulation Interval field is missing
	Accumulation Interval field is not allowed
	FAC keyword is invalid for this feature
	Historical data can not be specified
	Interval is not valid/not available
	Interval is not valid/not available
	Invalid direction specified for NTST TLA/TLR
	Invalid parameter combination
	Invalid use of INCL keyword
	Level field is not allowed
	MONDAT keyword is invalid for this feature
	MONDAT set to ALL is not allowed
	MONTIM set to ALL is not allowed
	Mismatch between channel 0 crossconnect and keywords
	Monitored Date field is not allowed
	Monitored Date field is not allowed
	Monitored Time field is not allowed
	Monitored Time field is not allowed
	NPC is non-channelized
	NPC number out of range
	No PM data available
	Only 15MIN for accumulation interval is allowed
	Only 15MIN for accumulation interval is allowed
	Only DAILY for accumulation interval is allowed
	Only DAILY for accumulation interval is allowed
	Only historical data can be specified
	Only one parameter is allowed
	PRIM keyword is invalid for this feature
	Scheduled reporting for this npc is inhibited
	Scheduling report could not be found
	The MONDAT and MONTIM parameters can not both be specified
	This NPC type does not allow Payload
NCON	No conditions

mmmm	<i>Explanation</i>
SAAL	Feature is active Manual Pending is Active PA NPC threshold already in allow mode Protection switching is already allowed The switch is allowed (not inhibited)
SAAS	All channels assigned, cannot be grown as NPCTG Another NPC is grown and added as this digroup BCON BBL has one or more legs under test Channel(s) is already registered Channels assigned, cannot be grown as test group Channels assigned, cannot be grown as test port Conference Port is currently registered to a different channel New bank id is an assigned one TG number previously assigned Termination is already assigned Termination is in process of being rolled The MIU is already equipped channel already under test channel part of a TP or TG circuit contains mapped channels for HUB request
SAIN	Loop back inhibited for digroup No mapped slots on a tsi No unmapped slots on a bus PA NPC threshold already in inhibit mode Parity channel cannot be within the range of a DS0 command. Protection switching is already inhibited Subject entity is pested Termination is under test or is a test port or group The switch is already inhibited can't change option, inhibition is active
SAIS	Both syncs are in-service CCN side s is in service CRO is still equipped Conference already exists DS3U NPC already In-Service

mmmm	<i>Explanation</i>
	DSPI is in service
	MIU is already in service
	Mate NPC (DGA/DGP) is in service
	NPC not IU/TI type
	Some TLIs are still equipped
	Some TSIs to degrow are in service
	Subject entity is in service
	TLI 3 or 4 still equipped
	Test group is not idle or frame is not In Service
	Test port is not idle or frame is not inservice
	The MMFG is already In-Service
	The MXR is in service
	The selected FLI is IS and Pested and at least 1 Service MXR is eqd
SAOP	RT's alarm exists
	This signal is already being sent
SAOS	A DMB on the UNIT is OOS
	Both syncs are out-of-service
	CCB is out of service
	CCI is out of service
	CCN side s is out of service
	CCNI is out of service
	DSPI out-of-service
	ETSI is out of service
	FC out of service
	FLI is out of service
	FMT is out of service
	FTMI is out of service
	File has already been cleared
	Formatter (FMT) on active CCN side is Out-Of-Service
	IU/TI type NPC failed
	MIU is out of service
	MXR is out of service
	Mate CCN side is out of service
	Mate SYNC is out of service
	NPC out of service or failed

mmmm	<i>Explanation</i>
	Protection MIU is out of service
	Protection MXR is out of service
	Protection entity out of service or failed
	SYNC is out of service
	Service MIU is out of service
	Service MXR is out of service
	Subject entity is out of service
	Sync 0 is not in-service
	Sync 1 is not in-service
	The MMFG is Out Of Service
	The mate FLI is OOS and Protection MIU is equipped
	The mate FLI is OOS and Protection MXR is IS
	The mate FLI is OOS and at least one Service MXR is equipped
	The protection FLI is out of service or pested (TOPRTN option)
	The selected MIU associated with the NPC is Out-Of-Service
	The selected MXR associated with the NPC is Out-Of-Service
	The service FLI is out of service or pested (TOSRVC option)
	UC is out of service
SAPS	Frame ID is protected
	The Service MMFG is already under protection
	The protection FLI is already selected (TOPRTN option)
	can't change option, protection switch is active
SAPV	option LOCAL already exists
	option REMOTE already exists
SARB	Exceeded limit of reports with accum. interval of 15 min. or less
	Exceeded maximum limit of PM reports
SARL	No FADs were activated by link n
	No test ports were activated by link n
SATF	Can't run test on active side
SAWS	An autonomous switch is in progress
	C-bit modify function is active
	C-bit operations are enabled
	Conference exists in a DMB
	Mapped slots exist on a tsi
	NPC already allocated as sync timing source

mmmm	<i>Explanation</i>
	NPC already grown as non-synchronization source
	NPC already has Equipment Loopback
	NPC is already grown and added as SLC digroup
	The Service MMFG is not under protection
	The service FLI is already selected (TOSRVC option)
SNAS	Connectivity contains unequipped units
SNIS	CPR is out of service
	Cannot clear journals for OOS unit
	DSPU unit controller is out of service
	NPC is OOS for a TGR command and OOS keyword not specified
	NPC not in service or failed
	RT/DL has unrestored DGA
	Sync source NPC is not inservice
	TD on one(both) sync(s) is not equipped or not in-service
	Unit(s) OOS, and additional backup required
SNOS	In-service NPC change not allowed
	Subject PWR to be cleared is not failed
SNVS	(Timing Distributor) TLI is not equipped
	1 hr >= 24 hr for DM opt
	15 min >= 24 hr for ERS opt
	15 min >= 24 hr for SERS opt
	15 min >= 24 hr for SLIP opt
	15 min >= 24 hr for US opt
	3 Timing Distributor type TLIs are equipped
	A DMB mode was assigned to a FTU-type NPC on the input
	A loopback is active on the FROM termination
	A loopback is active on the TO termination
	A user is already logged in on the link/vc
	Active CCN side is out of service
	Adding DL DGP forbidden for SLC 96 MD 1
	Alarm bits cannot be passed through or inverted
	All digroups not out of service
	Another signal already active prevents this signal from being sent
	Assignment of single priority to multiple SSPs
	At least one UC is OOS or At least one UC is failed

mmmm *Explanation*

At least one UC is not the correct type
Attempt to add to a null transmitting port
Attempt to remove a Service MIU which is under protection
Attention: preceding ccode 83 is an anomaly - see problem list
Autonomous loopback is active on DGA
Backup required before executing this command
Bad old_tape DB generic
Bad sync mode
Bad use of INCL, cannot override the current state of the conference
Bad use of INCL, cannot use keyword on conf.-to-conf. connection
Bit 3 provisioned for use as RAI3
Bit 4 provisioned for use as RAIS
Bit 4 provisioned for use as RBER
Bit 5 provisioned for use as SFI
Bit c not settable
Bits 3 through 8 are provisioned for Transmic 1G
Boot in progress, can't service request
Both sides of CCN are OOS
Broadcast unassigned channel/NPC in QRY,TO
C-bit modify function is disabled
CATP due to skipping continuity test for FMT
CCB is inservice but failed
CCI is inservice but failed
CCI is not present
CCNI is inservice but failed
CPR in buffer overflow condition
CRO type TLI (SSP portion not required)
CUS flag doesn't match that of conference
Can not use 12-th TP when NPCTP is in the T1DM or DMI mode
Can't disconnect return leg unless entire conference disconnected
Can't mount or unmount BOTH_MEM
Can't mount or unmount PMEM
Can't mount or unmount SMEM
Can't mount or unmount old_tape
Can't mount or unmount password recovery card

mmmm *Explanation*

Can't perform DMB CHG because NTR flag set on FROM side
Can't perform DMB CHG because NTR flag set on TO side
Can't start new session - previous session still verifying
Cannot create any more users
Cannot execute privileged command
Cannot perform DMB CHG on input direction A
Cannot perform DMB CHG on input direction B
Cannot perform DMB CHG on input direction F
Cannot perform DMB CHG on input direction G
Cannot perform DMB CHG on input direction L
Cannot perform DMB CHG on input direction T
Cannot remove Frame administrator
Cannot remove own link
Change not valid
Change to T1DM digroup with cross-connect that is not TRSP
Change to non-ESF digroup with 16-state cross-connect
Channel has a FAR, which is within the range
Channel or NPC not bridged
Channel out of bound in a BCON/v.c
Channels and conference port do not match
Clock absent for XPC to loop back
Combination of bit g (b7) and h (b8) is invalid
Command and protocol are inconsistent
Command invalid while backup in progress
Command is Frame administrator (DAX) only.
Conference Port is already registered to the same group of channels
Conference is LPD: has no switchable return leg
Conference is NTR: has no switchable return leg
Conference port is currently connected
Conference port is not registered
Conversion leg is terminated
Cross-connect to CPR is required
Customer controlled circuit, INCL not entered
DB MP or units ram error
DB retrofit fail

mmmm *Explanation*

DCTN conference channel cannot be rolled
DGA is not added
DGN on subject entity denied
DGP is protecting a primary digroup
DL ffff is used w/ operational mode other than Mode I
DMI combined with T1DM
DSPP not in service, or failed
DSPP pack FTMI Failed or Out of Service
DSPP pack NPC Failed or Out of Service
DSPP pack UC Failed or Out of Service
Database is empty
Database is not empty
Database not loaded
Delete or change a leg from a conference that has no leg
Deny Clear-2MB for Alternate Maps
Deny SLC for Alternate maps
Deny SP Type NPCs for Alternate Maps
Deny non-channelized NPCs for Alternate Maps
Designated TG or circuit to be tested in process of being rolled
Different DSxyz types are used for DGA/DGP on same DDC for Mode I
Digroup is protected
Disable not allowed - supports another feature
ETSI cannot be initialized when ECCN side is OOS or inservice but pested
ETSI is inservice but failed
ETSI is not present
Entity can't be addressed in this configuration
FC is inservice but failed
FLI is inservice but failed
FMT is in service but failed
FPI on SMEM does not match one on PMEM
FRC specified for protection, and service MMFG is In Service
FROM is a two-way and no CONV specified
FROM is not a backbone leg
FTMI is PESTED
FTMI is in service but failed

mmmm *Explanation*

FTMI type error
 Fail transfer DB from old_tape to SMEM
 Feature deactivation would leave system with core software
 Feature not enabled
 File already exists
 File doesn't exist/can't be accessed
 File is being accessed
 File is empty
 Firmware timing invalid for Transmic 1G NPC
 Flash Card is bad
 Flash Card is empty
 Flash Card is not present
 Frame is not in MCOND
 Frame time is not set
 Framed/Unframed clear 2Mbit/s NPC invalid for Automatic CRC-4
 Framed/Unframed clear 2Mbit/s NPC invalid for Firmware Timing
 Framed/Unframed clear 2Mbit/s NPC invalid for Transmic 1G, 2G
 G1 SMEM for SMEM->PMEM w/journals
 G4 to G4.1 retrofit failed
 Gateway test access not supported
 Hardware mismatch or not present
 INCL keyword needed when restricted Insertion Word specified
 IW is UMUX (18) but NPC not type DE4yz
 IW not allowed to be specified in Clear 2Mbit/s
 Illegal SSP type (not same as other SSPs)
 Illegal priority value
 Illegal test access mode for TS0
 Illegal test access mode for TS16
 Improper roll command sequence
 Inactive side NPC out of service and inactive side in service
 Incompatible types of NPCs in a DDC
 Incorrect language/addressing mode
 Incorrect number of parameters
 Incorrect or missing password
 Incorrect pack type in slot

mmmm *Explanation*

Initialization of application in progress,
retry command later
Input BRD (BBL) has same NPC and channel as BBL (BRD)
Insufficient data for setting up a conference
Invalid NPC number specified
Invalid PWR/MISC alarm level
Invalid combination of "x" and "y" values
Invalid combination of "x" and "z" values
Invalid executable on card
Invalid option, mailbox or flag
LEG mode was assigned to a DSPU-type NPC on the input
LLB not initiated
LPD invalid since existing conference is not already LPD
Language "F" provisioned for this channel
Language is not allowed
Last link in service
Line Loop Back is active
Line format types are incompatible
Link being used is not Link 1
Logical conflicts found in the map
Looped Circuit Access not allowed
MP database not consistent with Configuration file
Major/Minor BER threshold value is invalid for SLC NPCs
Maj|Min BER threshold is 7, but not in T1DM or Fe mode
Map/macro file write deferred until backup is completed
Mapped parity channel(s) on new
Mate RT/DL mode is different
Mate sync pack denied command
Maximum number of CPRs have already been grown for this unit
Minor <= major for BER opt
Minor >= major for COFA opt
Minor >= major for SLIP opt
Minor Slip threshold disabled before Major Slip threshold
Mismatch between MXR and NPC types
Mismatch between service MXR and protection MXR types

mmmm *Explanation*

NEW NPC already cross-connect or mapped channel(s) on new
 NPC addressing scheme selected is not allowed in the configuration file
 NPC as 12th test port can not change to DMI nor T1DM
 NPC has active circuit
 NPC has been designated as NPCTG
 NPC has been designated as NPCTP
 NPC invalid type
 NPC is NPCTG and chan 24 is used in a TG;Can't change to T1DM or DMI
 NPC is NPCTG, changing to CAS/NSA is not allowed
 NPC is a Facility Access Digroup
 NPC is a test port
 NPC is not a NPCTG
 NPC is not a NPCTP
 NPC is not added
 NPC is not designated for this NPCTP/NPCTG
 NPC is still provisioned to provide sync timing
 NPC not DA or TA type.
 NPC not deleted
 NPC not designated as sync timing source
 NPC providing timing to inservice SSP
 NPC type error
 NPC type is inconsistent with FTMI type
 NPC type option xyz is unassigned
 NPC type option xyz is unassigned or invalid for feature package
 NTR invalid since existing conference is not already NTR
 New NPC same as existing one
 New in CGA or PBA
 No CBTYPE NPC capacity remaining
 No DL digroups can be added until the associated RT bank is created
 No Facility Line Interface (FLI) is In Service
 No SAFE alarm for DGP
 No available timeslots on any of the inservice NPCS associated with FC/FMT
 No edit session active
 No equalization for CEPT FTMI
 No macro is currently executing

mmmm *Explanation*

No mapped channel on old
 No protection switch is currently active
 No signals active
 No unmapped time slot
 No user is logged in on the link/vc
 No user/link needs to be changed
 No zeros allowed for DAX privilege
 Not Timing Extractor type TLI (not SSP)
 Not a CRO TLI
 Not a DACS II compatible Flash Card
 Not enough DSPPs are in service
 Not enough TSIs for CCB test
 Not first channel in a BCON/virtual conf
 Not valid for frame administrator
 Number of DGPs on each unit is limited to 32
 Number of SLC RT's on each unit is limited to 80
 OLD termination is not mapped
 Obsolete circuit type
 Old and new channels have not been paired by a BCAST command.
 Old_tape is not present
 Old_tape unit is not restored
 Old_tape with journal
 One of the FAR end channels is being rolled
 One of the far NPC(s) is SLC
 One or more FADs could not be released
 One or more test ports could not be released
 One way unassigned channel/NPC in QRY,TO
 Only one channel allowed to have this language
 Option NOT leg can not appear with F, T, or B
 Option NOT leg is not a FTU leg
 Option NOT leg is not in conference
 Other FLI is OOS
 Other NPC on this DDC not the same digroup for Mode I DGA/DGP
 PDI Version number mismatch
 PMEM and SMEM are different

mmmm *Explanation*

PMEM and SMEM synchronization fail
PMEM error, boot from SMEM
PMEM not in service or not ready
PMEM not restored
Parity channel out of bound on new
Password recovery card is not READ-only
Point number mismatch
Priority values are same
Problem occurred while accessing BOTH_MEM
Problem occurred while accessing PMEM
Problem occurred while accessing SMEM or unformatted SMEM
Problem occurred while accessing old_tape
Protection switch existing is autonomous
RCV continuity test won't be run: SYNC OOS or pested
RCV continuity test won't be run: at least one timeslot in use
RCV continuity test won't be run: no DMB timeslots available
RCV continuity test won't be run: no available inservice NPCS for FC/FMT
RDLD flag doesn't match that of conference
RTBC conference exists
Range overlapping between FROM and TO or between two TOs
Ranges of old and new do not match
Reading Feature Package Id from PMEM failed
Red circuit, INCL not entered
Release number mismatch
Report already exists
SLC 96 MD 1 RT DGP requires mate NPC to be unequipped
SMEM error, boot from PMEM
SMEM is not present
SMEM unit is not restored
SR NPC was specified - not allowed
SSC Diagnostic Failure
SSP number is illegal
SSP number required
SSP type(options) same
SSP with 0 priority present

mmmm *Explanation*

SSP with non 0 priority present
 SYNC is inservice but failed
 Signaling state of the trunk failed for the channel
 Skip error summary since adjacent pack not in service or pested
 Software Identification Block failed comparison
 Software Identification Block is not readable
 Some associated NPCs are equipped
 Some circuits not activated,cleared or pictured
 Source does not contain requested information
 Specified width does not match existing conference width
 Stratum not allowed
 Sync architecture different
 Sync architecture is same
 Sync mode is same
 Sync stratum is same
 Syncs are equipped
 System macro/map space is full
 T1DM or DMI mode and channel 24 is connected
 TB type in hardware mismatches DB
 TO is a part of the same conference as a previous TO
 TO is already the return leg
 TO is not a leg of this/any conference
 TO is the backbone leg of a conference
 TO side of two-way to be converted is not an FTU NPC
 TS0 connected to nonTS0 in Mode 2 - "a" should be "-" or equal to "b"
 Termination is a test port
 Termination is protected (RDL D)
 Termination is under customer control (CUS)
 Termination is under test
 Test ports must be on CAS
 Test session already exists
 Testport/testgroup channel cannot be rolled
 The INCL keyword is needed for DGA
 The MMFG is protected
 The NDL options are different for DGA's on the same DDC for Mode I

mmmm *Explanation*

The NPC of VC BBL leg doesn't match that in the input command
 The NPC to delete has not been previously added to map
 The OLD or NEW NPC is already being rolled.
 The associated MMFG is under protection (for Service MIUs)
 The associated MXR is In-Service but pested
 The conference does not exist
 The first channel of VC BBL leg doesn't match that in the input command
 The first channel of VC BRD leg doesn't match that in the input command
 The input BRD leg is not in VC
 The map is not valid
 The mode of the RT is not applicable
 The reference map does not exist
 The requested digroup is carrying service
 The selected MIU associated with the NPC is In-Service but failed
 The selected MXR associated with the NPC is In-Service but failed
 The session is terminated due to maintenance operation
 The total number of receiving ports specified exceeds the max.
 There are no INS MXRs to run test on
 Timeslot channel numbering not allowed with CAS
 Timing Extractor type TLI (need SSP info)
 Timing Extractor type TLIs are present
 Transmic 1G NPC designated as SYNC source invalid
 Transmitting port cannot be dropped
 Tried to disconnect a nonexisting VC
 Trunk conditioning doesn't match that of conference
 Try to add a BBL to VC, but the VC already has backbone
 Try to delete a BBL leg from VC; however, VC has no BBL leg
 Try to delete a BRD leg from VC; however, VC has no BRD leg
 Trying to add a BBL leg to a conference set up as SYM
 Trying to add a BBL to a DMB conference that already has one
 Trying to add a SYM leg to conference set up as broadcast
 Trying to add a broadcast leg to a conference set up as SYM
 Trying to add or delete a leg when a conference is under test
 Trying to change in NTR direction
 Trying to change level in on BBL leg

mmmm *Explanation*

Trying to change level out on BRD leg
Two digroups from same bank added to different FTMI's
UC is in service but failed
Unable to verify Configuration file since MP DB not loaded
Unassigned operational mode
Unframed clear 2Mbit/s NPC invalid for Bit 4 used as RA IS/RBER
Unframed clear 2Mbit/s NPC invalid for TS0 processing
Unit is not FTU type
Unit type error
Unmapped channel(s) on old
Unpeping error registers for subj. entity failed
Use of this NPC is RESERVED for SLC 96 MD 1
User does not exist
User has been created
User has logged in somewhere
User is not logged in
User logged off during session
User login-id is not DAX
User macro/map space is full
User quit the menu
User still owns files
Width of existing two way does not match conference width
Write to CPR failed
Writing Feature Package Id to PMEM failed
Wrong SSP type(Timing Extractor type)
Wrong TLI type
Wrong TLI type (need CRO grow command)
X option is illegal
XMIT continuity test won't be run: CFT code specified
XMIT continuity test won't be run: no XMIT timeslots available
Y option is illegal
Z option is illegal
channel is OCON in opposite direction
circuit already terminated
circuit not terminated

mmmm	<i>Explanation</i>
	hub id not set when MJU pack grown
	invalid mode for TLA/TLR
	invalid test access mode
SOSF	All CBTYPE NPCs out of service or failed
	DSPU unit controller is failed
SPFA	No protection is available for the Service MMFG
	Protection switch process failed
SPSW	The Protection MMFG is selected, and auto. switchback is unavailable
	The protection MMFG is serving another facility
SROF	(NPC) Hardware mismatch
	BOOT on subject entity failed
	CCN denied request
	Can't lock or unlock ram database
	Circuits TCONed itself cannot be UTST
	DB can't get the slave mail box
	DB can't send or receive mail
	DGN on subject entity failed
	Failed to boot CI
	Failed to boot CONF file
	Failed to boot DB
	Failed to boot journal--recurrence indicates database corruption
	Failed to boot subject CCN side
	Failed to boot unit
	Failed to switch SYNC side
	General boot failure (vanilla flavor)
	IU/TI type NPC
	MIU is failed
	MXR is failed
	Mismatch between MXR and MIU HDW types
	NPC Failed or Out of Service
	No Memory Backup Has Been Scheduled
	None of the designated NPCTG(s) are equipped
	None of the designated TG(s) are equipped
	PMEM verification failed
	RST failed to boot DB

mmmm	<i>Explanation</i>
	RST failed to boot program
	SSC software out of date
	Sync not completely reset
	Sync pack denied command
	Syncs failed to cross couple
	The MIU boot failed
	The MIU diagnostics failed
	The MXR boot failed
	The MXR diagnostics failed
	Unit 1 denied request
	Unit 2 denied request
	Unit 3 denied request
	Unit 4 denied request
	Unit 5 denied request
	Unit 6 denied request
	Wrong MXR type grown for this MIU
SRTN	Test Port release failed
	Test group release failed
SWFA	Active CCN side not IS or failed or pested or hardware OOS
	Boot TLI failed
	Checksums verification failed
	DB PMEM error OP-CL-RD-WR-SK
	DB SMEM error OP-CL-RD-WR-SK
	DSPI failed
	Data link failed
	Device failed to format
	Device failed to initialize
	Far end failed to respond
	Hardware database mismatch
	MXR LOS with unselected FLI
	Selected FLI has LOC with at least one inservice MXR
	Sync is not configured yet
	Unselected FLI has LOS with at least one inservice MXR

mmmm	<i>Explanation</i>
NCON	No conditions
SAOP	SYNC autonomously restarted itself
SAOS	CRO declared OOS
	Mate link down
	Mate out of service
	TL out of service or loss of signal
SARL	TL error cleared
	TLI error cleared
SAWS	SYNC switched TLIs/SSPs
	SYNC switched to FAST mode
	SYNC switched to HOLDOVER
	SYNC switched to NORMAL mode
	SYNC switched to cross couple
SROF	BX Access Error
	BX stuck CCNI summary bit
	BX stuck summary bit
	Both syncs time base oven is cold
	CCNI summary bit set; no more info
	CPR serial access error
	DMB access error (e.g. pack not there)
	FC can't be accessed
	FLI access error
	FMT access error
	Invalid DDC pack id
	Invalid FPA state
	MIU access error
	MJU serial access error
	MXR access error (can't access pack)
	NPC can not be accessed
	NPC is alarming on FC
	Pack can't be accessed
	SRM serial access error
	TB i/o err. cant read TB packid or oven monitor
	Time base frequency drift
	Time base oven is cold

mmmm	<i>Explanation</i>
	Unknown what sync switched to
SWFA	Address Parity Error
	Address bus parity error
	Autonomous switch enable error
	BX Ram Parity Over High Byte
	BX Ram Parity Over Low Byte
	Bad EMXR Acknowledgement
	Bad Ram Data in DMB device (bits alarms)
	Bad UBX pack
	Bus Error Alarm
	Bus Terminator pack is not present
	Bus address error
	Bus status register parity error
	CC configuration register error
	CC exercise error
	CC instruction ram error
	CC parity error
	CC receiver data error
	CC summary bit error
	CC transmit data error
	CCB clock error
	CCB input port alarm error
	CCB packid error, wrong pack, can't read pack
	CCB sync pulse error
	CCB zero bit is stuck at 1
	CCI -5.2 power supply has failed
	CCI 240 sync is misaligned with frame sync
	CCI Peripheral Unit Alarm
	CCI detected Address Parity error
	CCI detected Bus Status Parity error
	CCI detected high byte data parity error
	CCI detected low byte data parity error
	CCI loss of 240 Frame Sync
	CCI loss of 8 KHz Frame Sync
	CCI pack is not present

mmmm *Explanation*

CCI pack's summary is set but has no errors
 CCIERR bit is stuck in system status reg
 CCNI access error (cannot access pack)
 CCNI stuck register bit, summary set, no other alarms
 CEC bit on PRISM not cleared
 CIA Device Error
 CIB Device Error
 CIC Device Error
 CPR D-Bit interface parity error
 CPR FIFO FRDY/FFULL stuck bit
 CPR clock error
 CPR control memory failure
 CPR control memory or state machine failure
 CPR input data interface error
 CPR processor interface failure
 CPU RAM Parity error
 CPU internal bus error
 CPU parallel bus parity error
 CPU serial bus parity error
 CRO error, unknown due to link, SYNC error
 CRO frequency offset
 CRO loss of energy CRO error
 CRO loss of energy detected SYNC error
 Can't access link
 Can't communicate to CCI pack(incorrect version number)
 Can't communicate to ETSI pack (incorrect version number)
 Channel controller frame sync error
 Channel controller loss of clock
 Chip ID Comparison
 Circuit ID Error
 Conference 0 DMB device (chip) error
 Conference 0 DMB input data parity error
 Conference 0 control interface error
 Conference 0 control ram parity error
 Conference 1 DMB device (chip) error

mmmm *Explanation*

Conference 1 DMB input data parity error
Conference 1 control interface error
Conference 1 control ram parity error
Control Memory 0 DMB input data parity error
Control Memory 0 control interface error
Control Memory 0 control ram parity error
Control Memory 0 loss of sync error
Control Memory 1 DMB input data parity error
Control Memory 1 control interface error
Control Memory 1 control ram parity error
Control Memory 1 loss of sync error
Control RAM BIST flag is set
Control RAM address parity error
Control RAM circuit pack parity
Control RAM device can't be accessed (incorrect chip Id)
Control RAM device is in reset state
Control RAM parity error
Control RAM port alarm
Control RAM port alarm summary is stuck
Control RAM stuck bit error
Control RAM sync alarm
Control RAM write data parity error
Control data readable output latch error
Corresponding CCNI bit is stuck
Cross couple fast lock range
Cross couple frequency offset error
Cross couple loss of energy
Cross couple out of lock
Cross couple real time violation
D5 Spare Bit Error
D7 Spare Bit Error
DDC Stuck Bit on FTMI
DMB FIFO error
DMB bits stuck in exercise register
DMB clock error

mmmm *Explanation*

DMB conference error 0 (used for trans)
 DMB conference error 1 (used for trans)
 DMB control memory error 0 (used for trans)
 DMB control memory error 1 (used for trans)
 DMB data processing error
 DMB parallel access error
 DMB serial access error (pack not there)
 DPC ROM error
 DPC loss of timing
 DSPI access error (e.g. pack not there)
 DSPI bus address parity error
 DSPI bus data parity error
 DUART error
 Data RAM BIST flag is set
 Data Strobe Signal
 Device clock error
 Device control ram parity error
 Duplex entity failed diagnostics
 EMXR DUART error
 EMXR Timer error
 EPROM checksum error
 ETSI Rcv MDX summary stuck bit
 ETSI TRD3ST exercise bit is set
 ETSI TX MDX summary stuck bit
 ETSI control RAM summary stuck bit
 ETSI loss of 240 frame sync
 ETSI loss of 32.768 MHz clock
 ETSI loss of Vdd (3.3v) power
 ETSI pack is not present
 ETSI pack's summary is set on CCI but has no errors
 ETSI ready high error on CCI
 ETSI ready time-out error on CCI(ETSI can't be accessed)
 Error due to unused bit
 Error due unknown reasons
 Error from side 0 bus extension

mmmm *Explanation*

Error from side 1 bus extension
Error in HSCC register
Error in PRISM register
FC Stuck Bit on FTMI
FLI address bus parity error
FLI circuit id error
FLI communication link error
FLI frame sync or internal error
FLI lock and key alarm
FLI loss of clock
FLI loss of signal
FLI register bit stuck
FMT 0-4TF timing error
FMT FIFO or control PROM error
FMT RF control bus error
FMT RF port alarm; no monitor alarms
FMT RF port and monitor alarms
FMT TF control bus error
FMT TF device or clock receiver error
FMT bus timeout
FMT communication link error
FMT error summary 1 stuck bit
FMT error summary 2 stuck bit
FMT link id error
FMT lock override, active select or kill parity
FMT multiple TF clock error
FMT multiple TF network data error
FMT multiple TF sync error
FMT serial address parity error
FMT single TF network data error
FMT single TF sync error
FMT timing error
FMT timing error, RF data parity
FTMI lost clock
Facility Processor Sanity Error

mmmm *Explanation*

Facility errors
Failed to write XPC register
Fan Bank One Error Flag
Fan Bank Zero Error Flag
Firmware error
Frame Audit reboot DDC failure
Hard Error stuck bit
Hard RAM error
Hard ROM check error
Hardware Boot Failed
Hardware Failure
Hardware database mismatch
High data byte bus parity error
Illegal exercise bits set
Illegal/unknown condition code
Interrupt controller error
Interrupt holding register error
Invalid code checksum
Loss of energy on generated SYNC pulse
Loss of energy on output of frequency synth.
Loss of energy on output of phase shifter
Loss of energy on time base strobe signal
Loss of timing alarm
Lost Clear-To-Send signal on X.25 links
Low data byte bus parity error
MIU communication link error
MIU got reset
MJU clock error
MJU control memory failure
MJU control memory or state machine failure
MJU error correction circuitry failure
MJU input data interface failure
MJU output block failure
MJU processor interface failure
MJU sampling circuitry failure

mmmm *Explanation*

MP-SYNC communications failure
MTC stuck summary bit
MXR 45MHz is not phase locked to system clock
MXR DS3 loss of signal
MXR HSCC device error
MXR LCA error
MXR M12 device error
MXR M12 summary stuck error
MXR M13 summary stuck bit error
MXR M23 device error
MXR M23 summary stuck error
MXR PIF Bus Parity Error
MXR PIF I/O device error
MXR RAM error
MXR ROM error
MXR channel controller configuration register error
MXR channel controller exercise error
MXR channel controller frame sync error
MXR channel controller instruction ram error
MXR channel controller loss of clock
MXR channel controller parity error
MXR channel controller receiver data error
MXR channel controller stuck bit error
MXR channel controller transmit data error
MXR communication link error
MXR facility error stuck bit
MXR firmware error
MXR hard error stuck bit
MXR loss of clock from unselected FLI
MXR pack is in reset state
MXR program error
MXR queue overflow
MXR transceiver framer error
MXR transceiver receive sync error
MXR transceiver summary stuck bit error

mmmm *Explanation*

MXR transceiver transmitter error
MXR unknown error
Mate sync hardware error
Multiple clock errors, CCB/SYNC problem
Multiple data parity error, CCB problem
NPC address parity error
NPC bus error
NPC's facility queue overflow condition
OOS RAM test ran while IS
Output data parity error (from an FTM)
PLL end of range
PLL end of range implicating TL
PLL excessive phase error (125 uSec out of phase)
PLL fast start time out
PLL real time violations
PUERR bit is stuck in system status reg
Pack id error, can't read pack
Packet layer parameters are mismatched between DACS II and the network
Peripheral unit port alarm (RCV MDX)
Phase/frequency output latch error
Possible power failure on side
Power Failure
Queue overflow error
R20 counter reaches limit
RAM data error
RAM data error, RAM address line stuck
RF bus error
ROM checksum error
Receive MDX address parity error
Receive MDX can't be accessed (incorrect chip Id
Receive MDX data source time slot parity error
Receive MDX sync error
Receive MDX write data parity error
Receiver Formatter Error
Receiver Time-out

mmmm *Explanation*

SRM clock error
SRM control memory failure
SRM error correction block failure
SRM input data interface failure
SRM multiplexor block failure
SRM output block failure
SRM processor interface failure
SYNC Error
SYNC summary is set on CCI circuit pack
Sanity Time-out
Sanity Timer Interrupt
Source of error is unknown
Source of error was not found
Stuck bit in register
Sync says its down
Sync says its time base is down
T3 timer expires
TL error reported, unknown
TLI error, link went down before status read
TLI hardware error
TSI device error
TSI device id error, cannot read device
TSI stuck bit, summary bit set, no devices alarming
TSIERR bit is stuck in system status reg
The 32 MHz clock is out of lock
Time base loss of energy detector
Timeout for Yellow Inhibit/Enable Request
Timeout while waiting for msg from EMXR
Timer 1 error
Timer 2 error
Timer Error
Timing Extractor type TLI has autobaud failure
Timing Extractor type TLI has hardware problem
Too many interrupts or illegal interrupt from XPC
Transceiver A Error

mmmm *Explanation*

Transceiver A stuck bit
Transceiver A transmit slip
Transceiver B Error
Transceiver B stuck bit
Transceiver B transmit slip
Transmit Formatter Error
Transmit MDX address parity error
Transmit MDX can't be accessed (incorrect chip Id
Transmit MDX data parity error
Transmit MDX data source time slot parity error
Transmit MDX sync error
Transmit MDX write data parity error
Transmit Time-out
Transmit time-out because Clear To Send lost
Transmit underrun threshold exceeded
Uart error
Unit could not be reset
Unit failed sanity check
Unknown DPLL error
Unknown PLL error,link went down before reading status
Unknown interrupt from BX
Unknown interrupt from MTC
Unknown mate error, link went down before read status
Unknown time base error
Unused bits on MTC pack
failed to switch CCN sides
failure to insert TCC
failure to remove TCC
softerr failure which forces link removal

Index

A

Abort, 13-1
About This Document, i
Activate, 5-2
Activate Alternate Maps, 5-2
Activate Facility Loopback, 2-6
Activate Facility Test Signal, 2-6
Add, 2-5
 Link, Protocol, Baud, 1-3
 Link, X.25, Protocol, Data Link, Layer
 Parameters, 1-2
 Network Processing Circuit, 2-5
 NPC Addressing and Priority, 1-4
 TABS Link Parameters, 1-2
 User, 1-2
 User/Link Language, 1-4
 X.25 Link Parameters, 1-3
Add NPC to SLC® Carrier Bank, 13-2
Administrative Link, 9-2
Administrative Link, Restore, 9-2
Alarm Cutoff, 13-2
Alarm Option, AIS, 12-8
Alarm Suppression,
 Change for DS1s Within a DS3, 7-6
Alarms, 12-4
All, 12-8, 12-15
All Common Equipment, 12-13
All ETSIs, 8-2, 9-2
All ETSIs on ECCN Side, 12-2
Allow DS1 Performance Monitoring
 Report, 3-1
Allow Switch of MMFG, 13-1

Allow Termination of Protection
 Switching, 13-4
Alternate, 4-5
Alternate Cross-Connection, 4-5
Alternate Maps,
 Activate, 5-2
 Create Picture, 5-2
ANSI NPC, 2-2
ANSI NPC Test Signal, 12-14
Append Component, 13-1
Association of NPC with SLC® RT, 2-5

B

Backup Memory Transfer, 13-2
Bank Number, 7-4
Bridge, 6-1
Broadcast, 4-1–4-4, 12-5
Broadcast Cross-Connection, 4-1, 4-2
Broadcast Disconnection, 4-3, 4-4
Broadcast, All, 12-5
Broadcast, From, 12-5

C

CCI and BT Packs, 12-1
CCNI, 12-1
CD-ROM Documentation, xvi
Change,
 Bank Number, 7-4
 Circuit Parameters, 7-1, 7-5
 Connectivity, 7-1
 Cross-Connect Termination
 Status, 7-5
 DS3 Parameters, 7-5

Change (Continued)

- DS3U NPC Type, 7-3
 - FTMI Equalization, 7-4
 - Hub Identification, 7-5
 - NPC AIS Alarm Option, 7-2
 - NPC Options, 7-2
 - NPC Type, 7-2
 - Options, 7-3
 - Priorities and/or Type, Synchronizer or NPC, 7-4
 - Pwr/Misc Option or FPC RT Retrofit Status, 7-4
 - Subrate Cross-Connection, 7-1, 7-2
 - Subrate Error Correction
 - Location, 7-4
 - Subrate Established Channel, 7-2
 - Subrate Terminate and Leave, 7-6
 - Subrate Test Access Split, 11-2
 - Switch, TOX, 7-1
 - Terminate and Leave, 7-6
 - Test Access Time Slot, 11-2
 - Type, Options, 7-4
 - Unprotected Alarm Setting, 7-5
 - User Password, 1-1
 - User/Link Screening, 1-4
- Change DS1 Alarm Suppression for DS1s Within a DS3, 7-6
 - Change for DS1s Within a DS3, 7-6
 - Change Macro Space, 5-2
 - Change NPC Frame-Word Setting, 7-3
 - Change NPC Time Slot Zero, 7-3
 - Change NPC Type for TH Type NPCs, 7-3
 - Change RT/DL, 7-4
 - Change Space, 5-2
 - Change Termination Status, 7-5
 - Change Test Access Split, 11-2
 - Change Time Slot, 11-2
 - Change Time Slot Zero Monitor, 7-3
 - Change/Set Options, 7-2
 - Circuit Parameters, 7-1, 7-5
 - Circuit Parameters, Change, 7-1, 7-5
 - Circuit Status, NPC, 12-5
 - Circuit/Hardware Subrate Trace, 12-6
 - Clear Backup Failure, 12-4
 - Clear Facility Performance Parameters, 3-2
 - Clear Power Supply, 12-4
 - Clock Control Interface, 8-1
 - Clock Control Interface, Remove, 8-1
 - Clock Reference Oscillator, 2-3, 9-3
 - Clock Reference Oscillator, Restore, 9-3
 - Communications Interface, 12-1
 - Configure, 12-9
 - Configure Digroup Circuits, 6-2
 - Configure Frame, 2-6
 - Configure Synchronizer, 2-6, 7-4
 - Configure Synchronizer Stratum, 7-4
 - Connectivity, 7-1
 - Connectivity, Change, 7-1
 - Contents of Document, viii
 - Control and Clock Interface, 9-1
 - Control and Clock Interface, Restore, 9-1
 - Conventions Used, x
 - Copy NPC, 13-2
 - Create Picture, 5-2
 - Create Picture Alternate Map, 5-2
 - Create/Edit, 5-2
 - Create/Edit a Macro or Map, 5-2
 - Cross-Connect Buffer, 9-1, 12-1
 - Cross-Connect Buffer (Non-CEF Only), 8-1
 - Cross-Connect Buffer (Non-CEF Only), Remove, 8-1
 - Cross-Connect Buffer, Restore, 9-1
 - Cross-Connect Circuits, 4-5
 - Cross-Connect Circuits, Disconnection, 4-5

- Cross-Connect Map, Query-Full, 12-5
- Cross-Connect Map, Query-Partial, 12-5
- Cross-Connect Network Interface, 8-1, 9-1
- Cross-Connect Network Interface, Remove, 8-1
- Cross-Connect Network Interface, Restore, 9-1
- Cross-Connect Status Bus, 12-12
- Cross-Connect Termination Status, 7-5
- Cross-Connection, 10-1, 10-2
 - Alternate, 4-5
 - Broadcast, 4-1, 4-2
 - Change Termination Status, 7-5
- Cross-connection,
 - One-Way, 4-2
- Cross-Connection,
 - One-Way, 4-2
 - One-Way Non-Channelized Digital Signal, 4-2
 - Subrate, 10-1, 10-2
 - Subrate, Change, 7-1, 7-2
 - Subrate, Terminated, 10-1, 10-2
 - Terminated, Subrate, 10-3
 - Two-Way, 4-2, 4-3
- Cross-connection,
 - Two-Way Non-Channelized Digital Signal, 4-3
- Cross-Connection,
 - Two-Way, Multipoint, 4-3

D

- Date, 12-6
- Deactivate Facility Test Signal, 2-6
- Delete, 5-1
- Delete (Continued)
 - Association of NPC with SLC® RT, 2-5
- Delete Feature Package
 - Identification, 13-2
- Delete Lines, 5-1
- Delete Lines From Macro, 5-1
- Delete Macro, 5-1
- Delete User, 1-2
- Deprovision,
 - Facility Terminating Module Interface, 2-5
 - Multiplexer, 2-5
 - Multiplexer Interface Unit, 2-5
 - NPC, 2-4
 - Synchronizer Time Base, 2-4
 - Synchronizer Timing Link Interface, 2-4
 - Test Port, 2-4
 - Test Port NPC, 2-4
 - Test-Access Group, 2-4
 - Test-Access Group NPC, 2-4 Unit, 2-5
- Destination Cross-Connect, 12-10
- Diagnose,
 - All ETSIs on ECCN Side, 12-2
 - CCNI, 12-1
 - Communications Interface, 12-1
 - Cross-Connect Buffer, 12-1
 - DSPU, 12-3
 - ETSI, 12-1
 - Facility Terminating Module Interface, 12-3
 - FLI, 12-3
 - FMT, 12-3
 - Format Converter, 12-3
 - Link, 12-2
 - Main Controller, 12-2
 - Main Processor, 12-2

- Diagnose (Continued)
 - Memory Card, 12-2
 - MIU, 12-4
 - MXR, 12-4
 - Network Processing Circuit, 12-2
 - Network Processing Circuits, 12-2
 - Synchronizer, 12-2
 - Synchronizer Timing Link
 - Interface, 12-3
 - Time Slot Interchange, 12-3
 - Time Slot Interchanges, 12-3
 - Unit On UC, 12-4
- Diagnostics,
 - CCI and BT Packs, 12-1
- Digital Signal Processing Unit NPC, 2-1, 2-2
- Disconnect, 6-1
 - One-Way, 4-4, 4-5
 - Test Access Time Slot, 11-4, 11-5
- Disconnect DS0 Circuit Roll, 6-1
- Disconnect Facility Roll, 6-1
- Disconnect Time Slot, 11-4, 11-5
- Disconnection, 10-4, 10-5
 - Broadcast, 4-3, 4-4
 - Cross-Connect Circuits, 4-5
 - One-Way,, 4-4
 - Subrate, 10-4, 10-5
 - Two-Way, 4-5
- Disestablish Channel, 10-5
- Disestablish Subrate Channel, 10-5
- Document Contents, viii
- DS0 Circuit, 6-2
- DS0 Circuit Roll, 6-2
 - Bridge, 6-1
 - Disconnect, 6-1
- DS1 Performance Monitoring Report
 - Schedule, 12-7
- DS1 Roll, 12-13
- DS3 Alarms, 12-5

- DS3 Bit Error Rate, 12-10
- DS3 Line Build Out, 12-10
- DS3 Parameters, 7-5
- DS3U NPC Type, 7-3
- DSPU, 12-3

E

- ECCN Error Source Register, 12-11
- Edit Delete, 5-1
- Edit Delete Map, 5-1
- Electronic Documentation, xvi
- Emode, Non-Channelized Test
 - FAD, 11-2
- Entity Equipage, 12-15
- Equalization, 12-15
- Equipage of ETSIs, 12-13
- Equipage Status, 12-15
- Equipage, Common, 12-13
- Equipment Connectivity, 12-5
- Equipped Multiplexer Interface
 - Units, 12-13
- Equipped Multiplexers in DS3 Unit, 12-14
- Equipped NPCs, 12-14
- Equipped TSIs, 12-15
- Error Correction Location, 12-9
- Error Recovery, Software/Hardware
 - Query, 12-7
- Error Source Register, 12-11, 12-12
- Error Source Register Formatter, 12-12
- Error Source Register FTMI, 12-12
- Error Source Register Main
 - Processor, 12-11
- Error Source Register Multiplexer, 12-12
- Error Source Register, Facility Line
 - Interface, 12-12

Error Source Register, Multiplexer
 Interface Unit, 12-12
ESR for FTU or Subrate NPC, 12-11
Establish Channel, 10-4
Establish Channel, Subrate, 10-4
Establish Subrate Channel, 10-4
ETSI, 12-1
ETSI, Remove, 8-2
ETSIs, Remove All, 8-2
ETSIs, Restore All, 9-2
Execute, 5-2
Execute Macro, 5-2
Expanded Time Slot Interchange, 9-1
Expanded Time Slot Interchange,
 Restore, 9-1

F

Facility Alarm, Set Daily Reporting
 Time, 13-3
Facility Alarms, 12-4
Facility Line Interface, 2-7
Facility Loopback Activate, 2-6
Facility Loopback Release, 2-6
Facility Roll, 6-2
 Bridge, 6-1
 Disconnect, 6-1
Facility Terminating Module
 Interface, 2-3, 2-5, 12-3
Facility Test Signal Activate, 2-6
Facility Test Signal Deactivate, 2-6
Feature Package, 12-6
FLI, 12-3
FLI To Protection, 13-3
FLI To Service, 13-3
Fmode, Non-Channelized Test
 FAD, 11-2

FMT, 12-3
 for DA, TA, and PA Type NPCs, 3-2
Format Converter, 12-3
Formatter, 2-7
Frame, 2-6
Frame, Configure, 2-6
Frame, Provision, 2-6
Framing Status of Subrate
 Multiplexor, 12-6
From, 12-9, 12-10
FTMI Equalization, 7-4
FTMI/DSPI, 8-3, 9-3
FTMI/DSPI, Remove, 8-3
FTMI/DSPI, Restore, 9-3
Full Cross-Connect Map, 12-5

G

Group Release, Nx64 kbit/s, 11-4

H

How to Comment on This Document, xvi
How to Order Documentation, xiv
How To Use This Document, vii
Hub Identification, 7-5
Hub Identification, Change, 7-5
Hub Identifier, 12-9
Hub, Query Identifier, 12-9
Hub, Two-Way Test Access, 11-2
Hub, Two-Way Test Access, Nx64
 kbit/s, 11-3
Hybrid DS3,
 Loopback,, 12-15

Hybrid DS3 Loopback, 12-15

I

Impedance, 12-15
Inhibit DS1 Performance Monitoring
 Report, 3-1
Inhibit Switch MMFG, 2-6
Inhibition of SLC[®], 13-2
Intended Audiences, vii

L

Line Loopback, Test Access, 11-4, 11-5
Line Loopback, Two-Way Test
 Access, 11-1
Link, 8-2, 12-2
Link Status and Protocol, 12-8
Link, Protocol, Baud, 1-3
Link, Remove, 8-2
Link, X.25, Protocol, Data Link, Layer
 Parameters, 1-2
List Contents, 5-2
List Macro Contents, 5-2
Load, 12-8
Location, 12-6
Log, 12-11
Log Off User/Link, 1-4
Log On To DACS II, 1-4
Loopback, 12-14
Loopback,, 12-15
Looped, 11-5
Looped Test Access, 11-5
Looped Test Access, Nx64 kbit/s, 11-5

Looped, Nx64 kbit/s, 11-5

M

Macro, 12-7
Macro Attributes, 12-8
Macro List, 12-7
Macro/Map Space, 12-9
Macros,
 Change Space, 5-2
 Create/Edit, 5-2
 Delete, 5-1
 Delete Lines, 5-1
 Execute, 5-2
 List Contents, 5-2
 Move Lines, 5-2
 Stop, 5-1
Main Controller, 8-2, 9-2, 12-2
Main Controller, Remove, 8-2
Main Controller, Restore, 9-2
Main Processor, 12-2
Map, 12-9
Map List, 12-7
Maps,
 Create/Edit, 5-2
 Edit Delete, 5-1
Markings, 12-10
Marks, 12-9
Memory Card, 12-2
Memory Status, 12-7
MIU, 12-4
MMFG, 2-7
MMFG To Protection, 13-3
MMFG To Service, 13-3
MMFG, Allow Switch of, 13-1
Monitor Test Port, Two-Way Test
 Access, 11-1

Monitor, Test Access, Nx64 kbit/s, 11-3
Monitor, Two-Way Test Access, 11-3
Move Lines, 5-2
Move Macro Lines, 5-2
Multiplexer, 2-4, 2-5
Multiplexer Interface Unit, 2-3, 2-5, 2-7
MXR, 12-4

N

Network Processing Circuit, 2-5, 12-2
 Add, 2-5
Network Processing Circuit
 Parameter, 12-8
Network Processing Circuits, 12-2
Non Channelized Test, 11-1
Non-Channelized Loop Test Access
 Facility, 11-5
Non-Channelized Test Access, 11-3
Non-Channelized Test FAD, 11-2
Non-Channelized Test FAD,
 Emode/Fmode, 11-2
Non-Channelized Test Hub, 11-3
Non-Channelized Test NPC
 Release, 11-4
Non-Channelized,, 11-3
Non-Channelized, Loop Facility, 11-5
Non-Channelized, Monitor, Split,
 Loop, 11-1
Non-Channelized, NPC Release, 11-4
Non-Channelized, To, 12-10
NPC, 2-2, 2-4
NPC Addressing and Priority, 1-4
NPC AIS Alarm Option, 7-2
NPC Map, 12-7
NPC Options, 7-2

NPC State, 12-14
NPC Time Slot Zero, 12-14
NPC Type, 7-2
NPC Type DS, 2-2
NPCs, 8-2, 9-2
NPCs Options, 12-7
NPCs, Remove, 8-2
NPCs, Restore, 9-2
Nx64 kbit/s, Monitor, 11-1
Nx64 kbit/s, Test Access, 11-3
Nx64 kbit/s, Two-Way Test
 Access, 11-2-11-4

O

One-Way, 4-2, 4-4, 4-5
One-Way Cross-Connection, 4-2
One-Way Disconnect, 4-4, 4-5
One-Way Multipoint Disconnection, 4-4
One-Way Non-Channelized Digital
 Signal, 4-2
One-Way Non-Channelized Digital
 Signal Cross-Connect, 4-2
One-Way,, 4-4
Options, 7-3

P

Partial Cross-Connect Map, 12-5
Password Recovery, 12-4
Performance Monitoring, Query DS1
 Report Schedule, 12-7
PMEM/SMEM, 8-2, 9-2
PMEM/SMEM, Remove, 8-2

PMEM/SMEM, Restore, 9-2
Priorities and/or Type, Synchronizer or NPC, 7-4
Protection Switching, 13-1
Provision,
 ANSI NPC, 2-2
 Clock Reference Oscillator, 2-3
 Digital Signal Processing Unit NPC, 2-1, 2-2
 Facility Terminating Module Interface, 2-3
 Frame, 2-6
 Multiplexer, 2-4
 Multiplexer Interface Unit, 2-3
 NPC, 2-2
 NPC Type DS, 2-2
 Synchronizer Time Base, 2-3
 Synchronizer Timing Link Interface, 2-3
 Test Port, 2-3
 Test Port NPC, 2-3
 Test-Access Group, 2-3
 Test-Access Group NPC, 2-3
 Unit, 2-1
Purpose of Document, vii
Pwr/Misc Option or FPC RT Retrofit Status, 7-4

Q

Query,

 Alarm Option, AIS, 12-8
 Alarms, 12-4
 All, 12-8, 12-15
 All Common Equipment, 12-13
 ANSI NPC Test Signal, 12-14

Query (Continued)

 Broadcast, 12-5
 Broadcast, All, 12-5
 Broadcast, From, 12-5
 Circuit Status, NPC, 12-5
 Circuit/Hardware Substrate Trace, 12-6
 Configure, 12-9
 Cross-Connect Status Bus, 12-12
 Date, 12-6
 Destination Cross-Connect, 12-10
 DS1 Performance Monitoring Report Schedule, 12-7
 DS1 Roll, 12-13
 DS3 Alarms, 12-5
 DS3 Bit Error Rate, 12-10
 DS3 Line Build Out, 12-10
 ECCN Error Source Register, 12-11
 Entity Equipage, 12-15
 Equalization, 12-15
 Equipage of ETSIs, 12-13
 Equipage Status, 12-15
 Equipage, Common, 12-13
 Equipment Connectivity, 12-5
 Equipped Multiplexer Interface Units, 12-13
 Equipped Multiplexers in DS3 Unit, 12-14
 Equipped NPCs, 12-14
 Equipped TSIs, 12-15
 Error Correction Location, 12-9
 Error Source Register, 12-11, 12-12
 Error Source Register Formatter, 12-12
 Error Source Register FTMI, 12-12
 Error Source Register Main Processor, 12-11
 Error Source Register Multiplexer, 12-12
 Error Source Register, Facility Line Interface, 12-12

Query (Continued)

- Error Source Register, Multiplexer Interface Unit, 12-12
- ESR for FTU or Subrate NPC, 12-11
- Facility Alarms, 12-4
- Feature Package, 12-6
- Framing Status of Subrate
 - Multiplexor, 12-6
 - From, 12-9, 12-10
- Full Cross-Connect Map, 12-5
- Hub Identifier, 12-9
- Hybrid DS3 Loopback, 12-15
- Impedance, 12-15
- Link Status and Protocol, 12-8
- Load, 12-8
- Location, 12-6
- Log, 12-11
- Loopback, 12-14
- Macro, 12-7
- Macro Attributes, 12-8
- Macro List, 12-7
- Macro/Map Space, 12-9
- Map, 12-9
- Map List, 12-7
- Markings, 12-10
- Marks, 12-9
- Memory Status, 12-7
- Network Processing Circuit
 - Parameter, 12-8
- Non-Channelized, To, 12-10
- NPC Map, 12-7
- NPC State, 12-14
- NPC Time Slot Zero, 12-14
- NPCs Options, 12-7
- Partial Cross-Connect Map, 12-5
- Roll DS0, 12-13
- RTMAP/DLMAP, 12-6
- SCDG, 12-8
- Sequence, 12-9

Query (Continued)

- Software/Hardware Error
 - Recovery, 12-7
- SSP, 12-11
- State, 12-14
- State Alarm Cut Off, 12-13
- State Unit DS3, 12-16
- Status Common Equipment, 12-13
- Status of Entities/Equipment, 12-15
- Status Register, 12-13
- Subrate Channel Information, Far-End, 12-6
- Subrate Channels, 12-16
- Subrate Cross-Connect, 12-10
- Synchronizer, 12-11
- Synchronizer Provisioning, 12-15
- Synchronizer State, 12-15
- Test Access Group NPC, 12-16
- Test Ports, 12-16
- Test-Access Group, 12-16
- Time Slot Zero Monitor, 12-14
- Timing Link Interface, 12-11
- Trunk Signaling Conversion
 - State, 12-10
- Unit Protection State, 12-16
- User/Link Screening Option, 12-11
- Who, 12-6
- Query Channels, 12-16
- Query Circuit/Hardware Subrate
 - Trace, 12-6
- Query Cross-Connect, 12-10
- Query Far-End Channel
 - Information, 12-6
- Query Line Number, 5-2
- Query Multiplexor Framing Status, 12-6
- Query Performance Monitoring Data,
 - for DA, TA, and PA Type NPCs, 3-2
- Query, Group, 12-16
- Query, Group NPC, 12-16

R

- Recover Password, 12-4
- Related Documentation, x
- Release Facility Loopback, 2-6
- Release Test Port, 2-5
- Remove,
 - All ETSIs, 8-2
 - Clock Control Interface, 8-1
 - Cross-Connect Buffer (Non-CEF Only), 8-1
 - Cross-Connect Network Interface, 8-1
 - Facility Line Interface, 2-7
 - Formatter, 2-7
 - FTMI/DSPI, 8-3
 - Link, 8-2
 - Main Controller, 8-2
 - MMFG, 2-7
 - Multiplexer Interface Unit, 2-7
 - NPCs, 8-2
 - PMEM/SMEM, 8-2
 - Synchronizer, 8-2
 - Synchronizer Time Base/Clock Reference Oscillator, 8-3
 - Synchronizer TLI/SSP, 8-2
 - Time Slot Interchange, 8-3
 - TSI (Non-CEF Only), 8-1
 - TSI on Cross-Connect Side (Non-CEF Only), 8-1
 - Unit Controller, 8-3
 - Unit Format Converter, 8-3
- Remove ETSI, 8-2
- Remove RT/DL, 8-2
- Request PSW/USW/ALW/INH on SLC®, 13-3
- Restore,
 - Restore (Continued)
 - Administrative Link, 9-2
 - All ETSIs, 9-2
 - Clock Reference Oscillator, 9-3
 - Control and Clock Interface, 9-1
 - Cross-Connect Buffer, 9-1
 - Cross-Connect Network Interface, 9-1
 - Expanded Time Slot Interchange, 9-1
 - Facility Line Interface, 2-7
 - Formatter, 2-7
 - FTMI/DSPI, 9-3
 - Main Controller, 9-2
 - MMFG, 2-7
 - Multiplexer Interface Unit, 2-7
 - NPCs, 9-2
 - PMEM/SMEM, 9-2
 - Synchronizer, 9-2
 - Synchronizer Timing Link Interface, 9-3
 - Time Slot Interchange, 9-3
 - Time Slot Interchanges, 9-3
 - TSI That Connects Units (Non-CEF Only), 9-1
 - Unit, 9-3
 - Unit Controller, 9-3
 - Restore RT/DL, 9-2
 - Retrieve Memory Status, 12-7
 - Retrieve Performance Monitoring Report Schedule, 3-2
- Roll,
 - DS0 Circuit, 6-2
 - Roll DS0, 12-13
 - Roll, Facility, 6-2
 - RTMAP/DLMAP, 12-6

S

Save Component, 5-2
SCDG, 12-8
Schedule DS1 Performance Monitoring Report, 3-3
Sequence, 12-9
Set Daily Facility Alarm Reporting Time, 13-3
Set Date, 13-2
Software/Hardware Error Recovery, 12-7
Split Test Access, 10-3, 10-4
Split, Subrate, 10-3
SSP, 12-11
State, 12-14
State Alarm Cut Off, 12-13
State Unit DS3, 12-16
Status Common Equipment, 12-13
Status of Entities/Equipment, 12-15
Status Register, 12-13
Stop, 5-1
Stop Macro, 5-1
Subrate, 10-1–10-5
 Change Test Access Split, 11-2
 Cross-Connection, 10-1, 10-2
 Disconnection, 10-4, 10-5
 Disestablish Channel, 10-5
 Establish Channel, 10-4
 Query Channels, 12-16
 Query Circuit/Hardware Subrate Trace, 12-6
 Query Cross-Connect, 12-10
 Query Far-End Channel Information, 12-6
 Query Multiplexor Framing Status, 12-6

Subrate (Continued)
 Split Test Access, 10-3, 10-4
 Terminated Cross-Connection, 10-1–10-3
 Test Access, 10-1, 10-3, 10-5
 Test Access, Terminate and Leave Release, 11-4
Subrate Channel Information, Far-End, 12-6
Subrate Channels, 12-16
Subrate Cross-Connect, 12-10
Subrate Cross-Connection, 7-1, 7-2
Subrate Error Correction Location, 7-4
Subrate Established Channel, 7-2
Subrate Established Channel, Change, 7-2
Subrate Terminate and Leave, 7-6
Subrate Terminate and Leave Release, 11-4
Subrate Terminate and Leave, Change, 7-6
Subrate Test Access Split, 11-2
Subrate, Change, 7-1, 7-2
Subrate, Change Split, 11-2
Subrate, Split, 10-4
Subrate, Terminated, 10-1, 10-2
Switch,
 FLI To Protection, 13-3
 FLI To Service, 13-3
 Inhibition of SLC[®], 13-2
 MMFG To Protection, 13-3
 MMFG To Service, 13-3
Switch, TOX, 7-1
Synchronizer, 8-2, 9-2, 12-2, 12-11
Synchronizer Provisioning, 12-15
Synchronizer State, 12-15
Synchronizer Time Base, 2-3, 2-4
Synchronizer Time Base/Clock Reference Oscillator, 8-3

Synchronizer Time Base/Clock
 Reference Oscillator, Remove, 8-3
Synchronizer Timing Link Interface, 2-3,
 2-4, 9-3, 12-3
Synchronizer Timing Link Interface,
 Restore, 9-3
Synchronizer TLI/SSP, 8-2
Synchronizer TLI/SSP, Remove, 8-2
Synchronizer, Configure, 2-6
Synchronizer, Remove, 8-2
Synchronizer, Restore, 9-2

T

TABS Link Parameters, 1-2
Terminate and Leave, 7-6
Terminate and Leave Release, Subrate
 Test Access, 11-4
Terminate and Leave, Change, 7-6
Terminate-And-Leave-Active, Test
 Access, 11-2
Terminate-And-Leave-Release, Test
 Access, 11-4
Terminated Cross-
 Connection, 10-1–10-3
Terminated, Subrate, 10-3
Test Access, 10-1, 10-3, 10-5
 Change Time Slot, 11-2
 Disconnect Time Slot, 11-4, 11-5
 Group Release, Nx64 kbit/s, 11-4
 Looped, 11-5
 Looped, Nx64 kbit/s, 11-5
 Non-Channelized Test FAD, 11-2
 Non-Channelized,, 11-3
 Non-Channelized, Loop Facility, 11-5
 Non-Channelized, Monitor, Split,
 Loop, 11-1
 Test Access (Continued)
 Non-Channelized, NPC
 Release, 11-4
 Nx64 kbit/s, Monitor, 11-1
 Query, Group, 12-16
 Query, Group NPC, 12-16
 Split, Subrate, 10-3
 Subrate, 10-1, 10-3, 10-5
 Subrate Terminate and Leave
 Release, 11-4
 Subrate, Change Split, 11-2
 Subrate, Split, 10-4
 Two-Way, 11-1–11-4
 Two-Way, Hub, 11-2
 Two-Way, Line Loopback, 11-1, 11-4,
 11-5
 Two-Way, Monitor, 11-3
 Two-Way, Monitor Nx64 kbit/s, 11-3
 Two-Way, Monitor Test Port, 11-1
 Two-Way, Nx64 kbit/s, 11-2, 11-4
 Two-Way, Nx64 kbit/s, Hub, 11-3
 Two-Way, Split Nx64 kbit/s, 11-2
 Test Access Group NPC, 12-16
 Test Access Time Slot, 11-2, 11-4, 11-5
 Test Access, Terminate and Leave
 Release, 11-4
 Test Port, 2-3, 2-4
 Test Port NPC, 2-3, 2-4
 Test Port, Release, 2-5
 Test Ports, 12-16
 Test-Access Group, 2-3, 2-4, 12-16
 Test-Access Group NPC, 2-3, 2-4
 Time Slot Interchange, 8-3, 9-3, 12-3
 Time Slot Interchange, Remove, 8-3
 Time Slot Interchange, Restore, 9-3
 Time Slot Interchanges, 9-3, 12-3
 Time Slot Interchanges, Restore, 9-3
 Time Slot Zero Monitor, 12-14
 Time Slot, Change Test Access, 11-2

Timing Link Interface, 12-11
TOX, Change Switch, 7-1
Trunk Signaling Conversion State, 12-10
TSI (Non-CEF Only), 8-1
TSI (Non-CEF Only), Remove, 8-1
TSI on Cross-Connect Side (Non-CEF Only), 8-1
TSI on Cross-Connect Side (Non-CEF Only), Remove, 8-1
TSI That Connects Units (Non-CEF Only), 9-1
TSI That Connects Units, Remove, 9-1
Two-Way, 4-2, 4-3, 4-5, 11-1–11-4
Two-Way Cross-Connect, Multipoint, 4-3
Two-Way Cross-Connection, 4-3
Two-Way Disconnection, 4-5
Two-Way Non-Channelized Digital Signal, 4-3
Two-Way Non-Channelized Digital Signal Cross-Connection, 4-3
Two-Way Test Access, 11-1–11-4
Two-Way Test Access, Group Release, 11-4
Two-Way Test Access, Hub, 11-2
Two-Way Test Access, Line Loopback, 11-4, 11-5
Two-Way Test Access, Monitor, 11-3
Two-Way Test Access, Monitor Nx64 kbit/s, 11-1
Two-Way Test Access, Nx64 kbit/s, 11-2, 11-4
Two-Way Test Access, Split Nx64 kbit/s, 11-2
Two-Way, Hub, 11-2
Two-Way, Line Loopback, 11-1, 11-4, 11-5
Two-Way, Monitor, 11-3
Two-Way, Monitor Nx64 kbit/s, 11-3
Two-Way, Monitor Test Port, 11-1

Two-Way, Multipoint, 4-3
Two-Way, Nx64 kbit/s, 11-2, 11-4
Two-Way, Nx64 kbit/s, Hub, 11-3
Two-Way, Split Nx64 kbit/s, 11-2
Type, Options, 7-4

U

Unit, 2-1, 2-5, 9-3
Unit Controller, 8-3, 9-3
Unit Controller, Remove, 8-3
Unit Controller, Restore, 9-3
Unit Format Converter, 8-3
Unit Format Converter, Remove, 8-3
Unit On UC, 12-4
Unit Protection State, 12-16
Unit, Restore, 9-3
Unprotected Alarm Setting, 7-5
Upgrade Frame, 13-4
User, 1-2
User Password, 1-1
User Password, Change, 1-1
User/Link Language, 1-4
User/Link Screening, 1-4
User/Link Screening Option, 12-11
User/Link Screening, Change, 1-4
Utilities, Alarm Reporting, 3-3
Utility Boot, 13-3
Utility Clear Counter, State of a Single In-Service, 3-2
Utility Clear Counter, State of All, 3-1
Utility Clear DA/TA/PA NPC Parameters, 3-2
Utility Clear Hardware/Software Error Recovery Log File, 3-1

W

Who, 12-6

X

X.25 Link Parameters, 1-3

X.25 Link Parameters, Add, 1-3