

365-353-004

DACS II PDS Operation and Command Message Supplement - Release 6.1 - 365-353-004

Refer to Chapter 6

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1. About This Document and Introduction

1.1 About This Document

1.1.1 Purpose

This document contains the operating procedures and commands and messages for DACS II Release 6.1 PDS. This document supplements the *DACS II Release 6.0 PDS Operation and Maintenance Manual* and the *DACS II Release 6.0 PDS Command and Message Manual*.

1.1.2 Intended Audiences

This document is intended for craft personnel responsible for operating and maintaining the DACS II frame.

1.1.3 How to Use This Document

Before you attempt to use the procedures in this document, you should become familiar with its contents. The contents are described below.

1.1.4 Contents

Chapter 1 - Introduction

This chapter provides a high-level overview of the DACS II Release 6.1 features.

Chapter 2 - Operating Procedures

This chapter contains the procedures to accomplish the tasks and activities needed to utilize the new set of features provided in DACS II Release 6.1. These activities are presented in a descriptive fashion with command examples. These examples are provided to develop a conceptual understanding of each feature. The Program Documentation Standards (PDS) version of the commands and messages are presented in this chapter.

Chapter 3 - Command and Message Supplement for Ericsson Cellular Framing

This chapter provides the commands and messages that have been modified to reflect the Ericsson Cellular Framing feature. The PDS version of the commands and messages are presented in this chapter.

Chapter 4 - Command and Message Supplement for Main Controller Availability

This chapter provides the commands and messages that have been

modified to reflect the Main Controller Availability feature. The PDS version of the commands and messages are presented in this chapter.

1.1.5 Conventions Used

This manual uses special fonts in order 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.

The backslash character is used in both the input commands and output message representations within this manual to mark the point in the message text where the line has been terminated and continued to another line. This is consistent with the present use of the backslash character on input to enter a command whose length exceeds 80 characters.

1.1.6 Related Documentation

The following manuals support DACS II Release 6.0 and should be used in conjunction with this manual.

- o DACS II Release 6.0 PDS Operation and Maintenance Manual (365-353-001)

Audience: End-user maintenance personnel.

Content: Procedures to operate and maintain the DACS II.

- o DACS II Release 6.0 PDS Command and Message Manual (365-353-002)

Audience: End-user maintenance personnel.

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

- o DACS II Release 6.0 PDS Quick Reference Guide (365-353-003)

Audience: End-user maintenance personnel.

Content: Abbreviated list of system commands and parameters.

- o DACS II Release 6.0 PDS 2.048 Mb/s Interface Operation and Maintenance Manual (365-353-021)

Audience: End-user maintenance personnel.

Content: Procedures to operate and maintain the DACS II.

- o DACS II Release 6.0 PDS 2.048 Mb/s Interface Command and Message Manual (365-353-022)

Audience: End-user maintenance personnel.

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

- o DACS II Release 6.0 PDS 2.048 Mb/s Interface Quick Reference Guide (365-353-023)

Audience: End-user maintenance personnel.

Content: Abbreviated list of system commands and parameters.

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1.2 Introduction

1.2.1 Introduction

This document details the operation procedures and the commands and messages of the Digital Access and Cross-Connect System II (DACS II) Release 6.1. DACS II Release 6.1 contains the following two new features:

- o Main Controller Availability Enhancement
- o Ericsson Cellular Framing

The remainder of this chapter provides an introduction to these two features.

1.2.2 Main Controller Availability Enhancement

The Main Controller availability enhancement makes the execution of the disk-to-tape database backup command optionally a background process so the Main Controller can be released for the processing of other input commands. DACS II Release 6.1 provides a new command option for enabling the background execution of the disk-to-tape backup command. When this new background option is entered for the backup command, the following three tasks are performed in the background:

- o Restoration of the tape by software
- o Database backup from disk to tape

- o Removal of the tape by software.

During the execution of this background backup, the Main Controller is available to process a limited set of input commands. This set of input commands is listed in Chapter 2 (see Table 2-1).

1.2.3 Ericsson Cellular Framing

DACS II Release 6.1 allows DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches using the Mobile Both-way Line Terminal (MBLT) framing format and cell sites. DACS II Release 6.1 supports Ericsson Cellular Framing by providing a new user-provisionable framing format, programmed by specifying a value of x=8 when provisioning Network Processing Circuits (NPCs) "xyz" parameters. This new framing format applies to the following NPC types:

- o "DA" and "DE" type NPCs in DS1 facility terminating units
- o "TA" and "TE" type NPCs in DS3 facility terminating units.

2. Operating Procedures

2.1 Main Controller Availability Enhancement

2.1.1 Overview

The Main Controller availability enhancement makes the execution of the disk-to-tape database backup command optionally a background process so the Main Controller can be released for the processing of other input commands. DACS II Release 6.1 provides a new command option for enabling the background execution of the disk-to-tape backup command. When this new background option is entered for the backup command, the following three tasks are performed in the background:

- o Restoration of the tape by software
- o Database backup from disk to tape
- o Removal of the tape by software.

The system must be in the following state before a background backup can be performed:

- o The Main Controller must be either in service or in maintenance condition.
- o The disk must be in service.
- o The tape must be both physically in the tape drive and writable.

During the execution of this background backup, the Main Controller is available to process a limited set of input commands. Table 2-1 lists the commands that can be processed during a background backup.

When a command that is not listed in this table is entered on any link/virtual circuit during a disk-to-tape background backup, it will neither be executed nor denied. Instead, these commands will be queued until the completion of the backup, as in the previous releases of DACS II software.

Note: If the command being queued is an autonomous removal command or any other error-recovery related command, all subsequent commands entered on all links/virtual circuits will be queued. However, if the command being queued is not an autonomous removal command or another error-recovery related command, only subsequent commands entered on the same link/virtual circuit will be queued.

2.1.2 Invoking Disk-to-Tape Background Backup

Note: The screening option for the link that the background backup is entered on should be set to 1. Refer to *Change Output Message Screening in Chapter 7 of the Operation and Maintenance Manual.*

To invoke a disk-to-tape background backup, enter the following command:

```
UTL::BMTR, FROM DISK, TO TAPE[, BKGRND][, INCL]
```

Where:

BMTR = Backup memory transfer.

FROM = From

DISK = Disk

TO = To

TAPE = Tape

BKGRND = Background

INCL = Inclusive. This keyword is used to request that the database on the disk be transferred to tape excluding the generic journal files.

2.1.3 Scheduling Daily Disk-to-Tape Background Backup

To schedule a daily disk-to-tape background backup, enter the following command:

```
UTL::TOD hrmmnc, BMTR[, BKGRND]
```

Where:

TOD = Time of day

hr = hours (00 through 23)

mn = minutes (00 through 59)

sc = seconds (00 through 59)

BMTR = Backup memory transfer. This requests that a transfer from disk to tape be executed at the time specified by TOD hrmmnc.

BKGRND = Background. This requests that the backup memory

transfer takes place in the background. This allows the Main Controller to process a limited set of commands during the backup.

2.1.4 Querying the Scheduled Daily Disk-to-Tape Background Backup

To query the status of daily disk-to-tape backups, enter the following command:

```
UTL::QRY,TOD,BMTR
```

Where:

TOD = Time of day.

BMTR = Backup memory transfer.

Note: The command response will indicate if the scheduled backup is to be performed in the background.

2.2 Ericsson Cellular Framing

2.2.1 Overview

Note: This feature is only applicable to 1.544 Mb/s applications.

DACS II Release 6.1 allows DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches using the Mobile Both-way Line Terminal (MBLT) framing format and cell sites. DACS II Release 6.1 supports Ericsson Cellular Framing by providing a new user-provisionable framing format, programmed by specifying a value of x=8 when provisioning Network Processing Circuits (NPCs) "xyz" parameters. This new framing format applies to the following NPC types:

- o DA and DE type NPCs in DS1 facility terminating units
- o TA and TE type NPCs in DS3 facility terminating units.

Table 2-2 contains the circuit packs and NPC types to which this feature applies.

Note: The following circuit packs are not supported by this feature: TG80, TG184, TG186, and TG183. However, provisioning NPCs on these circuit packs with Ericsson Cellular Format (x=8) will not be denied.

A typical network configuration with T1 facilities is shown in Figure 2-1.

In order to perform grooming and consolidation to reduce transmission costs, 1/0 cross-connect equipment can be placed between the cell sites and the cellular switches. Release 6.1 enables DACS II to terminate the Ericsson MBLT framing format, which carries both the cell traffic and a signaling link between the switch and the cell. All cell site signaling is carried on channel nine (D4 channel numbering), leaving 23 channels available to carry voice traffic.

Included in this section are procedures for growing type DA, DE, TA, and TE NPCs.

2.2.2 Install Plug-Ins and Grow Type DA NPC

Overview: This procedure is used to define the operating characteristics of the NPC in the data base. When the NPC is subsequently restored to service, it will be provisioned per the growth specification.

1. Install the TG191 circuit pack in the NPC slot.
2. Familiarize yourself with the command as follows:

```
GRTH::NPC <npc No.> [-<range>],TYPE mnxyz\  
[,OPTS(rr/m[,rr/m][...])][,IW X'pq[,INCL]\  
[,AIS {INFO|MJ|MN}][,PL {ENA|DSA}]!
```

Where:

<npc No.> = NPC number.

<range> = Optional, last NPC of continuous range of NPCs.

mn = NPC type DA.

xyz = NPC type identifier. Table 2-3 contains identifier definitions. Recommended value is DA810.

Note: The standard xyz table has been limited to show only values that apply to the Ericsson Cellular Format. The recommended y and z values are: y=1 and z=0.

rr = Facility performance parameter number. Table 2-4 contains valid values.

m = Facility performance threshold index (0 through 3).

IW = Insertion word.

INCL = Inclusive.

AIS = Alarm Indication Signal.

INFO = Information message (not an alarm).

MJ = Major

MN = Minor

PL = Payload loopback

ENA = Enabled

DSA = Disabled

3. Enter command with required TYPE options. If default alarm thresholds are appropriate, the OPTS field can be omitted from the command.
4. Check the output message to verify type and option selections.
5. When the PL field is not specified, the default is payload loopback enabled.

2.2.3 Install Plug-Ins and Grow Type DE NPC

Overview: This procedure is used to define the operating characteristics of the NPC in the data base. When the NPC is subsequently restored to service, it will be provisioned per the growth specification.

1. Install the appropriate plug-in cards in the NPC slots to be equipped from the following list: TG80B or TG191.
2. Familiarize yourself with the following command:
`GRTH::NPC <npc No.>[-<range>][,TYPE DExyz]
[,OPTS(rr/l,ss/m,tt/n,...)][,IW X'pq][,AIS {INFO|MJ|MN}]!`

Where:

- <npc No.> = NPC number, either extended (for example, [0]001) or hierarchical (for example, 01101).
- <range> = Optional, last NPC of continuous range of NPCs.
- xyz = Line and channel format specification; DE100 is the default. See Table 2-5 for values. Recommended value is DE810.
- rr/l,ss/m,tt/n,... = Optional, to list any or all alarm types (01 through 08) per Table 2-6 and predefined number (0 through 3) per Table 2-7 which sets alarm threshold. See EXAMPLE in step 5.
- pq = Optional, to enter IW in hexadecimal form; default is 7F. See typical values in Step 4.
- AIS field = Optional; to specify class of output message issued when AIS is received: INFO (default) for information, MJ for major alarm, or MN for minor alarm.

3. If you are going to use the IW field, consider the following:

- The two hexadecimal digits define an 8-bit insertion word for unassigned channels. To prevent the generation of a yellow alarm condition (with D4 line format), the hexadecimal number for the left digit must not be one that corresponds to a binary number

with bit 2 = 0 (that is, decodes to x0xx).

-- MUX keyword - IW = IA.

4. Enter command with required information.

EXAMPLE: GRTH::NPC 01101,TYPE DE810,OPTS
(01/1,03/2,07/2),IW X'18!

- o If the command is denied, find the reason for the denial and perform corrective action to obtain command completion (*Command Denials* has explanations of denial codes).

5. Check completion message to verify changes.

Note: The standard xyz table has been limited to show only values that apply to the Ericsson Cellular Format. The recommended y and z values are: y=1 and z=0.

2.2.4 Grow Type TE NPCs

Overview: This procedure is used to enter the type specifications of the NPCs on the Multiplexer/Enhanced Multiplexer (MXR/EMXR) pack in a DS3 unit. These NPCs are incorporated in the MXR pack and are not separate plug-ins. The type specification determines the basic operation and the line and channel formats of the DS1 signal. Optional fields in the growth command allow selecting different facility performance alarm thresholds and specifying a particular insertion word. The alarm threshold options are only applicable to the TE type.

1. Install the KCR1/KCR5 (MXR/EMXR) circuit pack in the appropriate slot.

2. Familiarize yourself with the command as follows:

```
GRTH:[FRM xy,SEQ ww]:NPC <npc No.>[-<range>],
TYPE mnxyz[,OPTS(rr/l,ss/m,...tt/n)][[,IW X'pq]]!
```

Where:

xy = DACS II frame number (00 through ZZ).

ww = Command sequence number (00 through 49).

<npc No.> = NPC number, either extended (for example, [0]001) or hierarchical (for example, 01101). The additional NPCs on the DS3 are identified by suffix, A through H.

<range> = Optional, for last NPC of continuous range to be grown.

mn = Type designation, mn = TE.

xyz = Format specification; see Table 2-8. TE100 is default.

Recommended value is TE810.

rr,ss,tt = Optional field for type TE NPC to select nondefault alarm thresholds; see Table 2-9 for code to represent facility parameter.

l,m,n = Option number (1 through 3) which has been

predefined in the data base; 0 selects default value.

pq = Optional, hexadecimal notation to specify IW pattern.
Typical values are 7F (default), 18 for T1DM format,
or FF for all 1s.

3. Enter command with required information. If default alarm thresholds and IW are appropriate for the NPCs, the corresponding optional fields can be omitted from the command.

EXAMPLE: GRTH::NPC 01101,TYPE TE810,OPTS(01/1,03/2,07/2),IW X'FF!

4. Check output message to verify type and option entries.

Note: The standard xyz table has been limited to show only values that apply to the Ericsson Cellular Format. The recommended y and z values are: y=1 and z=0.

2.2.5 Install Plug-Ins and Grow Type TA NPC

1. Install the KCR5 (EMXR) and KCR6 (EMIU) circuit pack.
2. Familiarize yourself with the command as follows:

```
GRTH::NPC <npc No.> [-<range>],TYPE mnxyz\  
[,OPTS(rr/m[,rr/m][...])][,IW X'pq[,INCL]]\  
[,AIS {INFO|MJ|MN}][,PL {ENA|DSA}]
```

Where:

<npc No.> = NPC number.
<range> = Optional, last NPC of continuous range of NPCs.
mn = NPC type TA.
xyz = NPC type identifier. Table 2-10 contains
identifier definitions.

Note: The standard xyz table has been limited to show only values that apply to the Ericsson Cellular Format. The recommended y and z values are: y=1 and z=0.

rr = Facility performance parameter number. Table 2-11
contains valid values.
m = Facility performance threshold index (0 through 3).

IW = Insertion word.
INCL = Inclusive.
AIS = Alarm Indication Signal.
INFO = Information message (not an alarm).

MJ = Major
MN = Minor
PL = Payload loopback
ENA = Enabled
DSA = Disabled

3. Enter command with required TYPE options. If default alarm thresholds are appropriate, the OPTS field can be omitted from the command.
4. Check the output message to verify type and option selections.
5. When the PL field is not specified, the default is payload loopback enabled.

2.2.6 Restore NPC

Overview: In the process of restoring, the DACS II runs both an out-of-service and in-service diagnostic and provisions the NPCs according to the NPC growth information. The looped tests that are included in the diagnostics test the transmission paths in the NPC (except line transformers) and test some of the facility checking circuitry. A hardware failure will cause a failed diagnostic and a restore denial. A facility problem will cause a CGA alarm.

1. Enter RST:[FRM xy,SEQ ww]:NPC <npc No.>[-<range>]!
Where:
xy = DACS II frame number (00 through ZZ)
ww = Command sequence number (00 through 49)
<npc No.> = NPC number, either extended (for example, [0]001) or hierarchical (for example, 01101)
<range> = Optional, to name the final NPC when it is desired to restore a continuous range of NPCs.
2. Repeat the procedure as needed to restore other NPCs (or groups of NPCs).

Note: If a NPC is restored but its FTMI is OOS the UTL::QRY,STATE! command will not show the alarm counts and alarms will not be displayed.

3. Command and Message Supplement For Ericsson Cellular Framing

3.1 Overview

This chapter contains information that is intended to supplement the *Command and Message Manual* to support the Ericsson Cellular Framing feature. Table 3-1 lists the *xyz* Identifier Definitions.

Table 3-1 supplements the following commands:

Message No.	Description
38221	Change NPC Options
38231	Change Type Options
38241	Change Options
38271	Change DS3U NPC Type
38211	Change NPC Type
31341	Grow ANSI NPC
31352	Grow NPC
33351	Remove NPC
34351	Restore NPC
52011	Query Cross-Connect Map
52031	Utility Query DMAP
52041	Channelized Utility Query To
52051	Channelized Utility Query From
52061	Non-Channelized Utility Query To
52071	Non-Channelized Utility Query From
56311	Utility Query State
56314	Utility Query NPC State

4. Commands and Messages for Main Controller Availability

4.1 General

The commands and messages supplied in this chapter are intended to supplement the Command and Message Manual to support the Main Controller Availability feature. The following is a listing of the commands and messages contained in this chapter.

Message No.	Description
55701	Backup Memory Transfer
51011	Set DACS II System Clock or Daily Facility Alarm Reporting Time
51061	Query Time of Day

4.2 UTL,BMTR,FRM,TO,EXCT,INCL -- BACKUP MEMORY TRANSFER

Input Message Format

[I.55701]

UTL:FRM xy,SEQ ww:BMTR,FROM <from>,TO <to>[,{EXCT|INCL|INSTL}][,BKGRND]!

Completion Message

[O.55702]

M hh:mm:ss xy ww n[vv] UTL BMTR IN PROGRESS

[O.55701]

M hh:mm:ss xy,ww n[vv] UTL BMTR FROM <from> TO <to> \
[{EXCT|INCL|INSTL}][BKGRND] COUNT ddd COMPL

Denial Message

[O.55701.01]

M hh:mm:ss xy,ww n[vv] UTL BMTR FROM <from> TO <to>[{EXCT|INCL|INSTL}] \
[BKGRND]
COND cc DNY

Autonomous Message

[O.55701]

```
A hh:mm:ss xy,ww UTL BMTR FROM <from> TO <to> \  
[ {EXCT|INCL|INSTL}][ BKGRND] COUNT ddd COMPL
```

[O.55701.01]

```
A hh:mm:ss xy,ww UTL BMTR FROM <from> TO <to> \  
[ {EXCT|INCL|INSTL}][ BKGRND] COND cc DNY
```

Explanation Of Message

This message performs two functions:

1. It may be used to request a transfer of data base information from random access memory (RAM), disk, or tape to either tape or disk.
2. It may be used to request a transfer of software between disk and tape.

The user requires restricted maintenance privilege for the transfer from tape to disk. This privilege is restricted to the frame administrator. The Main Controller (MC) must be in maintenance condition (MCOND) for transfers of databases or executables from tape to disk.

Every ten minutes the state of the frame is checked to look for changes in provisioning and/or cross connections. If a change has occurred within that period, an autonomous request is made to transfer data base information from RAM to disk.

This message may also be used to enable or disable the tape validation sequence whenever the database or program is transferred from the tape.

Explanation Of Parameters

BMTR - Backup memory transfer

FROM - From

from - Source for backup memory transfer

TO - To

to - Destination for backup memory transfer

RAM Random access memory

DISK Disk

TAPE Tape

Note: The only permissible combinations are listed below:

from	to
RAM	DISK
DISK	TAPE
TAPE	DISK

EXCT - Executable

Transfer generic software only. May not be used when transferring from RAM to disk. Frame must be in maintenance condition state (MCOND) when transferring software from disk to tape.

INSTL - Install

Transfer initialized data base only. Can be used only when transferring initialized data base from a special tape (different from the regular tape that contains release software and frame data base) to disk.

INCL - Inclusive

The INCL keyword is used to request that the data base on the disk be transferred to the tape excluding the generic journal files. This keyword cannot be combined with the EXCT keyword. INCL may not be used when transferring RAM to DISK.

BKGRND - Background

The BKGRND keyword is used to request that the operation of transferring the data base from disk to tape be run in the background.

Use of the BKGRND keyword in this command will cause three tasks to be performed in the background; restoring the tape by software, data base backup from disk to tape, and removing the tape by software.

The only commands available to the user while performing a background backup are those listed below.

11001	TCON, FROM, TO, RDC, CUS, INCL
11011	TCON, FROM, TO, RDC, CUS, INCL (clear DS1/clear 2M bps)
11021	TCON, FROM, TO, MPM, NAM, NTR, RDC, CUS, INCL
15001	TDIS, FROM, TO, INCL, OOS, DCC
15002	TDIS, FROM, TO, INCL, OOS, DCC (multi-point)
15011	TDIS, FROM, TO, OOS, INCL (clear DS1/clear 2M bps)
19001	ED, MACRO, MAP

19101 SECH,TO,DS0A,DS0B,SEC,PCH
 19111 SECH,TO,RATE,DP,PCH
 19151 SDCH,TO,PCH,DCC
 19201 SCON,RATE,TPT,FROM,TO
 19211 SCON,DS0A,RATE,TPT,FROM,TO,DS0B
 19221 SCON,RATE,MPTM,MJU,MA
 19401 SDIS,RATE,TPT,FROM,TO
 19411 SDIS,RATE,TPT,FROM,TO
 19421 SDIS,RATE,MPTM,MJU (MJU branch)
 19431 SDIS,RATE,MPTM,MJU,ALL (MJU master)
 19501 CHG,SECH,OLD,NEW,PCH,DCC
 19581 CHG,SCON,OLD,NEW (change MJU branch)
 19591 CHG,SCON,OLD,NEW,MPTM (change MJU master)
 39001 LOGIN,USER,PASSWD,DACS,II
 39101 LOGOFF,USER,LINK
 51011 UTL,TOD,CFA,MONDAT,FAC,BMTR,PRIM,BKGRND
 51041 UTL,QRY,WHO
 51131 UTL,QRY,SON
 52011 UTL,QRY,CMAP
 52041 UTL,QRY,TO
 52061 UTL,QRY,TO (clear DS1/clear 2M bps)
 52501 UTL,QRY,SECH,TO
 52511 UTL,QRY,SCON,CH,TO
 52521 UTL,QRY,SCON,TO
 52531 UTL,QRY,SRHDW,TO
 55711 ABT
 56311 UTL,QRY,STATE,NPC (except DA,TA,PA types)
 56314 UTL,QRY,STATE,NPC (DA,TA,PA types only)
 56501 UTL,QRY,SROOF,TO,ALL
 81001 AUD,QRY,CFA,CGA,LFVR,FFER

The BKGRND keyword may only be used when transferring the data base from DISK to TAPE. Therefore it cannot be combined with the EXCT keyword or the INSTL keyword. However, it can be combined with the INCL keyword.

COUNT - Count

ddd - Number of data base transfers performed on the tape

A counter is incremented for each UTL::BMTR disk to tape data base transfer performed on a tape. This count is used to estimate the useful life of a tape. NCB or ERR will appear in place of the count if the count cannot be displayed.

ddd Explanation

NCB No count block; old tape, doesn't have a count block
 ERR Error; the count block could not be read

cc - Hexadecimal condition code

cc	Explanation
8C	DB MP or units ram error
8D	DB disk error OP-CL-RD-WR-SK
8E	DB can't send or receive mail
8F	Can't lock or unlock ram database
90	DB can't get the slave mail box
95	Invalid option,mailbox or flag
96	Unit(s) OOS, and/or additional backup required
97	Entity can't be addressed in this configuration
98	Checksums verification failed
99	The tape contains previous release journal files, not retrofitable
20	Software Identification Block is not readable
21	Software Identification Block failed comparison
A5	FPI on tape does not match one on disk
84	Problem occurred while accessing TAPE or unformatted TAPE
85	Problem occurred while accessing DISK
86	Source does not contain requested information
87	Tape is a special install tape
88	Tape is a normal tape
91	Can't mount or unmount tape
92	Can't mount or unmount disk
93	TAPE is not present
94	TAPE unit is not restored
E6	DB tape error OP-CL-RD-WR-SK
E7	Disk not restored

4.3 UTL,CLR,BMTR, CANCEL BACKUP MEMORY TRANSFER

Input Message Format

[I.51051]

UTL:FRM xy,SEQ ww:CLR,BMTR!

Note: If the link/user has RMON privilege, the system will respond:

ARE YOU SURE? (YES/NO)

Otherwise, the BADVERB,CMD,INERR message (O.01131) will be given.

Completion Message

[O.51051]

M hh:mm:ss xy,ww n[vv] UTL CLR BMTR COMPL

Denial Message

[O.51051.01]

M hh:mm:ss xy,ww n[vv] UTL CLR BMTR COND cc DNY

Autonomous Message

Not applicable.

Explanation Of Message

This message requests the cancellation of the backup memory transfer (BMTR) scheduled by the UTL::TOD[,BMTR] command in Message 51011.

Explanation Of Parameters

CLR - Clear

BMTR - Back up memory transfer

COND - Condition

cc - Hexadecimal condition code

cc *Explanation*

E1 No Memory Backup Has Been Scheduled

4.4 UTL,TOD,CFA,FAC,X,PRIM,BMTR SET DACS II SYSTEM CLOCK OR DAILY FACILITY ALARM REPORTING TIME /* pds */

Input Message Format

[I.51011]

UTL:FRM xy,SEQ ww:[TOD hrmnsc]\
[, {CFA|FAC X'abcdef|PRIM X'ghij|BMTR[,BKGRND]|MONDAT}]!

Completion Message

[O.51011]

```
M hh:mm:ss xy,ww n[vv] UTL[ TOD[ MDNT] hrmnsc] \  
[ {CFA|FAC abcdef|PRIM ghij|BMTR[ BKGRND]|MONDAT}] COMPL
```

Denial Message

[O.51011.01]

```
M hh:mm:ss xy,ww n[vv] UTL[ TOD[ MDNT] hrmnsc] \  
[ {CFA|FAC abcdef|PRIM ghij|BMTR[ BKGRND]|MONDAT}] COND cc DNY
```

Autonomous Message

Not applicable.

Explanation Of Message

This command is used for the following purposes:

- o To set the DACS II System clock
- o To set the time for the daily backup memory transfer
- o To set the time for the daily facility alarms report
- o To set the parameters to be reported in the daily facility alarms report.

SETTING THE DACS II SYSTEM CLOCK

To set the DACS II System clock specify only the time to which the clock is to be set (TOD).

SETTING THE TIME FOR THE DAILY BACKUP MEMORY TRANSFER

To set the time for the daily backup memory transfer specify the time of day and BMTR.

SETTING THE TIME FOR THE DAILY FACILITY ALARMS REPORT

The facility alarms report is output daily at the default time of midnight. To output the report at a different time the user must redefine midnight. This redefined midnight is sometimes referred to as "local midnight". The "local midnight" is set by jointly specifying the time of day and the parameters to be reported. Once a "local midnight" has been set the facility alarms report will be output daily at the new "midnight".

A "local midnight" can be set for a gateway frame by specifying

TOD hrmnsc and either CFA or FAC X'abcdef

OR

TOD hrmnsc and either CFA or PRIM X'ghij.

SETTING THE PARAMETERS TO BE REPORTED

The parameters are set by use of the FAC keyword using the appropriate value of abcdef from the tables below.

Gateway offices require using either both or neither of the FAC and PRIM keywords since the domestic and international sides of the machine must be treated separately.

There are six common parameters. When any of the common parameters are selected, they should be enabled in both abcdef and ghij. These common parameters are listed below.

CGA or PBA
SLIP or CSS
ERS or ES
SERS or SES
CRC
FRER

To disable all reports specify zeros for each digit in the variable abcdef.

The CGA alarms report defaults to midnight if this command is not used to alter the report time or parameters.

Explanation Of Parameters

TOD - Time of day

hrmnsc

- Time specification

hr - hours (00 through 23)
mn - minutes (00 through 59)
sc - seconds (00 through 59)

When the time of day is used with the MONDAT keyword mn and sc are restricted to certain values listed in the explanation of MONDAT.

MONDAT

- Monitored daily time

When the MONDAT keyword is entered, "hrmnsc" is used to specify the starting time for the daily accumulation interval for PA type

NPCs. In this case, "mn" is limited to 00, 15, 30 or 45, and "sc" is limited to 00. The default daily monitor starting time is midnight. At midnight DACS II will report the facility alarms and the counts for all selected daily parameters for the daily interval just ended and clear all current counts and threshold crossing alarms to start a new daily interval. The report time specified with the MONDAT keyword is not applicable to other NPC types. Likewise, the midnight report time entered without the MONDAT keyword is not applicable to PA type NPCs.

MDNT - Midnight

This keyword is output to indicate that midnight, the default time to output facility alarm reports, has been reset to be the time indicated by TOD hrmsc. It is also used to indicate the time set for a backup memory transfer (BMTR) to occur.

Note: If the MONDAT keyword is entered, the MDNT keyword will not be output.

CFA - Carrier failure alarm

This keyword, when specified with the time of day field, indicates that the daily facility report time rather than the system time of day is being reprogrammed. The daily facility report will be output at the specified time, which defaults to midnight. See below the complete description of facility monitoring alarms that may be included in the daily facility report.

FAC - Facility

Request that the reporting of alarms specified by abcdef be enabled. This will cause only a subset of the daily facility report to be output.

abcdef

- Facility performance alarm reports enable (hexadecimal)

This variable represents a six-digit hexadecimal number. Each hexadecimal digit represents 4 bits and each bit corresponds to a particular facility parameter. To enable alarm reports for a facility parameter the bit corresponding to that parameter is set to 1 using the tables below. To disable the alarm report the bit is set to 0.

Note: In a gateway office the FAC parameter cannot be used alone but must be used with the international parameter PRIM.

The following tables should be used to set or interpret the hexadecimal values of digit identifiers a through f.

a - Digit identifier (Unassigned)

b - Digit identifier

b Facility parameter alarm report enabled

F DS3 ALM, SAFE, SANE
E DS3 ALM, SAFE
D DS3 ALM, SANE
C DS3 ALM
B SAFE, SANE
A SAFE
9 SANE
8 Not assigned
7 DS3 ALM, SAFE, SANE
6 DS3 ALM, SAFE
5 DS3 ALM, SANE
4 DS3 ALM
3 SAFE, SANE
2 SAFE
1 SANE
0 DS3 ALM, SAFE, SANE alarm reports disabled

DS3 ALM - DS3 alarm
SAFE - Shelf alarm far end
SANE - Shelf alarm near end

c - Digit identifier (Unassigned)

d - Digit identifier

d Facility parameter alarm report enabled

F FRER, BPV
E FRER
D BPV
C Not assigned
B FRER, BPV
A FRER
9 BPV
8 Not assigned
7 FRER, BPV
6 FRER
5 BPV
4 Not assigned
3 FRER, BPV
2 FRER
1 BPV
0 FRER, BPV alarm reports disabled

FRER - Frame errors
BPV - Bipolar violations

e - Digit identifier

e Facility parameter alarm report enabled

- F CRC, COFA, SERS, ERS
- E CRC, COFA, SERS
- D CRC, COFA, ERS
- C CRC, COFA
- B CRC, SERS, ERS
- A CRC, SERS
- 9 CRC, ERS
- 8 CRC
- 7 COFA, SERS, ERS
- 6 COFA, SERS
- 5 COFA, ERS
- 4 COFA
- 3 SERS, ERS
- 2 SERS
- 1 ERS
- 0 CRC, COFA, SERS, ERS alarm reports disabled

- CRC - Cyclic redundancy code
- COFA - Change of frame alignment
- SERS - Severely errored seconds
- ERS - Errored seconds

f - Digit identifier

f Facility parameter alarm report enabled

- F BER, SLIP, OOF, CGA, LOS
- E BER, SLIP, OOF
- D BER, SLIP, CGA, LOS
- C BER, SLIP
- B BER, OOF, CGA, LOS
- A BER, OOF
- 9 BER, CGA, LOS
- 8 BER
- 7 SLIP, OOF, CGA, LOS
- 6 SLIP, OOF
- 5 SLIP, CGA, LOS
- 4 SLIP
- 3 OOF, CGA, LOS
- 2 OOF
- 1 CGA, LOS
- 0 BER, SLIP, OOF, CGA, LOS alarm reports disabled

- BER - Bit error rate
- SLIP - Slip
- OOF - Out of frame
- CGA - Carrier group alarm

LOS - Loss of signal

Some examples of the available choices for X'abcdef are shown below:

X'00000A	BER and OOF alarm reporting enabled
X'000000	alarm reports disabled for all parameters
X'000001	CGA and LOS alarm reporting enabled
X'0C0511	DS3, BPV, ERS, CGA, and LOS alarm reporting enabled

BMTR - Backup memory transfer

Request that a transfer from disk to tape be done at the time specified by TOD hrmsc. A default time for this operation does not exist. To cancel the transfer use the UTL::CLR,BMTR command.

BKGRND - Background

The BKGRND keyword is used to request that the operation of transferring the data base from disk to tape be run in the background.

Use of the BKGRND keyword in this command will cause three tasks to be performed in the background; restoring the tape by software, data base backup from disk to tape, and removing the tape by software.

The only commands available to the user while performing a background backup are those listed below.

11001	TCON, FROM, TO, RDC, CUS, INCL
11011	TCON, FROM, TO, RDC, CUS, INCL (clear DS1/clear 2M bps)
11021	TCON, FROM, TO, MPM, NAM, NTR, RDC, CUS, INCL
15001	TDIS, FROM, TO, INCL, OOS, DCC
15002	TDIS, FROM, TO, INCL, OOS, DCC (multi-point)
15011	TDIS, FROM, TO, OOS, INCL (clear DS1/clear 2M bps)
19001	ED, MACRO, MAP
19101	SECH, TO, DS0A, DS0B, SEC, PCH
19111	SECH, TO, RATE, DP, PCH
19151	SDCH, TO, PCH, DCC
19201	SCON, RATE, TPT, FROM, TO
19211	SCON, DS0A, RATE, TPT, FROM, TO, DS0B
19221	SCON, RATE, MPTM, MJU, MA
19401	SDIS, RATE, TPT, FROM, TO
19411	SDIS, RATE, TPT, FROM, TO
19421	SDIS, RATE, MPTM, MJU (MJU branch)
19431	SDIS, RATE, MPTM, MJU, ALL (MJU master)
19501	CHG, SECH, OLD, NEW, PCH, DCC
19581	CHG, SCON, OLD, NEW (change MJU branch)
19591	CHG, SCON, OLD, NEW, MPTM (change MJU master)

```

39001  LOGIN,USER,PASSWD,DACS,II
39101  LOGOFF,USER,LINK
51011  UTL,TOD,CFA,MONDAT,FAC,BMTR,PRIM,BKGRND
51041  UTL,QRY,WHO
51131  UTL,QRY,SON
52011  UTL,QRY,CMAP
52041  UTL,QRY,TO
52061  UTL,QRY,TO (clear DS1/clear 2M bps)
52501  UTL,QRY,SECH,TO
52511  UTL,QRY,SCON,CH,TO
52521  UTL,QRY,SCON,TO
52531  UTL,QRY,SRHDW,TO
55711  ABT
56311  UTL,QRY,STATE,NPC (except DA,TA,PA types)
56314  UTL,QRY,STATE,NPC (DA,TA,PA types only)
56501  UTL,QRY,SROOF,TO,ALL
81001  AUD,QRY,CFA,CGA,LFVR,FFER

```

PRIM - Primary

Request that reporting of alarms specified by ghij be enabled. This will cause only a subset of the daily facility report to be output.

ghij - Primary Alarm or Parameter-count reports enable (hexadecimal)

This variable is a four-digit hexadecimal number. To enable alarm or parameter-count reports for a particular facility parameter, set the appropriate bit of ghij to 1. A bit set to 0 will disable the alarm report for the particular parameter.

There are two sets of parameters for ghij.

1. PA NPC parameters
2. PB or PC NPC parameters

Note: In a gateway office the PRIM parameter cannot be used alone but must be used with the domestic parameter FAC.

PA NPC parameters

The following tables should be used to set or interpret the hexadecimal values of digit identifiers g through j.

g - Digit identifier

g Facility parameter alarm report enabled

```

F FEBE, FES, FSES, FUAS
E FEBE, FES, FSES

```

D FEBE, FES, FUAS
 C FEBE, FES
 B FEBE, FSES, FUAS
 A FEBE, FSES
 9 FEBE, FUAS
 8 FEBE
 7 FES, FSES, FUAS
 6 FES, FSES
 5 FES, FUAS
 4 FES
 3 FSES, FUAS
 2 FSES
 1 FUAS
 0 FEBE, FES, FSES, FUAS alarm reports disabled

FEBE - Far end block error
 FES - Far end errored seconds
 FSES - Far end severley errored seconds
 FUAS - Far end unavailable seconds

h - Digit identifier

h Facility parameter alarm report enabled

F UATC, BER, FRER, MER
 E UATC, BER, FRER
 D UATC, BER, MER
 C UATC, BER
 B UATC, FRER, MER
 A UATC, FRER
 9 UATC, MER
 8 UATC
 7 BER, FRER, MER
 6 BER, FRER
 5 BER, MER
 4 BER
 3 FRER, MER
 2 FRER
 1 MER
 0 UATC, BER, FRER, MER alarm reports disabled

UATC - Unavailable time count
 BER - Minor bit error rate; for NPCs with MBER feature
 FRER - Framing errors
 MER - Multiframe errors

i - Digit identifier

i Facility parameter alarm report enabled

F CRC, CV, SES, ES
 E CRC, CV, SES

D CRC, CV, ES
 C CRC, CV
 B CRC, SES, ES
 A CRC, SES
 9 CRC, ES
 8 CRC
 7 CV, SES, ES
 6 CV, SES
 5 CV, ES
 4 CV
 3 SES, ES
 2 SES
 1 ES
 0 CV, SES, ES alarm reports disabled

CRC - CRC4 check block errors
 CV - Degraded minutes
 SES - Severely errored seconds
 ES - Errored seconds

j - Digit identifier

j Facility parameter alarm report enabled

F UAS, CSS, OFS, PBA
 E UAS, CSS, OFS
 D UAS, CSS, PBA
 C UAS, CSS
 B UAS, OFS, PBA
 A UAS, OFS
 9 UAS, PBA
 8 UAS
 7 CSS, OFS, PBA
 6 CSS, OFS
 5 CSS, PBA
 4 CSS
 3 OFS, PBA
 2 OFS
 1 PBA
 0 UAS, CSS, OFS, PBA alarm reports disabled

UAS - Unavailable seconds
 CSS - Controlled slip seconds
 OFS - Out-of-frame seconds
 PBA - Primary block alarms; default

Note: Enter 0 for an unassigned digit identifier

PB or PC NPC parameters

The following tables should be used to set or interpret the hexadecimal values of digit identifiers g through j.

g - Digit identifier (unassigned)

h - Digit identifier

h Facility parameter alarm report enabled

F BER, FRER, MER
E BER, FRER
D BER, MER
C BER
B FRER, MER
A FRER
9 MER
8 unassigned
7 BER, FRER, MER
6 BER, FRER
5 BER, MER
4 BER
3 FRER, MER
2 FRER
1 MER
0 BER, FRER, MER alarm reports disabled

BER - Bit error rate
FRER - Frame errors
MER - Multiframe alignment errors

i - Digit identifier

i Facility parameter alarm report enabled

F CRC, DM, SERS, ERS
E CRC, DM, SERS
D CRC, DM, ERS
C CRC, DM
B CRC, SERS, ERS
A CRC, SERS
9 CRC, ERS
8 CRC
7 DM, SERS, ERS
6 DM, SERS
5 DM, ERS
4 DM
3 SERS, ERS
2 SERS
1 ERS
0 CRC, DM, SERS, ERS alarm reports disabled

CRC - Cyclic redundancy code
DM - Degraded minutes
SERS - Severely errored seconds

```

                ERS      - Errored seconds

j      - Digit identifier

j      Facility parameter alarm report enabled

F      US, SLIP, LOFA, PBA
E      US, SLIP, LOFA
D      US, SLIP, PBA
C      US, SLIP
B      US, LOFA, PBA
A      US, LOFA
9      US, PBA
8      US
7      SLIP, LOFA, PBA
6      SLIP, LOFA
5      SLIP, PBA
4      SLIP
3      LOFA, PBA
2      LOFA
1      PBA
0      US, SLIP, LOFA, PBA alarm reports disabled

                US      - Unavailable seconds
                SLIP    - Slip
                LOFA    - Loss of frame alignment
                PBA     - Primary block alarms
    
```

cc - Hexadecimal condition code

```

cc      Explanation

E0      Bad FAC value entered
04      MONDAT keyword is invalid for this feature
48      Bad PRIM X'efgh values
4A      PRIM keyword is invalid for this feature
4B      The common bit(s) is(are) not set in both FAC & PRIM
4C      Both FAC and PRIM values(keywords) are required
D5      Boot in progress, can't service request
    
```

4.5 UTL, QRY, TOD, BMTR, QUERY TIME OF DAY

Input Message Format

[I.51061]

UTL:FRM xy,SEQ ww:QRY,TOD,BMTR!

Completion Message

[O.51061]

M hh:mm:ss xy,ww n[vv] UTL QRY TOD BMTR[BKGRND] {hrmnscl-----} \
COMPL

Denial Message

Not applicable.

Autonomous Message

Not applicable.

Explanation Of Message

This message requests the time of day at which an automated backup from disk to tape is scheduled to occur.

Explanation Of Parameters

TOD - Time of day

BMTR - Backup Memory Transfer

Used to request the time of day for the daily transfer from disk to tape

BKGRND - Background

The BKGRND keyword is used to request that the operation of transferring the data base from disk to tape be run in the background.

Use of the BKGRND keyword in this command will cause three tasks to be performed in the background; restoring the tape by software, data base backup from disk to tape, and removing the tape by software.

The only commands available to the user while performing a background backup are those listed below.

- 11001 TCON, FROM, TO, RDC, CUS, INCL
- 11011 TCON, FROM, TO, RDC, CUS, INCL (clear DS1/clear 2M bps)
- 11021 TCON, FROM, TO, MPM, NAM, NTR, RDC, CUS, INCL
- 15001 TDIS, FROM, TO, INCL, OOS, DCC
- 15002 TDIS, FROM, TO, INCL, OOS, DCC (multi-point)
- 15011 TDIS, FROM, TO, OOS, INCL (clear DS1/clear 2M bps)
- 19001 ED, MACRO, MAP

19101 SECH,TO,DS0A,DS0B,SEC,PCH
 19111 SECH,TO,RATE,DP,PCH
 19151 SDCH,TO,PCH,DCC
 19201 SCON,RATE,TPT,FROM,TO
 19211 SCON,DS0A,RATE,TPT,FROM,TO,DS0B
 19221 SCON,RATE,MPTM,MJU,MA
 19401 SDIS,RATE,TPT,FROM,TO
 19411 SDIS,RATE,TPT,FROM,TO
 19421 SDIS,RATE,MPTM,MJU (MJU branch)
 19431 SDIS,RATE,MPTM,MJU,ALL (MJU master)
 19501 CHG,SECH,OLD,NEW,PCH,DCC
 19581 CHG,SCON,OLD,NEW (change MJU branch)
 19591 CHG,SCON,OLD,NEW,MPTM (change MJU master)
 39001 LOGIN,USER,PASSWD,DACS,II
 39101 LOGOFF,USER,LINK
 51011 UTL,TOD,CFA,MONDAT,FAC,BMTR,PRIM,BKGRND
 51041 UTL,QRY,WHO
 51131 UTL,QRY,SQL
 52011 UTL,QRY,CMAP
 52041 UTL,QRY,TO
 52061 UTL,QRY,TO (clear DS1/clear 2M bps)
 52501 UTL,QRY,SECH,TO
 52511 UTL,QRY,SCON,CH,TO
 52521 UTL,QRY,SCON,TO
 52531 UTL,QRY,SRHDW,TO
 55711 ABT
 56311 UTL,QRY,STATE,NPC (except DA,TA,PA types)
 56314 UTL,QRY,STATE,NPC (DA,TA,PA types only)
 56501 UTL,QRY,SROOF,TO,ALL
 81001 AUD,QRY,CFA,CGA,LFVR,FFER

hrmnscl

- Starting time of facility report or transfer from disk to tape

hr - Hours (00 through 23)
 mn - Minutes (00 through 59)
 sc - Seconds (00 through 59)

DATA - Data

SEC - Secondary

HR - Hour

00-HR - The daily transfer from disk to tape is not scheduled
 24-HR - The time for the daily transfer from disk to tape is set

5. User Feedback Form

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Document Number: 365-353-004 Issue Number: 6.1

Publication Date: July 1994

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List of Tables

Table 2-1: Allowable Commands

Command Number	Command
11001	TCON, FROM, TO, RDC, CUS, INCL
11011	TCON, FROM, TO, RDC, CUS, INCL (clear DS1/clear 2.048 Mb/s)
11021	TCON, FROM, TO, MPM, NAM, NTR, RDC, CUS, INCL
11051	TCON, FROM, TO, PFW, NFW
15001	TDIS, FROM, TO, INCL, OOS, DCC
15002	TDIS, FROM, TO, INCL, OOS, DCC (multi-point)
15011	TDIS, FROM, TO, OOS, INCL (clear DS1/clear 2.048 Mb/s)
19101	SECH, TO, DS0A, DS0B, SEC, PCH
19111	SECH, TO, RATE, DP, PCH
19151	SDCH, TO, PCH, DCC
19201	SCON, RATE, TPT, FROM, TO
19211	SCON, DS0A, RATE, TPT, FROM, TO, DS0B
19221	SCON, RATE, MPTM, MJU, MA
19401	SDIS, RATE, TPT, FROM, TO
19411	SDIS, RATE, TPT, FROM, TO
19421	SDIS, RATE, MPTM, MJU (MJU branch)
19431	SDIS, RATE, MPTM, MJU, ALL (MJU master)
19501	CHG, SECH, OLD, NEW, PCH, DCC
19581	CHG, SCON, OLD, NEW (change MJU branch)
19591	CHG, SCON, OLD, NEW, MPTM (change MJU master)
39001	LOGIN, USER, PASSWD, DACS II
39101	LOGOFF, USER, LINK
51041	UTL, QRY, WHO
51131	UTL, QRY, SQN
52011	UTL, QRY, CMAP
52041	UTL, QRY, TO
52061	UTL, QRY, TO (clear DS1/clear 2.048 Mb/s)
52501	UTL, QRY, SECH, TO

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52511	UTL,QRY,SCON,CH,TO
52521	UTL,QRY,SCON,TO
52531	UTL,QRY,SRDHW,TO
55711	ABT
56311	UTL,QRY,STATE,NPC (except DA, TA, and PA types)
56314	UTL QRY,STATE,NPC (DA, TA, and PA types only)
56501	UTL,QRY,SROOF,TO,ALL
81001	AUD,QRY,CFA,CGA,LFVR,FFER

Table 2-2: Applicable Circuit Packs

Circuit Pack	NPC Type
TG80B	DE
TG191	DE,DA
KCR1	TE
KCR5	TE,TA

Table 2-3: Identifier Definitions

Bit	Value	Explanation
x	8*	Ericsson Cellular Format
y	0	Zero Code Suppression
	1	No Zero Code Suppression
	2	Bipolar with 8 Zero Substitution
z	0	D4 channel bank channel numbering
	1	D2 channel bank channel numbering
	2	D1D channel bank channel numbering

* Option 8 must be selected to allow DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches and cell sites.

Table 2-4: Facility Performance Parameters

rr	Parameter
41	Daily near-end path coding violations
42	Daily near-end path errored seconds
43	Daily near-end path severely errored seconds
44	Daily near-end severely errored framing seconds
45	Daily near-end path controlled slip seconds
46	Daily near-end path unavailable seconds
47	Daily near-end line coding violations
48	Daily near-end line errored seconds
49	Daily near-end line severely errored seconds
50	Daily far-end path coding violations
51	Daily far-end path errored seconds
52	Daily far-end path severely errored seconds
53	Daily far-end severely errored framing seconds
54	Daily far-end path controlled slip seconds
55	Daily far-end path unavailable seconds
56	Daily far-end line errored seconds
57	15-minute near-end path coding violations
58	15-minute near-end path errored seconds
59	15-minute near-end path severely errored seconds
60	15-minute near-end severely errored framing seconds
61	15-minute near-end path controlled slip seconds
62	15-minute near-end path unavailable seconds
63	15-minute near-end line coding violations
64	15-minute near-end line errored seconds
65	15-minute near-end line severely errored seconds
66	15-minute far-end path coding violations
67	15-minute far-end path errored seconds
68	15-minute far-end path severely errored seconds
69	15-minute far-end severely errored framing seconds

70	15-minute far-end path controlled slip seconds
71	15-minute far-end path unavailable seconds
72	15-minute far-end line errored seconds

Table 2-5: Identifier Definitions

Bit	Value	Explanation
x	8*	Ericsson Cellular Format
y	0	Zero Code Suppression
	1	No Zero Code Suppression
	2	Bipolar with 8 Zero Substitution
z	0	D4 channel bank channel numbering
	1	D2 channel bank channel numbering
	2	D1D channel bank channel numbering

* Option 8 must be selected to allow DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches and cell sites.

Table 2-6: Alarm Types

Type (rr,ss,tt,....)	Meaning
01	SLIPs, Major Alarm
02	SLIPs, Minor Alarm
03	BER (bit error rate), Major Alarm
04	BER, Minor Alarm
07	COFA (change of frame alignment, Major Alarm
08	COFA, Minor Alarm

Table 2-7: Alarm Thresholds

Option (l,m,n)	Meaning
0	Default Value
1	First Option Value (set1)
2	Second Option Value (set2)
3	Third Option Value (set3)

Table 2-8: Identifier Definitions

Bit	Value	Explanation
x	8*	Ericsson Cellular Format
y	0	Zero Code Suppression
	1	No Zero Code Suppression
	2	Bipolar with 8 Zero Substitution
z	0	D4 channel bank channel numbering
	1	D2 channel bank channel numbering
	2	D1D channel bank channel numbering

* Option 8 must be selected to allow DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches and cell sites.

Table 2-9: Facility Parameter Codes

Type (rr,ss,tt,....)	Meaning
01	SLIPs, Major Alarm
02	SLIPs, Minor Alarm
03	BER (bit error rate), Major Alarm
04	BER, Minor Alarm
07	COFA (change of frame alignment, Major Alarm
08	COFA, Minor Alarm

Table 2-10: Identifier Definitions

Bit	Value	Explanation
x	8*	Ericsson Cellular Format
y	0	Zero Code Suppression
	1	No Zero Code Suppression
	2	Bipolar with 8 Zero Substitution
z	0	D4 channel bank channel numbering
	1	D2 channel bank channel numbering
	2	D1D channel bank channel numbering

* Option 8 must be selected to allow DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches and cell sites.

Table 2-11: Facility Performance Parameters

rr	Parameter
41	Daily near-end path coding violations
42	Daily near-end path errored seconds
43	Daily near-end path severely errored seconds
44	Daily near-end severely errored framing seconds
45	Daily near-end path controlled slip seconds
46	Daily near-end path unavailable seconds
50	Daily far-end path coding violations
51	Daily far-end path errored seconds
52	Daily far-end path severely errored seconds
53	Daily far-end severely errored framing seconds
54	Daily far-end path controlled slip seconds
55	Daily far-end path unavailable seconds
57	15-minute near-end path coding violations
58	15-minute near-end path errored seconds
59	15-minute near-end path severely errored seconds
60	15-minute near-end severely errored framing seconds
61	15-minute near-end path controlled slip seconds
62	15-minute near-end path unavailable seconds
66	15-minute far-end path coding violations
67	15-minute far-end path errored seconds
68	15-minute far-end path severely errored seconds
69	15-minute far-end severely errored framing seconds
70	15-minute far-end path controlled slip seconds
71	15-minute far-end path unavailable seconds

Table 3-1: Identifier Definitions

Bit	Value	Explanation
x	0	Not Assigned
	1	D4
	2	ESF - Voice
	3	ESF - Data
	4	DDST (T1DM - Rbit connection via channel 24)
	5-7	Not assigned
	8*	Ericsson Cellular Format
	9	Not assigned
y	0	Zero Code Suppression
	1**	No Zero Code Suppression
	2**	Bipolar with 8 Zero Substitution
	3	Not assigned
	4	Zero Code Suppression/DMI signaling
	5	No Zero Code Suppression/DMI signaling
	6	Bipolar with 8 Zero Substitution/DMI signaling
	7-9	Not assigned
z	0	D4 channel bank numbering
	1	D2 channel bank numbering
	2	D1D channel bank numbering
	3-8	Not assigned
	9	Unchannelized 193-bit Clear DS1 cross-connection

* Option 8 must be selected to allow DACS II to terminate facilities in cellular networks that carry signals between Ericsson cellular switches and cell sites.

** Options 1 and 2 are only applicable to DA type clear-DS1 NPCs.

List of Figures

Figure 2-1: Network Configuration With T1 Facilities

