TAP-035

Clear DS1 Facility Alarm (External T1 Facility on DMIxxx)

PURPOSE

Provides procedures for clearing DS1 facility alarms.

GENERAL

This procedure assumes that you have logged on to the alarmed Network Element (NE) and have opened the 1603 SM Application browser (DLP-117). Unless stated otherwise, all menu items referenced in this procedure are selected from the browser context menu.
Refer to TAP-001 for assistance in analyzing alarms and isolating alarms to specific NEs.

Procedure

1. Retrieve alarms:

   Alarm Surveillance> Current Alarms>Retrieve

2. Are there any DMI or VTG alarm indications on drop group with alarmed DS1?

   If yes, go to TAP-021 to resolve.
   If no, go to step 3.

3. Have DS1 alarms and conditions been retrieved?

   If yes, go to step 5.
   If no, go to step 4.

4. Retrieve DS1 alarms and conditions:

   Alarm Surveillance> Current Conditions>Filter>DS1>OK>Retrieve

5. Identify the alarm condition and Access Identifier (refer to Table A). Then go to the step indicated in Table B to clear alarm.

Table A. DS1 (T1)-to-VT1 Assignment (Sequential and Grouped AID Formats*)

	VTG 1				VTG 2				VTG 3				VTG 4				VTG 5				VTG 6				VTG 7			
T1 SEQ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
VT 1.5 SEQ	1	8	15	22	2	9	16	23	3	10	17	24	4	11	18	25	5	12	19	26	6	13	20	27	7	14	21	28
VT 1.5 and T1 grp	1-1	1-2	1-3	1-4	2-1	2-2	2-3	2-4	3-1	3-2	3-3	3-4	4-1	4-2	4-3	4-4	5-1	5-2	5-3	5-4	6-1	6-2	6-3	6-4	7-1	7-2	7-3	7-4

** The AID format used is determined by the provisionable setting of the VT1.5/DS1 Numbering Mode (VTFORMAT) parameter (Provision >Network Element>Settings>Parameters).*

Table B. DS1 Facility Alarms/Conditions/Events

ALARM/CONDITION	DESCRIPTION	STEP
AIS	Alarm Indication Signal, all ones (NEND RCV)	6
	Alarm Indication Signal, all ones (NEND TRMT)	6
BERL-HT	Line bit error ratio has exceeded high threshold value	13
DS1ISD	DS1 Idle signal detected (NEND RCV)	23
INHLPBK-( )	Inhibit loopback (ESFLINE, INBANDRX, or INBANDTX)	27
INHPMREPT	Inhibit performance monitoring reporting	31
LOF	Loss of frame (NEND RCV)	62
	Loss of frame (NEND TRMT)	62
LOS	Loss of signal (NEND RCV)	35
	Loss of signal (NEND TRMT)	35
MTCE	Removed from service for maintenance	101
RAI	Remote alarm indication (NEND RCV)	105
	Remote alarm indication (NEND TRMT)	105

T-BPV	Bipolar violation - TCA* (NEND RCV)	111
T-CSSP	Controlled slip seconds - Path TCA* (FEND RCV)	111
	Controlled slip seconds - Path TCA* (FEND TRMT)	111
T-CVL	Coding violations - Line TCA* (NEND RCV)	111
T-CVP	Coding violations - Path TCA* (NEND RCV)	111
	Coding violations - Path TCA* (NEND TRMT)	111
	Coding violations - Path TCA* (FEND RCV)	111
	Coding violations - Path TCA* (FEND TRMT)	111
T-ESL	Error seconds - Line TCA* (NEND RCV)	111
	Error seconds - Line TCA* (FEND RCV)	111
	Error seconds - Line TCA* (FEND TRMT)	111
T-ESP	Error seconds - Path TCA* (NEND RCV)	111
	Error seconds - Path TCA* (NEND TRMT)	111
	Error seconds - Path TCA* (FEND RCV)	111
	Error seconds - Path TCA* (FEND TRMT)	111
T-SASP	SEF/AIS seconds - Path TCA* (NEND RCV)	111
	SEF/AIS seconds - Path TCA* (NEND TRMT)	111
T-SEFS	Severely errored framing seconds TCA* (FEND RCV)	111
	Severely errored framing seconds TCA* (FEND TRMT)	111
T-SESL	Severely errored seconds - Line TCA* (NEND RCV)	111
T-SESP	Severely errored seconds - Path TCA* (NEND RCV)	111
	Severely errored seconds - Path TCA* (NEND TRMT)	111
	Severely errored seconds - Path TCA* (FEND RCV)	111

	Severely errored seconds - Path TCA* (FEND TRMT)	111
T-UASP	Unavailable seconds - Path TCA* (NEND RCV)	111
	Unavailable seconds - Path TCA* (NEND TRMT)	111
	Unavailable seconds - Path TCA* (FEND RCV)	111
	Unavailable seconds - Path TCA* (FEND TRMT)	111
CONDITION	**DESCRIPTION**	**ACTION**
ACTLPBK	Loopback is active (Loopback type, location, request types are displayed as comment)	No Action
AINS	Automatic-In-Service state	No Action
CONNTESTACT	Test T1 is connected (Pattern = IDLE or QRSS are displayed as comment)	No Action
TSN-n	Test access session number assigned to DS1 under test, where n = 1...999	No Action
TSA-n	Test access mode, where n = MONE, MONF, SPLTA, SPLTB, SPLTE, SPLTF, LOOPE, or LOOPF	No Action
QRSS	Quasi-random pattern is detected on RCV facility	No Action
EVENT	**DESCRIPTION**	**ACTION**
ACTLPBK	Loopback is activated	No Action
AINS	Automatic-In-Service state	No Action
IS-AUTO	Automatic OOS-MA to IS	No Action
** TCA = Threshold Crossing Alert*		

Alarm/Condition - AIS

1. An AIS condition is a status indication of an alarm condition that has occurred upstream.

2. Retrieve alarms and determine direction of AIS alarm:

    a. Select the following menu items:
    Alarm Surveillance>Current Alarms

b. Click on Retrieve.

c. Click in left-hand column to select AIS alarm.

d. Click on Details.

3. From the Alarm Details screen, what is Direction parameter?

   If Receive (or blank), go to step 11.
   If Transmit, go to step 9.

4. Direction = Transmit: AIS is received on incoming signal (input, demux direction) from SONET network. Troubleshoot far-end NE where DS1 facility enters SONET network.

5. STOP. This procedure is complete.

- Direction = Receive: AIS is received on incoming (input, mux direction) DS1 facility. Troubleshoot far end equipment.

- STOP. This procedure is complete.

Alarm/Condition - BERL-HT

1. A BERL-HT indicates that the bit to error ratio has exceeded a pre-set threshold setting.

2. From response in step 4, are there any other alarms?

   If yes, go to step 5 and resolve other DS1 alarms first.
   If no, go to step 15.

3. Check equalization at Local LTE per vendor's documentation. Correct if necessary.

   NOTE: *Line equalization is applied in the transmit direction. An incorrect equalization setting at the local LTE may cause bit errors at the local (alarmed) NE.*

4. Did the alarm clear?

   If yes, STOP. This procedure is complete.
   If no, go to step 17.

5. From Table A, determine which VTG the alarmed DS1 is on.

6. **CAUTION: Possibility of service interruption. Follow the procedures in DLP-101 when replacing the VTG to avoid loss of traffic.**

7. Replace VTG per DLP-101.

8. Did the alarm clear?

   If yes, STOP. This procedure is complete.
   If no, go to step 21.

9. Test the DS1 line per local practice.

10. STOP. This procedure is complete.

Alarm/Condition - DS1ISD

1. The DS1ISD (Idle Signal Detected) indicates that a normal signal source is not present; i.e., the far end is transmitting the idle signal because the far end is receiving an idle signal when the DTE signal is not present, or there is an unassigned DS1 of a DSC. The DS1ISD alarm is only applicable to SF and ESF format.

2. Is this DS1 used to carry traffic?

   If yes, go to step 25.
   If no, STOP. This procedure is complete (ignore alarm).

3. Check far end to determine if/why DS1ISD is being generated. If alarm persists, determine/verify the facilities are cross-connected to the DS1 with the alarm.

4. STOP. This procedure is complete.

Alarm/Condition - INHLPBK

1. Remote request for facility loopback is inhibited.

2. Do you want to allow remote activation of loopbacks?

   If yes, go to step 29.
   If no, STOP. This procedure is complete.

3. Allow remote activation of loopbacks on DS1 facility:

   a. Select the following menu items:
   Provision>Facilities>DS1>DS1 Facility

   b. Select Allow/Inhibit tab.

   c. Click on Retrieve.

   d. Select DS1 facility.

   e. Click on Modify.

   f. Select Allow for:

      - ESF Line Loopback (requires VTG301)

      - Inband Loopback RX

      - Inband Loopback TX (requires VTG301)

   g. Click on OK.

   h. Click on Send, then Close.

4. STOP. This procedure is complete.

Alarm/Condition - INHPMREPT

1. An INHPMREPT indicates that autonomous reporting of performance monitoring data has been inhibited on DS1 facility.

2. Do you want to allow PM reporting?

   If yes, go to step 33.
   If no, STOP. This procedure is complete.

3. Allow PM reporting on DS1 facility:

   a. Select the following menu items:
   Provision>Facilities>DS1>DS1 Facility

   b. Select Allow/Inhibit tab.

   c. Click on Retrieve.

   d. Select DS1 facility.

   e. Click on Modify.

   f. From PM Reports drop-down list, select Allow.

   g. Click on OK.

   h. Click on Send, then Close.

4. STOP. This procedure is complete.

Alarm/Condition - LOS

1. An LOS condition indicates that an all zeros pattern existed on the DS1 incoming signal at the DS1 facility.

2. Retrieve alarms and determine direction of LOS alarm:

a. Select the following menu items:
Alarm Surveillance>Current Alarms

b. Click on Retrieve.

c. Click in left-hand column to select LOS alarm.

d. Click on Details.

3. From the Alarm Details screen, what is Direction parameter?

   If Receive (or blank), go to step 39.
   If Transmit, go to step 38.

4. Direction = Transmit: LOS is detected in the demux direction from the SONET network.

   Go to step 45.

5. Direction = Receive: LOS is detected in the mux direction from the DS1 facility.

6. Refer to Figure 1 to find location of alarmed DS1 on shelf backplane.

Figure 1. DS1 Wire-wrap I/O Panel Layout

1. Verify that there are good R/T terminal wire-wrap connections on the IN circuit of the alarmed DS1.

2. Are the connections good?

   If yes, go to step 45.
   If no, go to step 43.

3. Correct the wire-wrap connections.

4. STOP. This procedure is complete.

5. From Table A, determine the VTG serving the alarmed DS1.

6. Retrieve VTG states:

a. Select the following menu items:
Provision>Equipment>VTG> Parameters

b. Click on Retrieve.

7. From the response, is the VTG unit serving the alarmed DS1 active (ACT)?

   If yes, go to step 49.
   If no (STBY), go to step 48.

8. A faulty VTG caused a switch to protection and may have caused an LOS. Go to step 56 to replace VTG.

9. When an LOS is received, a diagnostic is automatically executed to verify a hard LOS or if the VTG is bad.

10. Do you want to perform diagnostic test for LOS?

    If yes, go to step 51.
    If no, go to step 60.

11. **CAUTION: Possibility of service interruption. The following diagnostics are service-affecting if performed on active VTG.**

12. For alarmed DS1, place VTG in maintenance state:

    a. Select the following menu items:
    Provision>Equipment>VTG

    b. Select Parameters tab.

    c. Click on Retrieve.

    d. Select main VTG associated with alarmed facility.

    e. Click on Modify.

f. From Service State drop-down list, select Maintenance.

g. Click on OK.

h. Click on Send, then Close.

13. Switch VTG to protection VTG:

a. Select the following menu items:
Manual Controls>Switching> Equipment

b. Select VTG tab.

c. Click on Retrieve.

d. Select active VTG to be switched from.

e. From Switch Mode, select Normal.

f. Click on Send.

14. Perform diagnostics on VTG:

a. Select the following menu items:
Manual Controls>Diagnostics> Equipment

b. Select VTG tab.

c. Modify the Group, Termination Method, Iterations and Phase, where:

- Group = Drop Group 1-1 through 3-1 (select for drop group with VTG)

- Module = 1...7 (for VTG-1 through VTG-7)
- Termination Method = Immediate
- Iterations = 5
- Phase = Phase 14 - SA, VTG LOS

d. Click on Send.

e. Wait for diagnostics to complete.

15. Did diagnostics pass?

    If yes, go to step 58.
    If no, go to step 56.

16. **CAUTION: Possibility of service interruption. Follow the procedures in DLP-101 when replacing the VTG to avoid loss of traffic.**

17. Replace VTG per DLP-101.

18. Place VTG back in service:

    a. Select the following menu items:
    Provision>Equipment>VTG

    b. Select Parameters tab.

    c. Click on Retrieve.

    d. Select main VTG associated with alarmed facility.

    e. Click on Modify.

f. From Service State drop-down list, select In Service.

g. Click on OK.

h. Click on Send, then Close.

19. Did alarm clear?

    If yes, STOP. This procedure is complete.
    If no, go to step 60.

20. Per local practice, if Direction=Receive, test the DS1 facility; if Direction=Transmit, look for alarms in the network.

21. STOP. This procedure is complete.

Alarm/Condition - LOF

1. An LOF condition indicates that an out-of-frame condition has persisted for more than three ms plus alarm delay time.

2. Retrieve alarms and determine direction of LOF alarm:

    a. Select the following menu items:
    Alarm Surveillance>Current Alarms

    b. Click on Retrieve.

    c. Click in left-hand column to select LOF alarm.

    d. Click on Details.

3. From the Alarm Details screen, what is Direction parameter?

If Receive (or blank), go to step 74.
If Transmit, go to step 65.

LOF - NEND, TRMT Direction

1. Direction = Transmit: LOF is detected in the demux direction from the SONET network. Problem could be end-to-end mismatch of T1 provisioning, LOF on far-end facility, equalization at remote LTE, VTG failure on either end, or network problems (incorrect cross-connect, etc.).

2. Verify the DS1 frame format and line code are set the same at both ends of the DS1 circuit by performing the following at the near-end and far-end NEs:

    a. Select the following menu items:
    Provisioning>Facilities>DS1>DS1 Facility

    b. Select Parameters tab.

    c. Click on Retrieve.

3. Are Line Code and Frame Format parameters the same at both ends of circuit?

    If yes, go to step 70.
    If no, go to step 68.

4. Determine correct parameters from office records and reprovision the incorrect DS1 port:

    a. From the screen opened in step 66, select DS1 facility to be modified.

    b. Click on Modify.

    c. From Line Code drop-down list, select AMI or B8ZS.

    d. From Frame Format drop-down list, select Clear Channel, ESF or SF.

    NOTE: *The ESF and SF formats require DMI301.*

e. Click on OK.

f. Click on Send, then Close.

5. STOP. This procedure is complete.

6. Check equalization at remote LTE per vendor's documentation. Correct if necessary.

   NOTE: *Line equalization is applied in the transmit direction. An incorrect equalization setting at the remote LTE may cause LOF at the remote NE (RCV direction) and local (alarmed) NE (TRMT direction).*

7. Did the alarm clear?

   If yes, STOP. This procedure is complete.
   If no, go to step 72.

8. Retrieve alarms at the far-end NE:

   Alarm Surveillance> Current Alarms>Retrieve

9. Are there any equipment or DS1 alarms at far-end NE?

If yes, resolve alarms at far-end NE (TAP-001).
If no, go to step 86.

LOF - NEND, RCV Direction

1. Direction = Receive: LOF is detected in the mux direction from the DS1 facility.

2. Verify the DS1 frame format and line code are set the same at both ends of the DS1 circuit by performing the following at the near-end and far-end NEs:

   a. Select the following menu items:
   Provisioning>Facilities>DS1>DS1 Facility

   b. Select Parameters tab.

   c. Click on Retrieve.

3. Are Line Code and Frame Format parameters the same at both ends of facility?

   If yes, go to step 79.
   If no, go to step 77.

4. Determine correct parameters from office records and reprovision the incorrect DS1 port:

   a. From the screen opened in step 75, select DS1 facility to be modified.

   b. Click on Modify.

   c. From Line Code drop-down list, select AMI or B8ZS.

   d. From Frame Format drop-down list, select Clear Channel, ESF or SF.

      NOTE: *The ESF and SF formats require DMI301.*

   e. Click on OK.

   f. Click on Send, then Close.

5. STOP. This procedure is complete.

6. Check equalization at local LTE per vendor's documentation. Correct if necessary.

   NOTE: *Line equalization is applied in the transmit direction. An incorrect equalization setting at the local LTE may cause LOF at the local NE (RCV direction) and remote NE (TRMT direction).*

7. Did alarm clear?

   If yes, STOP. This procedure is complete.
   If no, go to step 81.

8. Refer to Figure 1 to find location of alarmed DS1 on shelf backplane.

9. Verify that there are good R/T terminal wire-wrap connections on the IN circuit of the alarmed DS1.

10. Are the connections good?

    If yes, go to step 86.
    If no, go to step 84.

11. Correct the wire-wrap connections.

12. STOP. This procedure is complete.

13. From Table A, determine which VTG is serving the alarmed DS1.

14. Retrieve VTG states:

    a. Select the following menu items:
       Provision>Equipment>VTG

    b. Select Parameters tab.

    c. Click on Retrieve.

15. From the response, is the VTG unit serving the alarmed DS1 active (ACT)?

    If yes, go to step 90.
    If no (STBY), go to step 89.

16. ***NOTE:*** *A faulty VTG caused a switch to protection and may have caused an LOF.*

    Go to step 95 to replace VTG.

17. **CAUTION: Possibility of service interruption. The following diagnostics are service-affecting if performed on active VTG.**

18. For alarmed DS1, place VTG in maintenance state:

    a. Select the following menu items:
       Provision>Equipment>VTG

b. Select Parameters tab.

c. Click on Retrieve.

d. Select main VTG associated with alarmed facility.

e. Click on Modify.

f. From Service State drop-down list, select Maintenance.

g. Click on OK.

h. Click on Send, then Close.

19. Switch VTG to protection VTG:

a. Select the following menu items:
Manual Controls>Switching> Equipment

b. Select VTG tab.

c. Click on Retrieve.

d. Select active VTG to be switched from.

e. From Switch Mode, select Normal.

f. Click on Send.

20. Perform diagnostics on VTG:

a. Select the following menu items:

Manual Controls>Diagnostics> Equipment

b. Select VTG tab.

c. Modify the Group, Termination Method, Iterations and Phase, where:

- Group = Drop Group 1-1 through 3-1 (select for drop group with VTG)
- Module = 1...7 (for VTG-1 through VTG-7)
- Termination Method = Immediate
- Iterations = 1
- Phase = (click on Phase button at top of column to select all phases)

d. Click on Send.

e. Wait for diagnostics to complete.

21. Did diagnostics pass?

    If yes, go to step 97.
    If no, go to step 95.

22. **CAUTION: Possibility of service interruption. Follow the procedures in DLP-101 when replacing the VTG to avoid loss of traffic.**

23. Replace VTG per DLP-101.

24. Place VTG back in service:

    a. Select the following menu items:
    Provision>Equipment>VTG

b. Select Parameters tab.

c. Click on Retrieve.

d. Select main VTG associated with alarmed facility.

e. Click on Modify.

f. From Service State drop-down list, select In Service.

g. Click on OK.

h. Click on Send, then Close.

25. Did alarm clear?

    If yes, STOP. This procedure is complete.
    If no, go to step 99.

26. Per local practice, if Direction=Receive, test the DS1 facility; if Direction=Transmit, look for alarms in the network.

27. STOP. This procedure is complete.

Alarm/Condition - MTCE

1. An MTCE alarm is a result of the execution of a service state = Maintenance on the DS1 facility.

2. Was this a desired result?

   If yes, STOP. This procedure is complete.
   If no, go to step 103.

3. Place DS1 back in service:

a. Select the following menu items:
Provision>Facilities>DS1>DS1 Facility

b. Select Parameters tab.

c. Click on Retrieve.

d. Select DS1 facility to be modified.

e. Click on Modify.

f. From Service State drop-down list, select In Service.

g. Click on OK.

h. Click on Send, then Close.

4. STOP. This procedure is complete.

Alarm/Condition - RAI

1. Failures at the far end result in the transmission of a continuous RAI signal in the reverse direction (toward the near-end NE). These failures include: equipment failure that is DS1 service-affecting, LOS, LOF and AIS. RAI replaces yellow alarm and is applicable to SF and ESF formats only.

2. Retrieve alarms and determine direction of RAI alarm:

a. Select the following menu items:
Alarm Surveillance>Current Alarms

b. Click on Retrieve.

c. Click in left-hand column to select RAI alarm.

d. Click on Details.

3. From the Alarm Details screen, what is Direction parameter?

   If Receive (or blank), go to step 108.
   If Transmit, go to step 109.

4. RAI is received on incoming (input, mux direction) DS1 facility. Troubleshoot far-end equipment; then go to step 110.

5. RAI is received on incoming signal (input, demux direction) from SONET network. Troubleshoot far-end NE where DS1 facility enters SONET network.

6. Did alarm clear (may take several minutes to clear)?

If yes, STOP. This procedure is complete.
If no, go to step 90 to diagnose VTG at near end.

Alarm/Condition - T-xxx

1. A threshold crossover alert has been generated because one of the performance parameters exceeds the value specified for it (refer to Table C).

2. Retrieve current conditions for DS1 facility:

   Alarm Surveillance> Current Conditions>Filter>DS1>OK>Retrieve

3. Are there any other facility alarms (besides T-xxx)?

   If yes, go to step 114.
   If no, go to step 116.

4. Correct facility alarms before resolving TCA conditions per Table B.

5. STOP. This procedure is complete.

Table C. DS1 (T1) PM Thresholds

MONITOR TYPE	FACTORY DEFAULT		RANGE	DESCRIPTION
	15-MIN	1-DAY		

BERL-HT	4		3...6	Bit error ratio line - high threshold (SFBER)
BPV	13340	133400	1...4,294,967,295	Bipolar violations
CSSP	1	4	1...65535	Controlled slips
CVL	13340	133400	1...4,294,967,295	Coding violation count - Line
CVP (FMT=SF)	72	691	1...4,294,967,295	Coding violation count - Path
CVP (FMT=ESF)	13296	132960	1...4,294,967,295	Coding violation count - Path
ESL	65	648	1...65535	Line Errored Seconds
ESP	65	648	1...65535	Path Errored Seconds
SASP	2	17	1...65535	Path AIS seconds
SEFS	2	17	1...65535	Severely errored framing seconds (OOFS/COFAS)
SESL	10	100	1...65535	Line Severely Errored Seconds
SESP	10	100	1...65535	Path Severely Errored Seconds
UASP	10	10	1...65535	Unavailable seconds - Path

1. Is the condition severe enough to warrant unit replacement?

   If yes, go to step 119.
   If no, go to step 117.

2. Record the alarm as an event.

3. STOP. This procedure is complete.

4. Determine Location and Direction of T-xxx condition:

   a. From the screen opened in step 112, click in left-hand column to select T-xxx condition.

   b. Click on Details.

   c. Refer to Figure 2 for definition of Location and Direction parameters.

Figure 2. PM Monitoring Points in DS1 Circuit

1. Refer to Table D for corrective action based on location and direction of TCA. Refer to Figure 2 for definition of terms used in table.

Table D. Troubleshooting DS1 TCA Conditions

LOCATION/ DIRECTION	DESCRIPTION	GO TO
NEND/RCV	Suspect local DS1 facility or LTE. Troubleshoot per local practice	Step 121
NEND/TRMT	Suspect network between local and remote NEs. Look for other alarms in SONET network	TAP-001
FEND/RCV	Suspect local DS1 facility or NE. Troubleshoot facility per local practice. If facility is OK, problem may be at local NE	Step 121
FEND/TRMT	Suspect remote DS1 facility or NE. Troubleshoot facility per local practice. If facility is OK, problem may be at remote NE	TAP-001

1. Was problem found and corrected in the facility?

   If yes, STOP. This procedure is complete.
   If no, go to step 122.

2. Retrieve alarms at the local NE:

   Alarm Surveillance> Current Alarms>Retrieve

3. Are there any CLK or SYNCN alarms?

   If CLK, go to TAP-014.
   If SYNCN, go to TAP-027.
   If no, go to step 124.

4. Is there a SYNCCLK alarm against an HIF, DMI, or VTG unit?

   If HIF, go to TAP-026.
   If DMI, go to TAP-019.
   If VTG, go to TAP-037.
   If no, go to step 125.

5. Refer to Figure 1 to find location of alarmed DS1 on shelf backplane.

6. Verify that there are good R/T terminal wire-wrap connections for the alarmed DS1.

7. Are the connections good?

If yes, go to step 130.
If no, go to step 128.

8. Correct the wire-wrap connections.

9. STOP. This procedure is complete.

10. Verify that the DS1 Frame Format and Line Code parameters are set correctly:

    NOTE: *It is not necessary to verify the Frame Format parameter for the following alarms: T-CVL, T-BPV, and T-SESL.*

    a. Select the following menu items:
    Provision>Facilities>DS1>DS1 Facility

    b. Select Parameters tab.

    c. Click on Retrieve.

11. Are Line Code and Frame Format parameters set correctly?

    If yes, go to step 134.
    If no, go to step 132.

12. Determine correct parameters from office records and reprovision the incorrect DS1 port:

    a. From the screen opened in step 130, select DS1 facility to be modified.

    b. Click on Modify.

    c. From Line Code drop-down list, select AMI or B8ZS.

    d. From Frame Format drop-down list, select Clear Channel, ESF or SF.

    NOTE: *The ESF and SF formats require DMI301.*

    e. Click on OK.

f. Click on Send, then Close.

13. STOP. This procedure is complete.

14. Possibility of service interruption. Follow the procedures in DLP-101 when replacing the VTG to avoid loss of traffic.

15. Replace VTG per DLP-101.

16. Retrieve and monitor PM registers:

    a. Select the following menu items:
    Performance Monitoring>Facilities> DS1

    b. Select DS1 Line or DS1 Path tab.

    c. From Group, select drop group - port for DS1 facility.

    d. Click on Retrieve.

    e. Note value of Current register(s). The frequency for updating the Current register(s) is determined by the number of seconds selected in the Refresh Rate field.

17. Did PM error stop?

    If yes, STOP. This procedure is complete.
    If no, go to step 138.

18. Contact Customer Service (TNG-505).

19. STOP. This procedure is complete.