TAP-028

Clear NEP Unit Alarm

PURPOSE

Provides procedures for clearing NEP unit 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. Have alarms for the NEP equipment been retrieved?

   If yes, go to step 3.
   If no, go to step 2.

2. Retrieve NEP alarms and conditions:

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

3. Identify the condition type, then go to the step indicated in Table A to clear the alarm.

Table A. Alarms/Conditions/Events

ALARM/CONDITION	DESCRIPTION	STEP
BOOT	Processor is running bootcode	[1]
CONTBUS	SBI failure (sync, parity, TSI loop, SML)	4
CONTEQPT	SML: A/B Select fail	16
CONTRDUP	NEP - NEP link down	[1]
FAILTOSW	Fail to switch	[1]
IMPROPRMVL	Improper removal	[1]

INHDGN	Inhibit diagnostics	23
INHPMREPT	Inhibit PM report	27
INHSWDX [2]	Inhibit switch duplex	[1]
INT	Equipment failure	31
INVERR	Inventory error	39
MEA	Mismatch of equipment and attributes	53
MTCE	Removed from service for maintenance	55
PROGVER	Program version error	[1]
SYNCCLK	Clock fail (A/B, 6.17 MHz or 21.61 MHz fail)	59
CONDITION	**DESCRIPTION**	**ACTION**
ACT	Unit is active	No action
STBY	Unit is standby	[1]
EVENT	**DESCRIPTION**	**ACTION**
AUTORESET-0	Automatic reset level 0 (warm restart)	No action
AUTORESET-1	Automatic reset level 1 (cold restart)	No action
EQUIP	Unit is equipped	No action
MANRESET-0	Manual reset level 0 (warm restart)	No action
MANRESET-1	Manual reset level 1 (cold restart)	No action
MANRESET-2	Manual reset level 2 (download)	No action
MANSW	Manual switch	[1]
UNASSIGN	Unit is unassigned	[1]
UNEQUIP	Unit is unequipped	[1]
WTRREVERT	Wait to restore/revert time-out	No action

[1]These conditions/alarms are only possible when two NEPs are equipped. Existing software does not support two NEPs.
[2]Although the 1603 SM cannot be equipped with dual NEPs, the INHSWDX alarm is possible (i.e., INH-SW-EQPT command entered).

Alarm/Condition - CONTBUS

1. A CONTBUS against an NEP signifies that the serial bus interface has lost its sync, it received a parity error, the TSI loop has failed, or the SML link failed.

2. Diagnose NEP:

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

b. Select NEP tab.

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

- Termination Method = Immediate
- Iteration = 5
- Phase 2 = NSA, TSI SBI Loop
- Phase 10 = NSA, SML Active Reflection

d. Select Send.

3. Did the diagnostics pass?

   If yes, go to step 7.
   If no, go to step 9.

4. An intermittent error has occurred. Monitor for more alarms and if they continue go to step 9.

5. STOP. This procedure is complete.

- Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the NEP to avoid interrupting service.

- Replace the alarmed NEP (NEPA) per DLP-101.

- Retrieve alarms:

Alarm Surveillance> Current Alarms>Retrieve

- Did the alarm clear?

If yes, STOP. This procedure is complete.
If no, go to step 13.

- Were there any CONTCOM alarms on other units?

If yes, go to TAP-001.
If no, go to step 14.

- Call Customer Service (TNG-505).

- STOP. This procedure is complete.

Alarm/Condition - CONTEQPT

1. A CONTEQPT condition implies that A/B SML select mechanism has failed.

2. **CAUTION: Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the NEP to avoid interrupting service.**

3. Replace the NEP per DLP-101.

4. Retrieve alarms:

   Alarm Surveillance> Current Alarms>Retrieve

5. Did the alarm clear?

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

6. Contact Customer Service (TNG-505).

7. STOP. This procedure is complete.

Alarm/Condition - INHDGN

1. Diagnostics have been inhibited.

2. Is it desirable to allow diagnostics?

   If yes, go to step 25.
   If no, STOP. This procedure is complete.

3. Allow diagnostics:

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

   b. Select Allow/Inhibit tab.

   c. Click on Retrieve.

   d. Select Processor = NEP.

   e. Click on Modify.

   f. From Diagnostic Tests drop-down list, select Allow.

   g. Click on OK.

   h. Click on Send, then Close

4. STOP. This procedure is complete.

Alarm/Condition - INHPMREPT

1. Reporting of scheduled PM reports has been inhibited.

2. Is it desirable to allow PM reports?

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

3. Allow PM reports:

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

    b. Select Allow/Inhibit tab.

    c. Click on Retrieve.

    d. Select Processor = NEP.

    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 - INT

1. An INT alarm condition is caused by the equipment failing itself, error count on either the NEP or SML is in a fail condition, a DS1 or SBI loopback on the SML is stuck, or the SML DS1 ID failed.

2. **CAUTION: Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the NEP to avoid interrupting service.**

3. Replace the NEP per DLP-101.

4. Retrieve alarms:

   Alarm Surveillance> Current Alarms>Retrieve

5. Did the alarm clear?

   If yes, STOP. This procedure is complete.
   If no, go to step 36.

6. Are there any power supply or clock alarms?

If yes, refer to Table B.
If no, go to step 37.

Table B. Procedures for Clearing CLK and PWR Alarms

IF ALARMED UNIT IS...	THEN GO TO...
CLK	TAP-014
PWR	TAP-030

1. Contact Customer Service (TNG-505).

2. STOP. This procedure is complete.

Alarm/Condition - INVERR

1. Contents of inventory data inconsistent or absent due to EEPROM communication problem.

2. Retrieve hardware inventory:

   Administration> Inventory>Hardware
   Click on Retrieve.

3. Was a response obtained?

   If yes, go to step 45.
   If no, go to step 42.

4. **CAUTION: Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the NEP to avoid interrupting service.**

5. Replace NEP per DLP-101; EEPROM is bad.

6. STOP. This procedure is complete.

7. Is data consistent with unit description?

   If yes, go to step 46.
   If no, a unit EEPROM is bad. Go to step 48.

8. Error is intermittent; check for other alarms.

9. STOP. This procedure is complete.

10. Are there any other NEP alarms?

    If yes, go to step 49.
    If no, go to step 50.

11. Resolve NEP alarms first (refer to Table A).

12. Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the NEP to avoid interrupting service.

13. Replace NEP per DLP-101; EEPROM is bad.

14. STOP. This procedure is complete.

Alarm/Condition - MEA

1. Since the Equipment Type for the NEP is not provisionable, this alarm is not supported.

2. STOP. This procedure is complete.

Alarm/Condition - MTCE

1. MTCE alarm is a result of an execution of Maintenance service state on the NEP unit.

2. Was this a desired result?

If yes, STOP. This procedure is complete.
If no, go to step 57.

3. Place unit back in service:

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

    b. Select Parameters tab.

    c. Click on Retrieve.

    d. Select Processor = NEP.

    e. Click on Modify.

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

    g. Click on OK.

    h. Click on Send.

4. STOP. This procedure is complete.

Alarm/Condition - SYNCCLK

1. SYNCCLK alarm condition on NEP indicates it has either lost a clock input from CLK unit (A or B), or a derived clock to SML has failed.

2. Retrieve alarms:

    Alarm Surveillance> Current Alarms>Retrieve

3. Were there any CLK alarm conditions (INT, SYNCCLK, IMPROPRML, or MEA)?

If yes, go to TAP-014.
If no, go to step 62.

4. **CAUTION: Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the NEP to avoid interrupting service.**

5. Replace the NEP per DLP-101.

6. Retrieve alarms:

   Alarm Surveillance> Current Alarms>Retrieve

7. Did the alarm clear?

   If yes, STOP. This procedure is complete.
   If no, go to step 66.

8. Retrieve alarm history and examine message log:

   Alarm Surveillance> History Log
   FIlter>Message Type=Alarms
   Retrieve>Details
   From the Details screen, record the description associated with the alarm condition.

9. Look for the following components:

   - aid = NEPA
   - condeqpt = SYNCCLK
   - conddescr = CLKA or CLKB.

- **CAUTION: Possibility of service interruption. Adhere to the procedure in DLP-101 when replacing the CLK to avoid interrupting service.**

- Replace clock reported as the clock source in step 67 (DLP-101).

- Retrieve alarms:

Alarm Surveillance> Current Alarms>Retrieve

- Did the alarm clear?

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

- Contact Customer Service (TNG-505).

- STOP. This procedure is complete.