TL1 Command Components

Note The terms "Unidirectional Path Switched Ring" and "UPSR" may appear in Cisco literature. These terms do not refer to using Cisco ONS 15xxx products in a unidirectional path switched ring configuration. Rather, these terms, as well as "Path Protected Mesh Network" and "PPMN," refer generally to Cisco's path protection feature, which may be used in any topological network configuration. Cisco does not recommend using its path protection feature in any particular topological network configuration.

This chapter describes the components of TL1 commands and autonomous messages for the Cisco ONS 15454 and the Cisco ONS 15327, Release 4.0, including:

- TL1 default values
- Modifier support by platform
- Starting positions for an STS-Mc SPE
- Access identifiers (AIDs)
- Parameter types

4.1 TL1 Default Values

4.1.1 BLSR

Table 4-1 BLSR Default Values

BLSR	Default
RVRTV	Y
RVTM	5.0 minutes
SRVRTV	Y
SRVTM	5.0 minutes

4.1.2 Cross Connections

Table 4-2 Cross Connections Default Values

Cross Connections	Default
CCT	2WAY for both STSp and VT1 cross-connections

4.1.3 Environment Alarms and Controls

Table 4-3 Environment Alarms and Controls Default Values

Environment Alarms and Controls	Default
OPR-EXT-CONT	CONTTYPE is set as one provisioned in the respective AID, there is not default for it. It is only used as a filter if entered. DUR is always taken as CONT.
RTRV-ATTR-CONT	There is no default for CONTTYPE. It is only used as a filter if entered.
RTRV-ATTR-ENV	There is no default for both NTFCNCDE and ALMTYPE, which are only used as filters if entered.
RTRV-EXT-CONT	CONTTYPE defaults to the conttype associated with the AID.
SET-ATTR-ENV	NTFCNCDE defaults to NR. ALMTYPE defaults to NULL. ALMMSG defaults to \“Env Alarm Input 1\”.

4.1.4 Equipment

Table 4-4 Equipment Default Values

Equipment	Default
ALW-SWTOPROTN-EQPT, INH-SWTOPROTN-EQPT and ALW-SWTOWKG-EQPT, ING-SWTOWKG-EQPT	DIRN defaults to BTH
ENT-EQPT	PROTID, PRTYPE, RVRTV and RVTM defaults to NULL
SW-DX-EQPT	MODE defaults to NORM
SW-TOPROTN-EQPT and SW-TOWKG-EQPT	MODE defaults to NORM DIRN defaults to BTH

4.1.5 Performance

Table 4-5 Performance Default Values

Performance	Default
INIT-REG-<MOD2>	LOCN defaults to NEND (near end)
RTRV-PM-<MOD2>	LOCN defaults to NEND TMPER defaults to 15 minutes
RTRV-TH-<MOD2>	MONTYPE defaults to CVL for OCN, EC1, and DSN MONTYPE defaults to ESP for STSp MONTYPE defaults to UASV for VT1 MONTYPE defaults to AISSP for the DS1 layer of the DS3XM card LOCN defaults to NEND TMPER defaults to 15 minutes
SET-PMMODE-<STS_PATH>	PMSTATE defaults to ON
SET-TH-<MOD2>	LOCN defaults to NEND TMPER defaults to 15 minutes

4.1.6 Ports

Table 4-6 Ports Default Values

Ports	Default
OCN Line	DCC defaults to N TMGREF defaults to N SYNCMSG defaults to Y SENDDUS defaults to N PJMON defaults to 0 SFBER defaults to 1E-4 SDBER defaults to 1E-7 MODE defaults to SONET PST defaults to OOS
EC1 Line	PJMON defaults to 0 (zero) LBO defaults to 0-225 RXEQUAL is Y PST defaults to defaults to OOS
T1 Line (DS1/DS1N)	LINECDE defaults to AMI FMT defaults to D4 LBO defaults to 0-133 PST defaults to OOS
T3 Line (DS3, DS3E, DS3NE, DS3XM)	DS3/T3 LINECDE defaults to 0-225 DS3 PST defaults to OOS DS3E/DS3NE FMT defaults to UNFRAMED DS3E/DS3NE LINECDE defaults to B3ZS DS3E/DS3NE LBO defaults to 0-225 DS3 of DS3XM PST defaults to OOS

4.1.7 SONET Line Protection

Table 4-7 SONET Line Protection Default Values

SONET Line Protection	Default
EX-SW-<OCN>	ST (switch type) is optional and for BLSR protection switch only ST defaults to BLSR RING switch type
OCN Line Protection	PROTID defaults to the protecting port of the protection group (SLOT-#(OCN)PORT-#). It is a string that can have a maximum length of 32 characters RVRTV defaults to N (non-revertive mode) RVTM defaults to 5.0 minutes PSDIRN defaults to UNI
OPR-PROTNSW-<OCN>	ST (switch type) is optional and for BLSR protection switch only ST defaults to BLSR RING switch type

4.1.8 STS and VT Paths

Table 4-8 STS and VT Paths Default Values

STS and VT Paths	Default
STS Path	SFBER, SDBER, RVRTV, and RVTM apply to path protection configuration STS paths only SFBER defaults to 1E-4 SDBER defaults to 1E-6 RVRTV defaults to N RVTM defaults to empty because RVRTV is N when path protection configuration STSp is created J1 is implemented on DS1, DS1N, DS3, DS3E, DS3NE, DS3XM, EC1, OC3, OC48AS AND OC192 cards TRCMODE defaults to the OFF mode EXPTRC defaults to a copy of the provisioned string or NULL when TRCMODE is OFF mode EXPTRC defaults to the user entered string when the TRCMODE is MANUAL mode EXPTRC defaults to a copy of the acquired received string or NULL if the string has not been acquired when the TRCMODE is AUTO mode INCTRC defaults to the incoming string (NULL) when the TRCMODE is under OFF mode INCTRC defaults to a copy of the received string or NULL if the string has not been received when the TRCMODE is under MANUAL or AUTO mode
VT Path	RVRTV, RVTM apply to path protection configuration VT paths only RVRTV defaults to N RVTM defaults to empty because RVRTV is N when path protection configuration VT1 is created

4.1.9 Synchronization

Table 4-9 Synchronization Default Values

Synchronization	Default
BITS	LINECDE defaults to B8ZS FMT defaults to ESF SYNCMSG defaults to Y PST defaults to OOS
NE-SYNCN	TMMDE defaults to EXTERNAL SSMGEN defaults to GEN1 QRES defaults to SAME-AS-DUS RVRTV defaults to Y RVTM defaults to 5.0 minutes
SYNCN	PRI/SEC QREF defaults to PRS PRI STATUS defaults to ACT SEC STATUS defaults to STBY THIRD QREF defaults to ST3 STATUS defaults to STBY

4.1.10 Testing

Table 4-10 Testing Default Values

Testing	Default
OPR-LPBK	LPBKTYPE defaults to FACILITY
RLS-LPBK	LPBKTYPE defaults to current existing loopback type

4.2 Modifier Support by Platform

Table 4-11 details the TL1 modifiers supported on the ONS 15454 and ONS 15327 for commands that have carets (< >) in part of their input format; for example, RTRV-<OCN_TYPE>. A "Yes" in the ONS 15454 or ONS 15327 column indicates that a particular modifier is supported in that platform. A "No" in the ONS 15454 or ONS 15327 column indicates that a particular modifier is not supported in that platform. A "—" indicates that a particular modifier is not applicable to that platform.

Table 4-11 Modifier Support

Modifier	ONS 15454	ONS 15327
DS1	Yes	—
EC1	Yes	—
T1	Yes	Yes
T3	Yes	Yes
VT1	Yes	Yes
STS1	Yes	Yes
STS3C	Yes	Yes
STS6C	Yes	Yes
STS9C	Yes	Yes
STS12C	Yes	Yes
STS24C	Yes	Yes
STS48C	Yes	Yes
STS192C	Yes	No
OC3	Yes	Yes
OC12	Yes	Yes
OC48	Yes	Yes
OC192	Yes	No
G1000	Yes	Yes
GIGE	Yes	No
FSTE	Yes	No
POS	Yes	No
E100	Yes	Yes
E1000	Yes	Yes
CLNT	Yes	No
OCH (TXP, MXP)	Yes	No

4.3 Starting Positions for an STS-Mc SPE

Table 4-12, Table 4-13, and Table 4-14 list possible starting positions for Cisco ONS 15454 and Cisco ONS 15327 STS-Mc SPE. In each of the tables a "Y" indicates "Yes, this position is supported" and an "N" indicates, "No, this position is not supported". More information about the generic NE support requirement can be found in *GR-253-CORE: Synchronous Optical Network (SONET) Transport Systems: Common Generic Criteria*.

Table 4-12 Starting Positions for an STS-Mc SPE in an OC-12 Signal

STS-1 Number	STS-3c SPE	STS-6c SPE	STS-9c SPE	STS-12c SPE
1	Y	Y	Y	Y
4	Y	Y	Y	N
7	Y	Y	N	N
10	Y	N	Y	N

Table 4-13 Starting Positions for an STS-Mc SPE in an OC-48 Signal

STS-1 Number	STS-3c SPE	STS-6c SPE	STS-9c SPE	STS-12c SPE	STS-24c SPE	STS-48c SPE
1	Y	Y	Y	Y	Y	Y
4	Y	Y	Y	N	Y	N
7	Y	Y	N	N	Y	N
10	Y	N	Y	N	Y	N
13	Y	Y	Y	Y	Y	N
16	Y	Y	Y	N	Y	N
19	Y	Y	Y	N	Y	N
22	Y	N	N	N	Y	N
25	Y	Y	Y	Y	Y	N
28	Y	Y	Y	N	N	N
31	Y	Y	N	N	N	N
34	Y	N	N	N	N	N
37	Y	Y	Y	Y	N	N
40	Y	Y	Y	N	N	N
43	Y	Y	N	N	N	N
46	Y	N	Y	N	N	N

Table 4-14 Starting positions for an STS-Mc SPE in an OC-192 Signal

STS-1 Number	STS-3c SPE	STS-6c SPE	STS-9c SPE	STS-12c SPE	STS-24c SPE	STS-48c SPE	STS-192c SPE
1	Y	Y	Y	Y	Y	Y	Y
4	Y	Y	Y	N	N	N	N
7	Y	Y	N	N	N	N	N
10	Y	N	Y	N	N	N	N
13	Y	Y	Y	Y	N	N	N
16	Y	Y	Y	N	N	N	N
19	Y	Y	Y	N	N	N	N
22	Y	N	N	N	N	N	N
25	Y	Y	Y	Y	N	N	N
28	Y	Y	Y	N	N	N	N
31	Y	Y	N	N	N	N	N
34	Y	N	N	N	N	N	N
37	Y	Y	Y	Y	N	N	N
40	Y	Y	Y	N	N	N	N
43	Y	Y	N	N	N	N	N
46	Y	N	Y	N	N	N	N
49	Y	Y	Y	Y	Y	Y	N
52	Y	Y	Y	N	N	N	N
55	Y	Y	Y	N	N	N	N
58	Y	N	N	N	N	N	N
61	Y	Y	Y	Y	N	N	N
64	Y	Y	Y	N	N	N	N
67	Y	Y	N	N	N	N	N
70	Y	N	N	N	N	N	N
73	Y	Y	Y	Y	N	N	N
76	Y	Y	Y	N	N	N	N
79	Y	Y	N	N	N	N	N
82	Y	N	Y	N	N	N	N
85	Y	Y	Y	Y	N	N	N
88	Y	Y	Y	N	N	N	N
91	Y	Y	Y	N	N	N	N
94	Y	N	N	N	N	N	N
97	Y	Y	Y	Y	Y	Y	N
100	Y	Y	Y	N	N	N	N
103	Y	Y	N	N	N	N	N

Table 4-14 Starting positions for an STS-Mc SPE in an OC-192 Signal (continued)

STS-1 Number	STS-3c SPE	STS-6c SPE	STS-9c SPE	STS-12c SPE	STS-24c SPE	STS-48c SPE	STS-192c SPE
106	Y	N	N	N	N	N	N
109	Y	Y	Y	Y	N	N	N
112	Y	Y	Y	N	N	N	N
115	Y	Y	N	N	N	N	N
118	Y	N	Y	N	N	N	N
121	Y	Y	Y	Y	N	N	N
124	Y	Y	Y	N	N	N	N
127	Y	Y	Y	N	N	N	N
130	Y	N	N	N	N	N	N
133	Y	Y	Y	Y	N	N	N
136	Y	Y	Y	N	N	N	N
139	Y	Y	N	N	N	N	N
142	Y	N	N	N	N	Y	N
145	Y	Y	Y	Y	Y	N	N
148	Y	Y	Y	N	N	N	N
151	Y	Y	N	N	N	N	N
154	Y	N	Y	N	N	N	N
157	Y	Y	Y	Y	N	N	N
160	Y	Y	Y	N	N	N	N
163	Y	Y	Y	N	N	N	N
166	Y	N	N	N	N	N	N
169	Y	Y	Y	Y	N	N	N
172	Y	Y	Y	N	N	N	N
175	Y	Y	N	N	N	N	N
178	Y	N	N	N	N	N	N
181	Y	Y	Y	Y	N	N	N
184	Y	Y	Y	N	N	N	N
187	Y	Y	N	N	N	N	N
190	Y	N	Y	N	N	N	N

4.4 Access Identifiers

The AID code directs an input command to its intended physical or data entity inside the NE. Equipment modules and facilities are typical examples of entities addressed by the access code.

4.4.1 ALL

Table 4-15 ALL for ONS 15454 and ONS 15327

AID	ONS 15454	ONS 15327
CrossConnect ID	FACILITY STS VT	—
IPCC	ALL CC-{1–16}	—
NBR	AAA.BBB.CC.DD ALL NBR-{1–16}	—
PRSLOT	NULL SLOT-1 SLOT-3 SLOT-5 SLOT-13 SLOT-15 SLOT-17	—
UCP	IPCCAID NBRAID STSAID	—
AONS	AONS-{W_E,E_W}	—
BAND	BAND-{2-6,12-16}-{1-4}-ALL BAND-{2-6,12-16}-{1-4}-{RX,TX} BAND-{2-6,12-16}-{1}-ALL BAND-{2-6,12-16}-{1}-{RX,TX}	
BITS	BITS-ALL BITS-{1,2}	BITS-ALL BITS-{1,2}
BLSR	ALL BLSR-{0-9999}	ALL BLSR-ALL BLSR-{0-9999}
CHANNEL	CHAN-{1-6,12-17}-ALL CHAN-{1-6,12-17}-{1-32}-ALL CHAN-{1-6,12-17}-{1-32}-{RX,TX} CHAN-{1-6,12-17}-{1-4}-ALL CHAN-{1-6,12-17}-{1-4}-{RX,TX} CHAN-{1-6,12-17}-{2,3} CHAN-{1-6,12-17}-{2,5}	—
COM	Common	Common

Table 4-15 ALL for ONS 15454 and ONS 15327 (continued)

AID	ONS 15454	ONS 15327
DS1	DS1-{1-6,12-17}-{1-6}-{1-28}	—
ENV	ENV-IN-ALL ENV-IN-{1-20} ENV-IN-{1-32} ENV-IN-{1-4} ENV-IN-{1-6} ENV-OUT-ALL ENV-OUT-{1-16} ENV-OUT-{1-2} ENV-OUT-{1-4}	ENV-{IN,OUT}-{1-6} 6 Input, 2 Output
EQPT	AIP ALL BP FAN SLOT-ALL SLOT-{1-17} SLOT-{1-6,12-17}	SLOT-ALL SLOT-{1-8}
FACILITY	FAC-{1-4,14-17}-{1-8} FAC-{1-6,12-17}-1 FAC-{1-6,12-17}-ALL FAC-{1-6,12-17}-{0-11} FAC-{1-6,12-17}-{0-1} FAC-{1-6,12-17}-{1-12} FAC-{1-6,12-17}-{1-14} FAC-{1-6,12-17}-{1-4} FAC-{1-6,12-17}-{1-6} FAC-{1-6,12-17}-{1} FAC-{5,6,12,13}-{1} FAC-{8,10}-{1} VFAC-{1-6,12-17}-{0-1}	FAC-{1-6}-ALL FAC-{1-4}-{1} OC12, OC48 FAC-{5-6}-{1-3} XTC-14 DS3 FAC-{5-6}-{1-28} XTC-14/XTC-28 DS1 FAC-{1-4}-{2} G1000-2 FAC-{1-4}-{1-4} OC3
LINE	LINE-{1-6,12-17}-{1-2}-ALL LINE-{1-6,12-17}-{1-2}-{RX,TX} LINE-{1-6,12-17}-{1-3}-ALL LINE-{1-6,12-17}-{1-3}-{RX,TX} LINE-{8,10}-{1}-ALL LINE-{8,10}-{1}-{RX,TX}	—
OSC	ALL OSC-{1-9999}	—
RFILE	RFILE-DB RFILE-PKG	—

Table 4-15 ALL for ONS 15454 and ONS 15327 (continued)

AID	ONS 15454	ONS 15327
STS	FAC-{1-6,12-17}-{1-4} STS-{1-4,14-17}-{1-4}-1 STS-{1-4,14-17}-{1-4}-ALL STS-{1-4,14-17}-{1-4}-{1,4,7,10} STS-{1-4,14-17}-{1-4}-{1,4,7} STS-{1-4,14-17}-{1-4}-{1-3} STS-{1-4,14-17}-{1-8}-1 STS-{1-4,14-17}-{1-8}-ALL STS-{1-4,14-17}-{1-8}-{1-3} STS-{1-6,12-17}-1 STS-{1-6,12-17}-1-1 STS-{1-6,12-17}-1-ALL STS-{1-6,12-17}-1-{1,13,25,37} STS-{1-6,12-17}-1-{1,4,10,13,16,19,25,28,37,40} STS-{1-6,12-17}-1-{1,4,7,10,13,16,19,22,25} STS-{1-6,12-17}-1-{1,4,7,10-46} STS-{1-6,12-17}-1-{1,4,7,10} STS-{1-6,12-17}-1-{1,4,7,13,16,19,25,28,37,40,43} STS-{1-6,12-17}-1-{1,4,7} STS-{1-6,12-17}-1-{1,4} STS-{1-6,12-17}-1-{1-12} STS-{1-6,12-17}-1-{1-48} STS-{1-6,12-17}-ALL STS-{1-6,12-17}-{1-12} STS-{1-6,12-17}-{1-4}-1 STS-{1-6,12-17}-{1-4}-ALL STS-{1-6,12-17}-{1-4}-{1,4,7,10-46} STS-{1-6,12-17}-{1-4}-{1,4,7} STS-{1-6,12-17}-{1-4}-{1,4} STS-{1-6,12-17}-{1-4}-{1-12} STS-{1-6,12-17}-{1-6} STS-{5,6,12,13}-1-1 STS-{5,6,12,13}-1-{1,13,25,37-180} STS-{5,6,12,13}-1-{1,13,25,37} STS-{5,6,12,13}-1-{1,4,7,10,13,16,19,22,25} STS-{5,6,12,13}-1-{1,4,7,10-190} STS-{5,6,12,13}-1-{1,4,7,10-46} STS-{5,6,12,13}-1-{1,4,7,13,16,19,25,28,37,40,43} STS-{5,6,12,13}-1-{1,49,97,145}|STS-{5,6,12,13}-1-{1-192} STS-{5,6,12,13}-1-{1-48} VFAC-{1-6,12-17}-{0-1}	FAC-{1-6,12-17}-{1-4}Dynamically Allocated STSs STS-{1-4}-1-ALL ALL AID for Optical Cards STS-{1-4}-1-1 STS48c for OC48 STS-{1-4}-1-{1,13,25,37} STS12c for OC48 STS-{1-4}-1-{1,7,13,19,...,43} STS6c for OC48 STS-{1-4}-1-{1,7} STS6c for OC12 STS-{1-4}-1-{1,4,7,10,...,46} STS3c for OC48 STS-{1-4}-1-{1,4,7,10} STS3c for OC3 and OC12 STS-{1-4}-1-{1-12} STS1 for OC3, OC12 STS-{1-4}-1-{1-48} STS1 for OC48 STS-{5-6}-ALL ALL AID for XTC Cards STS-{5-6}-{1} STS1 for XTC-14/XTC-28 DS1 STS-{5-6}-{2-4} STS1 for XTC-28 DS3 VFAC-{1-4}-{1-2}
SYN	SYNC-NE	SYNC-NE

Table 4-15 ALL for ONS 15454 and ONS 15327 (continued)

AID	ONS 15454	ONS 15327
SYN_SRC	BITS-1 BITS-2 FAC-{1-6,12-17}-{1-4} FAC-{1-6,12-17}-{1} FAC-{5,6,12,13}-{1} INTERNAL NONE SYNC-NE	FAC-{1-4}-{1} OC12, OC48 FAC-{1-4}-{1-4} OC3 INTERNAL SYNC-NE SYNC-{BITS1,BITS2}
SYNC_REF	SYNC-ALL SYNC-NE SYNC-{BITS1,BITS2}	SYNC-ALL SYNC-NE SYNC-{BITS1,BITS2}
SYNCSW	INT PRI SEC THIRD	INT PRI SEC THIRD
TACC	{0, 1-999}	{0, 1-999}
UDC	UDC-{F,DCC}-{A,B}	—
VT1_5	VT1-{1-4,14-17}-{1-8}-{1-3}-{1-7}-{1-4} VT1-{1-6,12-17}-1-{1-12}-{1-7}-{1-4} VT1-{1-6,12-17}-1-{1-48}-{1-7}-{1-4} VT1-{1-6,12-17}-1-{1-7}-{1-2} VT1-{1-6,12-17}-{1-12}-1-{1-7}-{1-4} VT1-{1-6,12-17}-{1-4}-{1-12}-{1-7}-{1-4} VT1-{1-6,12-17}-{1-4}-{1-3}-{1-7}-{1-4} VT1-{1-6,12-17}-{1-6}-{1-7}-{1-4} VT1-{5,6,12,13}-1-{1-192}-{1-7}-{1-4} VT1-{5,6,12,13}-1-{1-48}-{1-7}-{1-4}	ALL VT1-{5-6}-{1-2}-{1-7}-{1-2} XTC-14 DS1 VT1-{5-6}-{1-2}-{1-7}-{1-4} XTC-28 DS1 VT1-{1-4}-{1-12}-{1-7}-{1-4} OC3, OC12 VT1-{1-4}-{1-48}-{1-7}-{1-4} OC48
WLEN	WLEN-{W_E,E_W}-{1530.33,1531.12,1531.90,1532.68,1534.25,1535.04,1535.82,1536.61,1538.19,1538.98,1539.77,1540.56,1542.14,1542.94,1543.73,1544.53,1546.12,1546.92,,1547.72,1548.51,1550.12,1550.92,1551.72,1552.52,1554.13,1554.94,1555.75,1556.55,1558.17,1558.98,1559.79,1560.61}	—

4.4.2 CrossConnectID

(ONS 15454 only)

Table 4-16 CrossConnectID for ONS 15454

AID	ONS 15454 Pattern
FACILITY	FAC-{1-4,14-17}-{1-8} FAC-{1-6,12-17}-1 FAC-{1-6,12-17}-ALL FAC-{1-6,12-17}-{0-11} FAC-{1-6,12-17}-{0-1} FAC-{1-6,12-17}-{1-12} FAC-{1-6,12-17}-{1-14} FAC-{1-6,12-17}-{1-4} FAC-{1-6,12-17}-{1-6} FAC-{1-6,12-17}-{1} FAC-{5,6,12,13}-{1} FAC-{8,10}-{1} VFAC-{1-6,12-17}-{0-1}

Table 4-16 CrossConnectID for ONS 15454 (continued)

AID	ONS 15454 Pattern
STS	FAC-{1-6,12-17}-{1-4} STS-{1-4,14-17}-{1-4}-1 STS-{1-4,14-17}-{1-4}-ALL STS-{1-4,14-17}-{1-4}-{1,4,7,10} STS-{1-4,14-17}-{1-4}-{1,4,7} STS-{1-4,14-17}-{1-4}-{1-3} STS-{1-4,14-17}-{1-8}-1 STS-{1-4,14-17}-{1-8}-ALL STS-{1-4,14-17}-{1-8}-{1-3} STS-{1-6,12-17}-1 STS-{1-6,12-17}-1-1 STS-{1-6,12-17}-1-ALL STS-{1-6,12-17}-1-{1,13,25,37} STS-{1-6,12-17}-1-{1,4,10,13,16,19,25, 28,37,40} STS-{1-6,12-17}-1-{1,4,7,10,13,16,19,22,25} STS-{1-6,12-17}-1-{1,4,7,10-46} STS-{1-6,12-17}-1-{1,4,7,10} STS-{1-6,12-17}-1-{1,4,7,13,16,19,25,28,37,40,43} STS-{1-6,12-17}-1-{1,4,7} STS-{1-6,12-17}-1-{1,4} STS-{1-6,12-17}-1-{1-12} STS-{1-6,12-17}-1-{1-48} STS-{1-6,12-17}-ALL STS-{1-6,12-17}-{1-12} STS-{1-6,12-17}-{1-4}-1 STS-{1-6,12-17}-{1-4}-ALL STS-{1-6,12-17}-{1-4}-{1,4,7,10-46} STS-{1-6,12-17}-{1-4}-{1,4,7} STS-{1-6,12-17}-{1-4}-{1,4} STS-{1-6,12-17}-{1-4}-{1-12} STS-{1-6,12-17}-{1-6} STS-{5,6,12,13}-1-1 STS-{5,6,12,13}-1-{1,13,25,37-180} STS-{5,6,12,13}-1-{1,13,25,37} STS-{5,6,12,13}-1-{1,4,7,10,13,16,19,22,25} STS-{5,6,12,13}-1-{1,4,7,10-190} STS-{5,6,12,13}-1-{1,4,7,10-46} STS-{5,6,12,13}-1-{1,4,7,13,16,19,25,28,37,40,43} STS-{5,6,12,13}-1-{1,49,97,145}|STS-{5,6,12,13}-1-{1-192} STS-{5,6,12,13}-1-{1-48} VFAC-{1-6,12-17}-{0-1}

4.4.3 IPCC

(ONS 15454 only)

IP Control Channel AIDs are used to access the IPCC of the UCP.

Table 4-17 IPCC for ONS 15454

Pattern	Description
ALL	Indicates the whole IPCCs of the UCP. The “ALL” AID is used for UCP retrieving command input only. A NULL AID in the IPCCs retrieval command defaults to the ALL AID, which returns all the IPCCs of the node
CC-{1-16}	Indicates individual IPCC of the UCP

4.4.4 NBR

(ONS 15454 only)

UCP neighbor AIDs are used to access the neighbors of the UCP.

Table 4-18 NBR for ONS 15454

Pattern	Description
AAA.BBB.CC.DD	Indicates the UCP neighbor or IP address. It is a character string.
ALL	Indicates the whole neighbors of the UCP. It is used for UCP retrieving command input only.
NBR-{1-16}	Indicates an individual neighbor index (1-16) of the UCP. It is optional in the ENT-UCP-NBR command which returns a neighbor index.

4.4.5 PRSLOT

(ONS 15454 only)

Valid protection slots for the electrical cards

Table 4-19 PRSLOT for ONS 15454

Pattern	Description
NULL	Indicates there is no protection group. Used when trying to delete a protection group.
SLOT-1	The No.1 slot of an NE
SLOT-3	The No.3 slot of an NE
SLOT-5	The No.5 slot of an NE
SLOT-13	The No.13 slot of an NE
SLOT-15	The No.15 slot of an NE

Table 4-19 PRSLOT for ONS 15454 (continued)

Pattern	Description
SLOT-17	The No.17 slot of an NE

4.4.6 UCP

(ONS 15454 only)

UCP alarm AID

Table 4-20 UCP for ONS 15454

Pattern	Description
IPCCAID	Indicates UCP Control Channel AIDs, in the type of "CC-CCID"
NBRAID	Indicates UCP Neighbor AIDs, in the type of "CC-NEIGHBORID"
STSAID	Indicates UCP STS Circuit AIDs, in the type of "STS-SLOT#-STS#"

4.4.7 AONS

(ONS 15454 only)

This AID is used to access the automatic optical node setup (AONS) application of the NE.

Table 4-21 AONS for ONS 15454

Pattern	Description
AONS-{W_E,E_W}	Automatic Optical Node Setup identifier (is per ring direction based)

4.4.8 BAND

(ONS 15454 only)

The BAND AID is used to access Optical Multiplex Section (OMS) layer of Optical Network units.

Table 4-22 BAND for ONS 15454

Pattern	Description
BAND-{2-6,12-16}-{1-4}-ALL	All the Channels in a Band OADM (1Bn, 4Bn) units
BAND-{2-6,12-16}-{1-4}-{RX,TX}	The Receive/Transmit Channels in a Band OADM (1Bn, 4Bn) units
BAND-{2-6,12-16}-{1}-ALL	All the Channels in an Optical Multiplexer/Demultiplexer (4Ch) units

Table 4-22 BAND for ONS 15454 (continued)

Pattern	Description
BAND-{2-6,12-16}-{1}-{RX,TX}	The Receive/Transmit Channels in an Optical Multiplexer/Demultiplexer (4Ch) units

4.4.9 BITS

4.4.9.1 BITS for ONS 15454

AID for BITS

Table 4-23 BITS for ONS 15454

Pattern	Description
BITS-ALL	BITS AIDS of both BITS-1 and BITS-2 in the RTRV-BITS command
BITS-{1,2}	Individual BITS AID

4.4.9.2 BITS for ONS 15327

AID for BITS

Table 4-24 BITS for ONS 15327

Pattern	Description
BITS-ALL	BITS AIDS of both BITS-1 and BITS-2 in the RTRV-BITS command
BITS-{1,2}	Individual BITS AID

4.4.10 BLSR

4.4.10.1 BLSR for ONS 15454

BLSR AIDs are used to access the specific BLSR of the NE.

Table 4-25 BLSR for ONS 15454

Pattern	Description
ALL	The whole BLSR of the NE
BLSR-ALL	The whole BLSR of the NE
BLSR-{0-9999}	Individual BLSR of the NE

4.4.10.2 BLSR for ONS 15327

BLSR AIDs are used to access the specific BLSR of the NE.

Table 4-26 BLSR for ONS 15327

Pattern	Description
ALL	The whole BLSR of the NE
BLSR-ALL	The whole BLSR of the NE
BLSR-{0-9999}	Individual BLSR of the NE

4.4.11 CHANNEL

(ONS 15454 only)

Accesses the Optical Channels (OCH) layer of Optical Network/Client units.

Table 4-27 CHANNEL Values

CHANNEL Values	Description
CHAN-{1-6,12-17}-ALL	All the Channels of an Optical Transponder/Muxponder
CHAN-{1-6,12-17}-{1-32}-ALL	All the Channels in an Optical Multiplexer/Demultiplexer (32Ch) units
CHAN-{1-6,12-17}-{1-32}-{RX,TX}	The Receive/Transmit Channels in an Optical Multiplexer/Demultiplexer (32Ch) units
CHAN-{1-6,12-17}-{1-4}-ALL	All the Channels in an OADM (1Ch, 2Ch, 4Ch) units and Optical
CHAN-{1-6,12-17}-{1-4}-{RX,TX}	The Receive/Transmit Channels in an OADM (1Ch, 2Ch, 4Ch) units and Optical Multiplexer/Demultiplexer (4Ch) units
CHAN-{1-6,12-17}-{2,3}	A single channel of an Optical Transponder/Muxponder. The TXP uses CHAN-slot-2 for the 1 DWDM Facility.
CHAN-{1-6,12-17}-{2,5}	A single channel of an Optical Transponder/Muxponder. The TXP uses CHAN-slot-2 for the 1 DWDM facility. MXP uses the CHAN-slot-5 for the 1 DWDM facility

4.4.12 COM

4.4.12.1 COM for ONS 15454

Common

Table 4-28 COM for ONS 15454

Pattern	Description
COM	Common

4.4.12.2 COM for ONS 15327

Common

Table 4-29 COM for ONS 15327

Pattern	Description
COM	Common

4.4.13 DS1

(ONS 15454 only)

Used to access the DS-1 frame layer of the DS3XM.

Table 4-30 DS1 for ONS 15454

Pattern	Description
DS1-{1-6,12-17}-{1-6}-{1-28}	DS1 AID for the DX3XM card

4.4.14 ENV

4.4.14.1 ENV for ONS 15454

The environmental AID for the AIC/AICI card

ENV-IN-{1-4}—Environmental AID for AIC Card on the 15454. “IN” is used for Environmental Alarms.

ENV-IN-{1-20}—Environmental AID for AICI Card on the 15454. “IN” is used for Environmental Alarms.

ENV-IN-{1-32}—Environmental AID for AICI Card Extensions on the 15454. “IN” is used for Environmental Alarms.

ENV-IN-ALL—All Environmental Alarm Input contacts

ENV-OUT-{1-4}—Environmental AID for AIC/AICI Card on the 15454. “OUT” is used for Environmental Controls.

ENV-OUT-{1-16}—Environmental AID for AICI Card Extensions on the 15454. “OUT” is used for Environmental Controls.

ENV-OUT-ALL—All Environmental Control Output contacts

Table 4-31 ENV for ONS 15454

Pattern	Description
ENV-IN-ALL	ENV-IN-{1-4} - Environmental aid for AIC/AICI Cards on the 15454. “IN” is used for Environmental Alarms.
ENV-IN-{1-20}	Environmental aid for AICI Card on the 15454. “IN” is used for Environmental Alarms.

Table 4-31 ENV for ONS 15454 (continued)

Pattern	Description
ENV-IN-{1-32}	Environmental aid for AIC/AICI Cards on the 15454. “IN” is used for Environmental Alarms.
ENV-IN-{1-4}	Environmental aid for AIC Card on the 15454. “IN” is used for Environmental Alarms.
ENV-OUT-ALL	Environmental aid for AIC/AICI Cards on the 15454. “OUT” is used for Environmental Controls.
ENV-OUT-{1-16}	Environmental aid for AICI Extensions on the 15454. “OUT” is used for Environmental Controls.
ENV-OUT-{1-4}	Environmental aid for AIC/AICI Cards on the 15454. “OUT” is used for Environmental Controls.

4.4.14.2 ENV for ONS 15327

The environmental components within the XTC card.

ENV-IN-{1-6}—Environmental aid on the 15327. “IN” is used for Environmental Alarms.

ENV-OUT-{1-2}—Environmental aid on the 15327. “OUT” is used for Environmental Controls.

Table 4-32 ENV for ONS 15327

Pattern	Description
ENV-{IN,OUT}-{1-6}	Environmental alarm AID. “IN” is used for environmental AID, “OUT” is used for control AID.
ENV-IN-{1-6}	Environmental AID for the 15327. “IN” is used for Environmental Alarms.
ENV-OUT-{1-2}	Environmental AID for 15327. “OUT” is used for Environmental Controls.

4.4.15 EQPT

4.4.15.1 EQPT for ONS 15454

Equipment AIDs are used to access specific cards. The OC48/OC192 cards can only use the high speed slots (Slot 5, Slot 6, Slot 12, Slot 13).

Table 4-33 EQPT for ONS 15454

Pattern	Description
AIP	The AID for the AIP. It is used for RTRV-INV output only.
ALL	The ALL AID is only used for the RTRV-INV input command. It reports all of the inventory information of the whole NE: AIP, BP, FAN and SLOT-ALL.
BP	The AID for the backplane. It is used for RTRV-INV output only.

Table 4-33 EQPT for ONS 15454 (continued)

Pattern	Description
FAN	The AID for the fan tray. It is used for RTRV-INV output only.
SLOT-ALL	All of the NE equipment AIDs
SLOT-{1-17}	Individual equipment AID of an NE
SLOT-{1-6,12-17}	Individual equipment AID of the I/O card units or slots

4.4.15.2 EQPT for ONS 15327

Equipment AIDs are used to access specific cards. The I/O cards can only use the I/O slots (Slots 1–4). Slots 5a nd 6 are reserved for the XTC cards and Slots 7 and 8 are reserved for MIC cards.

Table 4-34 EQPT for ONS 15327

Pattern	Description
SLOT-ALL	All of the NE equipment AIDs
SLOT-{1-8}	Individual equipment AID of an NE

4.4.16 FACILITY

4.4.16.1 FACILITY for ONS 15454

Facilities AIDs are used to access specific ports.

Table 4-35 FACILITY for ONS 15454

Pattern	Description
FAC-{1-4,14-17}-{1-8}	Facilities for an OC3-8 card
FAC-{1-6,12-17}-1	Facility AID for the 1 Client (CLNT) Port on a TXP card
FAC-{1-6,12-17}-ALL	All the facilities of an I/O unit or slot
FAC-{1-6,12-17}-{0-11}	Facilities for the Ethernet Front-end ports on the ML100T-12 card. Ports are numbered starting with 0 (i.e. first port is FAC-SLOT-0, second port is FAC-SLOT-1, ..., last port is FAC-SLOT-11 for ML100T-12 and first port is FAC-SLOT-0 and second port is FAC-SLOT-1 for ML1000-2)
FAC-{1-6,12-17}-{0-1}	Facilities for the Ethernet Backend Ports on the ML1000-2 card. Ports are 0-based, (i.e the first port is FAC-SLOT-0 and the second port is FAC-SLOT-1)
FAC-{1-6,12-17}-{1-12}	Facilities AID for the EC1 and DS3 cards
FAC-{1-6,12-17}-{1-14}	Facilities for the DS1 card
FAC-{1-6,12-17}-{1-4}	Facilities for the four-port OC3 card, four-port OC12 card, and G1000-4
FAC-{1-6,12-17}-{1-6}	Facilities for the DS3XM card

Table 4-35 FACILITY for ONS 15454 (continued)

Pattern	Description
FAC-{1-6,12-17}-{1}	Facility AID for the one-port OC12, and OC48AS cards
FAC-{5,6,12,13}-{1}	Facility AID for the OC48/OC192 card. The OC48/OC192 cards can only use the high speed slots (Slot 5, Slot 6, Slot 12, Slot 13).
FAC-{8,10}-{1}	Facility aid for the OSCM card. The OSCM cards can only use the XC slots (Slot-8, Slot-10)
VFAC-{1-6,12-17}-{0-1}	Facilities for the backend POS ports on the ML-series card. Port numbering is 0-based (i.e. the first POS port is VFAC-SLOT-0, the second POS port is VFAC-SLOT-1)

4.4.16.2 FACILITY for ONS 15327

Facilities AIDs are used to access specific ports.

Table 4-36 FACILITY for ONS 15327

Pattern	Description
FAC-{1-6}-ALL	All the facilities of an I/O unit or slot
FAC-{5-6}-{1-28}	Facilities AID for the DS1 on the XTC card
FAC-{5-6}-{1-3}	Facilities AID for the DS3 on the XTC card
FAC-{1-4}-{1}	Facilities AID for the OC12 and OC48 cards
FAC-{1-4}-{2}	Facilities aid for the G1000-2 card
FAC-{1-4}-{1-4}	Facilities AID for the OC3 card

4.4.17 LINE

(ONS 15454 only)

The LINE AID is used to access the Optical Transport Section (OTS) layer of optical network units.

Table 4-37 LINE Values

LINE Values	Description
LINE-{1-6,12-17}-{1-2}-ALL	All the Lines in a OPT-PRE, OCS-CSM, AD-1B, AD-4B, AD-1C, AD-2C, AD-4C units
LINE-{1-6,12-17}-{1-2}-{RX,TX}	The receive/transmit Lines in a OPT-PRE, OCS-CSM, AD-1B, AD-4B, AD-1C, AD-2C, AD-4C units
LINE-{1-6,12-17}-{1-3}-ALL	All the Lines in a OPT-BST units
LINE-{1-6,12-17}-{1-3}-{RX,TX}	The receive/transmit Lines in a OPT-BST units
LINE-{8,10}-{1}-ALL	All the Channels in an Optical Multiplexer/Demultiplexer (32Ch) units
LINE-{8,10}-{1}-{RX,TX}	The receive/transmit Channels in an Optical Multiplexer/Demultiplexer (32Ch) units

4.4.18 OSC

(ONS 15454 only)

OSC AIDs are used to access the OSC' of the NE

Table 4-38 OSC Values

OSC Values	Description
ALL	Indicates the whole OSCs of the NE
OSC-{1-9999}	Individual OSC of the NE

4.4.19 RFILE

4.4.19.1 RFILE for ONS 15454

(ONS 15454 only)

File transfer type

Table 4-39 RFILE for ONS 15454

Pattern	Description
RFILE-DB	Transferring the system database
RFILE-PKG	Transferring a software package

4.4.20 STS

4.4.20.1 STS for ONS 15454

SONET frame-level AID set

Table 4-40 STS for ONS 15454

Pattern	Description
FAC-{1-6,12-17}-{1-4}	Dynamically allocated STSs of all widths for the G1000-4 card
STS-{1-4,14-17}-{1-4}-1	STS12C AIDS for a 4-port OC12 card
STS-{1-4,14-17}-{1-4}-ALL	All the STSs for a 4-port OC12 card
STS-{1-4,14-17}-{1-4}-{1,4,7,10}	STS3C for a 4-port OC12 card
STS-{1-4,14-17}-{1-4}-{1,4,7}	STS6C AIDs for a 4-port OC12
STS-{1-4,14-17}-{1-4}-{1-3}	STS1 AID for a 4-port OC3 card
STS-{1-4,14-17}-{1-8}-1	STS3C for an 8-port OC3 card
STS-{1-4,14-17}-{1-8}-ALL	All the STSs for an 8-port OC3 card

Table 4-40 STS for ONS 15454 (continued)

Pattern	Description
STS-{1-4,14-17}-{1-8}-{1-3}	STS1 AID for an 8-port OC3 card
STS-{1-6,12-17}-1	STS1 AID for a DS1 card
STS-{1-6,12-17}-1-1	STS12C AID for a 1-port OC12 card STS48C AID for an OC48AS card
STS-{1-6,12-17}-1-ALL	All the STSs of an STS bandwidth on a single port optical card
STS-{1-6,12-17}-1-{1,13,25,37}	STS12C AIDs for an OC48AS card
STS-{1-6,12-17}-{1,4,10,13,16,19,25,28,37,40}	STS9C AID for an OC48AS card
STS-{1-6,12-17}-1-{1,4,7,10,13,16,19,22,25}	STS24C AID for an OC48AS card
STS-{1-6,12-17}-1-{1,4,7,10-46}	STS3C AID for an OC48AS card
STS-{1-6,12-17}-1-{1,4,7,10}	STS3C for a 1-port OC12 card
STS-{1-6,12-17}-1-{1,4,7,13,16,19,25,28,37,40,43}	STS6C AID for an OC48AS card
STS-{1-6,12-17}-1-{1,4,7}	STS6C AID for an OC12 card
STS-{1-6,12-17}-1-{1,4}	STS9C AID for a 1-port OC12 card
STS-{1-6,12-17}-1-{1-12}	STS1 AID for a 1-port OC12 card
STS-{1-6,12-17}-1-{1-48}	STS1 AID for an OC48AS card
STS-{1-6,12-17}-ALL	All the STSs for an STS1 bandwidth on any electrical card
STS-{1-6,12-17}-{1-12}	STS1 AID for EC1 and DS2 cards
STS-{1-6,12-17}-{1-4}-1	STS3C AID for a 4-port OC3 card
STS-{1-6,12-17}-{1-4}-ALL	All the STSs for a 4-port OC3 card
STS-{1-6,12-17}-{1-4}-{1,4,7}	STS6C AID for a 4-port OC12 card
STS-{1-6,12-17}-{1-4}-{1,4}	STS9C AID for a 4-port OC12 card
STS-{1-6,12-17}-{1-4}-{1-12}	STS1 AID for a 4-port OC12 card
STS-{1-6,12-17}-{1-6}	STS1 AID for a DS3XM card
STS-{5,6,12,13}-1-1	STS48C AID for an OC48 card STS192 AID for an OC192 card
STS-{5,6,12,13}-1-{1,13,25,37-180}	STS12C AID for an OC192 card
STS-{5,6,12,13}-1-{1,13,25,37}	STS12C AIDs for an OC48 card
STS-{5,6,12,13}-1-{1,4,7,10,13,16,19,22,25}	STS24C AID for an OC48 card
STS-{5,6,12,13}-1-{1,4,7,10-190}	STS3C for an OC192 card
STS-{5,6,12,13}-1-{1,4,7,10-46}	STS3C AID for an OC48 card
STS-{5,6,12,13}-1-{1,4,7,13,16,19,25,28,37,40,43}	STS6C AID for an OC48 card
STS-{5,6,12,13}-1-{1,49,97,145}	STS48C AID for an OC192 card
STS-{5,6,12,13}-1-{1-192}	STS1 AID for an OC192 card

Table 4-40 STS for ONS 15454 (continued)

Pattern	Description
STS-{5,6,12,13}-1-{1-48}	STS1 AID for an OC48 card
VFAC-{1-6,12-17}-{0-1}	Virtual facility AIDs for the ML-series cards back end POS ports. Both the ML1000-2 and ML100T-12 have two POS ports and are 0-based.

4.4.20.2 STS for ONS 15327

SONET frame-level AID set

Table 4-41 STS for ONS 15327

Pattern	Description
FAC-{1-4}-{1-2}	Dynamically allocated STSs of all widths for the G1000-2 card
STS-{1-4}-1--ALL	All the STSs of an STS bandwidth on an optical card
STS-{1-4}-{1}	STS48C AID for an OC48 card STS12C for an OC12 card
STS-{1-4}-1-{1,13,25,37}	STS12C AID for an OC48 card
STS-{1-4}-1-{1,7,13,19,...43}	STS6C AID for an OC48 card
STS-{1-4}-1-{1,7}	STS6C AID for an OC12 card
STS-{1-4}-1-{1,4,7,10,...,46}	STS3C AID for an OC48 card
STS-{1-4}-1-{1,4,7,10}	STS3C AID for an OC3 and OC12 card
STS-{1-4}-1-{1-12}	STS1 AID for an OC3 and OC12 card
STS-{1-4}-1-{1-48}	STS1 AID for an OC48 card
STS-{5-6}-ALL	All the STSs of an STS bandwidth on an XTC card
STS-{5-6}-{1}	STS1 AID for the DS1 in an XTC card
STS-{5-6}-{2-4}	STS1 AID for the DS3 in an XTC-28 card
VFAC-{1-4}-{1-2}	Dynamically allocated STSs of all widths for the back end ports of M3000-1 and M300T-8 cards.

4.4.21 SYN

4.4.21.1 SYN for ONS 15454

Synchronization AIDs

Table 4-42 SYN for ONS 15454

Pattern	Description
SYNC-NE	NE sync AID

4.4.21.2 SYN for ONS 15327

Synchronization AIDs

Table 4-43 SYN for ONS 15327

Pattern	Description
SYNC-NE	NE sync AID

4.4.22 SYN_SRC

4.4.22.1 SYN_SRC for ONS 15454

Synchronization source

Table 4-44 SYN_SRC for ONS 15454

Pattern	Description
BITS-1	Sync source is BITS-1
BITS-2	Sync source is BITS-2
FAC-{1-6,12-17}-{1-4}	Sync source is the optical card (four-port OC3 and four-port OC12) facility
FAC-{1-6,12-17}-{1}	Sync source is the optical card (one-port OC12 and OC48AS) facility
FAC-{5,6,12,13}-{1}	Sync source is the optical card (OC48,OC192) facility
INTERNAL	Set the SYN_SRC to be the system default value. The “Internal” value of the SYN_SRC is only applied for the SYNC-NE AID on the ED-SYNCN command.
NONE	Set the SYNC_SRC value to the default value for BITS-OUT. The “NONE” value of SYNC_SRC only applies to the BITS-1 and BITS-2 AID of the ED-SYNCN command.
SYNC-NE	SYNC-NE source. It is only used for BITS-OUT in line timing mode.

4.4.22.2 SYN_SRC for ONS 15327

Synchronization source

Table 4-45 SYN_SRC for ONS 15327

Pattern	Description
FAC-{1-4}-{1-4}	Sync source is the optical card (OC3) facility
FAC-{1-4}-{1}	Sync source is the optical card (OC12, OC48) facility
INTERNAL	Set the SYN_SRC to be the system default value. The “Internal” value of the SYN_SRC is only applied for the SYNC-NE AID on the ED-SYNCN command.

Table 4-45 SYN_SRC for ONS 15327 (continued)

Pattern	Description
SYNC-NE	SYNC-NE source. It is only used in the alarm report or alarm retrieve commands.
{BITS-1,BITS-2}	BITS-1 or BITS-2 of the synchronization source

4.4.23 SYNC_REF

4.4.23.1 SYNC_REF for ONS 15454

Synchronization AIDs

Table 4-46 SYNC_REF for ONS 15454

Pattern	Description
ALL	Equivalent to a combination of SYNC-ALL, BITS-1 and BITS-2. This AID is valid only for the commands RTRV-ALM-SYNCN and RTRV-COND-SYNCN
SYNC-ALL	NE, BITS1 and BITS2 sync AIDs used for the RTRV-SYNCN command only
SYNC-NE	NE sync AID
SYNC-{BITS1,BITS2}	BITS1 and BITS2 sync AIDs

4.4.23.2 SYNC_REF for ONS 15327

Synchronization AIDs

Table 4-47 SYNC_REF for ONS 15327

Pattern	Description
SYNC-ALL	NE, BITS1 and BITS2 sync AIDs used for the RTRV-SYNCN command only
SYNC-NE	NE sync AID
SYNC-{BITS1,BITS2}	BITS1 and BITS2 sync AIDs

4.4.24 SYNCSW

4.4.24.1 SYNCSW for ONS 15454

New synchronization reference that will be used

Table 4-48 SYNCSW for ONS 15454

Pattern	Description
INT	Internal clock. The “INT” value of the syncsw is only applied for the SYNC-NE AID on the OPR-SYNCSW command.
PRI	Primary timing reference
SEC	Secondary timing reference
THIRD	Third timing reference

4.4.24.2 SYNCSW for ONS 15327

New synchronization reference that will be used

Table 4-49 SYNCSW for ONS 15327

Pattern	Description
INT	Internal clock. The “INT” value of the syncsw is only applied for the SYNC-NE AID on the OPR-SYNC-SW command.
PRI	Primary timing reference
SEC	Secondary timing reference
THIRD	Third timing reference

4.4.25 TACC

(ONS 15454 only)

Test access AID which indicates the TAP number

Table 4-50 TACC for ONS 15454

Pattern	Description
{0, 1-999}	Indicates individual TAP number of the NE. The zero (0) TAP number is used in the [<TACC>] field of the ED-rr test access related commands. When [<TACC>] is zero (0), the TAP is deleted.

4.4.26 TAP

(ONS 15327 only)

Test access AID which indicates the TAP number

Table 4-51 TACC for ONS 15327

Pattern	Description
{0, 1-999}	Indicates individual TAP number of the NE. The zero (0) TAP number is used in the [<TACC>] field of the ED-rr test access related commands. When [<TACC>] is zero (0), the TAP is deleted.

4.4.27 UDC

(ONS 15454 only)

UDC AIDs for F-UDC and DCC-UDC channels on the AICI card

Table 4-52 UDC for ONS 15454

Pattern	Description
UDC-{F,DCC}-{A,B}	F-UDC and DCC-UDC AIDs for A and B channels

4.4.28 VT1_5

4.4.28.1 VT1_5 for ONS 15454

Virtual termination AIDs

Table 4-53 VT1_5 for ONS 15454

Pattern	Description
VT1-{1-4,14-17}-{1-8}-{1-3}-{1-7}-{1-4}	8-port OC3 card
VT1-{1-6,12-17}-1-{1-12}-{1-7}-{1-4}	1-port OC12 card
VT1-{1-6,12-17}-1-{1-48}-{1-7}-{1-4}	OC48AS card
VT1-{1-6,12-17}-1-{1-7}-{1-2}	DS1 card
VT1-{1-6,12-17}-{1-12}-1-{1-7}-{1-4}	EC1 card
VT1-{1-6,12-17}-{1-4}-{1-12}-{1-7}-{1-4}	4-port OC12 card
VT1-{1-6,12-17}-{1-4}-{1-3}-{1-7}-{1-4}	4-port OC3 card
VT1-{1-6,12-17}-{1-6}-{1-7}-{1-4}	DS3XM card
VT1-{5,6,12,13}-1-{1-192}-{1-7}-{1-4}	OC192 Card
VT1-{5,6,12,13}-1-{1-48}-{1-7}-{1-4}	OC48 card

4.4.28.2 VT1_5 for ONS 15327

Virtual termination AIDs

Table 4-54 VT1_5 for ONS 15327

Pattern	Description
ALL	All the VT cross-connections of the NE. This <ALL> AID is only used for the RTRV-CRS-VT1 command.
VT1-{5-6}-1-{1-7}-{1-2}	XTC-14 card VT aid set
VT1-{5-6}-1-{1-7}-{1-4	XTC-28 card VT aid set
VT1-{1-4}-1-{1-12}-{1-7}-{1-4}	OC3 and OC12 card VT AID set
VT1-{1-4}-1-{1-48}-{1-7}-{1-4}	OC48 card Vt aid set

4.5 Parameter Types

This section provides a description of all message parameter types defined for the TL1 messages used in the ONS 15454 and ONS 15327. The TL1 message descriptions frequently refer to this section.

4.5.1 ATAG Description

The ATAG is used for message sequencing. There are three streams of autonomous messages and each stream corresponds to a sequence. The sequence numbers increment by one for each autonomous message within that stream. The format of ATAG differs for each stream. The three streams are:

1. Alarmed events:

   These include REPT ALM and REPT EVT messages as well as the REPT SW autonomous message.

   ATAG Format: x.y
   where
   x – sequence number of this alarmed event. This is an integer in the range of 0–9999.
   y – sequence number of the previous alarmed event which is related to this alarmed event. This is an integer in the range of 0-9999.

   If there is no such previous related event, then y will be the same as x. For example, the first time an alarm is raised you will receive the autonomous message:

   TID-000 1998-06-20 14:30:00
   * 1346.1346 REPT ALM T1
   “FAC-1-1:MN,LOS,NSA,,,,:\“Loss Of Signal\”,DS1-14”
   ;

   When this alarmed event/condition is cleared, you will receive the autonomous message:

   TID-000 1998-06-20 14:31:00
   A 1349.1346 REPT ALM T1
   “FAC-1-1:CL,LOS,NSA,,,,:\“Loss Of Signal\”,DS1-14”
   ;

Note The autonomous message CANC also has an ATAG in this format even though it is not an alarmed event.

2. Database change messages:

   The REPT DBCHG message falls into this category.

   ATAG Format: x
   where:
   x – sequence number of the database change update message. This is an integer in the range of 0–9999. For example:

   TID-000 1998-06-20 14:30:00
   A 96 REPT DBCHG
   "TIME=18-01-05,DATE=1970-01-01,SOURCE=2,USERID=CISCO15,
   DBCHGSEQ=96:ENT-EQPT:SLOT-3"
   ;

Note The ATAG is the same as the DBCHGSEQ field in the REPT DBCHG output.

3. PM Reports:

   The REPT PM messages fall into this category.

   ATAG format: x
   where:
   x – sequence number of the PM report. This is an integer in the range of 0–9999. For example:

   TID-000 1998-06-20 14:30:00
   A5 REPT PM DS1
   "FAC-3-1:CVL,10,PRTL,NEND,BTH,15-MIN,05-25,14-46"
   ;

   This sequence number is global across all existing PM schedules.

4.5.2 CTAG Description

The correlation tag (CTAG) is included in each command by the user and is repeated by the NE in the response to allow the user to associate the command and response messages.

Note The valid values for a CTAG are strings of up to 6 characters comprised of identifiers (alphanumeric, beginning with a letter) or decimal numerals (a string of decimal digits with an optional non-trailing ".").

4.5.3 TID Description

The TID is the name of the NE where the command is addressed. TID is the Telcordia name for the system.

4.5.4 Parameter Notes

1. If a parameter is set to a value that is inconsistent with something already in the database, and that value is not changed to a consistent value then the command will be denied.
2. If a parameter is set to a value that is consistent with what is already in the database, but another parameter in the same command is incompatible, then the command will be denied.
3. The correct way to issue a command where parameters may be in conflict is to:
   a. First issue that command and change all relevant parameters to compatible values,
   b. Then issue the command again to change the target values.

   For example, OC-N is syncmsg=y, to change SDH to y, ED-OCN needs to be called to set syncmsg=N, then called again to set SDH=y.
4. The attribute defaults have also been presented under RTRV commands, and they can be retrieved only if the RTRV commands follow the card/entity original provision.
5. The default for an optional field of an ED command is either the provisioned default value or the last provisioned value in the previous ED command.

4.5.5 ALL_MONTYPE

Monitoring type list

Table 4-55 ALL_MONTYPE Values

ALL_MONTYPE Values	Description
AISSP	Alarm Indication Signal Seconds - Path
BBE-PM	OTN - Background Block Errors - Path Monitor Point
BBE-SM	OTN - Background Block Errors - Section Monitor Point
BBER-PM	OTN - Background Block Error Ratio - Path Monitor Point expressed as 1/10th of a percentage.
BBER-SM	OTN - Background Block Error Ratio - Section Monitor Point expressed as 1/10th of a percentage.
BIEC	FEC - Bit Errors Corrected
CGV	8B10B - Code Group Violations
CVCPP	Coding Violations - CP-Bit Path
CVL	Coding Violations - Line
CVP	Coding Violations - Path
CVS	Coding Violations - Section
CVV	Coding Violations - Section
ES-PM	OTN - Errored Seconds - Path Monitor Point
ES-SM	OTN - Errored Seconds - Section Monitor Point
ESCPP	Errored Seconds - CP- Bit Path
ESL	Errored Seconds - Line

Table 4-55 ALL_MONTYPE Values (continued)

ALL_MONTYPE Values	Description
ESP	Errored Seconds - Path
ESR	Errored Second - Ratio
ESR-PM	Errored Seconds Ratio - Path monitor Point expressed as 1/10th of a percentage
ESR-SM	Errored Seconds Ratio - Section monitor Point expressed as 1/10th of a percentage
ESS	Errored Seconds - Section
ESV	Errored Seconds - VT Path
FC-PM	OTN - Failure Count - Path Monitor Point
FC-SM	OTN - Failure Count - Section Monitor Point
FCP	Failure Count - Line
LAT-AVG	Average Laser Temperature current in 1/256 degrees Celsius
LAT-HIGH	Laser Temperature in 1/256 degrees Celsius Measured range [-40.000 C, 125.000 C]
LAT-LOW	Laser Temperature in 1/256 degrees Celsius Measured range [-40.000 C, 125.000 C]
LAT-MAX	Maximum Laser Temperature in 1/256 degrees Celsius Measured range [-40.000 C, 125.000 C]
LAT-MIN	Minimum Laser Temperature in 1/256 degrees Celsius Measured range [-40.000 C, 125.000 C]
LBCL-AVG	Average Laser Bias current in uA
LBCL-HIGH	High Laser Bias current in uA
LBCL-LOW	Low Laser Bias current in uA
LBCL-MAX	Max Laser Bias current in uA
LBCL-MIN	Minimum Laser Bias current in uA
LOSSL	Loss of Signal Seconds - Line
NPJC-PDET	PPJC-PDET:Negative Pointer Justification
NPJC-PGEN	PPJC-PGEN:Negative Pointer Justification
OBED	FEC - One Bit Errors Detected
OPR-AVG	Average Receive Power in 1/10 uW
OPR-HIGH	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
OPR-LOW	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
OPR-MAX	Maximum Receive Power in 1/10 uW
OPR-MIN	Minimum Receive Power in 1/10 uW
OPT-AVG	Average Transmit Power in 1/10 uW
OPT-HIGH	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
OPT-LOW	Transmit power in 1/10 uW. Measured value[-40.0 dBm,+30.0 dBm]
OPT-MAX	Maximum Transmit Power in 1/10 uW

Table 4-55 ALL_MONTYPE Values (continued)

ALL_MONTYPE Values	Description
OPT-MIN	Minimum Transmit Power in 1/10uW
OPWR-AVG	Optical Power - Average Interval Value in 1/10th of dBm
OPWR-MAX	Optical Power - Maximum Interval Value in 1/10th of dBm
OPWR-MIN	Optical Power - Minimum Interval Value in 1/10th of dBm
PPJC-PDET	PPJC-PDET:Positive Pointer Justification
PPJC-PGEN	PPJC-PGEN:Positive Pointer Justification
PSC	Protection Switching Count
PSC-R	Protection Switching Count - Ring
PSC-S	Protection Switching Count - Span
PSC-W	Protection Switching Count - Working
PSD	Protection Switching Duration
PSD-R	Protection Switching Duration - Ring
PSD-S	Protection Switching Duration - Span
PSD-W	Protection Switching Duration - Working
RXT-AVG	Average Receiver Temperature
RXT-HIGH	High Alarm Threshold level for Receiver Temperature
RXT-LOW	Low Alarm Threshold level for Receiver Temperature Measured range [-40.000 C,125.000 C]
RXT-MAX	Receiver Temperature Max PM value Measured range [-40.000 C, 125.000 C]
RXT-MIN	Receiver Temperature Min PM value Measured range [-40.000 C, 125.000 C]
SASCPP	Severely Errored Framing/AIS Second - CP-Bit Path
SASP	Severely Errored Framing/AIS Seconds Path
SEFS	Severely Errored Framing Seconds
SES-PM	OTN - Severely Errored Second - Path
SES-SM	OTN - Severely Errored Second - Section Monitor Point
SESCPP	Severely Errored Second - CP-Bit Path
SESL	Severely Errored Second - Line
SESP	Severely Errored Second - Path
SESR-PM	OTN - Severely Errored Second Ratio - Path Monitor Point expressed as 1/10th of a percentage
SESR-SM	OTN - Severely Errored Second Ratio - Section Monitor Point expressed as 1/10th of a percentage
SESS	Severely Errored Second - Section
SESV	Severely Errored Second - VT Path
UAS-PM	OTN - Unavailable Second - Path Monitor Point
UAS-SM	OTN - Unavailable Second - Section Monitor Point

Table 4-55 ALL_MONTYPE Values (continued)

ALL_MONTYPE Values	Description
UASCPP	Unavailable Second - CP-Bit Path
UASL	Unavailable Second - Line
UASP	Unavailable Second - Path
UASV	Unavailable Second - VT Path
UCW	FEC - Uncorrectable Words
ZBED	FEC - Zero Bit Errors Detected

4.5.6 ALL_THR

Threshold list

Table 4-56 ALL_THR Value

ALL_THR Values	Description
T-AISSP	Alarm Indication Signal Seconds - Path
T-BBE-PM	OTN TCA. Background Block Errors - Path Monitor Point
T-BBE-SM	OTN TCA. Background Block Errors - Section Monitor Point
T-BBEHP	Background Block Errors - High Order Path
T-BBEL	Background Block Errors - Line
T-BBELP	Background Block Errors - Low Order Path (VC3/VC12)
T-BBEM	Background Block Errors- Multiplex Section
T-BBEP	Background Block Errors - High Order Path
T-BBEPR	Background Block Errors
T-BBER	Background Block Errors - Regenerator Section
T-BBER-PM	Background Block Errors - Path Level OTN
T-BBER-SM	Background Block Errors - Section Level OTN
T-BBER-TCM1	Background Block Errors - Tandem1 Level OTN
T-BBER-TCM2	Background Block Errors - Tandem2 Level OTN
T-BBERS	Background Block Errors - Regenerator Section
T-BBESR	Background Block Errors
T-BBEV	Background Block Errors
T-BIEC	FEC TCA. Bit Errors Corrected
T-BYEC	FEC TCA. Byte Errors Corrected
T-CSS	Controlled Slipped Seconds
T-CVCPP	Coding Violations - CP-Bit Path
T-CVL	Coding Violations - Line
T-CVP	Coding Violations - Path
T-CVS	Coding Violations - Section
T-CVV	Coding Violations - VT Path
T-EBHP	EB - High Order Path
T-EBLP	EB Low Order Path VC3/VC12
T-EBMS	EB Multiplex Section
T-EBP	EB Line Path
T-EBRS	EB Regenerator Section
T-ES-PM	OTN TCA. Errored Seconds - Path Monitor Point
T-ES-SM	OTN TCA. Errored Seconds - Section Monitor Point
T-ESCPP	Errored Seconds - CP-Bit Path

Table 4-56 ALL_THR Value (continued)

ALL_THR Values	Description
T-ESHP	ED High Order Path VC4/VC4-nc
T-ESL	Errored Seconds - Line
T-ESLP	ES Low Order PAth VC3/VC12
T-ESMS	ES Multiplex Section
T-ESP	Errored Seconds - Path
T-ESR	ES - Regenerator Section
T-ESR-PM	ES - Regenerator Section - Path Level OTN
T-ESR-SM	ES - Regenerator Section - Section Level OTN
T-ESR-TCM1	ES - Regenerator Section - Tandem1 Level OTN
T-ESR-TCM2	ES - Regenerator Section - Tandem2 Level OTN
T-ESRS	ES Regenerator Section
T-ESS	Errored Seconds - Section
T-ESV	Errored Seconds - VT Path
T-FC-PM	OTN TCA. Failure Count - Path Monitor Point
T-FC-SM	OTN TCA. Failure Count - Section Monitor Point
T-FCHP	FC High Order Path
T-FCLP	FC Low Order Path
T-FCMS	FC Multiplex Section
T-FCP	Failure Count - Line
T-HOPWR	Optical Power - High Threshold crossed in 1/10th of dBm
T-LAT-HWT	Laser Level TCA. Laser Temperature in 1/256 degrees Celsius. Low/High Warning Threshold
T-LAT-LWT	Laser Level TCA. Laser Temperature in 1/256 degrees Celsius. Low/High Warning Threshold
T-LBCL-HWT	Laser Level TCA. Laser Bias current in uA. Low/High Warning Threshold
T-LBCL-LWT	Laser Level TCA. Laser Bias current in uA. Low/High Warning Threshold
T-LOPWR	Optical Power - Low Threshold crossed in 1/10th of dBm
T-LOSSL	Loss of Signal Seconds - Line
T-OBED	FEC TCA. One Bit Errors Detected
T-OPR-HWT	Laser Level TCA. Receive power in 1/10 uW. Low/High Warning Threshold
T-OPR-LWT	Laser Level TCA. Receive power in 1/10 uW. Low/High Warning Threshold
T-OPT-HWT	Laser Level TCA. Transmit power in 1/10 uW. Low/High Warning Threshold
T-OPT-LWT	Laser Level TCA. Transmit power in 1/10 uW. Low/High Warning Threshold
T-PJ-DET	Pointer Justification Detected
T-PJ-DIFF	Pointer Justification Diff
T-PJ-GEN	Pointer Justification Generated
T-PJNEG	PPJC-PDET:Negative Pointer Justification

Table 4-56 ALL_THR Value (continued)

ALL_THR Values	Description
T-PJNEG-GEN	PPJC-PGEN:Negative Pointer Justification
T-PJPOS	PPJC-PDET:Positive Pointer Justification
T-PJPOS-GEN	PPJC-PGEN:Positive Pointer Justification
T-PSC	Protection Switching Count
T-PSC-R	Protection Switching Count
T-PSC-S	Protection Switching Count
T-PSC-W	Protection Switching Count
T-PSD	Protection Switching Duration
T-PSD-R	Protection Switching Duration
T-PSD-S	Protection Switching Duration
T-PSD-W	Protection Switching Duration
T-RX-TEMP-MAX	Receiver Temperature Max TCA (applicable to MXP/TXP cards)
T-RXT-HWT	Receiver Temperature High Warning TCA
T-RXT-LWT	Receiver Temperature Low Warning TCA
T-SASCPP	Severely Errored Framing/AIS Second - CP-Bit Path
T-SASP	Severely Errored Framing/AIS Seconds
T-SEFS	Severely Errored Framing Seconds
T-SEFSRS	SEFRS
T-SES-PM	OTN TCA. Severely Errored Second - Path Monitor Point
T-SES-SM	OTN TCA. Severely Errored Second - Section Monitor Point
T-SESCPP	Severely Errored Second - CP-Bit Path
T-SESHP	SES High Order Path
T-SESL	Severely Errored Second - Line
T-SESLP	SES Low Order Path
T-SESMS	SES Multiplex Section
T-SESP	Severely Errored Second - Path
T-SESR-PM	SESR - Path Level OTN
T-SESR-SM	SESR - Section Level OTN
T-SESR-TCM1	SESR - Tandem1 Level OTN
T-SESR-TCM2	SESR - Tandem2 Level OTN
T-SESRS	SES Regeneration Section
T-SESS	Severely Errored Second - Section
T-SESV	Severely Errored Second - VT Path
T-UAS-PM	OTN TCA. Unavailable Second - Path Monitor Point
T-UAS-SM	OTN TCA. Unavailable Second - Path Monitor Point
T-UASCPP	Unavailable Second - CP-Bit Path

Table 4-56 ALL_THR Value (continued)

ALL_THR Values	Description
T-UASHP	UA High Order Path
T-UASL	Unavailable Second - Line
T-UASLP	UA Low Order Path
T-UASMS	UA Multiplex Section
T-UASP	Unavailable Second - Path
T-UASV	Unavailable Second - VT Path
T-UCW	FEC TCA. UnCorrectable Words
T-ZBED	FEC TCA. Zero Bit Errors Detected

4.5.7 ALM_THR

Alarm Threshold list for MXP/TXP cards.

Table 4-57 ALM_THR Values

ALS_THR Values	Description
LAT-HIGH	Laser Temperature in 1/256 degrees Celsius Measured range [-40.000 C, 125.000 C]
LAT-LOW	Laser Temperature in 1/256 degrees Celsius Measured range [-40.000 C, 125.000 C]
LBCL-HIGH	Laser Bias current in uA as 1/10% High Warning Threshold, Low Warning Threshold Measured value [0.0%, 100.0%]
LBCL-LOW	Laser Bias current in uA as 1/10% High Warning Threshold, Low Warning Threshold Measured value [0.0%, 100.0%]
OPR-HIGH	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
OPR-LOW	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm
OPT-HIGH	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
OPT-LOW	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
RXT-HIGH	Receiver Temperature High Alarm Threshold Measured range [-40.000 C, 125.000 C]
RXT-LOW	Receiver Temperature Low Alarm Threshold Measured range [-40.000 C, 125.000 C]
T-GAIN-HDEG	Gain not reached - High Degrade Threshold. It is in 1/10th of dB
T-GAIN-HFAIL	Gain not reached - Low Failure Threshold. It is in 1/10th of dB
T-GAIN-LDEG	Gain not reached - Low Degrade Threshold. It is in 1/10th of dB
T-GAIN-LFAIL	Gain not reached - Low Failure Threshold. It is in 1/10th of dB
T-OPWR-HDEG	Optical Power - High Degrade Threshold. It is in 1/10th of dBm
T-OPWR-HFAIL	Optical Power - High Failure Threshold. It is in 1/10th of dBm
T-OPWR-LDEG	Optical Power - Low Degrade Threshold. It is in 1/10th of dBm

Table 4-57 ALM_THR Values (continued)

ALS_THR Values	Description
T-OPWR-LFAIL	Optical Power - Low Failure Threshold. It is in 1/10th of dBm
T-VOA-HDEG	VOA Attenuation - High Degrade Threshold. It is in 1/10th of dB
T-VOA-HFAIL	VOA Attenuation - High Failure Threshold. It is in 1/10th of dB
T-VOA-LDEG	VOA Attenuation - Low Degrade Threshold. It is in 1/10th of dB
T-VOA-LFAIL	VOA Attenuation - Low Failure Threshold. It is in 1/10th of dB
XCVR-HIGH	Transceiver voltage in 1/10 mV Measure value [0.0 mV, 10000.0 mV]
XCVR-LOW	Transceiver voltage in 1/10 mV Measure value [0.0 mV, 10000.0 mV]

4.5.8 ALS_CFG

Specifies the type of check for ALS detection mode

Table 4-58 ALS_CFG Values

ALS_CFG Values	Description
ALL	The ALS is applied checking all the received signals (Line + OSC)
OSC	The ALS is applied checking only the received OSC signal
RX	The ALS is applied checking only the received Line signal

4.5.9 ALS_MODE

This type specifies the working mode for the Automatic Laser Shutdown (ALS) functionality.

Table 4-59 ALS_MODE Values

ALS_MODE Values	Description
AUTO	Automatic
DISABLED	Disabled
MAN	Manual
MAN-RESTART	Manual Restart for Test

4.5.10 ALS_RESTART

Automatic Laser Shutdown for the G1000 card

Table 4-60 ALS_RESTART Values

ALS_RESTART Values	Description
AUTO_RESTART	Automatic Laser Shutdown Automatic Restart

Table 4-60 ALS_RESTART Values

ALS_RESTART Values	Description
MAN_RESTART	Automatic Laser Shutdown Manual Restart
MAN_TEST_RESTART	Automatic Laser Shutdown Restart Test

4.5.11 AMPL_MODE

Defines the Amplifier control mode

Table 4-61 AMPL_MODE Values

AMPL_MODE Values	Description
GAIN	The Amplifier always maintains a fixed Gain
POWER	The Amplifier maintains the Output Power to a fixed value

4.5.12 AWG_STATUS

AWG status list

Table 4-62 AWG_STATUS Values

AWG_STATUS Values	Description
ON	The AWG is on
WARM-UP	The AWG is warming up

4.5.13 BITS_LineBuildOut

BITS Line buildout

Table 4-63 BITS_LineBuildOut Values

BITS_LineBuildOut Values	Description
0–133	BITS line buildout range is 0–133
134–266	BITS line buildout range is 134–266
267–399	BITS line buildout range is 267–399
400–533	BITS line buildout range is 400–533
534–655	BITS line buildout range is 534–655

4.5.14 BLSR_MODE

BLSR mode

Table 4-64 BLSR_MODE Values

BLSR_MODE Values	Description
2F	Two fiber BLSR
4F	Four fiber BLSR

4.5.15 BLSR_PTH_STATE

Indicates the BLSR path state only if the port is on the BLSR

Table 4-65 BLSR_PTH_STATE Values

BLSR_PTH_STATE Values	Description
PCAPTHACT	Indicates the BLSR ring un-switched and its PCA path is in the active state
PCAPTHSTB	Indicates the BLSR ring switched and its PCA path is in the standby state
PROTPTHACT	Indicates the BLSR ring switched and its protection path is in the active state
WKGPTHACT	Indicates the BLSR ring un-switched and its working path is in the active state
WKGPTHSTB	Indicates the BLSR ring switched and its working path is in the standby state

4.5.16 BLSR_PTH_TYPE

Indicates the BLSR path TYPE only if the port is on the BLSR

Table 4-66 BLSR_PTH_TYPE Values

BLSR_PTH_TYPE Values	Description
NON-PCA	Indicates the AID is on the working path, or the XC created protection path
PCA	Indicates the AID is on the BLSR PCA path

4.5.17 BLSR_TYPE

BLSR type of an OCN port

Table 4-67 BLSR_TYPE Values

BLSR_TYPE Values	Description
EASTPROT	Identifies that the OCN port is an east protecting port
EASTWORK	Identifies that the OCN port is an east working port
WESTPROT	Identifies that the OCN port is a west protecting port
WESTWORK	Identifies that the OCN port is a west working port

4.5.18 C2_BYTE

Indicates C2 byte Hex Code

Table 4-68 C2_BTYE Values

C2_BYTE Values	Description
0X00	Unequipped
0X01	Equipped-Non Specific payload
0X02	VT-Structured STS-1 SPE
0X03	Locked VT Mode
0X04	Asynchronous Mapping for DS3
0X12	Asynchronous Mapping for DS4NA
0X13	Mapping for ATM
0X14	Mapping for DQDB
0X15	Asynchronous Mapping for FDDI
0X16	HDLC-Over-SONET Mapping
0XE1	VT-structured STS-1 SPE with 1VTx payload defect
0XE2	VT-structured STS-1 SPE with 2VTx payload defects
0XE3	VT-structured STS-1 SPE with 3VTx payload defects
0XE4	VT-structured STS-1 SPE with 4VTx payload defects
0XE5	VT-structured STS-1 SPE with 5VTx payload defects
0XE6	VT-structured STS-1 SPE with 6VTx payload defects
0XE7	VT-structured STS-1 SPE with 7VTx payload defects
0XE8	VT-structured STS-1 SPE with 8VTx payload defects
0XE9	VT-structured STS-1 SPE with 9VTx payload defects
0XEA	VT-structured STS-1 SPE with 10VTx payload defects
0XEB	VT-structured STS-1 SPE with 11VTx payload defects
0XEC	VT-structured STS-1 SPE with 12VTx payload defects
0XED	VT-structured STS-1 SPE with 13VTx payload defects
0XEE	VT-structured STS-1 SPE with 14VTx payload defects
0XEF	VT-structured STS-1 SPE with 15VTx payload defects
0XF0	VT-structured STS-1 SPE with 16VTx payload defects
0XF1	VT-structured STS-1 SPE with 17VTx payload defects
0XF2	VT-structured STS-1 SPE with 18VTx payload defects
0XF3	VT-structured STS-1 SPE with 19VTx payload defects
0XF4	VT-structured STS-1 SPE with 20VTx payload defects
0XF5	VT-structured STS-1 SPE with 21VTx payload defects
0XF6	VT-structured STS-1 SPE with 22VTx payload defects
0XF7	VT-structured STS-1 SPE with 23VTx payload defects

Table 4-68 C2_BTYE Values (continued)

C2_BYTE Values	Description
0XF8	VT-structured STS-1 SPE with 24VTx payload defects
0XF9	VT-structured STS-1 SPE with 25VTx payload defects
0XFA	VT-structured STS-1 SPE with 26VTx payload defects
0XFB	VT-structured STS-1 SPE with 27VTx payload defects
0XFC	VT-structured STS-1 SPE with 28VTx payload defects
0XFE	O.181 Test Signal (TSS1 to TSS3) Mapping
0XFF	Reserved, however, C2 is 0XFF if AIS-L is being generated by an optical card or cross-connect downstream

4.5.19 CCT

Defines the type of cross-connect to be created

Table 4-69 CCT Values

CCT Values	Description
1WAY	A unidirectional connection from a source tributary to a destination tributary
1WAYDC	Path Protection configuration mcast drop with (1-way) continue
1WAYEN	Path Protection configuration mcast end node (1-way continue)
1WAYMON	A bidirectional connection between the two tributaries **Note** Starting with ONS 15454 R3.0 and ONS 15327 R3.3, 1WAYMON is not supported with TL1. However, it is still supported from CTC. Using CTC you can create 1WAYMON cross-connects and can be retrieved via TL1.
1WAYPCA	A unidirectional connection from a source tributary to a destination tributary on the protection path/fiber
2WAY	A bidirectional connection between the two tributaries
2WAYDC	A Bidirectional Drop and Continue connection applicable only to path protection configuration Traditional and Integrated Dual Ring InterConnections
2WAYPCA	A bidirectional connection between the two tributaries on the extra protection path/fiber

4.5.20 CIRCUIT_SIZE

The DWDM circuit size used on a wavelength.

Table 4-70 CIRCUIT_SIZE Values

CIRCUIT_SIZE Values	Description
10G_FEC	The circuit size is 10 Gbit/sec with FEC
10G_NO_FEC	The circuit size is 10 Gbit/sec without FEC
2G5_FEC	The circuit size is 2.5 Gbit/sec with FEC
2G5_NO_FEC	The circuit size is 2.5 Gbit/sec without FEC
MULTI_RATE	The circuit size support multi rate
NOT_SPEC	The circuit size is Equipment not specific

4.5.21 CMD_MODE

Command mode is used to force the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but the user may specify FRCD to force the system to override a state in which the command would normally be denied.

Table 4-71 CMD_MODE Values

CMD_MODE Values	Description
FRCD	Force the system to override a state in which the command would normally be denied
NORM	Execute the command normally. Do not override any conditions that may make the command fail.

4.5.22 COMM_TYPE

The out of band communications channel termination type

Table 4-72 COMM_TYPE Values

COMM_TYPE Values	Description
DCC	Section DCC type
GCC	Generic Communication Channel (OTN) Type
NONE	Disable DCC or GCC if enabled

4.5.23 COND_EFF

The affected unit's condition

Table 4-73 COND_EFF Values

COND_EFF Values	Description
CL	Standing condition cleared
SC	Standing condition raised
TC	Transient condition

4.5.24 CONDITION

The condition type of the alarm indication

Table 4-74 CONDITION Values

CONDITION Values	Description
8B10B-OOSYNC	8B10B Out Of Sync
ACOMAN	Alarm cutoff is in manual mode
AIS	External failure - Incoming - Alarm Indication Signal
AIS-L	External failure - Incoming - Alarm Indication Signal - Line
AIS-P	External failure - Incoming - Alarm Indication Signal - Path
AIS-PM	Alarm Indication Signal - Path Monitor Point
AIS-SM	Alarm Indication Signal - Section Monitor Point
AIS-V	External failure - Incoming - Alarm Indication Signal - VT layer
ALM-SUPPRESS	Alarms/Events Suppressed for this Object
APSB	External failure - Incoming - Automatic Protection Switching Channel - Byte failure
APSC	External failure - Incoming - Automatic Protection Switching Channel failure
APSC-IMP	External failure - Incoming - Automatic Protection Switching- Invalid K bytes
APSCCONNL	External failure - Incoming -Automatic Protection Switching -Connection Loss
APSCDFLTK	External failure - Incoming -Automatic Protection Switching -Default K byte
APSCINCON	External failure - Incoming -Automatic Protection Switching -Inconsistent
APSCM	External failure - Incoming - Automatic Protection Switching Channel - Protection Switching Channel Match failure
APSCNMIS	APS Channel - BLSR - Node Id Mismatch

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
APSMM	External failure - Incoming -Automatic Protection Switching Channel - Automatic Protection Switch Mode Mismatch
AS-CMD	Alarms and Events Suppressed By User Command
AS-MT	Alarms and Events Suppressed For Maintenance
AUD-LOG-LOSS	Audit Log 100 Percent Full - Oldest records will be lost
AUD-LOG-LOW	Internal hardware - Facility Termination Equipment - Automatic Laser Shutdown
AUTOLSROFF	Internal hardware - Facility Termination Equipment - Automatic Laser Shutdown
AUTORESET	Recovery action - Automatic system Reset
AUTOSW-AIS	Automatic Switch - Alarm Indication Signal
AUTOSW-LOP	Automatic Switch - Loss of Pointer
AUTOSW-PDI	Automatic Switch - Payload Defect Indication
AUTOSW-SDBER	Automatic Switch - Signal Degrade Bit Error Rate
AUTOSW-SFBER	Automatic Switch - Signal Fail Bit Error Rate
AUTOSW-UNEQ	Automatic Switch - Unequipped
AWG-DEG	AWG Temperature - Degrade
AWG-FAIL	AWG Temperature - Failure
AWG-OVERTEMP	AWG Over Temperature
BDI-PM	Backward Defect Indication - Path Monitor Point
BDI-SM	Backward Defect Indication - Section Monitor Point
BKUPMEMP	Internal hardware - Control Equipment - Primary non-volatile Backup Memory failure
BKUPMEMS	Internal hardware - Control Equipment - Secondary non-volatile Backup Memory failure
BLSR-RESYNC	Bidirectional Line Switched Ring - Tables Resynchronized
BLSR-UPDATED	BLSR Multiple Node Table Update Finished
BLSROSYNC	Bidirectional Line Switched Ring - Out of Synchronization
BPV	External failure - Incoming - Bipolar Violation
CARLOSS	External failure - Incoming - Carrier Loss on the LAN
CASETEMP-FAIL	Case High Temperature - Failure
CKTDOWN	Signaling unable to setup circuit
CKTDOWNEV	Signaled circuit going down
CLDRESTART	Recovery action - Cold Restart
COMIOXC	IO Slot To cross-connection Communication Failure
CONCAT	Control Bus Failure
CONTBUS-1	Control Bus Failure - Bus 1

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
CONTBUS-2	Control Bus Failure - Bus 2
CONTBUS-A-X	TCC/XTC card in Slot 7/Slot 5 has lost communication with the card in Slot X
CONTBUS-B-X	TCC/XTC card in Slot 11/Slot 6 has lost communication with the card in Slot X
CONTBUS_A	TCC/XTC A to shelf Slot communication failure
CONTBUS_B	TCC/XTC B to shelf Slot communication failure
CONTBUS_IO_A	Peer to Peer Slot communication failure
CONTBUS_IO_B	Peer to Peer Slot communication failure
CONTCOM	Internal hardware - Control Equipment - Control Communications equipment failure
CONTEQPT	Internal hardware - Control Equipment failure
CONTR	Internal hardware - Control Equipment - Control processor failure
COPY-IOSCFG	Copying IOS config file
CTNEQPT	Internal hardware - Interconnection Equipment failure
CTNEQPT-PBXPROT	Failure of the main payload between the protect XC/XCVT/XC10G card in Slot 10 and the reporting I/O card in Slot X
CTNEQPT-PBXWORK	Failure of the main payload bus between the active XC/XCVT/XC10G card in Slot 8 and the reporting I/O card in Slot X
CTNEQPT-PBPROT	Interconnection Equipment Failure - Protect XC Payload Bus
CTNEQPT-PBWORK	Interconnection Equipment Failure - Working XC Payload Bus
DATAFLT	Internal Error - Software Fault - Data integrity fault
DS3-MISM	DS3 Frame Format Mismatch
E-W-MISMATCH	Procedural Error - Mis-connect East/West Direction
EHIBATVG-A/B	Extreme High Voltage - Battery A or Battery B
ELWBATVG-A/B	Extreme Low Voltage - Battery A or Battery B
EOC	Embedded Operations Channel (Section DCC) failure
EOC-DOWN	Embedded Operations Channel (Section DCC) failure
EQPT	Internal hardware - Critical alarm caused by equipment failure
EQPT-FAIL	Equipment failure - Board Failure
EQPT-MAC	Equipment failure - Medium Access Control
EQPT-MISS	Replaceable Equipment/Unit is Missing
EQPT-RXLOCK	Equipment Rx Locked
EQPT-SQUELCHED	Equipment Squelched
EQPT-TXLOCK	Equipment Tx Locked
ERROR-CONFIG	Error in Startup Config
ESW	External error - Excessive Switching

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
EXCCOL	External failure - Incoming - Excess collisions on the LAN
EXERCISE-RING- FAIL	Exercise Ring Failed
EXERCISE-RING-REQ	Exercise Ring
EXERCISE-SPAN-FAIL	Exercise Span Failed
EXERCISE-SPAN-REQ	Exercise Span
EXERCISING-RING	Exercise Ring Completed
EXERCISING-SPAN	Exercise Span Completed
EXT	Failure detected External to the NE
EXTERR	External Error
EXTR-DROP	BLSR Extra Traffic Dropped
EXTRA-TRAF-PREEMPT	Extra Traffic preempted
FA	Internal hardware - Power failure - Fuse Alarm
FAC	External failure - Incoming - Facility, critical alarm caused by DS3 facility failure
FACTERM	Internal hardware - Facility Termination equipment failure
FAILTORLS	Internal hardware - Failure To Release from protection
FAILTOSW	Internal hardware - Failure To Switch to protection
FAILTOSW-HO	Failure to switch to protection - High Order Path
FAILTOSW-LO	Failure to switch to protection - Low Order Path
FAILTOSW-PATH	Failure to switch from the working path to the protection path on an path protection configuration
FAILTOSWR	Failure to Switch to Protection in a Ring
FAILTOSWS	Failure to Switch to Protection in a Span
FAN	Fan Tray failure
FANDEGRADE	Partial Failure of cooling fan tray
FE-AIS	Far-end DS3 node is reporting an AIS
FE-DS1-MULTLOS	Multiple inputs detect a loss on the far-end
FE-DS1-NSA	Non-service affecting failure detected from the far-end DS1
FE-DS1-SA	Service affecting failure detected from the far-end DS1
FE-DS1-SNGLLOS	One of the DS1 inputs on the far-end detects a LOS
FE-DS3-NSA	Non-service affecting failure detected from the far-end DS3
FE-DS3-SA	Service affecting failure detected from the far-end DS3
FE-EQPT-NSA	Non-service affecting equipment failure is detected from the far-end DS3
FE-EXERCISING-RING	Far End Exercise Ring
FE-EXERCISING-SPAN	Far End Exercise Span
FE-FRCDWKSWPR-RING	Working facility forced to switch to protection unit - Ring Far end

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
FE-FRCDWKSWPR-SPAN	Working facility forced to switch to protection unit - Span Far end
FE-IDLE	Far end node detects an idle DS3 signal
FE-LOCKOUTOFPR-ALL	Far end LockOut All Protection Channels of the network
FE-LOCKOUTOFPR-RING	Far End Lockout Of Protection - Ring
FE-LOCKOUTOFPR-SPAN	Far End Lockout Of Protection - Span
FE-LOCKOUTOFWK-RING	Far End Lockout Of Working - Ring
FE-LOCKOUTOFWK-SPAN	Far End Lockout Of Working - Span
FE-LOF	Far end node reports a DS3 loss of frame
FE-LOS	Far end node reports a DS3 loss of signal
FE-MANWKSWPR-RING	Far end Manual Ring Switching command is activated
FE-MANWKSWPR-SPAN	Far end Manual Span Switching command is activated
FE-SD-RING	Far end detected SD on Working channel and issued a Ring Switch
FE-SD-SPAN	Far end detected SD on Working channel and issued a Span Switch
FE-SDPRLF	Far end detected SD on Protection Channel
FE-SF-RING	Far end detected SF on Working channel and issued a Ring Switch
FE-SF-SPAN	Far end detected SF on Working channel and issued a Span Switch
FEBE	External failure - Incoming - Far End Block Error
FEC-UNC-WORD	FEC Uncorrected Word
FEPRLF	External failure - Incoming - Automatic Protection Switching Channel - Far End Protection Line Failure
FIBERTEMP-FAIL	Fiber High Temperature - Failure
FORCED-REQ	Forced switch request on facility/equipment
FORCED-REQ-RING	Forced switch request on a Ring
FORCED-REQ-SPAN	Forced switch request on a Span
FRCDWKSWBK	Recovery action - Working facility/equipment forced to switch back to working
FRCDWKSWPR	Recovery action - Working facility/equipment forced to switch to protection unit
FRCDWKSWPR-PATH	Recovery action - Working facility/equipment forced to switch to protection unit - Path
FRCWKBK-R	Working facility/equipment forced to switch back to working - Ring
FRCWKBK-S	Working facility/equipment forced to switch back to working - Span
FRCWKPR-R	Working facility/equipment forced to switch to protection unit - Ring
FRCWKPR-S	Working facility/equipment forced to switch to protection unit - Span
FRNGSYNC	Free Running Synchronization mode
FSTSYNC	Fast Start synchronization mode
FULLPASSTHR-BI	Bi-direction Full Pass Through is active

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
FULLPASSTHR-UNI	Uni-direction Full Pass Through is active
GAIN-HDEG	Gain not reached - High Degrade
GAIN-HFAIL	Gain not reached - High Failure
GAIN-LDEG	Gain not reached - Low Degrade
GAIN-LFAIL	Gain not reached - High Degrade
GCC-EOC	GCC Termination Failure
HI-LASERBIAS	Laser Bias High Threshold
HI-LASERPELTIER	Laser Peltier High Threshold
HI-LASERTEMP	Laser Temperature High Threshold
HI-RXPOWER	Receive Power High Threshold
HI-TXPOWER	Transmit Power High Threshold
HI-XCVRVOLT	Transceiver Voltage High Threshold
HITEMP	Internal hardware - Equipment failure - High temperature
HLDOVRSYNC	Holdover synchronization mode
IAE-SM	Incoming Alignment Error - Section Monitor Point
IMPROPRMVL	Procedural Error - Improper Removal
INC	Incoming failure condition
INC-ISD	Incoming failure condition - Idle Signal Path
INHMSG	ALM/EVT Messages Suppressed for object & sub-objects
INHMSG-DBCHG	DBCHG Messages Suppressed for entire shelf
INHMSG-PMREPT	PM report message inhibited for the TL1 session
INHSWPR	Inhibit switch to protect request on equipment
INHSWWKG	Inhibit switch to working request on equipment
INIT	Recovery action - Initialization initiated
INT	Internal hardware fault or failure
INTER-RING-STARTUP	Far end LockOut All Protection Channels of the network
INTERR	Error Internal to the NE Detected
INTMSGERR	One or more ALM/EVT/DBCHG messages lost
INTRUSION	Security: invalid login with user-ID
INTSFT	Internal Error - Software Fault or failure
INVMACADR	Equipment failure - Invalid MAC Address
KB_PASSTHR	K-Byte Pass Through is active
LANOVERFLOW	Traffic storm on LAN. LAN temporarily disabled
LASERBIAS-DEG	Laser BIAS - Degrade
LASERBIAS-FAIL	Laser BIAS - Failure
LASEREOL	Laser Approaching End Of Life

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
LASERTEMP-FAIL	Laser High Temperature - Failure
LCK-PM	Locked Defect - Path Monitor Point
LKOUTPR-R	Lockout of Protection - Ring
LKOUTPR-S	Lockout of Protection - Span
LKOUTWK-R	Lockout of working - Ring
LKOUTWK-S	Lockout of working - Span
LMP-HELLODOWN	LMP Hello FSM on Control Channel Down
LMP-NDFAIL	LMP Neighbor Discovery has failed
LO-LASERBIAS	Laser Bias Low Threshold
LO-LASERPELTIER	Laser Peltier Low Threshold
LO-LASERTEMP	Laser Temperature Low Threshold
LO-RXPOWER	Receive Power Low Threshold
LO-TXPOWER	Transmit Power Low Threshold
LO-XCVRVOLT	Transceiver Voltage Low Threshold
LOC	Loss of Fiber Continuity
LOCKOUT-REQ	Lockout switch request on facility/equipment
LOCKOUT-REQ-RING	Lockout switch request on a Ring
LOCKOUT-REQ-SPAN	Lockout switch request on a Span
LOCKOUTOFPR	Recovery action - Lockout of Protection
LOCKOUTOFPR-ALL	Far end LockOut All Protection Channels of the network
LOCKOUTOFPR-PATH	Recovery action - Lockout of Protection - Path
LOCKOUTOFWK	Recovery action - Lockout of working
LOF	External failure - Incoming - Loss of Frame
LOF-SM	Loss of Frame - Section Monitor Point
LOM-SM	Loss of Multi-Frame - Section Monitor Point
LOP	External failure - Incoming - Loss of Pointer
LOP-P	External failure - Incoming - Loss of Pointer - Path
LOP-V	Loss of pointer at the VT level
LOS	External failure - Incoming - Loss of Signal
LOS-ABBX	VIC loss of audio base band channel X signal
LOS-AFM	VIC loss of Audio FM signal
LOS-VBB	VIC loss of Video Base Band Signal
LOS-VIF	Video Interface Card Loss of Video IF signal
LPBK	Loopback
LPBKCRS	Cross-connect loopback

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
LPBKDS1FEAC	DS1 loopback signal is received from the far-end due to a Far-End Alarm and Control (FEAC) command
LPBKDS1FEAC-CMD	DS1 loopback command sent by the ONS 15454 to the far-end equipment
LPBKDS3FEAC	DS3 loopback signal is received from the far-end due to a Far-End Alarm and Control (FEAC) command
LPBKDS3FEAC-CMD	DS3 loopback command sent by the ONS 15454 to the far-end equipment
LPBKFACILITY	Loopback, Facility
LPBKM13	Loopback, Facility
LPBKM13-CMD	DS1 Loopback due to Far End Command
LPBKNETWORK	DS2 Loopback Command sent to Far End
LPBKTERMINAL	Loopback, Terminal
MAN	Manually caused abnormal condition
MAN-REQ	Manual Switch Request on facility/equipment
MANRESET	Recovery action - Manual system Reset
MANSWTOFIFTH	Recovery action - Manual synchronization Switch To Fifth reference
MANSWTOFOURTH	Recovery action - Manual synchronization Switch To Fourth reference
MANSWTOINT	Recovery action - Manual synchronization switch to internal clock
MANSWTOPRI	Recovery action - Manual synchronization Switch To Primary reference
MANSWTOSEC	Recovery action - Manual synchronization Switch To Second reference
MANSWTOSIXTH	Recovery action - Manual synchronization Switch To Sixth reference
MANSWTOTHIRD	Recovery action - Manual synchronization Switch To Third reference
MANUAL-REQ-RING	Manual switch request on a Ring
MANUAL-REQ-SPAN	Manual switch request on a Span
MANWKBK-R	Manual Switch of working facility/equipment to protection - Ring
MANWKBK-S	Manual Switch of working facility/equipment to protection - Span
MANWKPR-R	Manual Switch of Working facility/equipment to Protection unit -Ring
MANWKPR-S	Manual Switch of Working facility/equipment to Protection unit -Span
MANWKSWBK	Recovery action - Manual Switch of working facility/equipment to protection
MANWKSWPR	Recovery action - Manual Switch of Working facility/equipment to Protection unit
MANWKSWPR-PATH	Manual Switch of working facility/equipment to Protection - Path
MEA	Internal error - Mismatch of Equipment and Attributes

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
MEM-GONE	Software operations exceed the memory capacity of the TCC/XTC card
MEM-LOW	Data generated by software operations is close to exceeding the memory capacity of the TCC/XTC card
MFGMEM	Manufacturing Data Memory (EEPROM) Failure
NEW-ROOT	NewRoot trap in BRIDGE-MIB
NORMAL	Normal condition. This condition type is used by the NE to report the returning to normal from a previous off-normal condition
OCI-PM	Open Connectivity Indicator - Path Monitor Point
OG	External failure - Outgoing failure condition
OOF	External failure - Incoming - Out of Frame
OPWR-HDEG	Optical Power - High Degrade
OPWR-HFAIL	Optical Power - High Failure
OPWR-LDEG	Optical Power - Low Degrade
OPWR-LFAIL	Optical Power - Low Failure
PATHSEL	External failure - Incoming - Path Selector inability to switch to a valid signal
PDI	External failure - Incoming - Signal Label Mismatch Failure - Payload Defect Indication
PDI-P	External failure - Incoming - Signal Label Mismatch Failure - Payload Defect Indication - Path
PEER-MISM	Peer State Mismatch
PEER-NORESPONSE	Peer card not responding
PLM-P	External failure - Incoming - Signal Label Mismatch Failure - Payload Label Mismatch - Path
PLM-V	Content of the V5 byte in the SONET overhead is inconsistent or invalid
PLUG-IN	Internal hardware - Equipment unit plug-in
PM-TCA	Performance Monitoring - Threshold Crossing Alert
PRC-DUPID	Procedural Error - Duplicate Node ID
PRCDRERR	Procedural Error
PROGFLT	Internal Error - Software Fault - Program failure
PROTNA	Protection unit not available
PS	Occurrence of a protection switching event
PTIM	Payload Type Identifier Mismatch
PWR	Internal hardware - Power failure (detected internal to NE)
PWR-A	Internal hardware - Power failure (detected internal to NE) on slot 7
PWR-B	Internal hardware - Power failure (detected internal to NE) on slot 11

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
PWRRESTART	Recovery action - Powerfail Restart
RAI	External failure - Incoming - Remote Alarm Indication
RCVR	Internal hardware - Facility Termination equipment - Receiver failure
RCVR-MISS	Facility termination equipment detects a missing receive cable on the DS1 port or a possible mismatch of backplane equipment
RCVRY	Recovery or service protection action has been initiated
RDI-L	External failure - Outgoing - Remote Defect Indication - Line
RDI-P	External failure - Outgoing - Remote Defect Indication - Path
RFI	External failure - Incoming - Remote Failure Indication
RFI-L	External failure - Incoming - Remote Failure Indication - Line
RFI-P	External failure - Incoming - Remote Failure Indication - Path
RFI-V	Upstream failure has occurred at the VT layer
RFLOWCTL	Receive pause frames Threshold crossing alert
RING-MISMATCH	Procedural Error - Mis-connected Ring
RING-SEGMENT	Ring Is Segmented
RING-SW-EAST	Ring switch is active on the East side
RING-SW-WEST	Ring switch is active on the West side
RMON-ALARM	An RMON Alarm
RMON-RESET	RMON histories and alarms have been reset due to chipset reboot
ROVERSUB	Receive packets dropped - internal congestion Threshold crossing alert
RSVP-HELLODOWN	RSVP Hello FSM to Neighbor down
SD	Facility has passed BER Threshold for Signal Degrade
SD-L	BER threshold exceeded for Signal Degrade - Line
SD-P	BER threshold exceeded for Signal Degrade - Path
SDBER-EXCEED-HO	BER Threshold exceeded for Signal Degrade - High Order
SDBER-EXCEED-LO	BER Threshold exceeded for Signal Degrade - Low Order Path
SEF	External failure - Incoming - Severely Errored Frame
SF	Facility has passed BER threshold for Signal Failure
SF-L	BER Threshold exceeded for Signal Failure - Line
SF-P	BER Threshold exceeded for Signal Failure - Path
SFBER-EXCEED-HO	BER Threshold exceeded for Signal Failure - High Order Path
SFBER-EXCEED-LO	BER Threshold exceeded for Signal Failure - Low Order Path
SFP-MISMATCH	Pluggable Port Missing
SFP-MISSING	Pluggable Port Missing
SFP-SECURITYCODE	Pluggable Port Security Code Missing
SFTWDOWN	Recovery action - Software download in progress

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
SFTWDOWN-FAIL	Software Download Failed
SHUTTER-FAIL	Problem in Shutter - Failure
SLMF	External failure - Incoming - Signal Label Mismatch Failures - SONET
SNTP-HOST	SNTP host not alive condition
SPAN-SW-EAST	Span switch is active on the East side
SPAN-SW-WEST	Span switch is active on the West side
SQUELCH	Ring is isolated into two or more segments
SQUELCH-PATH	Squelching - Path level
SSM-DUS	Synchronization Status Messaging - Do Not Use for Synchronization
SSM-FAIL	Synchronization Status Messaging - Failed
SSM-OFF	Synchronization Status Messaging - Off
SSM-PRC	G811 Primary Reference Clock traceable
SSM-PRS	Synchronization Status Messaging - Primary reference source - Stratum 1
SSM-RES	Synchronization Status Messaging - Reserved - quality level set by user
SSM-SMC	Synchronization Status Messaging - SONET minimum clock
SSM-ST2	Synchronization Status Messaging - Stratum 2
SSM-ST3	Synchronization Status Messaging - Stratum 3
SSM-ST3E	Synchronization Status Messaging - Stratum 3E
SSM-ST4	Synchronization Status Messaging - Stratum 4
SSM-STU	Synchronization Status Messaging - Synchronized traceability unknown
SSM-TNC	Synchronization Status Messaging - Transit Node Clock traceable
SWMTXMOD	Switching Matrix Module Failure
SWTOFIFTH	Recovery action - Synchronization Switch To Fifth reference
SWTOFOURTH	Recovery action - Synchronization Switch To Fourth reference
SWTOINT	Recovery action - Synchronization Switch To Internal clock
SWTOPRI	Recovery action - Synchronization Switch To Primary reference
SWTOSEC	Recovery action - Synchronization Switch To Second refernce
SWTOSIXTH	Recovery action - Synchronization Switch To Sixth reference
SWTOTHIRD	Recovery action - Synchronization Switch To Third refernce
SYNC	External failure - Incoming - Loss of timing on synchronization link
SYNC-FREQ	Synchronization Reference Frequency Out Of Bounds
SYNCCLK	Internal hardware - Synchronization unit failure
SYNCEQPT	Internal hardware - Synchronization switching Equipment failure

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
SYNCFIFTH	External failure - Incoming - Loss of timing on fifth synchronization link
SYNCFOURTH	External failure - Incoming - Loss of timing on fourth synchronization link
SYNCOOS	External failure - Incoming - Loss of timing on all specified synchronization links
SYNCPRI	External failure - Incoming - Loss of timing on primary synchronization link
SYNCSEC	External failure - Incoming - Loss of timing on secondary synchronization link
SYNCSIXTH	External failure - Incoming - Loss of timing on sixth synchronization link
SYNCTHIRD	External failure - Incoming - Loss of timing on third synchronization link
SYSBOOT	Activation of new software
T-UIDAGE	Security: user-ID has expired
TFLOWCTL	Transmit pause frames Threshold crossing alert
TIM-P	SONET Trace Identifier message defect - Path
TOP-CHANGE	Topology Change trap in BRIDGE-MIB
TOVERSUB	Transmit packets dropped - internal congestion Threshold crossing alert
TPTFAIL	Transport Layer Failure
TRMT	Internal hardware - Facility Termination equipment - Transmit failure
TRMT-MISS	Facility termination equipment detects a missing transmit cable on the DS1 port or a possible mismatch of backplane equipment
TSI	Internal hardware - Interconnection Equipment - Time slot interchange equipment failure
TUNDERRUN	Buffer Underrun Alarm
UNAUTHCKT	Unauthorized incoming signaling request to create circuit
UNEQ-P	External failure - Incoming - Signal Label Mismatch Failure - Unequipped - Path
UNEQ-V	VT is receiving an unequipped signal
UNPLUG	Internal hardware - Equipment unit un-plug
VOA-HDEG	VOA Attenuation - High Degrade
VOA-HFAIL	VOA Attenuation - High Failure
VOA-LDEG	VOA Attenuation - Low Degrade
VOA-LFAIL	VOA Attenuation - Low Failure
WATM-TO	Internal Error - Watchdog Timer Timeout
WKGMEM	Internal hardware - Control Equipment - Working memory failure

Table 4-74 CONDITION Values (continued)

CONDITION Values	Description
WKSWBK	Recovery action - Working facility/equipment switched back to working
WKSWPR	Recovery action - Working facility/equipment switched to protection unit
WRMRESTART	Recovery action - Warm Restart
WTR	Wait To Restore
WTR-RING	Recovery action - SONET ring is in Wait To Restore state
WTR-SPAN	Recovery action - SONET span is in Wait To Restore state

4.5.25 CONT_MODE

Current state of environmental control

Table 4-75 CONT_MODE Values

CONT_MODE Values	Description
NA	Indicates Not applicable (i.e., duration is MNTRY)
OPR	Indicates that the environment control state is CLOSE
RLS	Indicates that the environment control state is OPEN

4.5.26 CONTTYPE

The Environmental control types as defined by Telcordia GR-833-CORE, Issue 2, November 1996, Appendix G.

Table 4-76 CONTTYPE Values

CONTTYPE Values	Description
AIRCOND	Air conditioning
ENGINE	Engine
FAN	Fan
GEN	Generator
HEAT	Heat
LIGHT	Light
MISC	Miscellaneous
SPKLR	Sprinkler

4.5.27 CREATION_TYPE

The Optical Link creation type.

Table 4-77 CREATION_TYPE Values

CREATION_TYPE Values	Description
AUTO	Automatically created by NE
PROV	Provisioned by user

4.5.28 CRS_TYPE

Indicates the cross-connection type

Table 4-78 CRS_TYPE Values

CRS_TYPE Values	Description
STS	Indicates all the STS cross-connections
VT	Indicates all the VT1 cross-connections

4.5.29 DATARATE

Data Rate

Table 4-79 DATARATE Values

DATARATE Values	Description
FC	Fiber Channel
GIG_E	Gigabit Ethernet
PASS_THRU	Pass thru

4.5.30 DIRECTION

Transmit and receive directions

Table 4-80 DIRECTION Values

DIRECTION Values	Description
BTH	Both transmit and receive directions
RCV	Receive direction only
TRMT	Transmit direction only

4.5.31 DIRN

Specifies the discriminating level for the requested monitored parameter

Table 4-81 DIRN Values

DIRN Values	Description
DN	Monitored parameter with values equal to or greater than the level of LEV will be reported
UP	Monitored parameter with values equal to or less than the value of LEV will be reported

4.5.32 DL_TYPE

Indicates software download type

Table 4-82 DL_TYPE Values

DL_TYPE Values	Description
ACT	Indicates to activate to a newer software load during the software download
RVRT	Indicates to revert to an older software load during software download

4.5.33 DS_LINE_CODE

DS123 Line Code

Table 4-83 DS_LINE_CODE Values

DS_LINE_CODE Values	Description
B3ZS	Bipolar with Three-Zero Substitution

4.5.34 DS_LINE_TYPE

DS123 Line type

Table 4-84 DS_LINE_TYPE Values

DS_LINE_TYPE Values	Description
C-BIT	C-BIT line type applies to DS3XM and DS3E card
M13	M23 line type applies to DS3XM and DS3E card
UNFRAMED	Line Type is unframed. The old DS3 (L3M) and DS3CR cards can only run in unframed mode.

4.5.35 DURATION

Duration

Table 4-85 DURATION Values

DURATION Values	Description
CONTS	Continuous duration
MNTRY	Momentary duration

4.5.36 E_LBO

Electrical signal line buildout

Table 4-86 E_LBO Values

E_LBO Values	Description
0-225	Electrical signal buildout range is 0-225
226-450	Electrical signal buildout range is 226-450

4.5.37 ENV_ALM

Environmental alarm types as defined by Telcordia GR-833-CORE, Issue 2, November 1996, Appendix F.

Table 4-87 ENV_ALM Values

ENV_ALM Values	Description
AIRCOMPR	Air compressor failure
AIRCOND	Air conditioning failure
AIRDRYR	Air dryer failure
BATDSCHRG	Battery discharging
BATTERY	Battery failure
CLFAN	Cooling fan failure
CPMAJOR	Centralized power major failure
CPMINOR	Centralized power minor failure
ENGINE	Engine failure
ENGOPRG	Engine operating
EXPLGS	Explosive gas
FIRDETR	Fire detector failure
FIRE	Fire
FLOOD	Flood
FUSE	Fuse failure

Table 4-87 ENV_ALM Values (continued)

ENV_ALM Values	Description
GEN	Generator failure
HIAIR	High airflow
HIHUM	High humidity
HITEMP	High temperature
HIWTR	High water
INTRUDER	Intrusion
LWBATVG	Low battery voltage
LWFUEL	Low fuel
LWHUM	Low humidity
LWPRES	Low cable pressure
LWTEMP	Low temperature
LWWTR	Low water
MISC	Miscellaneous
OPENDR	Open door
POWER	Commercial power failure
PUMP	Pump failure
PWR-48	48 Volt power supply failure
RECT	Rectifier failure
RECTHI	Rectifier high voltage
RECTLO	Rectifier low voltage
SMOKE	Smoke
TOXICGAS	Toxic gas
VENTN	Ventilation system failure

4.5.38 EQPT_TYPE

Identifies the type of equipment being provisioned into a slot

Table 4-88 EQPT_TYPE Values

EQPT_TYPE Values	Description
AD-1B	Optical Add/Drop Multiplexed (OADM) 1 Band Filter
AD-1C	Optical Add/Drop Multiplexed (OADM) 1 Channel Filter
AD-2C	Optical Add/Drop Multiplexed (OADM) 2 Channels Filter
AD-4B	Optical Add/Drop Multiplexed (OADM) 4 Bands Filter
AD-4C	Optical Add/Drop Multiplexed (OADM) 4 Channels Filter

Table 4-88 EQPT_TYPE Values (continued)

EQPT_TYPE Values	Description
AIC	The Alarm Interface Controller Card is an optional card which expands system management capabilities for the customer defined alarm I/O and orderwire functionality
AICI	The AICI card
AIP	The Alarm Indicator Panel
ALM-PWR	Alarm Power
BP	The Backplane of the NE
CRFT-TMG	Craft Timing
DCC	The Data Communications Channel
DMX-32	Optical De/Multiplexed (DMX) 32 Channels
DS1-14	A 14 port interface card supporting DS1 facilities
DS1N-14	A 14 port interface card supporting DS1 facilities
DS3-12	A 12 port interface card supporting DS3 facilities
DS3-3	A 3 port interface card supporting DS3 facilities
DS3ATM-12	A 12 port interface card supporting DS3 ATM facilities
DS3CR-12	Cost reduced DS3
DS3E-12	A 12 port interface card supporting DS3E facilities
DS3NE-12	A 12 port interface card supporting DS3E facilities
DS3N-12	A 12 port interface card supporting DS3 facilities
DS3XM-6	An interface card that converts six framed DS-3 network connections to 28x6 or 168 VT1.5s
E1000T-2	A 2 port interface card supporting 1000 Base T Ethernet facilities
E100T-12	A 12 port interface card supporting 100 Base T Ethernet facilities
E100T-4	A four port interface card supporting 100 Base T Ethernet facilities.
EC1-12	A 12 port interface card supporting EC1 facilities
FTA	The Fan Tray of the NE
FTA1	The Fan Tray 1 of the NE
FTA2	The Fan Tray 2 of the NE
G1000-4	A four port G1000 card
MIC-28-3-A	ONS 15327 MIC card A
MIC-28-3-B	ONS 15327 MIC card B
MIC-EXT	ONS 15327 MIC card
MIC-GEN	ONS 15327 MIC card
MUX-32	Optical Multiplexed (MUX) 32 Channels
MXP-2.5G-10G	10G (4 * 2.5G) Muxponder Card
OC12	An interface card that supports one or more OC-12 (622Mbs) optical facilities

Table 4-88 EQPT_TYPE Values (continued)

EQPT_TYPE Values	Description
OC12-327	ONS 15327 OC12 card
OC12-4	A four port OC12 card
OC12-IR-1	An interface card that supports one intermediate range OC-12 (622Mbs) optical facilities
OC12-LR-1	An interface card that supports one long range OC-12 (622Mbs) optical facilities
OC12-SR-1	An interface card that supports one short range OC-12 (622Mbs) optical facilities
OC192-LR-1	An interface card that supports one or more OC-192 optical facilities
OC3	An interface card that supports multiple OC-3 (155Mbs) optical facilities
OC3-327	ONS 15327 OC3 card
OC3-IR-4	An interface card that supports four intermediate range OC-3 (155Mbs) optical facilities
OC3-SR-4	An interface card that supports four short range OC-3 (155Mbs) optical facilities
OC3ATM-IR-6	An interface card that supports six intermediate range OC-3 (155Mbs) ATM optical fibers
OC3IR-STM1SH-1310-8	An OC3 card which has 8 ports over the lower speed slot of the ONS 15454 with XC10G/192
OC3POS-SR-4	An interface card that supports four short range OC-3 (155Mbs) POS optical facilities
OC48	An interface card that supports one or more OC-48 (10Gbs) optical facilities
OC48-327	ONS 15327 OC48 card
OC48-AS-1	An interface card that supports one short range OC-48 (10Gbs) optical facilities that can be provisioned in any I/O slot
OC48-ELR-1	An interface card that supports one short range OC-48 (2.5Gbs) optical facility
OC48-IR-1	An interface card that supports one intermediate range OC-48 (10Gbs) optical facility
OC48-LR-1	An interface card that supports one long range OC-48 (10Gbs) optical facility
OC48-SR-1	An interface card that supports one short range OC-48 (10Gbs) optical facilities
OPT-BST	Optical Booster Amplifier
OPT-PRE	Optical Pre-Amplifier
OSC-CSM	Optical Service Channel (OSC) with Combiner/Separator Module (SCM)
OSCM	Optical Service Channel (OSC) Module
TCC	The Timing Communication and Control card
TXP-MR-10G	10G Multirate Transponder Card
XC	A Cross-connect card

Table 4-88 EQPT_TYPE Values (continued)

EQPT_TYPE Values	Description
XC-VT	A Cross-Connect card
XC10G	A Cross-Connect card
XTC	ONS 15327 XTC card
XTC-DS1-14	ONS 15327 XTC DS1-14 card
XTC-DS1-28	ONS 15327 XTC DS1-28 card
XTC-DS1-56	ONS 15327 XTC DS1-56 card
XTC-DS3-3	ONS 15327 XTC DS3-3 card

4.5.39 EQUIP

Indicates the presence of a plug-in unit

Table 4-89 EQUIP Values

EQUIP Values	Description
EQUIP	The unit is Equipped - present
UNEQUIP	The unit is Unequipped - absent

4.5.40 EQUIPMENT_TYPE

Equipment type

Table 4-90 EQUIPMENT_TYPE Values

EQUIPMENT_TYPE Values	Description
AD-1B	Optical Add/Drop Multiplexed (OADM) 1 Band Filter
AD-1C	Optical Add/Drop Multiplexed (OADM) 1 Channel Filter
AD-2C	Optical Add/Drop Multiplexed (OADM) 2 Channels Filter
AD-4B	Optical Add/Drop Multiplexed (OADM) 4 Bands Filter
AD-4C	Optical Add/Drop Multiplexed (OADM) 4 Channels Filter
AIC	AIC card
AICI	AICI card
DS1	DS1 card
DS1N	DS1N card
DS3	DS3 card
DS3E	DS3E card
DS3I	DS3I Card
DS3IN	DS3IN Card
DS3N	DS3N card

Table 4-90 EQUIPMENT_TYPE Values (continued)

EQUIPMENT_TYPE Values	Description
DS3NE	DS3NE card
DS3XM	DS3XM card
E1000T	E1000T card
E100T	E100T card
EC1	EC1 card
G1000-2	A two port G1000 card (ONS 15327)
G1000-4	A four port G1000 card (ONS 15454)
MIC	ONS 15327 MIC card
MIC-EXT	ONS 15327 XC-EXT card
ML1000-2	2-Port GigE card
ML100T-12	12-Port FSTE card
MUX-32	Optical Multiplexed (MUX) 32 Channels
MXP-2.5G-10G	10G (4 * 2.5G) Muxponder Card
OC3	OC3 card
OC12	OC12 card
OC12-4	A four port OC12 card
OC48	OC48 card
OC192	OC192 card
OPT-BST	Optical Booster Amplifier
OPT-PRE	Optical Pre-Amplifier
OSC-CSM	Optical Service Channel (OSC) with Combiner/Separator Module (SCM)
OSCM	Optical Service Channel (OSC) Module
TCC	TCC card
TXP-MR-10G	10G Multirate Transponder Card
XC	XC card
XC10G	XC10G card
XCVT	XCVT card
XTC	ONS 15327 XTC card

4.5.41 ETHER_DUPLEX

Duplex mode

Table 4-91 ETHER_DUPLEX Values

ETHER_DUPLEX Values	Description
AUTO	Auto mode
FULL	Full mode
HALF	Half mode

4.5.42 ETHER_SPEED

Ethernet speed

Table 4-92 ETHER_SPEED Values

ETHER_SPEED Values	Description
100_MBPS	100 Mbps
10_GBPS	10 Gbps
10_MBPS	10 Mbps
1_GBPS	1 Gbps
AUTO	Auto

4.5.43 EXP

Indicates whether the user's password is about to expire.

Table 4-93 EXP Values

EXP Values	Description
NO	The password is not about to expire.
YES	The password is about to expire.

4.5.44 EXT_RING

Indicates if the ring supports the extended K1/K2/K3 protocol

Table 4-94 EXT_RING Values

EXT_RING Values	Description
N	Indicates the Ring does not support the extended K1/K2/K3 protocol
Y	Indicates the Ring does support the extended K1/K2/K3 protocol

4.5.45 FIBER_TYPE

The type of the system (fiber) connected to a port.

Table 4-95 FIBER_TYPE Values

FIBER_TYPE Values	Description
SMF-28	SMF-28 system type

4.5.46 FLOW

Indicates the type of flow control that has been negotiated for an Ethernet port

Table 4-96 FLOW Values

FLOW Values	Description
ASYMMETRIC	Asymmetric flow control
ASYMMETRIC_LOCAL	Asymmetric local flow control
NONE	No flow control
SYMMETRIC	Symmetric flow control

4.5.47 FRAME_FORMAT

The frame format for a T1 port

Table 4-97 FRAME_FORMAT Values

FRAME_FORMAT Values	Description
D4	Frame format is D4
ESF	Frame format is ESF
UNFRAMED	Frame format is unframed

4.5.48 GCCRATE

The data rate of the GCC traffic

Table 4-98 GCCRATE Values

GCCRATE Values	Description
192K	192 Kbps
576K	576 Kbps

4.5.49 HEATER_STATUS

Heater status list.

Table 4-99 HEATER_STATUS Values

HEATER_STATUS Values	Description
OFF	The heater is off
ON	The heater is on

4.5.50 INH_MODE

Indicates whether the function is inhibited

Table 4-100 INH_MODE Values

INH_MODE Values	Description
ALW	Function is allowed
INH	Function is inhibited

4.5.51 LASER_STATUS

Defines the laser status

Table 4-101 LASER_STATUS Values

LASER_STATUS Values	Description
APR	The Laser is switched on but is working Automatic Power Reduction
OFF	The Laser is switched off
ON	The Laser is switched on

4.5.52 LINE_BUILDOUT

Line buildout

Table 4-102 LINE_BUILDOUT Values

LINE_BUILDOUT Values	Description
0-131	Line buildout range is 0-131
132-262	Line buildout range is 132-262
263-393	Line buildout range is 263-393
394-524	Line buildout range is 394-524
525-655	Line buildout range is 525-655

4.5.53 LINE_CODE

Line code

Table 4-103 LINE_CODE Values

LINE_CODE Values	Description
AMI	Line code value is AMI
B8ZS	Line code value is B8ZS (Bipolar with Three-Zero Substitution)

4.5.54 LOCATION

Identifies the location where the action is to take place

Table 4-104 LOCATION Values

LOCATION Values	Description
FEND	Action occurs on the Far End of the facility
NEND	Action occurs on the Near End of the facility

4.5.55 LPBK_TYPE

Indicates the type of loopback that is to be operated or released

Table 4-105 LPBK_TYPE Values

LPBK_TYPE Values	Description
CRS	A path level loopback which is established at the cross-connect matrix level (the XC card). An STS level cross-connect loopback causes an AIS-P to be sent on the outgoing direction of transmission
FACILITY	A type of loopback that connects the incoming received signal immediately following the optical-to-electrical conversion (after descrambling) to the associated transmitter in the return direction
TERMINAL	A loopback that connects the signal that is about to be transmitted (after scrambling but before the electrical-to-optical conversion) is connected to the associated, incoming receiver

4.5.56 MFS_TYPE

Indicates the maximum frame size used by an Ethernet card

Table 4-106 MFS_TYPE Values

MFS_TYPE Values	Description
1548	Normal frame size
JUMBO	Jumbo frame size

4.5.57 MOD2

Line/Path Modifier

Table 4-107 MOD2 Values

MOD2 Values	Description
CLNT	Client facility for MXP/TXP cards
DS1	DS1 line of a DS3XM card
EC1	EC1 facility
G1000	G1000 Facility
OC3	OC3 facility
OC12	OC12 facility
OC48	OC48 facility
OC192	OC192 facility
OCH	Optical channel
OMS	Optical Multiplex Section
OTS	Optical Transport Section
STS1	STS1 path
STS3C	STS3C path
STS6C	STS6C path
STS9C	STS9C path
STS12C	STS12C path
STS48C	STS48C path
STS192C	STS192C path
T1	T1/DS1 facility/line
T3	T3/DS3 facility/line
VT1	VT1_5 path

4.5.58 MOD2_IO

Facility/Line Modifier

Table 4-108 MOD2_IO Values

MOD2_IO Values	Description
CLNT	Client facility for MXP/TXP cards
DS1	DS1 line of a DS3XM card
EC1	EC1 facility
G1000	G1000 facility
OC3	OC3 facility

Table 4-108 MOD2_IO Values (continued)

MOD2_IO Values	Description
OC12	OC12 facility
OC48	OC48 facility
OC192	OC192 facility
OCH	Optical channel facility for MXP/TXP cards
OMS	Optical multiplexing section
OTS	Optical Transport Section
T1	T1/DS1 facility
T3	T3/DS3 facility

4.5.59 MOD2ALM

Alarm type for certain generic TL1 commands

Table 4-109 MOD2ALM Values

MOD2ALM Values	Description
CLNT	Client facility for MXP/TXP cards
DS1	DS1 alarm
E100	E100 alarm
E1000	E1000 alarm
EC1	EC1 alarm
FSTE	Fast Ethernet Port alarm
G1000	G1000 alarm
GIGE	GIG Ethernet Port alarm
OC3	OC3 alarm
OC12	OC12 alarm
OC48	OC48 alarm
OC192	OC192 alarm
OCH	Optical channel
OMS	Optical Multiplex Section
OTS	Optical Transport Section
POS	POS port alarm
STS1	STS alarm
STS3C	STS alarm
STS6C	STS alarm
STS9C	STS alarm
STS12C	STS alarm

Table 4-109 MOD2ALM Values (continued)

MOD2ALM Values	Description
STS48C	STS alarm
STS192C	STS alarm
T1	T1 alarm
T3	T3 alarm
UDCDCC	UDCDCC Alarm
UDCF	UCDF Alarm
VT1	VT1 alarm

4.5.60 MOD2B

Alarm type for certain generic TL1 commands

Table 4-110 MOD2B Values

MOD2B Values	Description
BITS	BITS alarm
CLNT	Client facility for MXP/TXP cards
COM	Common alarm
DS1	DS1 alarm
E100	E100 alarm
E1000	E1000 alarm
EC1	EC1 alarm
ENV	ENV alarm
EQPT	EQPT alarm
FSTE	FSTE alarm
G1000	G1000 alarm
GIGE	GIGE alarm
MIC	MIC alarm (ONS 15327)
MIC-EXT	MIC-EXT Alarm (ONS 15327)
OC3	OC3 alarm
OC12	OC12 alarm
OC48	OC48 alarm
OC192	OC192 alarm
OCH	Optical channel
OMS	Optical Multiplex Section
OTS	Optical Transport Section
POS	POS alarm

Table 4-110 MOD2B Values (continued)

MOD2B Values	Description
STS1	STS alarm
STS3C	STS alarm
STS6C	STS alarm
STS9C	STS alarm
STS12C	STS alarm
STS24C	STS alarm
STS48C	STS alarm
STS192C	STS Alarm
SYNCN	SYNCN alarm
T1	T1 alarm
T3	T3 alarm
TCC	TCC alarm
UCP	UCP Alarm
VT1	VT alarm
XTC	ONS 15327 XTC Alarm

4.5.61 MOD2O

MXP/TXP facility types

Table 4-111 MOD2O Values

MOD2O Values	Description
OCH	Optical Channel
OMS	Optical Multiplexer Section
OTS	Optical Trace Section

4.5.62 MOD_PATH

STS/VT Path Modifier

Table 4-112 MOD_PATH Values

MOD_PATH Values	Description
STS1	STS1 path
STS3C	STS3C path
STS6C	STS6C path
STS9C	STS9C path
STS12C	STS12C path

Table 4-112 MOD_PATH Values (continued)

MOD_PATH Values	Description
STS24C	STS 24C path
STS48C	STS48C path
STS192	STS192C path
VT1	VT1_5 path

4.5.63 MOD_PORT

Move from MOD2_IO without DS1

Table 4-113 MOD_PORT Values

MOD_PORT Values	Description
EC1	EC1 port
G1000	G1000 port
OC3	OC3 port
OC12	OC12 port
OC48	OC48 port
OC192	OC192 port
T1	T1/DS1 port
T3	T3/DS3 port

4.5.64 MOD_TACC

Test Access Modifier

Table 4-114 MOD_TACC Values

MOD_TACC Values	Description
DS1	DS1 line of a DS3XM card
STS1	STS1 path
STS3C	STS3C path
STS6C	STS6C path
STS9C	STS9C path
STS12C	STS12C path
STS24C	STS24C path
STS48C	STS48C path
STS192C	STS192C path
T1	T1/DS1 facility/line

Table 4-114 MOD_TACC Values (continued)

MOD_TACC Values	Description
T3	T3/DS3 facility/line
VT1	VT1_5 path

4.5.65 MODULE_OP

Module operation mode

Table 4-115 MOD_OP Values

MODULE_OP Values	Description
CLR	Clear switch operation mode
LOCKDX	Lock duplex switch operation mode
LOCKPRT	Lock switch to protection operation mode
LOCKWKG	Lock switch to working operation mode
RST	Reset operation mode
SWITCHDX	Switch duplex operation mode
SWITCHPRT	Switch to protection operation mode
SWITCHWKG	Switch to working operation mode
UNLOCKDX	Unlock duplex switch operation mode
UNLOCKPRT	Unlock switch to protection operation mode
UNLOCKWKG	Unlock switch to working operation mode
UPGRADE	Upgrade operation mode

4.5.66 MSGTYPE

Type of trace message

Table 4-116 MSGTYPE Values

MSGTYPE Values	Description
EXPTRC	Expected incoming Path trace message
INCTRC	Incoming Path trace message
TRC	Outgoing Path trace message

4.5.67 MUX_TYPE

BLSR Extension Byte

Table 4-117 MUX_TYPE Values

MUX_TYPE Values	Description
E2	E2 Byte (orderwire)
F1	F1 Byte (user)
K3	K3 Byte
Z2	Z2 Byte

4.5.68 NOTIF_CODE

The 2-character Notification Code associated with an autonomous message

Table 4-118 NOTIF_CODE Values

NOTIF_CODE Values	Description
CL	The condition causing the alarm has Cleared
CR	A Critical alarm
MJ	A Major alarm
MN	A Minor alarm
NA	The condition is Not Alarmed
NR	The alarm is not reported

4.5.69 OCN_BLSR

Modifier used to differentiate the various levels of OC-N in BLSR

Table 4-119 OCN_BLSR Values

OCN_BLSR Values	Description
OC12	Optical Carrier level-12 (662Mbs)
OC48	Optical Carrier level-48 (2.4Gbs)
OC192	Optical Carrier level-192 (10Gbs)

4.5.70 OCN_MONTYPE

OCN monitor type

Table 4-120 OCN_MONTYPE Values

OCN_MONTYPE Values	Description
CVL	Coding Violation - Line
ESL	Errored Second - Line
PJNEG	PPJC-PDET:Negative Pointer Justification
PJPOS	PPJC-PFEN:Negative Pointer Justification
PSC	Protection Switching Count
PSD	Protection Switching Duration
SEFS	Severely Errored Framing Seconds
UASL	Unavailable Second -Line

4.5.71 OCN_TYPE

Modifier used to differentiate the various levels of OC-N in the ENT/ED/DLT/RTRV commands

Table 4-121 OCN_TYPE Values

OCN_TYPE Values	Description
OC3	Optical Carrier level-3 (155Mbs)
OC12	Optical Carrier level-12 (622Mbs)
OC48	Optical Carrier level-48 (2.4Gbs)
OC192	Optical Carrier level-192 (10Gbs)

4.5.72 ON_OFF

Disable or Enable an attribute

Table 4-122 ON_OFF Values

ON_OFF Values	Description
N	Disable the attribute
Y	Enable the attribute

4.5.73 OPTICAL_BAND

Defines the Optical Band

Table 4-123 OPTICAL_BAND Values

OPTICAL_BAND Values	Description
1530.33-1532.68	Band 1
1534.25-1536.61	Band 2
1538.19-1540.56	Band 3
1542.14-1544.53	Band 4
1546.12-1548.51	Band 5
1550.12-1552.52	Band 6
1554.13-1556.55	Band 7
1558.17-1560.61	Band 8
UNKNOWN	The band is not yet configured/retrieved from unit

4.5.74 OPTICAL_LINK_TYPE

The type of the Optical Link between two optical facilities

Table 4-124 OPTICAL_LINK_TYPE Values

OPTICAL_LINK_TYPE Values	Description
ADD-DROP	Link between two points that result in an add/drop connection from a Drop point to an Add point
HITLESS	Link between two OMS points that result in a hitless connection from a Drop point to an Add point of a consecutive Band/Channel Filter
OTS	Link between two OTS points

4.5.75 OPTICAL_MODE

The facility optical mode

Table 4-125 OPTICAL_MODE Values

OPTICAL_MODE Values	Description
SDH	The SDH optical mode the European format
SONET	The SONET optical mode the American format

4.5.76 OPTICAL_PORT_TYPE

Qualifies the optical port of a card

Table 4-126 OPTICAL_PORT_TYPE Values

OPTICAL_PORT_TYPE Values	Description
ADD	The signal is added to the port
DROP	The signal is dropped from the port
IN	The signal has entered the card
IN-EXP	Express channel that continues the signal from the previous card
OUT	The signal exit from the card
OUT-EXP	Express channel that continues the signal to the next card

4.5.77 OPTICAL_WLEN

The Optical Wavelength

Table 4-127 OPTICAL_WLEN Values

OPTICAL_WLEN Values	Description
1530.33	Wavelength 1
1531.12	Wavelength 2
1531.90	Wavelength 3
1532.68	Wavelength 4
1534.25	Wavelength 5
1535.04	Wavelength 6
1535.82	Wavelength 7
1536.61	Wavelength 8
1538.19	Wavelength 9
1538.98	Wavelength 10
1539.77	Wavelength 11
1540.56	Wavelength 12
1542.14	Wavelength 13
1542.94	Wavelength 14
1543.73	Wavelength 15
1544.53	Wavelength 16
1546.12	Wavelength 17
1546.92	Wavelength 18
1547.72	Wavelength 19

Table 4-127 OPTICAL_WLEN Values (continued)

OPTICAL_WLEN Values	Description
1548.51	Wavelength 20
1550.12	Wavelength 21
1550.92	Wavelength 22
1551.72	Wavelength 23
1552.52	Wavelength 24
1554.13	Wavelength 25
1554.94	Wavelength 26
1555.75	Wavelength 27
1556.55	Wavelength 28
1558.17	Wavelength 29
1558.98	Wavelength 30
1559.79	Wavelength 31
1560.61	Wavelength 32
USE-TWL1	Use Tunable Wavelength 1

4.5.78 OPTICS

The type of Gigabyte Ethernet optics being used

Table 4-128 OPTICS Values

OPTICS Values	Description
1000_BASE_LX	1000 Base LX
1000_BASE_SX	1000 Base SX
1000_BASE_ZX	1000 Base ZX
COPPER	Copper
CWDM	CWDM
DWDM	DWDM
IR	Intermediate Reach
LR	Long Reach
SR	Short Reach
UNKNOWN	Unknown Optical Type
UNPLUGGED	Unplugged
VLR	VLR

4.5.79 PAYLOAD

Identifies payload type

Table 4-129 PAYLOAD Values

PAYLOAD Values	Description
10GE	10GigE Payload Mode
SDH	SDH Payload Mode
SONET	SONET Payload Mode

4.5.80 PM_MODE

Identifies the type of PM parameters. Only P type is supported.

Table 4-130 PM_MODE Values

PM_MODE Values	Description
I	Transport Intermediate Node PM parameters
L	Transport Line PM parameters
NONE	No PM parameters are being stored for the entity
P	Transport Path PM parameters
S	Transport Section PM parameters
SEG	Transport Path Segment PM parameters (e.g., ISDN BRA)

4.5.81 PM_STATE

Directs the named PM mode type - path (P) state

Table 4-131 PM_STATE Values

PM_STATE Values	Description
OFF	Disable the mode
ON	Enable the mode

4.5.82 PRIVILEGE

Security level

Table 4-132 PRIVILEGE Values

PRIVILEGE Values	Description
MAINT	Maintenance security level
PROV	Provisioning security level

Table 4-132 PRIVILEGE Values (continued)

PRIVILEGE Values	Description
RTRV	Retrieve security level
SUPER	Superuser security level

4.5.83 PRODUCT_TYPE

Product (NE) type

Table 4-133 PRODUCT_TYPE Values

PRODUCT_TYPE Values	Description
15327	Cisco ONS 15327 NE
15454	Cisco ONS 15454 NE
UNKNOWN	Unknown product type

4.5.84 PROTECTION_GROUP

Protection group type

Table 4-134 PROTECTION_GROUP Values

PROTECTION_GROUP Values	Description
1-1	1 to 1 protection group
1-N	1 to N protection group

4.5.85 PROTTYPE

Protection type for DWDM Client facilities

Table 4-135 PROTTYPE Values

PROTTYPE Values	Description
Y-CABLE	Y Cable Protection for the Client Ports on MXP/TXP cards

4.5.86 PST

Primary State. This parameter indicates the current overall service condition of an entity.

Table 4-136 PST Values

PST Values	Description
IS	In-service
OOS	Out-of-Service

4.5.87 RDIRN_MODE

This type specifies the Optical Ring directionality

Table 4-137 RDIRN_MODE Values

RDIRN_MODE Values	Description
E-W	The direction of the signal is from east to west (or clockwise)
W-E	The direction of the signal is from west to east (or counterclockwise)

4.5.88 REVERTIVE_TIME

Revertive time

Table 4-138 REVERTIVE_TIME Values

REVERTIVE_TIME Values	Description
0.5 – 12.0	Revertive time is 0.5 to 12.0 minutes

4.5.89 SD_BER

The threshold for declaring Signal Degrade on a facility or path

Table 4-139 SD_BER Values

SD_BER Values	Description
1E-5–1E-9	SDBER is the 1E-5–1E-9

4.5.90 SDCC_MODE

Enables or disables the Section Data Communications Channel (SDCC) for the specified facility

Table 4-140 SDCC_MODE Values

SDCC_MODE Values	Description
N	Section Data Communications Channel is disabled for this facility
Y	Section Data Communications Channel is enabled for this facility

4.5.91 SERV_EFF

Indicates the effect of the alarm on service

Table 4-141 SERV_EFF Values

SERV_EFF Values	Description
NSA	The condition is Non-Service Affecting
SA	The condition is Service Affecting

4.5.92 SF_BER

The threshold for declaring Signal Failure on a facility or path

Table 4-142 SF_BER Values

SF_BER Values	Description
1E-3–1E-5	SFBER is the 1E-3–1E-5

4.5.93 SIDE

The role the unit is playing in the protection group

Table 4-143 SIDE Values

SIDE Values	Description
PROT	The entity is the protection unit in the protection group
WORK	The entity is a working unit in the protection group

4.5.94 SST

Secondary State. This parameter provides additional information pertaining to PST and PSTQ. Values for this state included here are a subset of the list in the GR document.

Table 4-144 SST Values

SST Values	Description
AINS	Out of service, auto in service
MT	Out of service, maintenance mode

4.5.95 STATUS

The status of the unit in the protection pair, either Active or Standby.

Table 4-145 STATUS Values

STATUS Values	Description
ACT	The entity is the active unit on the shelf
NA	Status is unavailable
STBY	The entity is the standby unit on the shelf

4.5.96 STM_TYPE

The Synchronous Transport Mode of the NE

Table 4-146 STM_TYPE Values

STM_TYPE Values	Description
SDH	The NE is operating in Synchronous Digital Hierarchy mode
SONET	The NE is operating in Synchronous Optical Network mode

4.5.97 STS_MONTYPE

STS Monitor Type

Table 4-147 STS_MONTYPE Values

STS_MONTYPE Values	Description
CVP	Coding Violation - P
ESP	Errored Second - Path
SESP	Severely Errored Second - Path
UASP	Unavailable Second - Path

4.5.98 STS_PATH

Modifier for some of the STS commands. This table does not include STS for the RTRV-CRS command, because STS is not a standard designator.

Table 4-148 STS_PATH Values

STS_PATH Values	Description
STS1	Synchronous Transport Signal level-1 (51 Mbs)
STS3C	Synchronous Transport Signal level-3 Concatenated (155 Mbs)
STS6C	Synchronous Transport Signal level-6 Concatenated (310 Mbs)
STS9C	Synchronous Transport Signal level-9 Concatenated (465 Mbs)
STS12C	Synchronous Transport Signal level-12 Concatenated (622 Mbs)
STS24C	Synchronous Transport Signal level-24 Concatenated (1240 Mbs)
STS48C	Synchronous Transport Signal level-48 Concatenated (2488 Mbs)
STS192C	Synchronous Transport Signal level-192 (9952 Mbs)

4.5.99 SW

The type of switch to be initiated

Table 4-149 SW Values

SW Values	Description
APS-CLEAR	APS-CLEAR switch state. It is a read only switch state, and is not allowed in the OPR-PROTNSW-xxx commands.
CLEAR	CLEAR switch state. This switch state is not allowed in the OPR-PROTNSW-xxx commands.
EXERCISE	EXERCISE switch state. This switch state is not allowed in the OPR-PROTNSW-XXX commands.
FRCD	Force a switch unless another FRCD or LOCKOUT is in effect.

Table 4-149 SW Values (continued)

SW Values	Description
LOCKOUT	Locks the facility out of switching. The system cannot switch to the protect facility to carry service.
MAN	Requests a manual switch of the facility

4.5.100 SWITCH_TYPE

BLSR Switch Type

Table 4-150 SWITCH_TYPE Values

SW_TYPE Values	Description
FRCDWKSWBK	Working unit forced to switch back to working
FRCDWKSWPR	Working unit forced to switch to the protection unit
LOCKOUTOFPR	Lockout of protection
LOCKOUTOFWK	Lockout of working
MANWKSWBK	Manual switch of working unit back to working
MANWKSWPR	Manual switch of working unit back to the protection unit
RING	BLSR ring switch type
SPAN	BLSR span switch type

4.5.101 SYNC_CLOCK_REF_QUALITY_LEVEL

Clock Source Quality Level

Table 4-151 SYNC_CLOCK_REF_QUALITY_LEVEL Values

SYNC_CLOCK_REF_QUALITY_LEVEL Values	Description
DUS	Don’t Use for Synchronization
PRS	Primary Reference Source, Stratum 1 Traceable
RES	Reserved for network synchronization use
SMC	SONET Minimum Clock Traceable
ST2	Stratum 2 Traceable
ST3	Stratum 3 Traceable
ST3E	Stratum 3E Traceable (2nd generation only)
ST4	Stratum 4 Traceable
STU	Synchronized, Traceability Unknown
TNC	Transit Node Clock (2nd generation only)

4.5.102 SYNC_GENERATION

Synchronization status message set generation

Table 4-152 SYNC_GENERATION Values

SYNC_GENERATION Values	Description
GEN1	First generation SSM set
GEN2	Second generation SSM set

4.5.103 SYNC_QUALITY_LEVEL

Reserved for network synchronization quality level

Table 4-153 SYNC_QUALITY_LEVEL Values

SYNC_QUALITY_LEVEL Values	Description for Generation-1
ABOVE-PRS	Better than Primary Reference Source. Valid setting for Generation-1 and Generation-2 SSM set
ABOVE-SMC	Between SMC and ST3. Valid setting for Generation-1 and Generation-2 SSM set
ABOVE-ST2	Between ST2 and STU. Valid setting for Generation-1 and Generation-2 SSM set
ABOVE-ST3	For Generation-1 SSM set, between ST3 and ST2. For Generation-2 SSM set, between ST3 and ST3E
ABOVE-ST3E	Between ST3E and TNC. Valid setting only for Generation-2 SSM set
ABOVE-ST4	Between ST4 and ST3. Valid setting for Generation-1 and Generation-2 SSM set
ABOVE-STU	Between STU and PRS. Valid setting for Generation-1 and Generation-2 SSM set
ABOVE-TNC	Between TNC and ST2. Valid setting only for Generation-2 SSM set
ABOVE-SMC	Between SMC and ST3
BELOW-ST4	Below ST4 but still usable. Valid setting for Generation-1 and Generation-2 SSM set
SAME-AS-DUS	Disable the RES message by equating it to DUS. Valid setting for Generation-1 and Generation-2 SSM set

4.5.104 SYNC_GENERATION

Synchronization status message set generation

Table 4-154 SYNC_GENERATION Values

SYNC_GENERATION Values	Description
GEN1	First generation SSM set
GEN2	Second generation SSM set

4.5.105 SYS_TYPE

The type of the system representing the fiber and the span length that connects two nodes.

Table 4-155 SYS_TYPE Values

SYS_TYPE	Description
SMF-28-LR	SMF-28 system type, long reach
SMF-28-MR	SMF-28 system type, medium reach
SMF-28-SR	SMF-28 system type, short reach

4.5.106 T1_MONTYPE

T1 monitor type

Table 4-156 T1_MONTYPE Values

T1_MONTYPE Values	Description
CVL	Coding Violation - Line
CVP	Coding Violation - Path
ESL	Errored Second - Line
SASP	Severely Errored Framing/AIS Seconds
SESL	Severely Errored Second - Line
SESP	Severely Errored Second - Path
UASP	Unavailable Second - Path

4.5.107 T3_MONTYPE

T3 monitor type

Table 4-157 T3_MONTYPE Values

T3_MONTYPE Values	Description
CVL	Coding Violation - Line
ESL	Errored Second - Line
SESL	Severely Errored Second - Line

4.5.108 TACC_MODE

Test access mode

Table 4-158 TACC_MODE Values

TACC_MODE Values	Description
LOOPE	Indicates to split both the A and B paths, connect the line incoming from E direction to the line outgoing in the E direction, and connect this looped configuration to the FAD. The line outgoing in the F direction shall have a QRS connected, and the line incoming from the F direction shall be terminated by the nominal characteristic impedance of the line.
LOOPF	Indicates to split both the A and B paths, connect the line incoming from F direction to the line outgoing in the F direction, and connect this looped configuration to the FAD. The line outgoing in the E direction shall have a QRS connected, and the line incoming from the E direction shall be terminated by the nominal characteristic impedance of the line.
MONE	Indicates that a monitor connection is to be provided from the FAD to the A transmission path of the accessed circuit.
MONEF	Indicates that a monitor connection is to be provided from the FAD1 to a DFAD, or the odd pair of a FAP, to the A transmission path and from FAD2 of the same DFAD, or the even pair of a FAP, to the B transmission path of the accessed circuit.
MONF	Indicates that a monitor connection is to be provided from the FAD to the B transmission path of the accessed circuit.
SPLTA	Indicates that a connection is to be provided from both the E and F sides of the A transmission path of the circuit under test to the FAD and split the A transmission path.
SPLTB	Indicates that a connection is to be provided from both the E and F sides of the B transmission path of the circuit under test to the FAD and split the B transmission path.
SPLTE	Indicates to split both the A and B paths and connect the E side of the accessed circuit to the FAD. The line outgoing in the F direction shall have a QRS connected, and the line incoming from the F direction shall have a QRS connected, and the line incoming from the E direction shall be terminated by the nominal characteristic impedance of the line.

Table 4-158 TACC_MODE Values (continued)

TACC_MODE Values	Description
SPLTEF	Indicates to split both the A and B paths, and connect the E side of the accessed circuit to FAD1 and the F side to FAD2.
SPLTF	Indicates to split both the A and B paths, and connect the F side of the accessed circuit to the FAD. The line outgoing in the E direction shall have a QRS connected, and the line incoming in the E direction shall have a QRS connected, and the line incoming from the E direction shall be terminated by the nominal characteristic impedance of the line.

4.5.109 TERM_MODE

Terminating mode of the card

Table 4-159 TERM_MODE Values

TERM_MODE Values	Description
LINE	Line Terminating Mode
SEC	Section Terminating Mode
TRANS	Transparent Mode

4.5.110 TIMING_MODE

Timing mode for the current node

Table 4-160 TIMING_MODE Values

TIMING_MODE Values	Description
EXTERNAL	The node derives its clock from the BITS input
LINE	The node derives its clock from the SONET lines
MIXED	The node derives its clock from the mixed timing mode

4.5.111 TMPER

Performance parameter

Table 4-161 TMPER Values

TMPER Values	Description
15-MIN	Performance Parameter Accumulation Interval Length - Every 15 Minutes
1-DAY	Performance Parameter Accumulation Interval Length - Every 24 Hours

4.5.112 TRANS_MODE

G1000 Transponder Mode

Table 4-162 TRANS_MODE Values

TRANS_MODE Values	Description
BI	Bidirectional
NONE	Not in Transponder Mode
UNI	Unidirectional

4.5.113 TRCFORMAT

Indicates the trace format

Table 4-163 TRCFORMAT Values

TRCFORMAT Values	Description
1-BYTE	1 Byte Trace Message
16-BYTE	16-Byte Trace Message
64-BYTE	64-Byte Trace Message

4.5.114 TRCLEVEL

Indicates the trace mode options

Table 4-164 TRCLEVEL Values

TRCLEVEL Values	Description
J0-SEC	Trace at the SONET Section level
PATH	Trace at the path monitor level (OTUk)
SEC	Trace at the section monitor level

4.5.115 TRCMODE

Path Trace Mode

Table 4-165 TRCMODE Values

TRCMODE Values	Description
AUTO	Use the previously received path trace string as the expected string (not applicable to MXP/TXP cards)
AUTO-NO-AIS	Use the previously received path trace string as the expected string and do not turn on AIS and RDI if TIMP detected

Table 4-165 TRCMODE Values (continued)

TRCMODE Values	Description
MAN	Use the provisioned expected string as the expected string
MAN-NO-AIS	Use the provisioned expected string as the expected string and do not turn on AIS and RDI if TIMP detected
OFF	Turn off path trace capability. Nothing will be reported

4.5.116 TX_RSLT

Indicates the file transferred result

Table 4-166 TX_RSLT Values

TX_RSLT Values	Description
FAILURE	Indicates a failed result
SUCCESS	Indicates a successful result

4.5.117 TX_STATUS

Indicates the file transferred status

Table 4-167 TX_STATUS Values

TX_STATUS Values	Description
COMPLD	Indicates the file transmission is completed
IP	Indicates the file transmission is in process
START	Indicates the file transmission is started

4.5.118 TX_TYPE

Specifies the type and direction of the file transferred

Table 4-168 TX_TYPE Values

TX_TYPE Values	Description
RFBU	Indicates Remote File Backup
RFR	Indicates Remote File Restore
SWDL	Indicates Software Download

4.5.119 UCP_ADM_STATE

UCP Administrative States

Table 4-169 UCP_ADM_STATE Values

UCP_ADM_STATE Values	Description
DOWN	Indicates the UCP administrative state is down
UP	Indicates the UCP administrative state is up

4.5.120 UCP_CC_TUN_MD

UCP IP Tunneling mode. Default is DISABLED.

Table 4-170 UCP_CC_TUN_MD Values

UCP_CC_TUN_MD Values	Description
DISABLED	DISABLED UCP tunneling mode
GRE	GRE UCP tunneling mode
IP-IN-IP	IP-IN-IP UCP tunneling mode

4.5.121 UCP_CKT_STATE

UCP Operation States of Circuits

Table 4-171 UCP_CKT_STATE Values

UCP_CKT_STATE Values	Description
CLEARING	UCP circuit is in the clearing state
CLOSED	UCP circuit is in the closed state
FAILED	UCP circuit is in the failed state
LISTENING	UCP circuit is in the listening state. This state is applicable only at termination.
OPEN	UCP circuit is opened
OPENING	UCP circuit is opening
PENDING	UCP circuit is in the open-pending state
RETRY	UCP circuit is in retry state. This state is applicable only at source
WAIT	UCP circuit is in wait-cc state. This state is applicable only at source

4.5.122 UCP_CRC_MODE

UCP CRC mode for this control channel, it is applicable to IPCCs of the SDCC type only.

Table 4-172 UCP_CRC_MODE Values

UNI_BI Values	Description
16-BIT	Indicates a 16-bit CRC mode
32-BIT	Indicates a 32-bit CRC mode

4.5.123 UCP_IPCC_TYPE

UCP Types

Table 4-173 UCP_IPCC_TYPE Values

UCP_IPCC_TYPE Values	Description
ROUTED	Indicates the Optical User Network Interface–Client
SDCC	Indicates the Optical User Network Interface–Network

4.5.124 UCP_TNA_TYPE

Types of TNA (transport network administered address)

Table 4-174 UCP_TNA_TYPE Values

UCP_TNA_TYPE Values	Description
IPV4	Indicates IPV4 TNA type
IPV6	Indicates IPV6 TNA type
NSAP	Indicates NSAP TNA type

4.5.125 UNI_BI

Unidirectional and Bidirectional switch operations

Table 4-175 UNI_BI Values

UNI_BI Values	Description
BI	Bidirectional protection switching
UNI	Unidirectional protection switching

4.5.126 UP_DOWN

Up/Down

Table 4-176 UP_DOWN Values

UP_DOWN Values	Description
DOWN	Down
UP	Up

4.5.127 VALIDITY

Response validity

Table 4-177 VALIDITY Values

VALIDITY Values	Description
COMPL	Complete Response
PRTL	Partial Response

4.5.128 VOA_CNTR_MODE

Defines the VOA control mode

Table 4-178 VOA_CNTR_MODE Values

VOA_CNTR_MODE Values	Description
ATTN	VOA has a fixed attenuation
POWER	VOA controls the attenuation to obtain a fixed output power

4.5.129 VT1_5_MONTYPE

VT1_5 Monitor Type

Table 4-179 VT1_5_MONTYPE Values

VT1_5_MONTYPE Values	Description
CVV	Coding Violation - VT Path
ESV	Errored Seconds - VT Path
SESV	Severely Errored Seconds - VT Path
UASV	Unavailable Second - VT Path

4.5.130 WDM

Facility Types for MXP/TXP cards

Table 4-180 WDM Values

WDM Values	Description
CLNT	Client Facility
OCH	Optical Channel (DWDM) Facility

4.5.131 WLEN_MODE

The Wavelength configuration mode of a single node/direction

Table 4-181 WLEN_MODE Values

WLEN_MODE Values	Description
ADD	The wavelength is added at this node
DROP	The wavelength is dropped from this node
EXP	The wavelength is expressed in this node