PLN-8021-004

DMS-100 Family

North American DMS-100

Release Document Volume 2 of 2

LET0015 Preliminary 13.02 May 2001

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Logs Highlights

Log	Comments	Featid
TOPS305, TOPS505	New	a59006653
TOPS614	New	a59006658
TOPS105, TOPS106	Changed	a59015863
XAC329, XAC629	New	a59019176
UNB303	New	a59021965
UNB306	Changed	"
DFIL318	Changed	a59021972
UNB304	Changed	a59021979
E911212	Changed	a59021986
E911233, E911234, E911235	New	a59021993
TEOL100	Changed	a59022361
SCAI102	Changed	a59022453
APS1XX	Changed	a59022816
DFIL110	Changed	a59023032
SPM300, SPM331, SPM500, SPM630	Changed	a59024393
DFIL324	New	a59026486
PKT200	New	s10387512

Logs List of Features

a59006653
a59006658
a59015863
a59019176
a59021965
a59021972
a59021979
a59021986
a59021993
a59022361
a59022453
a59022816
a59023032
a59024393
a59026486
s10387512

1: Log changes (LG)

1.1 TOPS305

1.1.1 Explanation

Log title: TOPS305

Name: TOPS IP DataLink Fault

Description: The TOPS305 log is a new TOPS IP trouble log.

The tops305 log is generated:

- when a TOPS IP Position goes into and out of the SYSB (system busy) state,
- when a TOPS IP Position is in the CPB or CPD state and is FRLSed (Force Released) at the MAP,
- when a TOPS IP Position loses or regains communication with an External DA (Directory Assistance) Database,
- when an unsolicited busy message from a TOPS IP position is successfully processed by the CM.
- When an external database alarm message is received from a TOPS IP position.

Event type: TBL

1.1.2 Format

Figure 1 Formats of log reports

<Office Id> <Node Name> <Alarm Indicator> tops305 <Date> <Time>
<Sequence Numbers> TBL TOPS IP DataLink Fault
Data Link: TOPSPOS <IP Position Number>
Trouble: <Trouble Text>

Reason: < Reason Text>
Error Code: <ErrorCode>

Figure 2 Sample log report

RTPF CM ** tops305 JUN23 18:12:05 5050 TBL TOPS IP DataLink Fault
Data Link: TOPSPOS 1000
Trouble: Data Link is System Busy
Reason: End-to-end connectivity Failure
Error Code: EC 0 - Reserved

This log indicates that TOPS position 1000 went into a SYSB state due to the CM losing application data connectivity with the IP position.

Figure 3 Sample log report

RTPF CM ** tops305 JUN23 18:12:05 5050 TBL TOPS IP DataLink Fault
Data Link: TOPSPOS 1000
Trouble: Data Link is System Busy
Reason:
Error Code: 0

This log indicates that TOPS position 1000 went into a SYSB state due to the death of the peripheral connectivity audit.

1.1.3 Field descriptions

Table 1 Header Field descriptions

Field	Format	Description
Office ID	n/a	This field provides the name of the switch where the log report is generated.
Node Name	n/a	This field identifies the node from which the log is being generated.
Alarm Indicator	n/a	This field either displays “***” to report a critical alarm, “***” to report a major alarm, or is blank, indicating that an alarm has been cleared.
Date	mmmdd	This field gives three letters followed by two digits, indicating the month and date the log was generated.

Table 1 Header Field descriptions

Field	Format	Description
Time	hh:mm:ss	This field display the time in hours (24 hour clock), minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.

Table 2 Body Field descriptions

Field	Size (Value)	Description
Data Link:	10 chars (n/a)	Tag for next field
TOPSPOS	6 chars	This field identifies the data link as being an TOPS Position. TOPS Positions are datafilled in table TOPSPOS.
<Position Number>	variable (0 to 9999)	The number assigned to the position in table TOPSPOS
Trouble:	8 chars (n/a)	Tag for next field.
<Trouble Text>	variable (“ “Data Link Is System Busy”, “OPP IP Alarm” “Resolved”}	This field indicates whether the log is reporting a TOPS IP Position fault, or if it has been corrected.
Reason:	7 chars (n/a)	Tag for next field
<Reason Text>	variable (“No Failure”, “CM Restart”, “Peripheral Failure”, “Network Failure”, “End-to-End Connectivity Failure”, “EXDB: DA Alarm Status: <No alarm, Minor, Major, Critical>”,	Describes the nature of the fault
Error Code:	7 chars (n/a)	Tag for next field
<ErrorCode>	2 digits (0 to 99)	Provides an internal number which is equivalent to the return code received from the XPM.

1.1.4 Action

When TOPS IP positions goes into a the system busy (SYSB) state, several diagnostic actions should be performed. First, post the position at the TOPSPOS MAP level that is listed in the log and execute the INFO command to determine why the position is SYSB. Depending on the results of the INFO

command, the DMS networking hardware should be checked to make sure it is in-service.

Note: When this log is generated it may signify that the position has lost power.

When TOPS IP positions lose communication with an external database, it should be verified that the database is functional. If it is, then the network that connects the database to the position should be examined.

1.1.5 Associated OM registers

None.

1.1.6 Additional information

Alarms are usually generated in conjunction with this log. See the AL section of this DDOC for more information on alarms.

1.2 TOPS505

1.2.1 Explanation

Log title: TOPS505

Name: TOPS IP Position State Change
Description: The TOPS505 log is a new TOPS IP information log.

This is an information log only. Any time a TOPS IP position changes state to any of the following: OFFL, MANB, SYSB, URES, CRES, a TOPS505 log is generated.

A TOPS505 log is generated also when a position is added or removed from datafill in table TOPSPOS.

Event type: INFO

1.2.2 Format

Figure 4 Formats of log reports

```
TOPS505 mmmdd hh:mm:ss ssdd INFO TOPS IP Datalink State Change

Data Link: TOPSPOS: <Position Number>

Reason: <ChangeReason>

From: <FromState>

To: <ToState>

Error Code: <ErrorCode>
```

Figure 5 Sample log report

```
RTPF CM TOPS505 JUN23 18:12:05 5050 INFO TOPS IP DataLink State Change

Data Link: TOPSPOS 1000

Reason: Manual Command

From: ManB

To: URes

Error Code: EC 0 Reserved
```

1.2.3 Field descriptions

Table 3 Header Field descriptions

Field	Format	Description
Office ID	n/a	This field provides the name of the switch where the log report is generated.
Node Name	n/a	This field identifies the node from which the log is being generated.
Date	mmmdd	This field gives three letters followed by two digits, indicating the month and date the log was generated.
Time	hh:mm:ss	This field display the time in hours (24 hour clock), minutes, and seconds that the log was generated.
Sequence Numbers	ssdd	This field defines a unique sequence number for each log report generated.

Table 4 Body Field descriptions

Field	Size (Value)	Description
Data Link:	10 chars (n/a)	Tag for next field
TOPSPOS	7 chars (n/a)	This field identifies the data link as being an OC-IP data link. OC-IP data links are datafilled in table OCIPDL.

Table 4 Body Field descriptions

Field	Size (Value)	Description
<PositionNumber>	variable (0 to 9999)	The number assigned to the postion in table TOPSPOS.
Reason:	7 chars {n/a}	Tag for next field
<ChangeReason>	variable (“Manual Command”, “System Detected Trouble”, “System Corrected Trouble”, “Datafill Change”)	This field indicates the event which caused the data link to change state.
From:	5 chars (n/a)	Tag for next field
<FromState>	variable (“NEq”, “OffL”, “ManB”, “URes”, “CRes”, “Idl”, “CPB”, “CPD”, “SysB”)	This field is the state of the data link prior to the state change.
To:	3 chars (n/a)	Tag for next field
<ToState>	variable (“NEq”, “OffL”, “ManB”, “URes”, “CRes”, “CPB”, “CPD”, “SysB”)	This field is the state of the data link is in after the state change.
Error Code:	7 chars (n/a)	Tag for next field
<ErrorCode>	2 digits (0 to 99)	Provides an internal number which is equivalent to the return code received from the XPM. Ref table TOPSMTC.

1.2.4 Action

No action required.

1.2.5 Associated OM registers

None.

1.2.6 Additional information

None.

2: Log changes (LG)

2.1 TOPS 614

2.1.1 Explanation

Log title: TOPS 614
Name: TOPS Message IP Address Mismatch
Description:
Event type: This log indicates that a message from a position or over an OC link has been received by the switch with an invalid IP address; ie, an address which does not correspond to the switch's current notion of the correct address.

2.1.2 Format

Figure 1 Format of TOPS 614 Log

```
TOPS 614 mmmdd hh:mmm:ss ssdd INFO TOPS Msg IP Addr Mismatch
Source ID =        <pos id | oc data link>
Expected Addr = <ip address>
Msg Addr =         <ip address>
```

Figure 2 Example TOPS 609 Log

```
TOPS 614 DEC03 18:30:02 2112 INFO TOPS Msg IP Addr Mismatch
Source ID =        TOPSPOS 500
Expected Addr = 47 192 5 216
Msg Addr =         47 103 23 95
```

2.1.3 Field descriptions

Table 5 Field descriptions

Field	Value	Description
Source ID	TOPSPOS id | OC Office Name + Datalink #	The source of the received message.
Expected Addr	4{0-255}	The IP address of the position/OC datalink as the switch expects.
Message Addr	4{0-255}	The IP address of the source of the message.

2.1.4 Action

The generation of this log represents an possible instance of a security violation or instance of improper datafill. As such, the source of the faulty IP address should be investigated to determine whether any further action is necessary.

2.1.5 Associated OM registers

None.

2.1.6 Additional information

- None.

3: Log changes (LG)

3.1 TOPS105

3.1.1 Explanation

Log title: TOPS105
Name: TOPS Trouble
Description: The TOPS subsystem generates this report when trouble is encountered by TOPS call processing.
Event type: TOPS105 records the problem number along with a text trouble code indicating the problem encountered.

Note: OC has been removed from the header of this log since the log can be generated for both Standalone and OC call environments.

3.1.2 Format

Figure 1 Formats of log reports

```
TOPS 105 mmmdd hh:mmm:ss ssdd SYSB TOPS TROUBLE
    CKT <cp id>
    OCOFC = <destination OC office> OCIPDLNUM = <OCIPDL Num>
    PROBLEM NO = <nnnn> TRBLCODE = <trouble text>
```

Figure 2 Sample log reports

```
TOPS 105 MAY19 21:51:01 0383SYSB TOPS TROUBLE
    CKT HOSTBYPASS 1
    OCOFC = HOST1 OCIPDLNUM = 3
    PROBLEM NO = 0 TRBLCODE = VOICE_BYPASS_CONN_FAIL
```

3.1.3 Field descriptions

The following lists the new and changed fields for the TOPS105 log.

Table 6 Field descriptions

Field	Value	Description
OCOFC	Symbolic text	The name of the OC Office from Table OCOFC. This field is set to 'NA' for calls in the standalone environment.
OCIPDLNUM	Symbolic Text	This field identifies the specific OC-IP data link number which encountered trouble. OC-IP data links are datafilled in Table OCIPDL. This field is set to 'NA' if not utilizing OC-IP data links.
TRBLCODE	VOICE_BYPASS_CONN_FAIL	Indicates that VoIP bypass connection to the operator failed.

3.1.4 Action

Table 7 Trouble code text and action

Trouble Code Text	Action
VOICE_BYPASS_CONN_FAIL	Ensure that the associated Gateway trunk and peripheral are in service. Check the associated IPGW logs. Check for network problems.

3.1.5 Associated OM registers

None.

3.1.6 Additional information

This log can be generated in the Standalone as well as the OC Host/Remote configurations. When the log is generated in the Standalone environment the OCOFC field is 'NA'. For calls in the OC Host/Remote configurations the OCOFC field contains an office name from Table OCOFC. Note that OC has been removed from the header of this log.

3.2 TOPS106

3.2.1 Explanation

Log title: TOPS106
Name: TOPS Datalink Trouble
Description: The TOPS subsystem generates this report when trouble is encountered by TOPS call processing.
Event type: TOPS106 records the problem number along with a text trouble code indicating the problem encountered.

3.2.2 Format

Figure 3 Formats of log reports

```
TOPS 106 mmmdd hh:mmm:ss ssdd SYSB TOPS DATALINK TROUBLE
    CKT <cp id>
    OCOFC = <destination OC office> OCIPDLNUM = <OCIPDL Num>
    PROBLEM NO = <nnnn> TRBLCODE = <trouble text>
```

Figure 4 Sample log reports

```
TOPS 106 MAY19 21:51:01 0383SYSB TOPS DATALINK TROUBLE
    CKT TOPSVCCT
    OCOFC = HOST1 OCIPDLNUM = 3
    PROBLEM NO = 0 TRBLCODE = NO DATALINK MEMBERS AVAILABLE
```

3.2.3 Field descriptions

The following lists the new and changed fields for the TOPS106 log.

Table 8 Field descriptions

Field	Value	Description
OCOFC	Symbolic text	The name of the OC Office from Table OCOFC. This field is set to ‘NA’ for calls in the standalone environment.
OCIPDLNUM	Symbolic Text	This field identifies the specific OC-IP data link number which encountered trouble. OC-IP data links are datafilled in Table OCIPDL. This field is set to ‘NA’ if not utilizing OC-IP data links.

3.2.4 Action

Check the state of the datalink.

3.2.5 Associated OM registers

None.

3.2.6 Additional information

None.

4: Log changes (LG)

4.1 XAC329

4.1.1 Explanation

Log title: XA-CORE ETHR (Ethernet).
Name: XAC329.
Description: The system generates the ethernet (ETHR) log report when any of the following conditions occur:

- There is a loss of communication between the XA-Core and the ethernet network via any single link failure.
- There is a loss of ethernet link redundancy.

The ETHR log report indicates the recommended action that operating personnel can follow to correct the condition. When the condition clears the system generates the ETHR Cleared log XAC629.

The ETHR log generates a card list when the system detects a fault on more that one packlet. The card list displays other packlets that operating company personnel need to check as possible sources of the fault identified in the log report.

An ETHR log indicates one of two alarm levels:

- Critical Alarm: There are insufficient ethernet links inservice to maintain engineered capacity requirements. (eg. If the customer's office is engineered with 4 ethernet links then there must be less than 2 links inservice to result in a critical condition.)
- Major alarm: There is a loss of ethernet link redundancy between the XA-Core and the ethernet network. (eg. If the customer's office is engineered with 4 ethernet links then only the minimum of 2 links remain inservice. The next link failure could result in a degredation of service.)

4.1.2 Event Type

Fault (FLT)

4.1.3 Format

Figure 1 Formats of log reports

```
XAC### mmmdd hh:mm:ss ssdd FLT      Title text
        IMPACT: text describing impact to system
        CARD:   Type STATE:Site Fl Row Bay     Shf/Slot:   EqPEC/Serial:
                tttt  ssss HOST 00 A00 DPCC:00 n/nnp frfr   NTccccvv/nnnnnnnn
        Port <n>, Link <n>:<cccc>, <cccc>
        REASON: reason/cause description
        ACTION: suggested action text
        CARDLIST:Type Site FL Row Bay     Shf/Slot      EqPEC/Serial
                 cccc-cccc-nn-cnn-cccc:nn--nn/nnc-c--cccccccc/nnnnnnnnnn
                cccc-cccc-nn-cnn-cccc:nn--nn/nnc-c--cccccccc/nnnnnnnnnn
                cccc-cccc-nn-cnn-cccc:nn--nn/nnc-c--cccccccc/nnnnnnnnnn
```

Figure 2 Sample log reports

```
**XAC329 OCT29 09:09:19 1199 FLT   ETHR (Ethernet)
        IMPACT: 2 of 4 Ethernet links on XA-CORE is in-service
        CARD:   Type STATE:Site Fl Row Bay     Shf/Slot:   EqPEC/Serial:
                ETHR Manb  HOST 00 A00 DPCC:00 00/14R L   NTLX09BA/nnnnnnnn
        Port 0, Link 0: CBSY, CBSY
        REASON: Ethernet link(S) are out of service due to manually busied packlet.
        ACTION: Attempt to RTS AMDI packlet.
```

4.1.4 Field descriptions

Table 9 Field descriptions

Field	Value	Description
Alarm	Three asterisks (***) Two asterisks (**)	The alarm field displays the severity of the alarm. Three asterisks (***) indicate a critical alarm condition. There are insufficient links inservice to maintain engineered capacity requirements. Two asterisks (**) indicate a major alarm condition. The minimum number of ethernet links remain inservice.
Reportid	XAC329	The reportid field displays the log group (XAC) and identification number of the log report.
Event Type	FLT	The Event Type field describes the type of event identified in the log report.
Event text	Text string	The Event Text field describes the type of event identified in the log report.

Table 9 Field descriptions

Field	Value	Description
IMPACT	Text string	The impact field describes the impact of the condition to the Xa-Core.
Card Type	Character string	The Card Type field displays the type of circuit pack (CP) or packlet identified in the log report.
State	Character String	The state field displays the site location of the switch that contains the CP or packlet identified in the log report.
Site	Host	The site field displays the site location of the switch that contains the CP or packlet identified in the log report.
FL	Numeric	The Floor field displays the floor position, within the site, of the CP or packlet identified in the log report.
Row	Alphanumeric	The row field displays the row position, on the floor, that contains the CP or packlet identified in the log report.
Bay	DPCC:00	The bay field identifies the bay (frame type and number) that contains the CP or packlet identified in the log report.
Shf/Slot	nn/nns p Where: nn/=0 to 3 /nn=01 to 18 s=F or L p=U or L	The shelf (Shf) and Slot field identify the shelf position within the bay, and slot position whiten the shelf, that contains the CP or packlet identified in the log report. Where: nn/= the shelf position number. /nn= the slot position number. s=side position, either front (F) or rear (R) side of the XA-Core shelf that contains the CP p= the packlet position, either the upper (U) or lower (L) position, within an IOP CP. (The packlet position only displays where the indicated slot and side are from an IOP CP).
EqPEC/Serial	Alphanumeric	The EqPEC/Serial field identifies the equipment product engineering code (EqPEC) and the serial number of the CP or packlet identified by the log report.
Port <n> state	Alphanumeric	The port number and state field display the ethernet port number and the operational state of the ethernet link.
Link <n> state	Alphanumeric	The link number and state field display the ethernet link number and the operational state of the ethernet link.
REASON	Text string	The Reason filed describes the cause of the condition identified in the log report.
ACTION	Text string	The Action Field displays the recommended action that operating company personnel can follow to correct the condition identified in the log report.

Table 9 Field descriptions

Field	Value	Description
CARD LIST	Alphanumeric	The Card List field displays a list of other CPs or packlets that operating company personnel need to check as possible sources of the fault identified by the log report. The Card List field displays the card or packlet weight (probability, shown as a percentage, that the CP or packlet contains a fault), card type, state, site, floor, row, bay, shelf and slot position, the product engineering code and serial number for each CP or packlet.

4.1.5 Action

If the ethernet packlet state is ManB, attempt to return the packlet to service. Replace the ethernet packlet if faulty.

If the ethernet packlet state is Cbsy because an Input/Output Processor (IOP) circuit pack (CP) is out-of-service, ensure the identified IOP circuit is in-service.

If the ethernet packlet state is SysB, attempt to return the ethernet packlet to service. Replace the ethernet packlet if faulty.

If the ethernet packlet state is in-service (InSv) or in-service trouble (Istb) Check the sanity of the packlet, replace if faulty.

If the ethernet packlet state is unknown and a state change has occurred on an ethernet packlet, port or link, ensure ethernet packlets are InSv. Check the integrity of the ethernet links.

If the ethernet port or link state is ManB, attempt to return to service the ethernet port or link.

If the ethernet port or link state is Sysb, contact next level of support if problem persists.

If the XA-Core system is in split mode, take no action. The ethernet packlet, port and link will return to service when the system exits split mode.

4.1.6 Associated OM registers

The OM register XETHRMJU or XETHRCRU are pegged depending on a major or a critical alarm.

The OM register XETHR, XETHRPRT or XETHRLNK are pegged based on hardware fault notifications received for ethernet packlets, ports or links.

4.1.7 XAC 629 Explanation

Log title: Ethernet cleared log.
Name: XAC629.
Description: The system generates the ETHR Ethernet link condition cleared log (XAC629) when the ETHR alarm condition clears. Communication between the XA-Core and the ethernet network.

4.1.8 Event Type

Information (INFO)

4.1.9 Format

Figure 3 Formats of log reports

```
XAC###  mmmdd hh:mm:ss ssdd INFO    Title text
   DESCRIPTION: description text
   CARD: Type    STATE  Site     Fl  Row   Bay Shf/Slot: EqPEC/Serial:
         tttt ssss HOST 00 A00 DPCC:00 n/nnp frfr NTccccvv/nnnnnnnn
   Port <n>, Link <n>:<cccc>, <cccc>
```

Figure 4 Sample log reports

```
XAC609 OCT09 19:09:19 1900 INFO ETHR (Ethernet Link Condition Cleared)
   DESCRIPTION: OOS link(s) restored to service.
   CARD:Type State Site Fl Row Bay     Shf/Slot:EqPEC/Serial:
        ETHR Insv  HOST 00 A00 DPCC:00 00/05R L  NTLX09BA/nnnnnnnn
   Port 0, Link 0: INSV, INSV
```

4.1.10 Field descriptions

Table 10 Field descriptions

Field	Value	Description
Reportid	XAC629	The reportid filed displays the log group and identification number of the log report.
Event Type	INFO	The Event Type field displays the type of event identified in the log report/
Event Text	Text string	The Even text field describes the type of event identified in the log report.
Description	Text	The description field describes the system event and the group redundancy recovery.
Card Type	Character string	The Card Type field displays the type of circuit pack (CP) or packlet identified in the log report.
State	Character string	The State field displays the current operational state of the CP or packlet identified in the log report.
Site	Host	The Site field displays the site position of the CP identified in the log report.

Table 10 Field descriptions

Field	Value	Description
FL	Numeric	The Floor field displays the floor position, within the site, of the CP or packlet identified in the log report.
Row	Alphanumeric	The Row field displays the row position of the CP identified in the log report.
Bay	DPCC:00	The Bay field identifies the bay (frame type and number) that contains the CP or packlet identified in the log report.
Shf/Slot	nn/nns p where: nn/=0 to 3 /nn=01 to 18 s=F or R p= U or L	The shelf (Shf) and slot field identify the shelf position within the bay, and slot position within the shelf. that contains the CP or packlet identified in the log report. Where: nn/= the shelf position number /nn= the slot position number s= side position, either from (F) side or read (R) side of the XA-Core shelf that contains the CP. p= the packlet position, either the upper (U) or lower (L) position, within an IOP CP. (The packlet position only displays when the indicated slot and side are from an IOP CP.).
EqPEC/Serial	Alphanumeric	The EqPEC/Serial field identifies the equipment product engineering code (EqPEC) and the serial number of the CP or packlet identified in the log report.
Port <n> state	Alphanumeric	The port number and state field identifies the ethernet port number and operational state of the ethernet link.
Link <n> state	Alphanumeric	The link number and state field identifies the ethernet link number and operational state of the ethernet link.

4.1.11 Action

There are no actions for this log.

5: Log changes (LG)

5.1 UNB303 logs

5.1.1 Explanation

Log title: UNB
Name: UNB 303
Description:

UNB 303 log is generated when a problem is encountered with a CCR. These logs are modified by this feature to be generated when there is a problem with SWITCHED ISUP CCCs.

5.1.2 Format

Figure 1 Formats of log reports

```
UNB 303 <date> <time> INFO
<ccr_problem>
<result>
CCR: <ccr_index>[CCC: <ccc_index>]
[CCR DEFINITION: <type> <ccr_id> <ccr_tag>]
```

Figure 2 Sample log reports

```
UNB 303 Jun1 10:00:00 6700 INFO
UNSUPPORTED TRUNK TYPE FOR CCC
CCR CONTENT CANNOT BE DELIVERED
CCR: 10 CCC: 1
CCC_DEF: COMBINED 6136211088 Y
```

5.1.3 Field descriptions

Table 11 Field descriptions

Field	Value	Description
date	month-date	This field represents the date of generation of log
time	time	This field represents the time of generation of log
ccr_problem	Refer section 10.1.6 for new values added by this feature	This field represents the problem that the CCR encountered.
result	Can be any one of the following; Call content cannot be delivered CCR has been deleted Correlation tag may not have been entirely delivered	This field identifies the consequence of the problem
ccr_index	1 through 500	This field identifies the index number of the CCR that encountered the problem.
ccc_index	1 or 2	This field indicates the CCC of the affected CCR. A value of 1 identifies the first (or only) CCC of the CCR. A value of 2 identifies the second CCC of a paired CCR.
type	combined or paired	This field indicates whether the CCR is a combined or paired CCR.
ccr_id	LINE <dn1>/<dn2>] <signalling> TRUNK <tg1><tn1> [<tg2><tn2>]	Specifies the type of CCC (line or trunk) and the CCC through four sub fields depending on the type of CCR and whether they are lines or trunks.
signaling	Y or N	Specifies if signaling is enabled on the CCC(s).
tg1	String	Specifies the CLLI of the trunk group containing the first CCC of the CCR.
tn1	Integer 0 to 9999	Specifies the trunk number of the first CCC of the CCR.
tg2	String	Specifies the CLLI of the trunk group containing the first CCC of the CCR.
tn2	Integer 0 to 9999	Specifies the trunk number of the first CCC of the CCR.
dn1 or dn2	10-digit DN	This field indicates the 10-digit DN of CCC1 (combined) or CCC1 and CCC2 (paired).

5.1.4 Action

None.

5.1.5 Associated OM registers

The appropriate register of the ISUP connection (ISUPCONN) OM group will be pegged for unsuccessful ISUP link attempts.

5.1.6 Additional information

5.1.6.1 New Values taken by ‘Problem’ field in UNB303 logs

5.1.6.1.1 ISUP LINK RELEASED

The remote end has sent an ISUP REL message with cause which forced the link to be taken down. This problem type will take the existing result type ‘Call content cannot be delivered’.

5.1.6.1.2 MISSING BILLING NUMBER

Billing number has not been specified for the agency. Without the billing number, long-distance recorder connection cannot be billed.

5.1.6.2 New Values taken by ‘Result’ field in UNB 303 logs

5.1.6.2.1 SWITCHED ISUP CCC CALL CANNOT BE BILLED

This value is taken by the ‘Result’ field in UNB303 logs when the billing number is missing in AGNECY table for the switched ISUP CCC call.

5.2 UNB306 logs

5.2.1 Explanation

Log title: UNB
Name: UNB 306
Description:

UNB 306 log is generated when an STS, PRETRANSLATOR or LCANAME assigned to an USNBD agency is deleted from tables HNPACONT, STDPRTCT or LCASCRCN respectively. The datafill did exist in the table when entered in USNBD, however in the interim the datafill has been removed from the table.

Without the STS and pretranslator datafill, USNBD cannot set up the agency recording links to record the target's calls. Without the LCANAME datafill, USNBD cannot determine if a switched connection to a remote agency's recording device is billable or not. The datafill must exist in the appropriate tables when monitoring sessions are activated in order for USNBD to monitor the target's calls.

The log report identifies the agency whose datafill is deleted. Only USNBD users belonging to this agency can view this log report.

5.2.2 Format

Figure 3 Formats of log reports

```
UNB 306 <date> <time> INFO
UNB AGENCY <datafill-type> DELETED FROM TABLE <table-name>
AGENCY = <agency-name>
```

Figure 4 Sample log reports

```
UNB 306 Jun1 10:00:00 6700 INFO
UNB AGENCY STS DELETED FROM TABLE HNPACONT
AGENCY = AGENCY 1
```

5.2.3 Field descriptions

Table 12 Field descriptions

Field	Value	Description
date	month-date	This field represents the date of generation of log
time	time	This field represents the time of generation of log

Table 12 Field descriptions

Field	Value	Description
datafill-type	The possible values are: STS PRETRANSLATOR LCANAME	This field identifies the type of datafill which has been removed from the appropriate table.
table-name	The possible values are: HNPACONT STDPRTCT LCASCRCN	This field identifies the table from which the datafill has been deleted
agency-name	1 to 16 alphanumeric characters	This field identifies the USNBD agency whose recording links cannot be established

5.2.4 Action

USNBD user for the agency should determine the deleted datafill value using the USNBD command AGENCY. The USNBD user should ensure that this value is the correct to be assigned to the agency.

If incorrect, the user assigns the correct datafill value for the agency via AGENCY command. Conversely, if the current agency datafill is correct, it should be validated that the value does not exist in the table name indicated in the log. The user should invoke the operating company procedure to re-add the missing datafill to the table indicated in the log report.

5.2.5 Associated OM registers

None.

5.2.6 Additional information

None.

6: Log changes (LG)

6.1 DFIL318 log

6.1.1 Explanation

Log title: DFIL318
Name: GETS DATAFILL ERROR
Description: This log is generated to notify the craftsperson that a datafill problem exists with the announcement provided in the office parameter HPC_CALL_QUEUING (in table OFCVAR).
The log is generated only when the CPU is not overloaded.
Event type: Datafill Error

6.1.2 Format

Figure 1 Formats of log reports

```
* DFIL318 FEB23 10:09:59 2800 INFO GETS DATAFILL ERROR
  <error>
  <solution>
```

Figure 2 Sample log reports

```
* DFIL318 FEB23 10:09:59 2800 INFO GETS DATAFILL ERROR
  Error in office parm HPC_CALL_QUEUING:
  Ensure the announcement type is STND.

* DFIL318 FEB23 10:09:14 1400 INFO GETS DATAFILL ERROR
  Error in office parm HPC_CALL_QUEUING:
  Ensure the announcement field is valid.
```

6.1.3 Field descriptions

Table 13 Field descriptions

Field	Value	Description
<error>	**Error in office parm HPC_CALL_QUEUING**	**A datafill problem exists with the office parameter HPC_CALL_QUEUING.**
<solution>	**Ensure the announcement type is STND.**	**The type of the announcement contained in HPC_CALL_QUEUING is not STND.**
	Ensure the announcement field is valid.	**The CLLI contained in HPC_CALL_QUEUING does refer to an announcement.**

6.1.4 Action

If the <solution> field contains the ‘Ensure the announcement type is STND.’ constant, then change the announcement of the HPC_CALL_QUEUING office parameter with an announcement of STND type.

If the <solution> field contains the ‘Ensure the announcement field is valid.’ constant, then change the CLLI of the HPC_CALL_QUEUING office parameter to an announcement.

6.1.5 Associated OM registers

Not Applicable

6.1.6 Additional information

None

7: Log changes (LG)

7.1 UNB304 logs

7.1.1 Explanation

Log title: UNB
Name: UNB 304
Description:

UNB304 log is generated when

- Surveillance is modified.
- Subject is OUTed.
- LCC of the subject is modified.

The format of the UNB304 log when the subject is OUTed or Subject's LCC is modified is displayed in figure 1.

The following modifications are made by this feature for UNB304 log generated when the subject is OUTed or Subject's LCC is modified.

- For User,
  - — The "subject information" is displayed only when the user agency is the same as the surveillance agency of the subject. Thus, it prevents the user of one agency from getting information about the surveillance belonging to another agency.
- For ADMIN,
  - — the "subject information" is always displayed.
  - — The log is modified to display the agency information of surveillance also.

There is no Modification to UNB304 log generated when surveillance is modified.

Event type: The Log is generated when the Subject is OUTed or Subject's LCC is modified.

7.1.2 Format

Figure 1 Formats of UNB304 log when the subject is OUTed or Subject's LCC is modified.

UNB 304 <date> <time> INFO
<problem>
<result>
<SIN>
<agency> (Only for ADMIN)
<Subject information>
<CCR information>
<CDC information>

Figure 2 Sample log reports (For ADMIN - When subject is OUTed)

INDY1CDN10BO UNB304 JUN19 06:01:10 2000 INFO
SUBJECT HAS BEEN DELETED
SURVEILLANCE HAS BEEN DELETED
SIN: SIN1
Agency: AGENCY2
SURV. DEFN.: DN 4164771051 A Y Y N
CCR: 1
CDC: 1

Figure 3 Sample log reports (For User - When subject is OUTed)

When SURV Agency = User Agency = AGENCY2

INDY1CDN10BO UNB304 JUN19 06:01:10 2000 INFO

SUBJECT HAS BEEN DELETED

SURVEILLANCE HAS BEEN DELETED

SIN: SIN1

SURV. DEFN.: DN 4164771051 A Y Y N

CCR: 1

CDC: 1

Figure 4 Sample log reports (For User - When subject is OUTed)

When SURV Agency ^= User Agency (Surv agency = AGENCY2, User agency = AGENCY1)

INDY1CDN10BO UNB304 JUN19 06:01:10 2000 INFO

SUBJECT HAS BEEN DELETED

SURVEILLANCE HAS BEEN DELETED

SIN: SIN1

CCR: 1

CDC: 1

7.1.3 Field descriptions

Table 14 Field descriptions (new added field)

Field	Value	Description
Agency	String of char.	This field identifies the agency of the surveillance.

7.1.4 Action

None.

7.1.5 Associated OM registers

No change in OM behavior

7.1.6 Additional information

None.

8: Log changes (LG)

8.1 E911212

8.1.1 Explanation

Log title: E911212
Name: E911 Disconnect
Description: The Enhanced 911 (E911) subsystem generates this log at disconnect for each call answered at an E911 automatic call distribution (ACD), line appearance on a digital trunk (LDT), or line public safety answering point (LINE PSAP). The log is produced, for a 2-way call when the E911 attendant or the calling party disconnects from the call. When a primary PSAP attendent is in the process of transferring a calling party to a secondary PSAP and the three parties are in a 3-way call, an E911212 log is produced as follows: ˚ If the controlling PSAP (the primary PSAP who initiated the call transfer) drops out of the call (the calling party and the secondary PSAP revert to a 2-way call), an E911212 log is generated for the primary PSAP. ˚ If the secondary PSAP drops out of the call or is flashed off by the primary PSAP attendant (the calling party and the primary PSAP revert to a 2-way call), an E911212 log is generated for the secondary PSAP. ˚ If the calling party disconnects, two E911212 logs are generated, one for the primary PSAP attendant who transferred the call and one for the attendant who answered the call transfer. If if it is a wireless call, then the longitude and latitude of the caller will be displayed in the log. The E911212 log report consists of five lines: the log header (standard for all logs) and four lines of text in the body of the log.

8.1.2 Format

The format for log report E911212 follows:

E911212 mmmdd hh:mm:ss ssdd INFO E911 CALL EVENT RECORD ANI PSAPNAME POSID LOGIN OFFER <NPA & DN> <psap name> <position id> <login id> <time of day> ANSW XFR DISC XFR DN <time of day> <time of day> <time of day> <NPA & DN> XFR PSAPNAME XFR ANSW

<pdsp name xfrd to> <time of day> pANI<NPA & DN>LAT DEG<Degrees Minutes Seconds Direction> LONG DET<Degrees Minutes Seconds Direction>

Example An example of log report E911212 follows:

Figure 1 Formats of log reports

E911212 mmmdd hh:mm:ss ssdd INFO E911 CALL EVENT RECORD ANI PSAPNAME POSID LOGIN OFFER <NPA & DN> <psap name> <position id> <login id> <time of day> ANSW XFR DISC XFR DN <time of day> <time of day> <time of day> <NPA & DN> XFR PSAPNAME XFR ANSW <pdsp name xfrd to> <time of day> pANI<NPA & DN> LAT DEG<Degrees Minutes Seconds Direction> LONG DET<Degrees Minutes Seconds Direction>

Figure 2 Sample log reports

This is an example of an E911212 log which is output when a wirelss caller disconnects from the PSAP and the Geodetic Location information is availbale.

```
E911212 JAN10 15:10:25 0101 INFO E911 CALL EVENT
RECORD
   ANI          PSAPNAME       POSID     LOGIN
   OFFER
   9196211235    RALEIGHPOLICE   7708       8888
     15:10:00
   ANSW            XFR       DISC             XFR DN
   15:10:02         15:10:17   15:10:25
         9196211901
   XFR  PSAPNAME    XFR  ANSW
   RALEIGHFIRE        15:10:19
   pANI        LAT DEG        LONG DEG
   6139110747   45 59’59” N     170 59’59” E
```

This is an example of an E911212 log which is output when a wireline or wireless caller disconnects from the PSAP and the Geodetic Location information is not availbale.

```
E911212 JAN10 15:10:25 0101 INFO E911 CALL EVENT
RECORD
   ANI          PSAPNAME       POSID     LOGIN
   OFFER
   9196211235    RALEIGHPOLICE   7708       8888
     15:10:00
   ANSW            XFR       DISC             XFR DN
   15:10:02         15:10:17   15:10:25
         9196211901
   XFR  PSAPNAME    XFR  ANSW
   RALEIGHFIRE        15:10:19
   pANI        LAT DEG        LONG DEG
   N/A             N/A             N/A
```

8.1.3 Field descriptions

Table 15 Field descriptions

Field	Value	Description
ANI	Typically, a ten digit DN	Identifies the NPA and DN of the calling party. Existing field.
PSAPNAME		Identifies the name of the PSAP where the emergency call terminates. Existing field.

Table 15 Field descriptions

Field	Value	Description
POSID		Identifies the four-digit number that corresponds to the ACD position. This four-digit number is entered when the position is datafilled. The POSID is the identification number (IDNUM) for the position entered in SERVORD or found in table KETSETLINE. For LDT or LINE PSAPs, no LOGIN or POSITION ID is provided for the answering position. "NO ID" will be displayed in the POSID field. Existing field.
LOGIN		Identifies the four-digit identifier for the ACD agent. For Line PSAPs, no log-in identifier is provided; the words "no ID" are displayed in the LOGIN field. Existing field.
OFFER		Identifies the timestamp when a call is offered to the PSAP. For an ACD PSAP, the time will represent when either the call was presented to an attendant or when the call was queued because no attendants were available. For an LDT or LINE PSAPs, the time will represent when the call was presented to an attendant. Existing field.
ANSW		Identifies the timestamp when the call previously offered to the attendant is answered. If the caller abandoned the call before the attendant answered, "NO ANSW" will be displayed. Existing field.
XFR		Identifies the timestamp when the call answered by the attendant is transferred. If the attendant did not transfer the call before disconnecting, "NO XFR" will be displayed in the XFR field. Existing field.
DISC		Identifies the timestamp when the call answered by the attendant is transferred. If the attendant did not transfer the call before disconnecting, "NO XFR" will be displayed in the XFR field. Existing field.

Table 15 Field descriptions

Field	Value	Description
XFR DN		Identifies the NPA and DN of the agent position where the call was transferred, if the XFR PSAPNAME field has a valid PSAPNAME (other than "NON PSAP AGENCY"). If the XFR PSAPNAME field contains NON PSAP AGENCY, the XFR DN represents the digits dialed by the agent who transferred the call. The field will be blank if no transfer occurred. Existing field.
XFR PSAPNAME		Identifies the name of the PSAP where the attendant transferred the call. If the call was not transferred to an E911 PSAP agency datafilled in table E911PSAP on the E911 Tandem, NON PSAP AGENCY will be displayed in the XFR PSAPNAME field. If no transfer took place the field is left blank. Existing field.
XFR ANSW		Identifies the timestamp when the add-on party of a call transfer answers the call. Existing field.
pANI		Pseudo Automatic Number Identification. Identifies the NPA and DN of the wireless calling party if the host switch of the PSAP can identify the call as a wireless call. For all other calls,N/A will be displayed. Existing field.
LAT DEG		If available, the latitude of the wireless E911 caller will displayed in Degrees, Minutes, Seconds and direction. The Direction will be abbreviate N for North or S for South latitudes. N/A will be displayed in this field forwireline calls or for calls where the geodetic location information is not available. **NEW FIELD.**

Table 15 Field descriptions

Field	Value	Description
LONG DEG		If available, the longiitude of the wireless E911 caller will displayed in Degrees, Minutes, Seconds and direction. The Direction will be abbreviate E for East or Wfor West longitudes. N/A will be displayed in this field forwireline calls or for calls where the geodetic location information is not available. **NEW FIELD.**

8.1.4 Action

This is an information-only log which is printed at disconnect for each call answered at the ACD, LDT, or LINE PSAP. The log is generated for record keeping purposes only.

8.1.5 Associated OM registers

None.

8.1.6 Additional information

The latitude and longitude information is displayed to Seconds only. The acuracy of the log display is within a couple of seconds of what has been encoded.

9: Log changes (LG)

9.1 E911233 log

9.1.1 Explanation

Log title: E911
Name: E911233
Description: Problem encountered with OFBSR query.

E911233 log is generated in when:

- Links or Databases are down.
- No response is received from OFBSR database to the first query.
- No response is received from OFBSR database to the second query.
- No ESN index has been found.

9.1.2 Format

Figure 1 Format of E911233 log

```
E911233 mmmdd hh:mm:ss ssdd OFBSR QUERY FAILURE

<REASON>

<RESULT>

NPA = <NPA> DN = <DN> PANI = <PAMI> <OFBSR INFO>
```

9.1.3 Examples

- Unable to launch the ESN query to the OFBSR database due to the fact that MPC links and/or databases are unavailable. The call will either be default routed based on the ESN of the E911 trunk or routed based on the ESN retrieved from the E911SRDB table.

```
E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
UNABLE TO QUERY
CALL DEFAULT ROUTED
  NPA = 919 DN = 6211234 PANI= N/A LINKS UNAVAILABLE

E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
UNABLE TO QUERY
TABLE E911SRDB QUERIED
  NPA = 919 DN = 6211234 PANI= N/A LINKS UNAVAILABLE
```

- ESN query was launched to the OFBSR but no response was received prior to timer's expiration. Second query will be launched.

```
E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
NO RESPONSE FROM OFBSR
LAUNCHED SECOND QUERY
  NPA = 919 DN = 6211234 PANI = N/AE911SR01
```

- ESN query was launched to the OFBSR, but no ESN was found. Second query will not be launched. The call will either be default routed or routed via the E911SRDB table.

```
E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
NO ESN INDEX FOUND
CALL DEFAULT ROUTED
  NPA = 919 DN = 6211234 PANI = N/AE911SR01

E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
NO ESN INDEX FOUND
TABLE E911SRDB QUERIED
  NPA = 919 DN = 6211234 PANI = N/AE911SR01
```

- No response was received to the second ESN query. The call will either be default routed based on the ESN of the E911 trunk or routed based on the ESN retrieved from the E911SRDB table.

```
E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
NO RESPONSE FROM OFBSR SECOND ATTEMPT
CALL DEFAULT ROUTED
  NPA = 919 DN = 6211234 PANI = N/AE911SR01

E911233 JUN19 13:05:24 2000 OFBSR QUERY FAILURE
NO RESPONSE FROM OFBSR SECOND ATTEMPT
TABLE E911SRDB QUERIED
  NPA = 919 DN = 6211234 PANI = N/AE911SR01
```

9.1.4 Field descriptions

The following table describes each field in the log report:

Table 16 Field descriptions

Field	Value	Description
OFBSR QUERY FAILURE	Constant	Indicates a problem with the OFBSR database.
REASON	Character String	Contains a text reason for why the log is being generated. Following are the appropriate reasons: UNABLE TO QUERY NO RESPONSE FROM OFBSR NO REPONSE FROM OFBSR SECOND ATTEMPT NO ESN INDEX FOUND
RESULT	Character String	Identifies action taken. Following are the appropriate results: CALL DEFAULT ROUTED LAUNCHED SECOND QUERY TABLE E911SRDB QUERIED
NPA	Integers	Identifies the numbering plan area code that provides the service.
DN	Integers	Identifies the station number used in the NPA code that provides the service.
PANI	Integers	Pseudo Automatic Number Identification. Identifies the NPA and DN of the wireless calling party if the call can be identified as a wireless call. For all other calls, N/A will be displayed.

Table 16 Field descriptions

Field	Value	Description
OFBSR INFO	Character String	Identifies the database which is associated with the query problem. Following are the outputs for the three reasons: For UNABLE TO QUERY: E911SR01 LINKS DOWN E911SR02 LINKS DOWN ALL LINKS DOWN For NO RESPONSE FROM OFBSR: E911SR01 E911SR02 For NO ESN INDEX FOUND: E911SR01 E911SR02

9.1.5 Action

- Verify the accuracy of the data link between the MPC card and the OFBSR database.
- Verify the accuracy of the entries in the DMS and/or the OFBSR systems

9.1.6 Associated OM registers

No changes in OM behavior

9.1.7 Additional information

None

9.2 E911234 log

9.2.1 Explanation

Log title: E911
Name: E911234
Description: Changing to Secondary OFBSR Database.

E911234 log is generated when the health status of the primary database changes and the secondary will be used for all OFBSR messaging.

9.2.2 Format

Figure 2 Format of E911234 log

E911234 mmmdd hh:mm:ss ssdd INFO E911SR01 HEALTH CHANGE ROUTING TO SECONDARY DATABASE

9.2.3 Examples

An example of log report E911234 follows:

```
RTPT15AK     E911234 SEP15 14:31:18 4300 INFO E911SR01 HEALTH CHANGE
        ROUTING TO SECONDARY DATABASE
```

9.2.4 Field descriptions

The following table describes each field in the log report:

Table 17 Field descriptions

Field	Value	Description
E911SR01 HEALTH CHANGE	Constant	Indicates a change in the status of the database.
ROUTING TO SECONDARY DATABASE	Constant	Identifies which database will be used for selective routing.

9.2.5 Action

No immediate action required.

9.2.6 Associated OM registers

No changes in OM behavior

9.2.7 Additional information

None.

9.3 E911235 log

9.3.1 Explanation

Log title: E911
Name: E911235
Description: Changing to Primary OFBSR Database.

E911235 log is generated when a change in the health status of the databases facilitates a change of from secondary to primary database for all OFBSR messaging.

9.3.2 Format

Figure 3 Format of E911235 log

E911235 mmmdd hh:mm:ss ssdd INFO E911SR02 HEALTH CHANGE ROUTING TO PRIMARY DATABASE

9.3.3 Examples

An example of log report E911235 follows:

```
RTPT15AK     E911235 SEP15 14:02:17 4100 INFO E911SR02 HEALTH CHANGE
        ROUTING TO PRIMARY DATABASE
```

9.3.4 Field descriptions

The following table describes each field in the log report:

Table 18 Field descriptions

Field	Value	Description
E911SR02 HEALTH CHANGE	Constant	Indicates a change in the status of the database.
ROUTING TO PRIMARY DATABASE	Constant	Identifies which database will be used for selective routing.

9.3.5 Action

No immediate action required.

9.3.6 Associated OM registers

No changes in OM behavior

9.3.7 Additional information

None

10: Log changes (LG)

10.1 TEOL100

10.1.1 Explanation

Log title: TEOL
Name: TOPS End Of Life Notification
Description: This log is generated when TOPS functionality that is scheduled for removal within three releases has been used at least once in the preceding week.
Event type: Weekly audit

10.1.2 Format

Figure 1 Formats of log reports

```
TEOL100 mmmdd hh:mm:ss ssdd INFO TOPS End Of Life Notification
  Use of functionality scheduled for removal:
    Functionality Used              Scheduled Removal
    ------------------------        ------------------------
    <function>                      <release>
```

Figure 2 Sample log reports

```
TEOL100 SEP24 13:23:54 2112 INFO TOPS End Of Life Notification
  Use of functionality scheduled for removal:
    Functionality Used              Scheduled Removal
    ------------------------        ------------------------
    BP Terminal                      TOPS16
    Table SPLDNID                    TOPS17
```

10.1.3 Field descriptions

Table 19 Field descriptions

Field	Value	Description
Functionality used	DMODEM Device, MP Terminal, BP Terminal, SA/IC Position, IBM-DA Protocol, Services Database, TOPS OC via DCM, Table TOPSBC, Table SPLDNID, DANI Signaling, OC Night Closedown, TOPS OC via ETMS, Position via ETMS, Authorization Code, EAOSSIC Signaling, MODBELL Signaling, EAFGD Signaling	This field identifies the functionality that is scheduled for removal yet is being used.
Scheduled removal	TOP16, TOP17, TOP18	This field identifies the release in which the functionality is scheduled to be removed.

10.1.4 Action

If there is a plan in place to transition off of the identified functionality prior to upgrading to the identified release (or beyond), then the notification logs can be ignored. If there is no such plan in place, then the next level of support should be contacted to initiate an appropriate transition plan.

10.1.5 Associated OM registers

None.

10.1.6 Additional information

The log indicates only that the functionality was used one or more times in the previous week. It does not indicate when the functionality was used (i.e. the time of the log itself is not at all related to the time of usage), nor does it indicate the number of times it was used.

11: Log changes (LG)

11.1 SCAI102 LOG

11.1.1 Explanation

Log title: SESSION_DISASSOCIATED

Name: SCAI102

Description:
The SCAI102 will generate reasons ‘HARDRESET TRANS CLEAR’ when a transport data entry is cleared and ‘HARDRESET SESS CLEAR’ when a session is released. Both the above logs will be generated only when the DV_APPL_LOGON is sent with the HARDRESET parameter set to TRUE.

Event type: LOGON with HARD_RESET parameter set to T.

11.1.2 Format

Figure 1 Formats of log reports

```
SCAI102 date time segnbr INFO SESSION_DISASSOCIATED

LINK ID:

DEVICE:

SCAI GROUP:

REASON: HARDRESET TRANS CLEAR
```

Figure 2 Formats of log reports

```
SCAI102 date time segnbr INFO SESSION_DISASSOCIATED

LINK ID:

DEVICE:

SCAI GROUP:

REASON: HARDRESET SESS CLEAR
```

Figure 3 Sample log reports for X.25 Link when transport data cleared.

```
SCAI102 JUNE 15 13:51:33 5169 INFO SESSION_DISASSOCIATED

LINK ID   : DNA: 000000000000000 PROTOCOL: 0 0 0 0

DEVICE: MPC : 0 LINK: 3

SCAI GROUP:

REASON    : HARDRESET TRANS CLEAR

START TIME: NOT AVAILABLE

STOP  TIME: 2000/06/15 13:51:33.125 THU.
```

Figure 4 Sample log reports for X.25 Link when session is released

```
SCAI102 JUNE 15 13:51:33 5169 INFO SESSION_DISASSOCIATED

LINK ID   : DNA: 000000000000000 PROTOCOL: 0 0 0 0

DEVICE: MPC : 0 LINK: 3

SCAI GROUP: SCAI_GRP1

REASON    : HARDRESET SESS CLEAR

START TIME: 2000/06/15 13:50:33.125 THU.

STOP  TIME: 2000/06/15 13:51:33.125 THU.
```

Figure 5 Sample log reports for TCP Link when transport data is cleared.

```
SCAI102 JUNE 15 13:51:33 5170 INFO SESSION_DISASSOCIATED

LINK ID   : IP_ADDR: 192 136 141 205 LINKSET: TCP_1

DEVICE: NOT APPLICABLE

SCAI GROUP: SCAI_GRP15

REASON    : HARDRESET TRANS CLEAR

START TIME: NOT AVAILABLE

STOP  TIME: 2000/06/15 13:51:33.125 THU.
```

Figure 6 Sample log reports for TCP Link when session is released.

```
SCAI102 JUNE 15 13:51:33 5170 INFO SESSION_DISASSOCIATED

LINK ID   : IP_ADDR: 192 136 141 205 LINKSET: TCP_1

DEVICE: NOT APPLICABLE

SCAI GROUP: SCAI_GRP15

REASON    : HARDRESET SESS CLEAR

START TIME: 2000/06/15 13:50:33.125 THU.

STOP  TIME: 2000/06/15 13:51:33.125 THU.
```

11.1.3 Field descriptions

Table 20 Field descriptions

Field	Value	Description
date, time, segnbr	Mandatory/ type $info JUNE 15 13:51:33 5169	gives the info about the time & type of occurrence
LINK ID	TABLE [0 TO 47] OF CHAR	gives info about the DNA and PROTOCOL of the link for a X.25 link. gives info about the IP address and the linkset name for a TCP link.
DEVICE ID	TABLE [0 TO 19] OF CHAR	gives info about the MPC and LINK on which the session was established for a X.25 link. this field is NOT APPLICABLE for a TCP link.

Table 20 Field descriptions

Field	Value	Description
SCAI GROUP	Mandatory/type SCAI_GRP SCAI_GRP15	gives the name of the customer group to which the linkset belongs.
REASON	Optional/type TABLE [0 TO 31] OF CHAR HARDRESET TRANS CLEAR HARDRESET SESS CLEAR	gives the reason for the action taken and hence the specific log generation.
START TIME	Mandatory/type TABLE [0 TO 27] OF CHAR	gives the time when the session has logged on
STOP TIME	Mandatory/type TABLE [0 TO 27] OF CHAR	gives the time when session has terminated

11.1.4 Action

No immediate action is required.

11.1.5 Associated OM registers

None.

11.1.6 Additional information

This activity modifies the SCAI 102 log, so that it is now produced with two additional reasons of ‘HARDRESET TRANS CLEAR’ and ‘HARDRESET SESS CLEAR’.

X.25:

When a modified DV_APPL_LOGON is sent with the HARDRESET parameter (optional parameter) set to TRUE, this DV_APPL_LOGON message will take down corrupt SVC’s. If a SVC being cleared is the last SVC in a session then the session resources will be released and the SCAI102 log will be generated with the reason of ‘HARDRESET SESS CLEAR’

If any instances of corrupt transport are found then the transport data is cleared and a SCAI102 log with the reason of ‘HARDRESET TRANS CLEAR’ is generated.

NOTE:

If one SVC in a multi-SVC is found to be corrupt, then only that SVC will be taken down and the SCAI102 log will not be generated.

TCP/IP:

When the modified DV_APPL_LOGON is used, if a corrupt session is detected then the session resources allocated to the corrupt session are released and the SCAI102 log will be generated with the reason of ‘HARDRESET SESS CLEAR’.

If any instances of corrupt transport are found then the corrupt transport is released with the reason of ‘HARDRESET TRANS CLEAR’

12: Log changes (LG)

12.1 APS

12.1.1 Explanation

Log title: APS log
Name: APS1XX
Description: An APS1XX log is generated at the completion of each call to print APS call records to a log device.
Event type:Modified

12.1.2 Format

Figure 1 Formats of log reports

```
APS1XX Log_date Log_time Seqno INFO APS LOG ENTRY
MSG COUNT      = <Msg_Count>
CALLING DN     = <Calling_no>
CALLED DN      = <Called_no>
DATE           = <mm/dd>
ANSWER TIME = <hh:mm>
DURATION       = <min>
CHARGES        = <Charge>
BOOTH          = <Booth number>
```

Figure 2 Sample log reports

```
APS118 MAY01 14:22:39 9806 INFO APS LOG ENTRY
MSG COUNT      = 1
CALLING DN     = 1027835473
CALLED DN      = 1027835475
DATE           = 05/01
ANSWER TIME  = 14:22
DURATION       = 1
CHARGES        =  20
BOOTH          = 0
```

12.1.3 Field descriptions

Table 21 Field descriptions

Field	Value	Description
MSG COUNT	Numerical value	The number of APS log
CALLING DN	Numerical value	The directory number of the originating party
CALLED DN	Numerical value	The directory number of the terminating party
DATE	Numerical value	The month and day the call originated(mm/dd)
ANSWER TIME	Numerical value	The time of day at which the call was answered (hh:mm)
DURATION	Numerical value	The duration of the call (MIN)
CHARGES	Symbolic text and Numerical value	Dollar sign and charges or only charges
BOOTH	Numerical value	Booth number where the call is originated from. This is always zero in the case of direct dial calls

12.1.4 Action

No immediate action is required.

12.1.5 Associated OM registers

NONE.

12.1.6 Additional information

N/A.

13: Log changes (LG)

13.1 DFIL 110

13.1.1 Explanation

Log title: DFIL 110
Name: DFIL 110
Description: The DFIL110 log is produced when the carrier specified by the E800 or PVN database is not represented in table OCCINFO. When this report is printed it can be assumed that the call did not complete. The printing of this log does not impact call processing.
Event type:

13.1.2 Format

Figure 1 Formats of log reports

```
RTPT14BC    * DFIL110 mn dd hh:mm:ss ssdd 5400 FAIL SSP CARRIER DATA
ERROR
      HOST nn n nn nn DN nnnnnnnnnn
      UNDATAFILLED CARRIER
         CARRIER DIGITS = nnnn
               DIALED    DIGITS = nnnnnnnnnnn

         ROUTING DIGITS = nnnnnnnnn
```

Figure 2 Sample log reports

```
RTPT14BC   * DFIL110 JUL11 10:40:27 5400 FAIL SSP CARRIER DATA ERROR
HOST 02 0 04 05    DN 6136210048
      UNDATAFILLED CARRIER
         CARRIER DIGITS = 1234
               DIALED    DIGITS = 18005671002

 ROUTING DIGITS = 6136210048
```

13.1.3 Field descriptions

Table 22 Field descriptions

Field	Value	Description
Host	nn n nn nn	LEN (line equipment number)
DN	10 digit number	directory number of the callee
Undatafilled Carrier	constant	constant
Carrier Digits	4 digits	carrier digits
Dialed digits	11 digit number	E800 or PVN number
Routing Digits	10 digit number	number the E800 or PVN number uses
Date	mm dd	date log is produced
Time	hh mm ss	time the log is produced
FAIL SSP CARRIER DATA ERROR	constant	constant

13.1.4 Action

13.1.5 Associated OM registers

13.1.6 Additional information

14: Log changes (LG)

14.1 SPM300

14.1.1 Explanation

Log title: Device Fault
Name: Fault Report Log
Description: SPM300 log is generated when a device fault occurs
Event type: TBL

14.1.2 Format

Figure 1 Formats of log reports

```
** SPM300 <time stamp> TBL Device Fault
  Location: <node type> <node number> <circuit pack> <circuit packno>
  Status: <alarm status>
  Problem Description: <text up to 16 chars>
    <text up to 64 chars>
  Action:Replace the following cards in the ordered list.
  Cardlist:
    <device_cardlist >
```

Figure 2 Sample log reports

```
RTPL07BZ ***  SPM300 MAY20 14:00:54 2200 TBL  Device Fault Report
          Location   : SPM : 11 MGP : 0
          Status     : Alarm Raised
          Problem Description: Critical
            Hardware fault detected
          Action     : Replace the following cards in the order listed.
          Cardlist   :
            Site     Flr Row  FrPos SlfPos ShfPec     Slot
            HOST     1   M     2     0      NTLX67AA  3
            HOST     1   M     2     0      NTLX71AA  9
            HOST     1   M     2     1      NTLX65AA  11
```

14.1.3 Field descriptions

Table 23 Field descriptions

Field	Value	Description
Location: node type	SPM	PM type
Location: node number	0 to 2047	PM number
Location: circuit pack	CEM, OC-3, DSPR, DLC, VSP, MGP	circuit pack type
Location: circuit packno	0 to 27	circuit pack number
Status	alarm raised, fault cleared, info only	alarm status
Problem Description	no_problem, noncritical, critical, error and text	problem severity and problem decription text
Cardlist	card list consisting of site, floor, row, frame position, shelf pec and slot	card list

14.1.4 Action

Replace cards in order listed.

14.1.5 Associated OM registers

None

14.1.6 Additional information

None

14.2 SPM331

14.2.1 Explanation

Log title: Failed Device Protection Switch
Name: Failed spare log
Description: Generated when a device has a protection switch failure
Event type: TBL

14.2.2 Format

Figure 3 Formats of log reports

```
** SPM331 <time stamp> TBL Failed Device Protection Switch
    Location: <pm type> <node number> <circuit pack> <circuit packno>
    Status: <alarm status>
    Problem:  Device failed protection switch.
    Description: <text>
```

Figure 4 Sample log reports

```
** SPM331 Feb07 10:22:11 4700 TBL Failed Device Protection Switch
      Location:SPM 01 MGP 01
  Status:Alarm Raised
  Problem:Device failed protection switch.
  Description:
```

14.2.3 Field descriptions

Table 24 Field descriptions

Field	Value	Description
Location: pm type	SPM	pm type
Location: node number	0 to 2047	pm number
Location: circuit pack	CEM, OC-3, DSPR, DLC, VSP, MGP	circuit pack type

Table 24 Field descriptions

Field	Value	Description
Location: circuit packno	0 to 27	circuit pack number
Status	alarm raised, alarm cleared	alarm status
Description	text	problem text

14.2.4 Action

None

14.2.5 Associated OM registers

None

14.2.6 Additional information

None

14.3 SPM500

14.3.1 Explanation

Log title: Device State Change
Name: State Change Log
Description: Generated when a device changes state
Event type: INFO

14.3.2 Format

Figure 5 Formats of log reports

```
** SPM500 <time stamp> INFO Device State Change
  Location: <pm type> <node number> <circuit pack> <circuit packno>
  From:   <state>
  To:     <state>
```

Figure 6 Sample log reports

```
** SPM500 Feb07 10:22:11 4700 INFO Device State Change
Location: SPM 01 MGP 01
From:  INSV
To:    ISTB
```

14.3.3 Field descriptions

Table 25 Field descriptions

Field	Value	Description
Location: pm type	SPM	PM type
Location: node number	0 to 2047	PM Number
Location: circuit pack	CEM, OC-3, DSPR, DLC, VSP, MGP	circuit pack type
Location: circuit packno	0 to 27	circuit pack number
From	Uneq, SysB, ManB, OffL, CBsy, ISTb, InSv	device state
To	Uneq, SysB, ManB, OffL, CBsy, ISTb, InSv	device state

14.3.4 Action

None - INFO log

14.3.5 Associated OM registers

None

14.3.6 Additional information

None

14.4 SPM630

14.4.1 Explanation

Log title: Device Protection Switch
Name: Successful Spare Log
Description: Generated when a successful sparing event has occurred
Event type: INFO

14.4.2 Format

Figure 7 Formats of log reports

```
  ** SPM630 <time stamp> INFO Device Protection Switch
    Location: <pm type> <node number> <circuit pack> <circuit packno>
    <Sparing reason> from <circuit pack> <circuit packno> to <circuit pack>
<circuit packno>
```

Figure 8 Sample log reports

```
** SPM630 Feb07 10:22:11 4700 INFO Device Protection Switch
    Location:SPM 01  MGP 01
    Manual switch from MGP 01 to MGP 00
```

14.4.3 Field descriptions

Table 26 Field descriptions

Field	Value	Description
Location: pm type	SPM	PM type
Location: node number	0 to 2047	PM number
Location: circuit pack	CEM, OC-3, DSPR, DLC, VSP, MGP	circuit pack type
Location: circuit packno	0 to 27	circuit pack number
sparing reason	Manual switch, Forced switch, Automatic switch	sparing reason
circuit pack	CEM, OC-3, DSPR, DLC, VSP, MGP	circuit pack type
circuit packno	0 to 27	circuit pack number

14.4.4 Action

None - INFO log

14.4.5 Associated OM registers

None

14.4.6 Additional information

None

15: Log changes (LG)

15.1 DFIL324

15.1.1 Explanation

Log title: DFIL324
Name: DFIL324
Description: The DFIL324 is generated when an ISUP REL message is received containing a SAP of RLT_REQUEST_MSG and the RLT option is not assigned to the ISUP IT trunk in Table TRKOPTS.
Event type:

15.1.2 Format

Figure 1 Formats of log reports

```
URTPB04BA * DFIL324 APR07 14:37:37 6600 INFO Missing Datafill
CKT RTPBSS7IT    0
Missing RLT option in table TRKOPTS.
Called DR = nnnnnnnnn
```

Figure 2 Sample log reports

```
URTPB04BA * DFIL324 APR07 14:37:37 6600 INFO Missing Datafill
CKT RTPBSS7IT    0
Missing RLT option in table TRKOPTS.
Called DR = 411
```

15.1.3 Field descriptions

Table 27 Field descriptions

Field	Value	Description
CKT	Trunk name and circuit number	Contains the trunk and circuit on the aent that recieved an RLT request.
Called DR	10 digit number	Called number of the first leg which resulted in a SAP of RLT_REQUEST_MSG being returned in the ISUP REL message.

15.1.4 Action

When a DFIL324 is generated it indicates that the EAEO has not setup to process RLT calls for the trunk. The TOPS office should be contacted so that no further RLT requests are recieved on that trunk. If the EAEO does wish to process RLT calls on that trunk, then it should datafill the appropriate translations and assign RLT to the trunk in table TRKOPTS.

15.1.5 Associated OM registers

N/A

15.1.6 Additional information

N/A

16: Log changes (LG)

16.1 PKT 200

16.1.1 Explanation

Log title: PKT 200
Name: PKT CRC ERROR
Description: This log is generated whenever the differential CRC Error on a particular channel exceeds 5% .

The differential Error is calculated as follows:

Let

A = Previous CRC Errord Frames

B = CRC Errord Frames

C = Previous Total Frames

D = Total Frames

Then differential Error is

$$\frac{(B - A)}{(B - A) + (D - C)}$$

Event type: Info

16.1.2 Format

Figure 1 Formats of log reports

<Switch Name> **PKT200** <Month> <Date> <Time> **INFO CRC ERROR**
XLIU NO : <XLIU No.> **CHANNEL :**<Channel>
ERRORED FRAME RECEIVED: <> **PREVIOUS ERRORED FRAMES RECEIVED:**<>
FRAMES RECEIVED :<> **PREV FRAMES RECEIVED:** <>
PERCENTAGE ERROR: <Percentage Error>

Figure 2 Sample log reports

TCSA13AE CM PKT200 JUL25 12:32:17 9800 INFO CRC ERROR
XLIU NO : 1 CHANNEL :1
ERRORED FRAME RECEIVED: 1 PREVIOUS ERRORED FRAMES RECEIVED:0
FRAMES RECEIVED :0 PREV FRAMES RECEIVED: 0
PERCENTAGE ERROR: 100

16.1.3 Field descriptions

Table 28 Field descriptions

Field	Value	Description
XLIU No.	ULINT	This is the XLIU Number in which the problem occured.
Channel	ULINT	This indicates the channel Number on which the CRC Error occured.
ERRORED FRAME RECEIVED	ULINT	This field details the total number of Errored frames received so far on the channel in the XLIU.
PREVIOUS ERRORED FRAMES RECEIVED	ULINT	This field details the total number of Errored frames received till the previous pegging on the channel in the XLIU.
FRAMES RECEIVED	ULINT	This field details the total number of frames received so far on the channel in the XLIU
PREV FRAMES RECEIVED	ULINT	This field details the total number of frames received till the previous pegging on the channel in the XLIU.
PERCENTAGE ERROR	ULINT	This field gives the differential percentage for the CRC Error between the two pegging for the particular channel in the XLIU.

16.1.4 Action

A suggested action can be to manually swact the NIU Plane containing the channel so that further CRC Errors can be avoided. But this cannot gurantee a solution and may not sometimes solve the problem.

16.1.5 Associated OM registers

None.

16.1.6 Additional information

None.

Data Schema Highlights

Table	Comments	Actid
TOPSPARM	Changed	a59006653
TOPSPOS, IPSVCS, IPCOMID	Changed	a59006658
IBNRTx, OFRx, HNPACONT, FNPACONT	Changed	a59017604
TRKOPTS	Changed	a59021972
TRKGRP, VIRTGRPS, MPCFASTA, E911OFC	Changed	a59021993
DNREGION, DNREVXLA	Changed	a59022041
PKTVPROF	New	a59022288
OCHOSTQ, TQCQINFO, TOPSPARM, OCGRP	Changed	"
TOPSTOPT, TRKOPTS, OCGRP	Changed	a59022293
TOPSTERM	Deleted	a59022361
TQOGTKEY	Changed	"
TRKGRP, STDPRT	Changed	a59022437
E911TDRT	New	"
SCAISSRV	Changed	a59022448
SCAICOMS	Changed	a59022453
CUSTTIID, IBNFEAT, KSETFEAT	Changed	a59022533
TRIGITM	Changed	a59022554
ACDGRP	Changed	a59022576
CUSTSTN	Changed	a59022782
TOPSPARM	New	a59022816
DNSCRN	Changed	a59023407
SCRGRP	New	"
LTDEF, PRIPROF	Changed	a59023416

Data Schema Highlights

Table	Comments	Actid
XPMIPMAP	Changed	a59023612
LCMDRINV, LNINV	Changed	a59023787
MNCKTPAK	Changed	a59024393
OCGRP, OCDLGRP, OCIPDL, VLMEM	Changed	a59024821
ISUPTRK, TOPSTOPT, TOPAMAOP	Changed	a59026113
LGRPINV, MTAVERT	Changed	a59026377
TRKOPTS	Changed	a59026486

Data Schema List of Features

a59006653
a59006658
a59017604
a59021972
a59021993
a59022041
a59022288
a59022293
a59022361
a59022437
a59022448
a59022453
a59022533
a59022554
a59022576
a59022782
a59022816
a59023407
a59023416
a59023612
a59023787
a59024393
a59024821
a59026113
a59026377
a59026486

Data Schema List of Features

17: Data schema changes (DS)

17.1 Table information

17.1.1 Table name: TOPSPARM

TOPS PARaMeter

17.1.1.1 Functional description

Table TOPSPARM allows the Operating Company to specify TOPS options.

17.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

17.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSPARM	unchanged	current + 2	Minimal increase

17.1.1.4 Table fields

The following table lists fields for table TOPSPARM, PARMNAME and PARMVAL, along with the new tuples and their value ranges.

Table 2 Table fields

PARMNAME	PARMVAL
IPPOS__AUDIT_INTERVAL	<5 - 15>
IPPOS_AUDIT_THRESHOLD	<2 - 5>

Table 3 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
PARMNAME	Changed	N/A	IPPOS__AUDIT_INTERVAL IPPOS_AUDIT_THRESHOLD	two new default values for field parmname are added to the table
PARMVAL	Changed	N/A	5 (audit interval default) 3 (audit polling threshold default)	two new default values for field parmvalue are added for the new default parmname entries

17.1.1.5 Datafill example

The following example shows sample partial datafill for table TOPSPARM:

Table 4 Datafill example

PARMNAME	PARMVAL
.	.
.	.
.	.
IPPOS_AUDIT_INTERVAL	5
IPPOS__AUDIT_THRESHOLD	3
.	.
.	.
.	.

17.1.1.6 Table release history update

This table was last updated in the TOP14 release.

17.1.1.7 Supplementary information

None.

17.1.1.8 Translation verification tools

TOPSPARM does not use translation verification tools.

18: Data schema changes (DS)

18.1 Table information

18.1.1 Table name: TOPSPOS

TOPS Position Table

18.1.1.1 Functional description

Existing table.

18.1.1.2 Datafill sequence and implications

Table IPCOMID and IPSVCS must be datafilled before table TOPSPOS if IP based positions are being provisioned. The corresponding service in IPSVCS must be set to UDP. Table TRKOPTS must be datafilled before TOPSPOS for a packetized voice link. The datafill must indicate the trunk clli is dynamic with the POS application (unless a placeholder clli is in use). Additionally, if IP data is indicated, then packetized voice must be used; the converse is also true.

18.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSPOS		unchanged	

18.1.1.4 Table fields

The following table lists fields for table TOPSPOS.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
POSNO	unchanged			
VLTYPE	new	VLPATH selector	{TDM, PKTV}	Voice link type. TDM is a traditional voice link. PKTV is packetized (IP) voice.
VLCLLI	new	{PKTV} VLPATH	CLLI	Voice link CLLI.
VCCKT	unchanged	{TDM} VLPATH		
VCPDGRP	unchanged	{TDM} VLPATH		
CARDCODE	unchanged	{TDM} VLPATH		
DATATYPE	changed	DATAPATH selector	{DMODEM, TMS, IP}	Data link data type.
IPCOMID	new	{IP} DATAPATH	0-1023	IP data link communications identifier (reference to table IPCOMID)
URESOK	new	{IP} DATAPATH	{Y,N}	Indicates whether it is OK for the position to remain in the URES maintenance state indefinitely (rather than transitioning to SYSB) if an in-service request is not received from the position within 15 seconds.
POSTYPE	unchanged	{DMODEM} DATAPATH		
PROTOCOL	unchanged	{DMODEM} DATAPATH		
DATA_CIRCUIT	unchanged	{DMODEM} DATAPATH		
DATA_PADGRP	unchanged	{DMODEM} DATAPATH		
XMISSION	unchanged	{DMODEM} DATAPATH		
POSTYPE	unchanged	{TMS} DATAPATH		

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
PROTOCOL	unchanged	{TMS} DATAPATH		
TPCNO	unchanged	{TMS} DATAPATH		
TPCPOSNO	unchanged	{TMS} DATAPATH		
POSAREA	unchanged			

18.1.1.5 Datafill example

The following example shows sample datafill for table TOPSPOS:

```
POSNO
        VLPATH
                        DATAPATH
                                                POSAREA
-------------------------------------------------------------

2000
      PKTV   POSCLLI1
                IP 4 N
                                OPR 6 QMSCAM CORECAM 50

2001
      PKTV   POSCLLI2
                IP 4 Y
                                OPR 6 QMSCAM CORECAM 50

2002
      TDM    TMS   0   1   3    NPDGP    DS1SIG
                TMS MP OPP 200 0
                                OPR 6 QMSCAM CORECAM 50
```

18.1.1.6 Table release history update

- new selector VLTYPE
- new field POSCLLI under PKTV refinement
- entry IP added to field DATATYPE
- new refinement for IP DATATYPE - fields COMID and URESOK

18.1.1.7 Supplementary information

None.

18.1.1.8 Translation verification tools

TOPSPOS does not use translation verification tools.

18.1.1.9 Dump and Restore

On transition from pre-TOP15 to TOP15 and above loads, the VLTYPE field will be set to TDM and all remaining fields will be brought over.

18.1.2 Table name: IPSVCS

Internet Protocol Services Table

18.1.2.1 Functional description

Existing table, unchanged.

18.1.2.2 Datafill sequence and implications

This activity adds the restriction that the IP Position application does not allow the PROTOCOL value in table IPSVCS to be changed to anything except UDP if the IP service is datafilled against a COMID that is used for IP positions. Neither does it allow the PORT to be changed unless all positions associated with the IP service are offline.

18.1.2.3 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
IPSVCS	unchanged	unchanged	

18.1.2.4 Table fields

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
SERVICE	unchanged			
PORT	unchanged			
PROTOCOL	unchanged			

18.1.2.5 Datafill example

Unchanged.

18.1.2.6 Table release history update

- Added restrictions on modifying tuples that are in use by the IP Position application.

18.1.2.7 Supplementary information

None.

18.1.2.8 Translation verification tools

Unchanged.

18.1.2.9 Dump and Restore

Unchanged.

18.1.3 Table name: IPCOMID

Internet Protocol Communication Identifier Table

18.1.3.1 Functional description

Existing table, unchanged.

18.1.3.2 Datafill sequence and implications

This activity adds the restriction that the IP Position application does not allow the SERVICE or XPMNAME values in table IPCOMID to be changed if the comid is datafilled against a position in table TOPSPOS, unless all positions associated with the comid are offline.

18.1.3.3 Table size

Table 5 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
IPCOMID	unchanged	unchanged	

18.1.3.4 Table fields

Table 6 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
COMID	unchanged			
SERVICE	unchanged			
XPMNAME	unchanged			

18.1.3.5 Datafill example

Unchanged.

18.1.3.6 Table release history update

- Added restrictions on modifying tuples that are in use by the IP Position application.

18.1.3.7 Supplementary information

None.

18.1.3.8 Translation verification tools

Unchanged.

18.1.3.9 Dump and Restore

Unchanged.

19: Data schema changes (DS)

19.1 Table information

19.1.1 Table name: IBNRTx[1]

IBN Routing Tables

19.1.1.1 Functional description

N/A

19.1.1.2 Datafill sequence and implications

Tables should be datafilled in the following sequence:

- SUPERTKG
- DIGMAN
- IBNRTx

19.1.1.3 Table size

Unchanged.

19.1.1.4 Table fields

The following table lists fields affected for table IBNRTx.

[1]Where x is one of E, 2, 3, 4

Table 1 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTIONS (Option list of SG selector.)	New	Subfield	{DMI}	A new options list has been added to the SG selector
DMI	New	Refinement for DMI option.	1 to 31,999	A DMI option has been added to the SG selector's new option list. The new DMI option enables the called number characteristics to be manipulated by use of table DIGMAN. This is an index into table DIGMAN.

19.1.1.5 Datafill example

The following example shows sample datafill for table IBNRTx:

Figure 1 Example datafill showing the use of the SG selector with DMI

```
TABLE DIGMAN
DMIKEY
                                                                  DMIDATA
-----------------------------------------------------------------------------
  1010
                            (   REM  4) (    CF  1) (ARDENY ) (   ANS  VOX)$


TABLE SUPERTKG
SGNAME
                                                                  TRKGRPS
-----------------------------------------------------------------------------
             KNGARG
                                      (  KNGA2090FTBWE) (  KNGA3084J2ICE)$


TABLE IBNRTE
RTE                                                               RTELIST

-----------------------------------------------------------------------------
 696                                 (   SG   CYC  10 KNGARG (DMI 1010) $)$
                                                                         $
```

19.1.1.6 Table release history update

Added an options list to the SG selector.

Added a new option, DMI that allows the manipulation of the called number characteristics.

19.1.1.7 Supplementary information

None.

19.1.1.8 Translation verification tools

The following example shows Traver output, when used to verify IBNRTx.

Figure 2 Example Traver of SG with DMI in IBN routing table

```
>traver l 7222500 919199741001 b
TABLE IBNLINES
HOST 00 0 06 01 0 DT STN IBN 7222500 THE_FAR_SIDE 0 0 613 (LNR) $
TABLE DNATTRS
613 722 2500
    (PUBLIC ( NAME PRI_IBN_0) $)$ $
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
TUPLE NOT FOUND
TABLE CUSTSTN
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE NCOS
THE_FAR_SIDE 0 0 0 KDK0 ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
THE_FAR_SIDE PXDK MERXLA FTCOMM 0 KDK
TABLE DIGCOL
KDK 9 POTS Y
TABLE IBNXLA: XLANAME PXDK
PXDK 9 NET N Y 1 Y POTS Y N DOD N 80 613_PKDK_80 L613_LATA1_69 NONE $
TABLE DIGCOL
POTS specified: POTS digit collection
TABLE LINEATTR
80 IBN NONE NT 0 0 NILSFC 0 NIL NIL 00 613_PKDK_80 L613_LATA1_69 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_PKDK_80 FR01 613 PKDK NONE N $ $
TABLE RATEAREA
L613_LATA1_69 L613 NIL LATA1 $
TABLE STDPRTCT
PKDK ( 1) ( 0) 2
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 19 19 N DD 1 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HPCPATTN
TUPLE NOT FOUND
TABLE HNPACONT
613 Y 995 1 ( 203) ( 1) ( 84) ( 0) 3 $
 . SUBTABLE HNPACODE
 . 919 919 HNPA 0
 . 974 974 LRTE 974

(continued on next page)
```

Example TRAVER of SG selector with DMI option in an IBN routing table (cont.)

```
. SUBTABLE RTEREF
 .  974 T IBNRTE 974
 .  . TABLE IBNRTE
 .  .  974 SG CHCCL 15 PRIHUNT7 (DMI 11)$
 .  .  . TABLE SUPERTKG
 .  .  . PRIHUNT7 (SGNACLK2) (SGNICLK3) (SGNACLK5) (SGNICLK6) $
 .  .  . TABLE DIGMAN
          . . 11 (CL BEG) (REM 6)
.  .       . . (INC 336764)
 .  .  . EXIT TABLE DIGMAN
 .  . EXIT TABLE IBNRTE
 . EXIT TABLE RTEREF
EXIT TABLE HNPACONT
LNP00100 SOC Option is IDLE.
LNP Info: Called DN is not resident.
LNP Info: HNPA results are used.

DIGIT TRANSLATION ROUTES

1 SGNACLK2        N CDN E164 NA 3367641001 NIL_NSF  BC 3.1_KHZ_AUD

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 ATB

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

19.1.2 Table name: OFRx[1]

Office Routing Tables

19.1.2.1 Functional description

N/A

19.1.2.2 Datafill sequence and implications

Tables should be datafilled in the following sequence:

- SUPERTKG
- DIGMAN
- OFRx

19.1.2.3 Table size

Unchanged.

[1]Where x is one of T, 2, 3 or 4

19.1.2.4 Table fields

The following table lists fields affected for table OFRx:

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTIONS (Option list of SG selector.)	New	Subfield	{DMI}	A new options list has been added to the SG selector
DMI	New	Refinement for DMI option.	1 to 31,999	A DMI option has been added to the SG selector's new option list. The new DMI option enables the called number characteristics to be manipulated by use of table DIGMAN. This is an index into table DIGMAN.

19.1.2.5 Datafill example

The following example shows sample datafill for table OFRx:

Figure 3 Example datafill showing the use of the SG selector with DMI

```
TABLE DIGMAN
DMIKEY
                                                                  DMIDATA
-----------------------------------------------------------------------------
  1010
                           (   REM  4) (    CF  1) (ARDENY ) (   ANS  VOX)$


TABLE SUPERTKG
SGNAME
                                                                  TRKGRPS
-----------------------------------------------------------------------------
             KNGARG
                                      (  KNGA2090FTBWE) (  KNGA3084J2ICE)$


TABLE OFRTE
RTE                                                               RTELIST
                                                                   OPTIONS
-----------------------------------------------------------------------------
 696                                 (   SG   CYC  10 KNGARG (DMI 1010) $)$
                                                                         $
```

19.1.2.6 Table release history update

Added an options list to the SG selector.

Added a new option, DMI that allows the manipulation of the called number characteristics.

19.1.2.7 Supplementary information

None.

19.1.2.8 Translation verification tools

The following example shows the output from Traver when it is used to verify OFRx.

Figure 4 Example Traver of SG with DMI in Office routing table

```
>traver l 7222500 919199871001 b
TABLE IBNLINES
HOST 00 0 06 01 0 DT STN IBN 7222500 THE_FAR_SIDE 0 0 613 (LNR) $
TABLE DNATTRS
613 722 2500
    (PUBLIC ( NAME PRI_IBN_0) $)$ $
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
TUPLE NOT FOUND
TABLE CUSTSTN
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE NCOS
THE_FAR_SIDE 0 0 0 KDK0 ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
THE_FAR_SIDE PXDK MERXLA FTCOMM 0 KDK
TABLE DIGCOL
KDK 9 POTS Y
TABLE IBNXLA: XLANAME PXDK
PXDK 9 NET N Y 1 Y POTS Y N DOD N 80 613_PKDK_80 L613_LATA1_69 NONE $
TABLE DIGCOL
POTS specified: POTS digit collection
TABLE LINEATTR
80 IBN NONE NT 0 0 NILSFC 0 NIL NIL 00 613_PKDK_80 L613_LATA1_69 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_PKDK_80 FR01 613 PKDK NONE N $ $
TABLE RATEAREA
L613_LATA1_69 L613 NIL LATA1 $
TABLE STDPRTCT
PKDK ( 1) ( 0) 2
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 19 19 N DD 1 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HPCPATTN
TUPLE NOT FOUND
TABLE HNPACONT
613 Y 995 1 ( 203) ( 1) ( 84) ( 0) 3 $
 . SUBTABLE HNPACODE
 . 919 919 HNPA 0
 . 987 987 LRTE 987

(continued on next page)
```

Example TRAVER of SG selector with DMI option in an Office routing table (cont.)

```
. SUBTABLE RTEREF
 .  987 T OFRT 987
 .  . TABLE OFRT
 .  .  987 SG CHCL 4 PRIHUNT7 (DMI 9)$
 .  .  . TABLE SUPERTKG
 .  .  . PRIHUNT7 (SGNACLK2) (SGNICLK3) (SGNACLK5) (SGNICLK6) $
 .  .  . TABLE DIGMAN
          . . 9 (CL BEG) (REM 6)
.  .       . . (INC 704821)
 .  .  . EXIT TABLE DIGMAN
 .  . EXIT TABLE IBNRTE
 . EXIT TABLE RTEREF
EXIT TABLE HNPACONT
LNP00100 SOC Option is IDLE.
LNP Info: Called DN is not resident.
LNP Info: HNPA results are used.

DIGIT TRANSLATION ROUTES

1 SGNACLK2        N CDN E164 NA 7048211001 NIL_NSF  BC 3.1_KHZ_AUD

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 ATB

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

19.1.3 **Table name:** HNPACONT, subtable RTEREF

HNPA Routing Table

19.1.3.1 Functional description

N/A

19.1.3.2 Datafill sequence and implications

Tables should be datafilled in the following sequence:

- SUPERTKG

- DIGMAN
- HNPACONT, subtable RTEREF
- HNPACONT, subtable HNPACODE

19.1.3.3 Table size

Unchanged.

19.1.3.4 Table fields

The following table lists fields affected for table HNPACONT, subtable RTEREF:

Table 3 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTIONS (Option list of SG selector.)	New	Subfield	{DMI}	A new options list has been added to the SG selector
DMI	New	Refinement for DMI option.	1 to 31,999	A DMI option has been added to the SG selector's new option list. The new DMI option enables the called number characteristics to be manipulated by use of table DIGMAN. This is an index into table DIGMAN.

19.1.3.5 Datafill example

The following example shows sample datafill for table HNPACONT, subtable RTEREF:

Figure 5 Example datafill showing the use of the SG selector with DMI

```
TABLE DIGMAN
DMIKEY
                                                                        DMIDATA
------------------------------------------------------------------------------
  1010
                            (   REM  4) (    CF  1) (ARDENY ) (   ANS  VOX)$


TABLE SUPERTKG
SGNAME
                                                                       TRKGRPS
------------------------------------------------------------------------------
             KNGARG
                                      (  KNGA2090FTBWE) (  KNGA3084J2ICE)$


TABLE OFRTE
RTE                                                                  RTELIST
                                                                      OPTIONS
------------------------------------------------------------------------------
 696                                 (   SG   CYC  10 KNGARG (DMI 1010) $)$
                                                                            $
```

19.1.3.6 Table release history update

Added an options list to the SG selector.

Added a new option, DMI that allows the manipulation of the called number characteristics.

19.1.3.7 Supplementary information

None.

19.1.3.8 Translation verification tools

The following example shows the output from Traver when it is used to verify HNPACONT, subtable RTEREF.

Figure 6 Example Traver of SG with DMI in HNPA routing table

```
>traver l 7222500 919199861001 b
TABLE IBNLINES
HOST 00 0 06 01 0 DT STN IBN 7222500 THE_FAR_SIDE 0 0 613 (LNR) $
TABLE DNATTRS
613 722 2500
    (PUBLIC ( NAME PRI_IBN_0) $)$ $
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
TUPLE NOT FOUND
TABLE CUSTSTN
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE NCOS
THE_FAR_SIDE 0 0 0 KDK0 ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
THE_FAR_SIDE PXDK MERXLA FTCOMM 0 KDK
TABLE DIGCOL
KDK 9 POTS Y
TABLE IBNXLA: XLANAME PXDK
PXDK 9 NET N Y 1 Y POTS Y N DOD N 80 613_PKDK_80 L613_LATA1_69 NONE $
TABLE DIGCOL
POTS specified: POTS digit collection
TABLE LINEATTR
80 IBN NONE NT 0 0 NILSFC 0 NIL NIL 00 613_PKDK_80 L613_LATA1_69 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_PKDK_80 FR01 613 PKDK NONE N $ $
TABLE RATEAREA
L613_LATA1_69 L613 NIL LATA1 $
TABLE STDPRTCT
PKDK ( 1) ( 0) 2
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 19 19 N DD 1 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HPCPATTN
TUPLE NOT FOUND
TABLE HNPACONT
613 Y 995 1 ( 197) ( 1) ( 84) ( 0) 3 $
 . SUBTABLE HNPACODE
 . 919 919 HNPA 0
 . 986 986 LRTE 986

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```

Example TRAVER of SG selector with DMI option in the HNPA routing table (cont.)

```
. SUBTABLE RTEREF
 .  986 SG CHCL 15 PRIHUNT1 (DMI 7)$
 .  . TABLE SUPERTKG
 .  . PRIHUNT1 (SGNACLK1) (SGNACLK2) (SGNICLK3) (SGNACLK4) (SGNACLK5) (SGNICLK6)
 .  .     (SGNACLK7) (SGNACLK8) (SGNICLK9) (SGNACLK10) (SGNACLK11) (SGNICLK12)
 .  .     (SGNACLK13) (SGNACLK14) (SGNICLK15) $
.  .  . TABLE DIGMAN
  . .   7 (CL BEG) (REM 6)
.  .  . . (INC 228321)
 .  .  . EXIT TABLE DIGMAN
 . EXIT TABLE RTEREF
EXIT TABLE HNPACONT
LNP00100 SOC Option is IDLE.
LNP Info: Called DN is not resident.
LNP Info: HNPA results are used.

DIGIT TRANSLATION ROUTES

1 SGNACLK1       N CDN E164 NA 2283211001 NIL_NSF BC 3.1_KHZ_AUD

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 *CONF

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

19.1.4 **Table name:** FNPACONT, subtable RTEREF

FNPA Routing Table

19.1.4.1 Functional description

N/A

19.1.4.2 Datafill sequence and implications

Tables should be datafilled in the following sequence:

- SUPERTKG
- DIGMAN
- FNPACONT, subtable RTEREF
- FNPACONT, subtable FNPACODE

19.1.4.3 Table size

Unchanged.

19.1.4.4 Table fields

The following table lists fields affected for table FNPACONT, subtable RTEREF:

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTIONS (Option list of SG selector.)	New	Subfield	{DMI}	A new options list has been added to the SG selector
DMI	New	Refinement for DMI option.	1 to 31,999	A DMI option has been added to the SG selector's new option list. The new DMI option enables the called number characteristics to be manipulated by use of table DIGMAN. This is an index into table DIGMAN.

19.1.4.5 Datafill example

The following example shows sample datafill for table FNPACONT, subtable RTEREF:

Figure 7 Example datafill showing the use of the SG selector with DMI

```
TABLE DIGMAN
DMIKEY
                                                                        DMIDATA
------------------------------------------------------------------------------
  1010
                            (   REM  4) (    CF  1) (ARDENY ) (   ANS  VOX)$


TABLE SUPERTKG
SGNAME
                                                                      TRKGRPS
------------------------------------------------------------------------------
             KNGARG
                                        (  KNGA2090FTBWE) (  KNGA3084J2ICE)$


TABLE OFRTE
RTE                                                                 RTELIST
                                                                     OPTIONS
------------------------------------------------------------------------------
 696                                  (   SG   CYC  10 KNGARG (DMI 1010) $)$
                                                                           $
```

19.1.4.6 Table release history update

Added an options list to the SG selector.

Added a new option, DMI that allows the manipulation of the called number characteristics.

19.1.4.7 Supplementary information

None.

19.1.4.8 Translation verification tools

The following example shows the output from Traver when it is used to verify FNPACONT, subtable RTEREF.

Figure 8 Example Traver of SG with DMI in FNPA routing table

```
>traver l 7222500 917059851001 b
TABLE IBNLINES
HOST 00 0 06 01 0 DT STN IBN 7222500 THE_FAR_SIDE 0 0 613 (LNR) $
TABLE DNATTRS
613 722 2500
    (PUBLIC ( NAME PRI_IBN_0) $)$ $
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
TUPLE NOT FOUND
TABLE CUSTSTN
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE NCOS
THE_FAR_SIDE 0 0 0 KDK0 ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
THE_FAR_SIDE PXDK MERXLA FTCOMM 0 KDK
TABLE DIGCOL
KDK 9 POTS Y
TABLE IBNXLA: XLANAME PXDK
PXDK 9 NET N Y 1 Y POTS Y N DOD N 80 613_PKDK_80 L613_LATA1_69 NONE $
TABLE DIGCOL
POTS specified: POTS digit collection
TABLE LINEATTR
80 IBN NONE NT 0 0 NILSFC 0 NIL NIL 00 613_PKDK_80 L613_LATA1_69 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_PKDK_80 FR01 613 PKDK NONE N $ $
TABLE RATEAREA
L613_LATA1_69 L613 NIL LATA1 $
TABLE STDPRTCT
PKDK ( 1) ( 0) 2
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 17 19 N DD 1 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HPCPATTN
TUPLE NOT FOUND
TABLE HNPACONT
613 Y 995 1 ( 197) ( 1) ( 84) ( 0) 3 $
 . SUBTABLE HNPACODE
 . 705 705 FNPA 0
TABLE FNPACONT
705 999 - ( 2) ( 0) ( 2)
 . SUBTABLE FNPACODE
 . 985 985 985 Y


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```

Example TRAVER of SG selector with DMI option in the FNPA routing table (cont.)

```
. SUBTABLE RTEREF
 .  985 SG CHCL 15 PRIHUNT1 (DMI 8)$
 .  . TABLE SUPERTKG
 .  . PRIHUNT1 (SGNACLK1) (SGNACLK2) (SGNICLK3) (SGNACLK4) (SGNACLK5) (SGNICLK6)
 .  .     (SGNACLK7) (SGNACLK8) (SGNICLK9) (SGNACLK10) (SGNACLK11) (SGNICLK12)
 .  .     (SGNACLK13) (SGNACLK14) (SGNICLK15) $
.  .  . TABLE DIGMAN
  . .   8 (CL BEG) (REM 6)
.  .  . . (INC 201444)
 .  .  . EXIT TABLE DIGMAN
 . EXIT TABLE RTEREF
EXIT TABLE FNPACONT
LNP00100 SOC Option is IDLE.
LNP Info: Called DN is not resident.
LNP Info: HNPA results are used.

DIGIT TRANSLATION ROUTES

1 SGNACLK1       N CDN E164 NA 2014441001 NIL_NSF BC 3.1_KHZ_AUD

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 *CONF

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

20: Data schema changes (DS)

20.1 Table information

20.1.1 Table name: TRKOPTS

Trunk Option Table

20.1.1.1 Functional description

The table TRKOPTS is used to provision options on trunk groups. There is an entry in the table for each option assigned on a trunk group. The key of the table is composed of the CLLI of the trunk group, and the name of the option.

HPC Call Queuing (HPC CQ) feature reuses option HPCNOTQ of table TRKOPTS. This option is used to prevent an HPC call to be queued on a supported public (i.e. IT, TO, T2, ATC and CELL) trunk group when the HPC CQ feature is enabled on an office wide basis through office parameter HPC_CALL_QUEUING.

20.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

20.1.1.3 Table size

The HPC CQ feature does not change the size of the table.

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TRKOPTS	**0**	**131072**	The size of this table changes dynamically.

20.1.1.4 Table fields

HPCNOTQ option is extended from P2, PX, and PRA egress trunks to also include IT, TO, T2, ATC and CELL public trunks. There is no changes in the existing fields and options.

20.1.1.5 Datafill example

The following example shows sample datafill for table TRKOPTS with HPCNOTQ option:

Figure 1 HPCNOTQ Option for Public trunks

```
CI:
>TABLE TRKOPTS
TABLE: TRKOPTS
>ADD ISUPT2 HPCNOTQ HPCNOTQ
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE TO BE ADDED:
     ISUPT2 HPCNOTQ   HPCNOTQ
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
>
```

20.1.1.6 Datafill error messages

This section presents messages displayed when an attempt is made to add a tuple that contains an error. Note that only error messages specific to the HPCNOTQ option are mentioned here. Refer to document AQ1574DS for generic TRKOPTS error descriptions (e.g. duplicate entry, invalid CLLI, etc.).

Note that HPCNOTQ specific error messages are always followed by the message:

```
"Error reported by option HPCNOTQ with VPROC operation defined in
module HPCOPTUI."
```

This message indicates that the error is specific to the HPCNOTQ trunk option.

20.1.1.6.1 Unsupported trunk type

When an attempt is made to assign the HPCNOTQ option on a trunk group of a type other then IT, T2, TO, ATC, CELL, P2, PX and PRA, the following error message is displayed:

```
"*** ERROR - HPCNOTQ option can only be assigned to IT, T2, TO,
             ATC, CELL, P2, PX and PRA trunk types."
```

20.1.1.6.2 Invalid trunk direction

When an attempt is made to assign the HPCNOTQ option on an incoming trunk group, the following error message is displayed:

```
"*** ERROR - Must be 2W or OUTGOING Trunk."
```

When the HPCNOTQ option is assigned to a trunk group and an attempt is made to change the direction of that trunk group to *incoming* in table TRKSGRP, the following error message is displayed:

```
"*** ERROR - Incoming trunk not supported by HPCNOTQ option
             datafilled in table TRKOPTS.
 TRKSGRP data conflicts with data in table TRKOPTS"
```

20.1.1.6.3 Invalid Signalling Type

When an attempt is made to assign the HPCNOTQ option on a CELL trunk group type with signaling other than MF signaling, the following error message is displayed:

```
"*** ERROR - HPCNOTQ option can only be assigned on MF signaling
for CELL trunk Type."
```

When an attempt is made to assign the HPCNOTQ option on IT, TO, T2 and ATC trunk group type with signaling other than SS7 and MF, the following error message is displayed:

```
"*** ERROR - HPCNOTQ option can only be assigned on SS7 and MF
signaling for IT, TO, T2 and ATC Trunk Type."
```

When the HPCNOTQ option is assigned to an CELL trunk group and an attempt is made to change the signaling of that trunk group in table TRKSGRP, the following error message is displayed:

```
"*** ERROR - Only MF signaling type is allowed for CELL Trunk

             Group Type for HPCNOTQ option in table TRKOPTS.

TRKSGRP data conflicts with data in table TRKOPTS"
```

When the HPCNOTQ option is assigned to a supported public trunk group (IT, TO, T2 and ATC) and an attempt is made to change the signaling of that trunk group in table TRKSGRP, the following error message is displayed:

```
"*** ERROR - Only MF and SS7 signaling types are allowed for
current Trunk Type for HPCNOTQ option in table TRKOPTS.

TRKSGRP data conflicts with data in table TRKOPTS"
```

When an attempt is made to assign HPCNOTQ option on a supported public trunk which is not datafilled in Table TRKSGRP then the following error message is generated:

```
"*** ERROR - Current GROUP should be datafilled in Table TRKSGRP
prior to datafilling HPCNOTQ option in Table TRKOPTS."
```

20.1.1.6.4 HPCTQ and HPCNOTQ option conflict

HPCTQ and HPCNOTQ option can be assigned on public trunk groups. Both the options can not be assigned simultaneously on the same trunk group. When an attempt is made to assign the HPCNOTQ option on a trunk group with HPCTQ option already assigned, the following error message is displayed:

```
"***ERROR - HPCNOTQ can not be assigned to a trunk group having
HPCTQ option."
```

Similarly, when an attempt is made to assign the HPCTQ option on a trunk group with HPCNOTQ option already assigned, the following error message is displayed:

```
"***ERROR - HPCTQ can not be assigned to a trunk group having
HPCNOTQ option."
```

20.1.1.6.5 HPCTQ and HPCCQ option

HPCTQ has preference over HPCCQ. When the HPCTQ option is assigned on a trunk while HPCCQ is enabled, following warning message is displayed:

```
"*** WARNING - HPC_CALL_QUEUING is ON.

HPCTQ parameters will have precedence over HPCCQ parameters."
```

20.1.1.7 Table release history update

HPCNOTQ option is extended for public trunk groups also.

20.1.1.8 Supplementary information

None.

20.1.1.9 Translation verification tools

The new HPCNOTQ option of table TRKOPTS is not used by translation verification tools.

21: Data schema changes (DS)

21.1 Table information

21.1.1 Table name: MPCFASTA

MPC Fast Application Table

21.1.1.1 Functional description

Table MPCFASTA identifies applications that use the MPC Fast Utility, a streamlined I/O interface through the MPC. Each application has a tuple in MPCFASTA.

Each tuple in MPCFASTA contains the alphanumeric application name (INDEX), the time between audits performed (AUDITFRQ), either minutes or seconds (UNITS), the type of link audit failure recovery (RECOVERY) procedure to be used and the MLC list (MLCLIST) that the specified MLCs per application. An MLC consists of one MPC, one link on the MPC, and one channel of the link.

Feature Specific Requirements:

- This feature requires 2 MLCs to be datafilled per applications.
- This feature adds two new application ids, E911SR01 and E911SR02. E911SR01 application would correspond to the primary Off-Board Selective Routing Interface and E911SR02 would be the secondary Interface.
- Since this feature will not support the link audit the AUDITFRQ should be datafilled as 0, indicating that there will be no mpc internal link audits performed on the links. The setting of the field RECOVERY will not apply.

21.1.1.2 Datafill sequence and implications

The MPC tables must be datafilled in the following sequence:

- MPC - Table MPC identifies the MPC card hardware in the DMS computing module (CM) and requires one entry or tuple for each MPC.

- MPCLINK - Table MPCLINK specifies the link and protocol information for cards datafilled in the table MPC. Table MPCLINK can be datafilled with any valid multiprotocol controller (MPC) link definition and protocol combination, followed by a group of protocol-specific fields.
- MPCFASTA - MPC Fast Application Table. Two new application ids (E911SR01 and E911SR02) will be created for use in this table.

21.1.1.3 Table size

There is no changes to the existing table size

21.1.1.4 Table fields

The following table lists the modified fields for table MPCFASTA

Table 1 Table MPCFASTA field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
INDEX	Changed	None	E911SR01 E911SR02	New entries added to the INDEX field.

21.1.1.5 Datafill example

The following example shows sample datafill for table MPCFASTA

Table 2

INDEX	AUDITYPE	AUDITFRQ	UNITS	RECOVERY	MLCLIST
E911SR01	IDLE	0	MINUTES	REGULAR	(4 2 1) (4 3 1)
E911SR02	IDLE	0	MINUTES	REGULAR	(6 2 1) (6 3 1)

21.1.1.6 Table release history update

Two new application ids E911SR01 and E911SR02 will be added to the INDEX field of the existing table MPCFASTA.

21.1.1.7 Supplementary information

Not applicable

21.1.1.8 Translation verification tools

Not applicable

21.1.2 Table name: E911OFC

E911 Office Table

21.1.2.1 Functional description

Table E911OFC is an "office-parm-like" table specific to E911. Currently it only contains bools (option is either on or off).

This feature will add the following two new options OFBSR related options:

- USE_OFBSR_INTERFACE - Option indicating whether the office supports the Off-Board Selective Routing (OFBSR) Interface.
- USE_ONBOARD_SRDB - Option indicating that in the event of OFBSR query failure the On-Board Database (E911SRDB) will be used for routing purposes.

21.1.2.2 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
E911OFC	na	na	Memory allocation is nominal

21.1.2.3 Table fields

The following table lists fields for table E911OFC

Table 4 Table E911OFC field descriptions

E911 Option Subfield	New or Changed	Subfield or refinement	Entry	Explanation and action
E911OPTN	Changed	Subfield	use_ofbsr_interface	Boolean indicating whether the Off-Board Selective Database will be used on the office wide basis.

Table 4 Table E911OFC field descriptions

E911 Option Subfield	New or Changed	Subfield or refinement	Entry	Explanation and action
E911OPTN	Changed	Subfield	use_onboard_srdb	Boolean indicating whether E911SRDB table will be used as backup to the OFBSR database.

21.1.2.4 Datafill example

The following example shows sample datafill for table E911OFC

```
TABLE: E911OFC
>add
E911OPTN:
>use_ofbsr_interface
*** This will affect the routing of E911 calls ***
USE_OFBSR_DATABASE will cause E911 calls to route
via the Off_Board SRDB. Unavailability of the OFBSR
will cause the E911 calls to default route.
Setting USE_ONBOARD_SRDB will allow the E911 calls
to route via E911SRDB table in the event when no
response is received from OFBSR.
TUPLE TO BE ADDED:
  USE_OFBSR_INTERFACE
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>add
E911OPTN:
>use_onboard_srdb
USE_ONBOARD_SRDB should be set if E911SRDB table is
datafilled. Setting USE_ONBOARD_SRDB will allow the
E911 calls to route via E911SRDB table in the event
when no response is received from OFBSR.
TUPLE TO BE ADDED:
  USE_ONBOARD_SRDB
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.



>pos use_ofbsr_interface
   USE_OFBSR_INTERFACE
>del
Removing USE_OFBSR_INTERFACE means that all E911
calls routed will be routed via E911SRDB table.
USE_ONBOARD_SRDB should be removed if set.
TUPLE TO BE DELETED
   USE_OFBSR_INTERFACE

>pos use_onboard_srdb
   USE_ONBOARD_SRDB
>del
If USE_OFBSR_INTERFACE is set removal of USE_ONBOARD_SRDB
will cause E911 calls to be default routed based on
the facility’s ESN index.
```

```
TUPLE TO BE DELETED
   USE_ONBOARD_SRDB
```

21.1.2.5 Table release history update

The following parameters added:

- USE_OFBSR_INTERFACE - A boolean option to elect the Off-Board Selective Routing for all E911 calls in the office.
- Use_ONBOARD_SRDB - A boolean option to indicate if the E911SRDB table will be used if no response is received from OFBSR.

21.1.2.6 Supplementary information

The default setting is to not data fill table E911OFC.

21.1.2.7 Translation verification tools.

E911OFC does not use translation verification tools.

21.1.3 Table name: TRKGRP

E911 table for Trunk Group Data

21.1.3.1 Functional description

Table TRKGRP contains the definitions of logical trunk data. This feature will enhance the type definition for E911 trunks, both MF and ISUP, by adding a new boolean parameter.

21.1.3.2 Table size

Table 5 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TRKGRP	na	na	Memory allocation is nominal

21.1.3.3 Table fields

The following table lists fields for table TRKGRP

Table 6 Table TRKGRP field descriptions

E911 Option Subfield	New or Changed	Subfield or refinement	Entry	Explanation and action
OFBSR	New	Subfield	Y/N	Boolean indicating whether the facility is using the Off-Board Selective Database. The default is ‘N’.

21.1.3.4 Datafill example

The following two table shows sample data fills for table TRKGRP:

Table 7 Datafilf example for ISUP trunk

```
TABLE: TRKGRP
>pos e911ics7
    E911ICS7
        IT 0 ELO NCRT IC NIL MIDL 613 AT1 NSCR 613 000 N N
        (E911 747 113 E911_STD Y N 0 0) $
                                 ↑
                              OFBSR
```

Table 8 Datafill example for MF trunk

```
TABLE: TRKGRP
>pos e911icmf
    E911ICMF
            E911 20 ELO NCRT NPRT 613 Y 0 Y BELL 1 10 10 REV 692 111 N N
                                      ↑
                                   OFBSR
```

21.1.3.5 Table release history update

The following information was added:

- OFBSR: A boolean value to indicate if the facility is using the Off-Board Selective Routing database to complete translations and routing of the 911 call.

21.1.3.6 Supplementary information

Default will be set to ‘N’.

21.1.3.7 Translation verification tools

Setting the OFBSR field to ‘Y’ will affect the translations of the 911 call. The Off-Board Selective Routing Database and not the Table E911SRDB will be queried for the ESN index.

The TRAVER tool will be modified to include a message notifying the user that the facility is using the external database for routing of the call.

21.1.4 Table name: VIRTGRPS

E911 table for Virtual Facility Group Data

21.1.4.0.1 Functional description

Table VIRTGRPS contains the definitions for the Virtual Facility Group Data (VFGs). This feature will enhance the type definition for E911VFG by adding an additional parameter.

21.1.4.1 Table size

Table 9 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
VIRTGRPS	na	na	Memory allocation is nominal

21.1.4.2 Table fields

The following table lists fields for table VIRTGRPS:

Table 10 Table VIRTGRPS field descriptions

E911 Option Subfield	New or Changed	Subfield or refinement	Entry	Explanation and action
OFBSR	New	Subfield	Y/N	Boolean indicating whether the facility is using the Off-Board Selective Database. The default is ‘N’.

21.1.4.3 Datafill example

The following example shows sample datafill for table VIRTGRPS

```
TABLE: VIRTGRPS
>pos 911vfg
911VFG              SIZE   10 E911   110 621 613 Y 0 N N Y Y $
                                                 ↑
                                            OFBSR
```

21.1.4.4 Table release history update

The following information was added:

- OFBSR: A boolean value to indicate if the facility is using the Off-Board Selective Routing database to complete translations and routing of the 911 call.

21.1.4.5 Supplementary information

The default will be set to ‘N’.

21.1.4.6 Translation verification tools

Setting the OFBSR field to ‘Y’ will affect the translations of the 911 call. The Off-Board Selective Routing Database and not the Table E911SRDB will be queried for the ESN index.

The TRAVER tool will be modified to include a message notifying the user that the facility is using the external database for routing of the call.

22: Data schema changes (DS)

22.1 Table information

22.1.1 Table name: DNREGION

22.1.1.1 Functional description

The fields FROMDIGS and TODIGS are modified by replacing existing type SMALL_DIGIT_REGISTER with DN_DIGIT_REGISTER to allow DNs with more than 10 digits for REVXLVER tool.

Note: In North American market, REVXLVER tool will continue to support reverse translations with 10 digit DNs only.

A new standard region name ‘INTERNAT’ is being introduced by this activity. This region name can be used to define a region in table DNREGION. But if the feature DDN International Interworking is active in office, DDN will ignore this datafill. All other features will continue using the datafill as usual.

With the office parameter DDN_INTERNATIONAL set to ‘Y’, if the Telco tries to provision a region using the ‘INTERNAT’ region name, the following warning will be displayed:

```
* WARNING *: DDN REVERSE TRANSLATIONS WILL NOT USE INTERNAT
             REGION DATAFILL IN TABLE DNREGION
```

22.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

22.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
DNREGION	0	Depends on the FROMDIGS and TODIGS fields of the tuple.	Memory is dynamically allocated.

The size of table DNREGION is increased automatically as new tuples are added. The number of different region names which may be specified in the REGION field is limited to 4095. We can have many tuples for any given REGION depending upon the grouping of FROMDIGS and TODIGS fields.

22.1.1.4 Table fields

The following table lists fields for table DNREGION.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
FROMDIGS	Changed	Refinement	1 to 15 digits	The type of field FROMDIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.
TODIGS	Changed	Refinement	1 to 15 digits	The type of field TODIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.

22.1.1.5 Datafill example

The following example shows sample datafill for table DNREGION:

```
REGION FROMDIGS TODIGS
-------------------------------------------
local_a 91948142202513 91948142202515
toll_a 613 909
```

22.1.1.6 Table release history update

The type of fields FROMDIGS and TODIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.

22.1.1.7 Supplementary information

None.

22.1.1.8 Translation verification tools

The following example shows the output from REVXLVER tool when it is used to verify DNREGION table.

```
>revxlver ddn 6340103 44326340203 b
TABLE IBNLINES
   HOST 00 0 01 03 0 DT STN IBN 6340103 LONS634 0 0 4432 $
TABLE CUSTNTWK
   LONS634 AUSIN634 3 (AUSIN634 CXLA 9) (PUBLIC CXLA 10)
                      (CLID OFFNET) (RNID OFFNET)
TABLE DNREVXLA
   CXLA 44 44     (LOCAL_7 4 N N)
                  (DEFAULT 0 0 N)
TABLE DNREGION
   LOCAL_7 103 103

DELIVERY DIGITS

6340203

+++ REVXLVER: SUCCESSFUL TRACE
```

22.1.2 Table name: DNREVXLA

22.1.2.1 Functional description

The fields FROMDIGS, TODIGS and PRFXDIGS are modified by replacing existing type SMALL_DIGIT_REGISTER with DN_DIGIT_REGISTER to allow DNs with more than 10 digits for REVXLVER tool.

Note: These changes will allow the customer to datafill upto 15 prefix digits in each result. But for each result, prefix and optional prefix digits together cannot exceed 18 digits. This is an existing restriction.

In North American market, REVXLVER tool will continue to support reverse translations with 10 digit DNs only.

This activity introduces a new standard region name ‘INTERNAT’. If the feature DDN International Interworking is active in office, the ‘INTERNAT’ digit manipulation result will be used for international DDN calls. For all

features except DDN, the ‘INTERNAT’ region name behaves just like any other DN region name.

With the office parameter DDN_INTERNATIONAL set to ‘Y’, if the Telco tries to add the ‘INTERNAT’ region name to the result list, the following warning will be displayed:

```
* WARNING *: DDN WILL USE THE INTERNAT DIGIT MANIPULATION
             ALGORITHM FOR INTERNATIONAL CALLS.
             FOR ALL OTHER FEATURES MAKE SURE THAT THE
             INTERNAT REGION IS DEFINED IN TABLE DNREGION.
```

With the office parameter set to ‘N’, the same action will result in the following warning:

```
* WARNING *: PLEASE MAKE SURE THAT THE INTERNAT REGION IS
             DEFINED IN TABLE DNREGION.
```

22.1.2.2 Datafill sequence and implications

Current datafill order unchanged.

22.1.2.3 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
DNREVXLA	0	Depends on the RESULTS field of the tuple.	Memory is dynamically allocated.

The size of table DNREVXLA is increased automatically as new tuples are added. The number of different reverse translators which may be specified in the RXLANAME field is limited to 1023. We can have many tuples for any given REGION depending upon the RESULTS field of the tuple.

22.1.2.4 Table fields

The following table lists fields for table DNREVXLA.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
FROMDIGS	Changed	Refinement	1 to 15 digits	The type of field FROMDIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
TODIGS	Changed	Refinement	1 to 15 digits	The type of field TODIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.
PRFXDIGS	Changed	Refinement	1 to 15 digits	The type of field PRFXDIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.

22.1.2.5 Datafill example

The following example shows sample datafill for table DNREVXLA:

```
RXLANAME FROMDIGS TODIGS RESULTS
-------------------------------------------------------------------
CXLA 91948142202513 91948142202515 (DEFAULT 1 6 N) $
CG_ACB 50 52 (DEFAULT 0 90175 N) $
```

22.1.2.6 Table release history update

The type of fields FROMDIGS, TODIGS and PRFXDIGS is changed from SMALL_DIGIT_REGISTER to DN_DIGIT_REGISTER.

22.1.2.7 Supplementary information

None.

22.1.2.8 Translation verification tools

The following example shows the output from REVXLVER when it is used to verify DNREVXLA table.

```
>revxlver ddn 6340103 44326340203 b
TABLE IBNLINES
   HOST 00 0 01 03 0 DT STN IBN 6340103 LONS634 0 0 4432 $
TABLE CUSTNTWK
   LONS634 AUSIN634 3 (AUSIN634 CXLA 9) (PUBLIC CXLA 10)
                      (CLID OFFNET) (RNID OFFNET)
TABLE DNREVXLA
   CXLA 44 44  (LOCAL_7 4 N N)
               (DEFAULT 0 0 N)
TABLE DNREGION
   LOCAL_7 103 103

DELIVERY DIGITS

6340203

+++ REVXLVER: SUCCESSFUL TRACE
```

23: Data schema changes (DS)

23.1 Table information

23.1.1 Table name: OCHOSTQ

Operator Centralization Host Queue

23.1.1.1 Functional description

Table OCHOSTQ was created to allow the Operating Company to specify both a primary and alternate host on a queue basis. This table enables a remote switch to route to more than one host simultaneously and the ability to selectively route calls to an alternate host switch when the primary host switch is unavailable. This table is indexed on a queue basis so that traffic can be segregated by queue.Routing information in this table does not apply to calls received from a remote. It only applies to trunk originating traffic. (In other words calls received from a remote (by a host) are never rerouted to another host.)

This feature will remove the CODEC and ALTCODEC fields from this table. Instead, the voice codec information will be available not just on an OC call queue basis, but for every call queue (using table TQCQINFO). Table OCHOSTQ will revert back to the pre-TOPS13 representation.

23.1.1.2 Datafill sequence and implications

Datafill Sequence:

- No tables are required to datafill the QTYPE field.

- The tables required to datafill the PRIHOST & ALTHOST fields are as follows:
  - OCPARMS
  - OCGRP

Datafill Restrictions:

- No new datafill restrictions are introduced.

23.1.1.3 Table size

23.1.1.4

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
OCHOSTQ	unchanged	unchanged	No Change

23.1.1.5 Table fields

The following table lists fields for table OCHOSTQ.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
QTYPE	Unchanged	OCHQIDX	CQ#	Queue Type - Enter a Call Queue Index
PRIHOST	Unchanged		alphanumeric (1 to 32 chars)	Primary Host - Enter the host or switch name which to route the call.
CODEC	REMOVED		G711 or G729	Codec Voice Selection for the primary host
RRDATA	CHANGED		see subfields	
	Unchanged	REROUTESEL	Y or N	Re route selector data. Enter Yes to allow rerouting to an alternate host when the primary host is unavailable. Enter No to indicate that rerouting is not allowed

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
	Unchanged	ALTHOST	alphanumeric (1 to 32 chars)	Alternate Host. - Enter a Host or switch name
	REMOVED	ALTCODEC	G711 or G729	Codec Voice Selection for the alternate host
	Unchanged	REASONS	ALL, DEFAIL, VLTHROTL, DEFLECT, NONE, QOVFLOW	If the REROUTESEL value is Y. Then enter the reason(s) for rerouting

23.1.1.6 Datafill example

An example of the TOPS15 representation of table OCHOSTQ is as follows:

Table 3 Example of Table OCHOSTQ

QTYPE	PRIHOST	RRDATA
CQ131	**HOSTIP1**	**N**
CQ132	**HOSTIP2**	**Y HOSTD QOVFLOW $**
CQ133	**HOST1**	**N**

23.1.1.7 Table release history update

Removed CODEC and ALTCODEC fields in TOPS15.

23.1.1.8 Supplementary information

On dump and restore, the CODEC and ALTCODEC fields will not be copied from the old side to the new side.

23.1.1.9 Translation verification tools

Not Applicable.

23.1.2 Table name: PKTVPROF

Packetized Voice Profile

23.1.2.1 Functional description

Table PKTVPROF defines the packetized voice profiles. The table is indexed by integer field PROFNUM, and contains selector field CODEC. The subfields for the CODEC selector are as follows:

— CODEC (G711 / G729) - This subfield indicates the packetized voice codec for the call queue. If G711 is selected, it indicates that the G.711 voice codec will be used, and no additional subfields will appear. If G729 is selected, it indicates that a G.729 voice codec will be used. The SILEN subfield appears only for G729, and determines which of the G.729 codecs will be used.

— SILEN (NOSILSUP / SILSUP) - This subfield determines if silence suppression (which discontinues the codec output if it detects parts of a signal where there is no speech) is performed for the call. If SILSUP is indicated, then silence suppression will be performed. This is achieved using the G.729AB voice codec (G.729A protocol with silence suppression per G.729 Annex B). Otherwise, if NOSILSUP is indicated, then silence suppression will not be performed. This is achieved using the G.729A voice codec (G.729A protocol with no silence suppression).

23.1.2.2 Datafill sequence and implications

Datafill Sequence:

- No tables are required to datafill table PKTVPROF
- This table will contain two default tuples (tuple 0 and 1). These tuples are added during the initialization of table PKTVPROF.

Datafill Restrictions:

- The deletion of a tuple is disallowed if the PROFNUM is datafilled in table TQCQINFO.

23.1.2.3 Table size

The table will allow for a total of 64 entries.

Table 4 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
PKTVPROF	0	64	

23.1.2.4 Table fields

The following table lists fields for table PKTVPROF:

Table 5 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
PROFNUM	NEW		{0 to 63}	Packetized Voice Profile Number- Enter a Profile Index
PKTVFLDS	NEW	CODEC	G711, G729	Packetized Voice Attributes- Enter G711 or G729, and optionally enter SILEN.
		SILEN	NOSILSUP or SILSUP	Packetized Voice Silence - Enter NOSILSUP or SILSUP. Only present if CODEC is G729.

23.1.2.5 Datafill example

The following example shows sample datafill for table PKTVPROF:

Table 6 Example of Table PKTVPROF

PROFNUM	PKTVFLDS	
	CODEC	SILEN
0	G711	
1	G729	NOSILSUP

Table 6 Example of Table PKTVPROF

PROFNUM	PKTVFLDS	
	CODEC	SILEN
2	G729	SILSUP

23.1.2.6 Table release history update

This is a new table.

23.1.2.7 Supplementary information

On IPL, two default tuples will be added to table.

23.1.2.8 Translation verification tools

None.

23.1.3 Table name: TQCQINFO

TOPS Queue Management System Call Queue Information

23.1.3.1 Functional description

Table TQCQINFO defines the call queues. This table will be modified so that a packet voice profile can be assigned for each call queue. The new field PKTVPROF is an integer index into new table PKTVPROF.

23.1.3.2 Datafill sequence and implications

Datafill Sequence:

- table PKTVPROF must now be datafilled prior to datafilling this table.

Datafill Restrictions:

- No new datafill restrictions are introduced.

23.1.3.3 Table size

Table 7 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TQCQINFO	unchanged	unchanged	

23.1.3.4 Table fields

The following table lists fields for table OCHOSTQ.

Table 8 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
CALLQ	Unchanged		CQ#	Queue Type - Enter a Call Queue Index
QMSSERV	Unchanged		alphanumeric (up to 32 characters)	QMS Service- Enter the QMS service name assigned to calls designated to the specified CALLQ.
CWOFF	Unchanged		UNSIGNEDINT	Call Waiting off - Enter in tenth of seconds the call age at which the application is told the CW display is turned off for the call queue.
CWON	Unchanged		UNSIGNEDINT	Call Waiting on- Enter in tenth of seconds the call age at which the application is told the CW display is turned on for the call queue.
TREAT	Unchanged		alphanumeric (1 to 4 characters)	Treatment - Enter the treatment used if the call deflects.
PKTVPROF	NEW		{0 TO 63}	PKTVPROF - Enter the PKTVPROF index
ALRTAREA	Unchanged		see subfields	

Table 8 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
	Unchanged	ALERT	Y OR N	Alert - When set to Y, a message is sent to OPP compliant positions to indicate when calls are waiting in queue or when calls are no longer waiting in queue. When set to N, a message is not sent to OPP compliant positions. This is the default. This field should be set in the TOPS OC HOST and the TOPS Stand-alone offices. Setting this field in the TOPS OC Remote has not effect. When this field is changed, it takes affect immediately.
	Unchanged	QCA (present when ALERT = Y)	Y OR N	Queue Call Alerting - When set to Y, threshold are assigned.
	Unchanged	QCAOFF (present when QCA= Y)	{0 to 253}	Queue Call Alerting Off Threshold
	Unchanged	QCAON (present when QCA= Y)	{1 TO 254}	Queue Call Alerting On Threshold

23.1.3.5 Datafill example

An example of the TOPS15 representation of table TQCQINFO is as follows:

Table 9 Example of Table TQCQINFO

QTYPE	QMSSERV	CWOFF	CWON	TREAT	PKTVPROF	ALTAREA
CQ131	**TOPS_TA**	**500**	**1000**	**VACT**	**0**	**N**
CQ132	**TOPS_TA**	**500**	**1000**	**VACT**	**1**	**N**
CQ133	**TOPS_TA**	**500**	**1000**	**VACT**	**2**	**N**

23.1.3.6 Table release history update

Add PKTVPROF field in TOPS15.

23.1.3.7 Supplementary information

The addition or change of a tuple from TQCQINFO is disallowed if the PKTVPROF index indicated is not datafiiled in table PKTVPROF.

On an ONP from TOPS13 to TOPS15, each tuple in TQCQINFO on the new side will be assigned an index into table PKTVPROF. If the call queue has an entry in table OCHOSTQ, then the PKTVPROF field is populated with the index which corresponds to the value of the CODEC field (in table OCHOSTQ). Otherwise, the PKTVPROF field is populated with the index into PKTVPROF which corresponds to the value of the default CODEC(in table TOPSPARM OCIP_DEFAULT_CODEC). On an ONP from pre-TOPS13 to TOPS15, each tuple in TQCQINFO on the new side will be assigned an index of 0 into table PKTVPROF.

23.1.3.8 Translation verification tools

Not Applicable.

23.1.4Table name: TOPSPARM

TOPS Parameters

23.1.4.1 Functional description

The default OC-IP codec value in TOPSPARM is used solely on ONPs (from pre-TOPS15 to TOPS15) to populate new field PKTVPROF in table TQCQINFO. It serves no other purpose. As a result, the parameter in table TOPSPARM will be removed (OCIP_DEFAULT_CODEC).

23.1.4.2 Datafill sequence and implications

Current datafill order unchanged.

23.1.4.3 Table size

Table 10 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSPARM	No change	One less tuple	

23.1.4.4 Table fields

Table 11 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OCIP_DEFAULT_CODEC	DELETED		G711 or G729	The default CODEC for OC-IP.

23.1.4.5 Datafill example

23.1.4.6 Table release history update

Not Applicable.

23.1.4.7 Supplementary information

Not Applicable.

23.1.4.8 Translation verification tools

Not Applicable.

23.1.5Table name: OCGRP

Operator Centralization Group Table

23.1.5.1 Functional description

With host voice bypass, an OC call will establish a packetized voice connection directly from the remote to the IP position. As a result, the tuple in

OCGRP (host's entry) on the remote switch will no longer indicate the voice link CLLI to the host switch. Instead, with host voice bypass, the hosts's entry in OCGRP on the remote switch will indicate the voice link CLLI from the remote to the IP position.

For host voice bypass, the host will not need to provision voice links to that remote. Since an OC-IP voice link is NOT needed, a placeholder CLLI group can be datafilled in table CLLI for use in table OCGRP. This placeholder CLLI will be used on the host switch to datafill field VLGRP (for the remote's entry in table OCGRP with a BCSLEVEL of 50 or greater), instead of entering a provisioned OC-IP voice link.

But, if the data link is IP, and the OFCTYPE is HOST (which means the connection is from the remote switch to a HOST switch or an IP position) , the voice link must be a dynamic trunk group in Table TRKOPTS (with the application of OC).

WARNING: PLACEHOLDER CLLI USED. OC TRAFFIC FROM THIS REMOTE WILL BE ADVERSELY AFFECTED UNLESS ALL ITS CALLS TO THIS HOST ROUTE TO IP POSITIONS.

In summary, table OCGRP will allow entering a CLLI name in Table OCGRP for a remote office (BCSLEVEL 50 or greater) which has no associated trunk group and members, if the data link indicates IP.

23.1.5.2 Datafill sequence and implications

Current datafill order unchanged.

23.1.5.3 Table size

Table 12 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
OCGRP	0	31	

23.1.5.4 Table fields

The following table lists fields for table OCGRP.

Table 13 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OFFICE	unchanged		1 to 32 chars	Office Name. Enter the specific office name at the other end of a link. The name must be datafilled in table OCOFC.
OFCTYPE	unchanged		HOST or REMOTE	Office Type.
VLGRP	unchanged		1 to 16 chars	Voice Link Group. Enter the voice link group CLLI. Voice Link Group must in datafilled in table TRKOPTS.
DLOVRLAY	unchanged	DLSEL		Data Link Overlay
	unchanged	DLSEL	HDLC, LAPD, IP	Data Link Selector HDLC -high level data link control LAPD -link access protocol (D) IP-internet protocol
	unchanged	DLGRP	CLLI from TOPSHDLC	Only appears when DLSEL=HDLC
	unchanged	OCDLGRP	name from OCDLGRP	Only appears when DLSEL=LAPD
BCSLEVEL	unchanged		0 to 99	Batch Change Supplement Level

23.1.5.5 Datafill example

An example of some OCGRP datafill for TOPS15 is as follows:

Table 14 Example of Table OCGRP

OFFICE	OFCTYPE	VLGRP	DLOVRLAY	BCSLEVEL
BYPASSED_HOST	**HOST**	**HOSTBYPASS1**	**IP**	**50**
BYPASSING_REMOTE	**REMOTE**	**PLACEHOLDER**	**IP**	**50**

For the above OCGRP datafill, the first tuple will be contained on the remote switch. The VLGRP HOSTBYPASS1 is the voice link used to connect the remote to the IP position.

For the above OCGRP datafill, the second tuple will be contained on the host switch. The VLGRP is a placeholder CLLI.

23.1.5.6 Table release history update

Not Applicable.

23.1.5.7 Supplementary information

Not Applicable.

23.1.5.8 Translation verification tools

Not Applicable.

24: Data schema changes (DS)

24.1 Table information

24.1.1 Table name: TOPSTOPT

TOPS Trunk Options

24.1.1.1 Functional description

Allows datafill of various options for trunks used by TOPS. These trunks are not necessarily the TOPS trunk group type; they may be other trunk group types as well, such as IT or ATC.

This activity adds a new field, MAXCONNS, which has the range 0 to 32767 (unsignedint). This field indicates the maximum number of VoIP connections which may be initiated on a trunk group reserved for TOPS VoIP calls. Each VoIP connection corresponds to a trunk member. See the FN section of this activity for information on how this limit works.

For TOPS, the effective maximum of this field is 2016, since a TOPS dynamic trunk group may have at most 2016 members. Datafilling MAXCONNS with a value greater than 2016 will have no effect; the maximum number of connections for that trunk group will remain 2016.

MAXCONNS applies to all TOPS dynamic trunk types: remote OC-IP voice links, host OC-IP voice links, and IP position voice links. MAXCONNS has no effect on trunk groups which are not datafilled as OC or POS dynamic trunks in Table TRKOPTS.

24.1.1.2 Datafill sequence and implications

To set the new field to a non-zero value, tables must be datafilled in the following sequence:

- TRKOPTS: Indicate the trunk group is reserved for OC or POS dynamic trunks.
- TOPSTOPT: Set the value as desired.

The following error message appears when attempting to increase MAXCONNS to a nonzero value for a trunk group not reserved for TOPS VoIP calls. The tuple addition or change will be disallowed.

```
Trunk group not marked as a dynamic trunking application in
Table TRKOPTS. MAXCONNS must be 0.
```

The following warning message appears when attempting to set MAXCONNS to zero for a TOPS dynamic trunk group. The tuple addition or change will be allowed.

```
Warning: MAXCONNS is set to 0. No connections will be allowed
on this trunk group.
```

The following warning message appears when setting MAXCONNS to a value higher than 2016. The tuple addition or change will be allowed.

```
Warning: MAXCONNS is set higher than the maximum per trunk
group. A maximum of 2016 connections will be used by call
processing.
```

The following warning message appears when the customer tries to use VoIP usage limits, but the required DMS-100 software is not present in the load. The tuple addition or change will be allowed. The MAXCONNS field will be set to 2016, and VoIP Usage Limits will not be used.

```
Warning: TOPS VoIP usage limits are not supported in this load.
MAXCONNS will be set to the maximum per trunk group, which is
2016.
```

24.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSTOPT	0	Based on Table DATASIZE datafill for Table TRKGRP.	Each tuple requires an additional word of data store for the MAXCONNS value.

24.1.1.4 Table fields

The following table lists fields for Table TOPSTOPT.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
GRPKEY	Unchanged			
ORGAREA	Unchanged			
DISPCLG	Unchanged			
ADASERV	Unchanged			
ADASANS	Unchanged			
ANITOCLI	Unchanged			
OLNSQRY	Unchanged			
DCIBIDX	Unchanged			
LNPCLGAM	Unchanged			
XLASCHEM	Unchanged			
SPIDPRC	Unchanged			
TRKSPID	Unchanged			
BILLSCRN	Unchanged			
ANIFSPL	Unchanged			
MAXCONNS	New	None	{0 to 32767} (unsignedint)	The maximum number of VoIP connections supported by this trunk group.

24.1.1.5 Datafill example

The following example shows sample datafill for Table TOPSTOPT:

```
TABLE: TOPSTOPT
GRPKEY ORGAREA DISPCLG ADASERV ADASANS ANITOCLI OLNSQRY DCIBIDX LNPCLGAM
XLASCHEM SPIDPRC TRKSPID BILLSCRN ANIFSPL MAXCONNS
-----------------------------------------------
IPVLTOHOST N N NONE NA N NONE 0 N N N N N N 100
```

24.1.1.6 Table release history update

TOPS15: MAXCONNS field added.

24.1.1.7 Supplementary information

On a dump and restore from a release prior to TOPS15, if the customer had previously datafilled the dynamic trunk group in Table TOPSTOPT, the trunk

group will be restored with a connection limit set to the maximum value (32767) so call processing is not affected.

For trunks in Table TOPSTOPT which are not marked as dynamic in Table TRKOPTS, the MAXCONNS field will be added with a value of 0.

24.1.1.8 Translation verification tools

TOPSTOPT does not use translation verification tools.

24.1.2 Table name: TRKOPTS

Trunk Options

24.1.2.1 Functional description

A DMS-wide table which allows datafill of various trunk group options.

This activity renames the application VIPER to POS, for use by TOPS. VIPER was never used and cannot be datafilled.

Trunks marked as POS are used when establishing a VoIP connection from a TOPS host or standalone switch to an IP operator workstation.

Trunks marked as OC are used when establishing a VoIP connection between a TOPS remote switch and a TOPS host switch. Trunks marked as OC are also used when initiating a VoIP connection from a TOPS remote switch to an IP operator workstation. This direct connection is termed *host voice bypass*.

24.1.2.2 Datafill sequence and implications

To datafill the POS application in Table TRKOPTS, the trunk group must be present in the following tables:

- CLLI
- TRKGRP
- TRKSGRP

The trunk group cannot be in the following tables:

- IPINV
- TOPSPOS
- TOPSTOPT

To remove the POS datafill from a trunk group in Table TRKOPTS, all tuples containing the trunk group CLLI must be deleted from Tables IPINV, TOPSPOS, and TOPSTOPT.

A trunk cannot be marked as POS unless it is outgoing (OG) in Table TRKGRP. Other restrictions apply, as indicated in NTP 297-8403-906, the TOPS-IP User's Guide.

24.1.2.3 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TRKOPTS	Unchanged	Unchanged	Unchanged

24.1.2.4 Table fields

The following fields apply when the trunk option is DYNAMIC.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTKEY	Unchanged			
OPTION	Unchanged			
SIGNALING	Unchanged			
SIGNALING_NETWORK	Unchanged			
BEARER_NETWORK	Unchanged			
APPLICATION	Changed	Field	{OC, POS, DPT, RAS, SIPBCPT}	Prior to CSP15, the range was {OC, VIPER, DPT, RAS, SIPBCPT}. VIPER is not used and cannot be datafilled.

24.1.2.5 Datafill example

The following example shows sample datafill for Table TRKOPTS:

```
TABLE: TRKOPTS
OPTKEY OPTINFO
-------------------------------------------------
HOSTIPPOS DYNAMIC DYNAMIC ISUP IP IP POS
```

24.1.2.6 Table release history update

TOPS15: VIPER application renamed to POS.

24.1.2.7 Supplementary information

Dump and restore is not affected, since it was not possible to datafill the VIPER value in previous releases.

24.1.2.8 Translation verification tools

TRKOPTS does not use translation verification tools.

24.1.3 Table name: OCGRP

Operator Centralization Group

24.1.3.1 Functional description

This table defines the offices in the customer's OC network.

Previously, the only field which could be changed without deleting and re-adding the tuple was BCSLEVEL. With this activity, the customer will now be able to change the voice link CLLI field (VLGRP) for OC-IP offices. This allows easier customer verification and isolation of 7X07 cards used for OC-IP.

Since a change to the tuple immediately affects OC-IP traffic, a warning will be printed when such a change is made. The warning which appears is one of the following. The tuple addition or change is allowed.

```
WARNING: VOICE LINK CLLI HAS BEEN CHANGED. OC TRAFFIC TO THIS
-------  OFFICE WILL NOW USE THE UPDATED VOICE LINK CLLI.

WARNING: VOICE LINK CLLI HAS BEEN CHANGED. OC TRAFFIC TO THIS
-------  OFFICE MUST NOW USE HOST VOICE BYPASS.
```

The second warning above appears if the tuple contains a placeholder CLLI. Placeholder CLLIs have no TRKGRP datafill. A placeholder CLLI is employed in a host when no voice links to remotes are needed, since OC-IP Host Voice Bypass is in use.

A warning has been added to Table OCGRP when a placeholder CLLI is datafilled. The following message will appear. The tuple addition or change is allowed.

```
WARNING: PLACEHOLDER CLLI USED. OC TRAFFIC FROM THIS REMOTE
-------  WILL BE ADVERSELY AFFECTED UNLESS ALL ITS CALLS TO
         THIS HOST ROUTE TO IP POSITIONS.
```

The following error messages can appear when attempting to datafill a placeholder CLLI in Table OCGRP. Placeholder CLLIs may only be used with a tuple for a remote office, and only if the BCSLEVEL in the tuple is 50 or higher. If these messages appear, the tuple addition or change is disallowed.

```
PLACEHOLDER CLLI ONLY VALID FOR REMOTE OFFICE

PLACEHOLDER CLLI ONLY VALID WHEN BCSLEVEL GREATER THAN 49
```

The following warning message appears when an OC-IP voice link CLLI is datafilled in Table OCGRP, and the CLLI has TRKGRP datafill, but no actual members exist because no IPGW in Table IPINV is datafilled with the CLLI name. The tuple addition or change is allowed.

```
WARNING: NO TRUNK MEMBERS EXIST FOR THIS TRUNK GROUP.
-------  DATAFILL TABLE IPINV TO DEFINE TRUNK MEMBERS.
```

24.1.3.2 Datafill sequence and implications

Unchanged.

24.1.3.3 Table size

Table 5 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
OCGRP	Unchanged	Unchanged	Unchanged

24.1.3.4 Table fields

Table 6 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OFFICE	Unchanged			
OFCTYPE	Unchanged			
VLGRP	Unchanged			
DLOVRLAY	Unchanged			
BCSLEVEL	Unchanged			

24.1.3.5 Datafill example

The following example shows sample datafill for Table OCGRP:

```
TABLE: OCGRP
OFFICE OFCTYPE VLGRP DLOVRLAY BCSLEVEL
-------------------------------------
IPHOST1 HOST IPVLTOHOST IP 50
```

24.1.3.6 Table release history update

TOPS15: VLGRP field may be changed for OC-IP offices only.

24.1.3.7 Supplementary information

None.

24.1.3.8 Translation verification tools

OCGRP does not use translation verification tools.

24.1.4 Table name: TOPSPOS

TOPS Position

24.1.4.1 Functional description

This table defines the TOPS positions (operator workstations) for a TOPS switch. Warnings and error messages have been added as indicated in this section.

An attempt to add a tuple with a TDM voice link type and an IP data type will produce the following error message. The tuple addition is disallowed.

```
POSITION WITH IP DATATYPE MUST USE PKTV VLTYPE.
```

A warning appears when a placeholder CLLI is datafilled in Table TOPSPOS. Placeholder CLLIs are CLLIs which have no TRKGRP datafill. A placeholder CLLI is employed in a host when no voice links to positions are needed, since OC-IP Host Voice Bypass is in use. The following message will appear. The tuple addition is allowed.

```
WARNING: PLACEHOLDER CLLI USED. THIS POSITION CANNOT SUPPORT
-------  DELAY CALLS OR NON-OC MONITORING.
```

The following warning message appears when a voice link CLLI is datafilled in Table TOPSPOS, and the CLLI has TRKGRP datafill, but no actual members exist because no IPGW in Table IPINV is datafilled with the CLLI name. The tuple addition is allowed.

```
WARNING: NO TRUNK MEMBERS EXIST FOR THIS TRUNK GROUP.
-------  DATAFILL TABLE IPINV TO DEFINE TRUNK MEMBERS.
```

The following error message appears when attempting to add a CLLI which has TRKGRP datafill but is not defined as a POS dynamic trunk in Table TRKOPTS. The tuple addition is disallowed.

```
TRUNK MUST BE ASSIGNED DYNAMIC POS OPTION IN TABLE TRKOPTS
```

24.1.4.2 Datafill sequence and implications

Unchanged.

24.1.4.3 Table size

Table 7 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSPOS	Unchanged	Unchanged	Unchanged

24.1.4.4 Table fields

Table 8 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
POSNO	Unchanged			
VLPATH	Unchanged			
DATAPATH	Unchanged			
POSAREA	Unchanged			

24.1.4.5 Datafill example

The following example shows sample datafill for Table TOPSPOS:

```
TABLE: TOPSPOS
POSNO VLPATH DATAPATH POSAREA
-----------------------------
909 PKTV IPVLSTANDL4 IP 2 Y OPR 6 20
```

24.1.4.6 Table release history update

TOPS15: Warning and error messages added.

24.1.4.7 Supplementary information

None.

24.1.4.8 Translation verification tools

TOPSPOS does not use translation verification tools.

24.1.5 Table name: IPINV

Internet Protocol Inventory

24.1.5.1 Functional description

This table defines the IP Gateway (IPGW) 7X07 cards for a DMS. Warnings and error messages have been added as indicated in this section.

When a TOPS IPGW is off-lined, the DMS automatically updates the IPGW's 48 trunk members to be installation busy (INB). This takes a short period of time, during which the deletion of the IPGW from Table IPINV will be disallowed. The following error message will appear:

```
ERROR: Associated trunk members not INB.
```

When the craftsperson sees this message, they should wait a moment and then retry the delete command in Table IPINV.

A second error message appears when the craftsperson tries to delete the IPGW while its c-side links are still in service. This can lead to problems later when the craftsperson tries to re-add the IPGW. So the craftsperson must manually busy the two c-side links to the IPGW card before Table IPINV will allow the deletion. The following error message from Table IPINV indicates the c-side links must be set to the MBsy state. The tuple delete will be disallowed.

```
ERROR: Cside links must be MBsy to delete tuple.
```

The c-side links in question can be determined by examining the `PORT` field in Table IPINV. If the `PORT` is n, then the two c-side links are n and n+1. These links can be set to MBsy by posting the IPGW's parent XPM at the MAPCI;MTC;PM level, and then using the commands BSY LINK n and BSY LINK n+1.

As an example, if the `PORT` field is 2, then the two commands are BSY LINK 2 and BSY LINK 3.

24.1.5.2 Datafill sequence and implications

Unchanged.

24.1.5.3 Table size

Table 9 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
IPINV	Unchanged	Unchanged	Unchanged

24.1.5.4 Table fields

Table 10 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
IPNO	Unchanged			
PMTYPE	Unchanged			
PMNO	Unchanged			
IPPEC	Unchanged			
LOAD	Unchanged			
PORT	Unchanged			
IPZONE	Unchanged			
GWTYPE	Unchanged			

24.1.5.5 Datafill example

The following example shows sample datafill for Table IPINV:

```
TABLE: IPINV
IPNO PMTYPE PMNO IPPEC LOAD PORT IPZONE GWTYPE
-----------------------------------------------
TGWY 02 0 DTC 2 7X07AA NILLOAD 0 192 168 3 24 0 0 0 0 TOPS IPVLTOHOST 0
```

24.1.5.6 Table release history update

CCM15: Warning and error messages added.

24.1.5.7 Supplementary information

None.

24.1.5.8 Translation verification tools

IPINV does not use translation verification tools.

25: Data schema changes (DS)

25.1 Table information

25.1.1 Table name: TQOGTKEY

TOPS QMS Outgoing Trunk Table

25.1.1.1 Functional description
Unchanged

25.1.1.2 Datafill sequence and implications
Unchanged

25.1.1.3 Table size
Unchanged

25.1.1.4 Table fields
The KEYINFO field no longer allows a KEYTYPE selector of SO.

25.1.1.5 Datafill example
A tuple containing a KEYTYPE selector of SO in the KEYINFO field is removed during an ONP from TOPS 14 (or earlier) to TOPS 15 (or later):

~~99 SOLBL **SO** 2012200009 OPER N 99~~

25.1.1.6 Table release history update
Disallowed KEYTYPE of SO.

25.1.1.7 Supplementary information
NONE

25.1.1.8 Translation verification tools
NONE

25.1.2 Table name: TOPSTERM

TOPS Terminations Table

25.1.2.1 Action

Deleted

26: Data schema changes (DS)

26.1 Table information

26.1.1 Table name: TRKGRP

Trunk Group Table

26.1.1.1 Functional description

'E911' is a option for IT ISUP trunks which will allow direct processing of E911 calls. A new sub-option is introduced under the E911 option called TDMPRFX. The TDMPRFX field will allow numbers 0 through 15 with 0 being the default value.

26.1.1.2 Datafill sequence and implications

Standard trunk datafill rules will apply. If datafilled, a new Generic Digits Parameter, GENERIC DIGITS E911TANDEM PREFIX is built in the IAM for E911 calls which transports the TDMPRFX.

26.1.1.3 Table size

The E911 Tandem-Tandem feature does not change the size of the table.

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TRKGRP	**NA**	**NA**	The size of this table changes dynamically.

26.1.1.4 Table fields

A sub-option TDMPRFX under the E911 option is introduced by this activity.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
TDMPRFX	NEW	NA	0 TO 15	Sub-option TDMPRFX under option E911 in Table TRKGRP will take values from 0 to 15. Default value will be ‘0’.

26.1.1.5 Datafill example

The following example shows sample datafill for table TRKGRP with TDMPRFX sub-option under the E911 option:

Figure 1 New Sub-option TDMPRFX

```
CI:
>TABLE TRKGRP
TABLE: TRKGRP
>POS E911ICS7
E911ICS7 IT 0 ELO NCRT IC NIL MIDL 613 AT1 NSCR 613 000 N N
(E911 747 113 E911_STD N 0) $
>CHA
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
GRPTYP: IT
..........
..........
OPTION: E911
>
ESCO: 747
>
ESN: 113
>
E911SIG: E911_STD
>
ORIGHOLD: N
>
ECPHTIME: 0
>
TDMPRFX: 15
OPTION:
>$
TUPLE TO BE CHANGED:
E911ICS7 IT 0 ELO NCRT IC NIL MIDL 613 AT1 NSCR 613 000 N N
(E911 747 113 E911_STD N 0 15) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
```

26.1.1.6 Datafill error messages

This section presents messages displayed when an attempt is made to datafill the TDMPRFX option with a value that contains an error. Only error messages specific to the TDMPRFX option is mentioned here.

An attempt to datafill the sub-option TDMPRFX with a value other than in the range 0 to 15 will give a standard error message.

*** ERROR ***

The range specified for TDMPRFX is then displayed.

26.1.1.7 Table release history update

A new sub-option TDMPRFX is added to existing option E911 in Table TRKGRP.

26.1.1.8 Supplementary information

None.

26.1.1.9 Translation verification tools

Translation verification tool (TRAVER) is not impacted by the introduction of the new sub-option TDMPRFX.

26.1.2 Table name: STDPRTCT

26.1.2.1 Functional description

A new selector is introduced by this activity called E911RTE which will be pointing to a new table E911TDRT. The type of call field will take the same values as ‘T’ selector i.e DD, OA, NP and NL.

26.1.2.2 Datafill sequence and implications

Standard datafill rules for Table STDPRCT will apply.

Datafilling the new selector pointing to Table E911TDRT will impact the routing of 911 transfer calls based on the TDMPRFX and the called number done in Table E911TDRT.

26.1.2.3 Table size

The E911 Tandem-Tandem feature does not change the size of the table.

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
STDPRTCT	**NA**	**NA**	The size of this table changes dynamically.

26.1.2.4 Table fields

A new selector is introduced called E911RTE in sub-table STDPRT.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
E911RTE	NEW	NA	NA	Selector E911RTE will be one of the selectors available in Table STDPRT.

26.1.2.5 Datafill example

Figure 2 New Selector E911RTE

```
>Table STDPRTCT
> POS P621
> SUB 2
> ADD
> FROMDIGS:
>911
TODIGS:
>911
PRERTSEL:
TYPE OF PRERTSEL IS PRET_ROUTE_SELECTOR
TYPE IS PRET_ROUTE_SELECTOR {S,T,D,N,L,P,V,R,X,F,Z,EA,NSC,FGB,ET,E911,FGDCL,
                            SFMT,SSP,E911RTE}
PRERTSEL:
>E911RTE
TYPCALL:
>OA
NOPREDIG:
>0
MINDIGSR:
>3
MAXDIGSR:
>7
TAB:
TYPE OF TAB IS TAB_NAME
TYPE IS TAB_NAME {E911TDRT}
TAB:
>E911TDRT
POS: NONE
>
TUPLE TO BE ADDED:
               911 911 E911RTE OA 0  3 7 E911TDRT NONE
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y
TUPLE ADDED
```

26.1.2.6 Datafill error messages

Standard error messages of Table STDPRTCT will apply.

26.1.2.7 Table release history update

A new selector E911RTE is introduced by this activity. The 'TYPE_OF_CALL' field will have options DD, OA,NP and NL. This will point to a new table E911TDRT.

26.1.2.8 Supplementary information

None

26.1.2.9 Translation verification tools

26.1.2.9.1 Fixed /Manual Transfer

Traver is not supported for a manual transfer call with translations using the new selector. This is true for 911 transfers where the alternate PSAP number is dialled manually or mapped to a QCK key.The following message is displayed :

'TRAVER NOT SUPPORTED FOR E911RTE SELECTOR'

For transfers using '*' code (like speed call), traver is presently not supported. Hence no modification to the traver tool is done.

26.1.2.9.2 Selective Routing / Default ESN

Traver will be supported for selective / default ESN routing using the TDMPRFX value. The traver tool output will be the same except that with TDMPRFX it will go to a new tuple datafilled in Table E911ESN.

26.1.2.9.3 Selective Transfer

No modification to the traver tool is done as selective transfer involves dialling with '*' code which is presently not supported by traver.

26.1.3 Table name: E911TDRT

E911 Tandem Routing

26.1.3.1 Functional description

A new table E911TDRT is introduced by this activity. This will compose of three fields i.e E911TRDN, TDMPRFX and ROUTE. Based on the dialled

number in 911RTNUMBER and the TDMPRFX which constitute the key, the call will be routed as per the route datafilled for that combination.

26.1.3.2 Datafill sequence and implications

The first field in Table E911TDRT, E911TRDN is the directory number associated with the PSAP transfer. This is a vector of up to 18 digits. TDMPRFX (as explained in section 11.1.1) takes the range from 1 to 15. The field ROUTE can be datafilled for any combination of external route i.e OFRT 1, OFRT 2 etc.

26.1.3.3 Table size

Table 5 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
E911TDRT	0	Depends on digit range of E911TRDN (1500 tuples with all 18 digit E911TRDN entry.)	The size of this table changes dynamically.

26.1.3.4 Table fields

New table E911TDRT will have the following fields:

Table 6 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
E911TRDN	NEW	NA	VECTOR OF UP TO 18 {N,1,2,3,4,5,6,7,8,9,0,B,C,D,E,F}'S	This is the directory number associated with the PSAP transfer and is a vector of up to 18 digits.
TDMPRFX	NEW	NA	Range from 0 to 15	Details as in Sec 11.1.1.4

Table 6 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
ROUTE	NEW	NA	This takes a combination of tabid multiple with integers from 0 to 1023	The final route is selected from the tabid and the number specified. e.g.: OFRT 0, OFRT 1023 For each route the corresponding table is datafilled accordingly.

26.1.3.5 Datafill example

Figure 3 New Table E911TDRT

```
>TABLE E911TDRT
> ADD
9111234 1 OFRT 12
TUPLE TO BE ADDED:
9111234 1 OFRT 12
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
> Y
TUPLE ADDED
```

26.1.3.6 Datafill error messages

THe following error message is displayed for E911TRDN, TDMPRFX and OUTE if the value datafilled is outside the specified range for each field.

*** ERROR ***

The range specified for each field is then displayed.

26.1.3.7 Table release history update

This is a new table introduced by this activity with the following fields:

- E911TRDN - This is the directory number associated with the PSAP transfer and is a vector of up to 18 digits.
- TDMPRFX - 1 to 2 digit number taking a range from 0 to 15.
- ROUTE - This is of type “external_route_id” and is similar to EXTRTEID for ‘T’ selector.

e.g.:- OFRT 0 to OFRT 1023, IBNRTE 0 to IBNRTE 1023

26.1.3.8 Supplementary information

None

26.1.3.9 Translation verification tools

This new table is pointed to by the new selector E911RTE. Refer section 11.1.2.9 for impact to the traver tool.

27: Data schema changes (DS)

27.1 Table information

27.1.1 Table name: SCAISSRV

Switch Computer Application Interface Subservices table

27.1.1.1 Functional description

NA

27.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

27.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
SCAISSRV	0	511	Protected

27.1.1.4 Table fields

The following table lists fields for table SCAISSRV.

The default tuples TPCC15$ and SCAICC09$ will be added to the table SCAISSRV.The new function CALLHELD will be added under each of these categories. The default tuples must be present in the table for subscription to the new functions.

TPCC15$

TPCC (CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (CNTRLREL Y)(NCTRLREL Y) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (ANSWCALL)(RELSCALL Y) (ADDPTY Y Y Y Y) (CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y)(MAKECALL Y Y) **(CALLHELD Y)**$

SCAICC09$

SCAICC (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (ANSWCALL) (RELSCALL Y) **(CALLHELD Y)** $

Table 2 Table field descriptions for table SCAISSRV

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
Function	New	CALLHELD		CALLHELD is added to the functions in categories TPCC and SCAICC.

27.1.1.5 Datafill example

The following example shows sample datafill for table SCAISSRV:

TABLE: SCAISSRV

>add HELDTUP1

MACHINES NOT IN SYNC - DMOS NOT ALLOWED

JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>y

CATEGORY:

>SCAICC

FUNCTION:

>CALLHELD

NCALLID: N

```
>Y
FUNCTION:
>$
TUPLE TO BE ADDED:
HELDTUP1 SCAICC (CALLHELD Y ) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y

>add HELDTUP2
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
CATEGORY:
>TPCC
FUNCTION:
>CALLHELD
NCALLID: N
>Y
FUNCTION:
>$
TUPLE TO BE ADDED:
HELDTUP2  TPCC (CALLHELD Y ) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y
```

27.1.1.6 Table release history update

The field that is added under categories TPCC and SCAICC of table SCAISSRV is **CALLHELD**

27.1.1.7 Supplementary information

NA

27.1.1.8 Translation verification tools

SCAISSRV does not use translation verification tools.

28: Data schema changes (DS)

28.1 Table information

28.1.1 Table name: SCAICOMS

Switch Computer Application Interface Communications Table

28.1.1.1 Functional description

NA

28.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

28.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
SCAICOMS	0	224	N/A

28.1.1.4 Table fields

The following table lists fields for table SCAICOMS.

Table 2 Table field descriptions for table SCAISSRV

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTIONS	Changed	DNSTATUS	Selector	DN Status option indicating DN's need to be associated.

28.1.1.5 Datafill example

The following example shows sample datafill for table SCAICOMS:

Exapmle with DNSTATUS.

Example with TCP Linkset.

TABLE: SCAICOMS

LINKSET:

>tcp1

LNKSEL:

>tcp

IP_ADDR:

>192 136 141 205

MULTIMSG:

>n

OPTION:

>DNSTATUS

OPTION:

>$

The tuple in table SCAICOMS will be as shown below

LINKSET SCAILNKS OPTIONS

TCP1 TCP 192 136 141 205 N (DNSTATUS) $

Similarly an X.25 tuple with DNSTATUS option is as shown below

LINKSET SCAILNKS OPTIONS

X251 X25 (MPC (0 3 000000000000000 9 9 9 9 SVC) $)$ MN CR (DNSTATUS) $

28.1.1.6 Table release history update

The following information was added

Entry DNSTATUS was added to the OPTIONS field.

28.1.1.7 Supplementary information

NA

28.1.1.8 Translation verification tools

SCAICOMS does not use translation verification tools.

29: Data schema changes (DS)

29.1 Table name: CUSTTIID

29.1.1 Functional description

Table CUSTTIID allows trigger items to be assigned on a Customer group basis. A tuple in the table CUSTTIID is composed of a Customer group name, a trigger item identifier (from table TRIGITM) and an activation field.

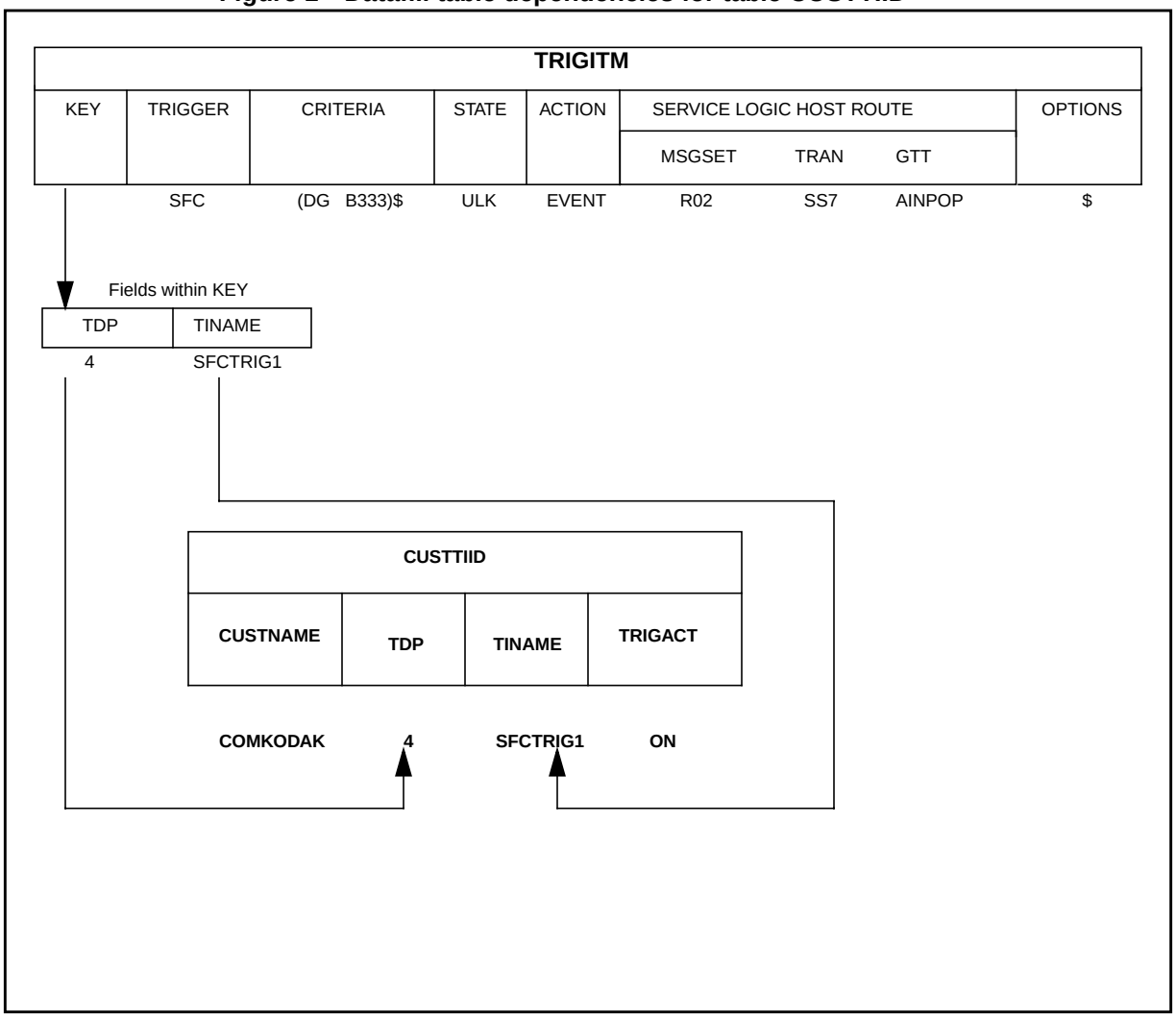
29.1.2 Datafill sequence and implications

The datafill sequence remains the same. For SFC/PFC to be assigned on a customer group this table needs to be datafilled. The following fields need to be datafilled.

- CUSTNAME - Enter a valid customer group name.
- TIID - This is a two part key consisting of the TDP and the TI Name. This key should have a corresponding tuple in table TRIGITM.
- TRIGACT - This is a subscription field that supports a value of ON or OFF.

Table 1, shows the datafill table dependencies for the table CUSTTIID. An example of datafill for the table CUSTTIID is also illustrated in the figure.

Figure 1 Datafill table dependencies for table CUSTTIID



29.1.3 Table size

Unchanged

29.2 Table name: IBNFEAT

Integrated Business Network Line Feature Table

29.2.1 Functional description

Table IBNFEAT (IBN Line Feature Table) lists the specific line features that are assigned to the Integrated Business Network (IBN) and Residential (RES)

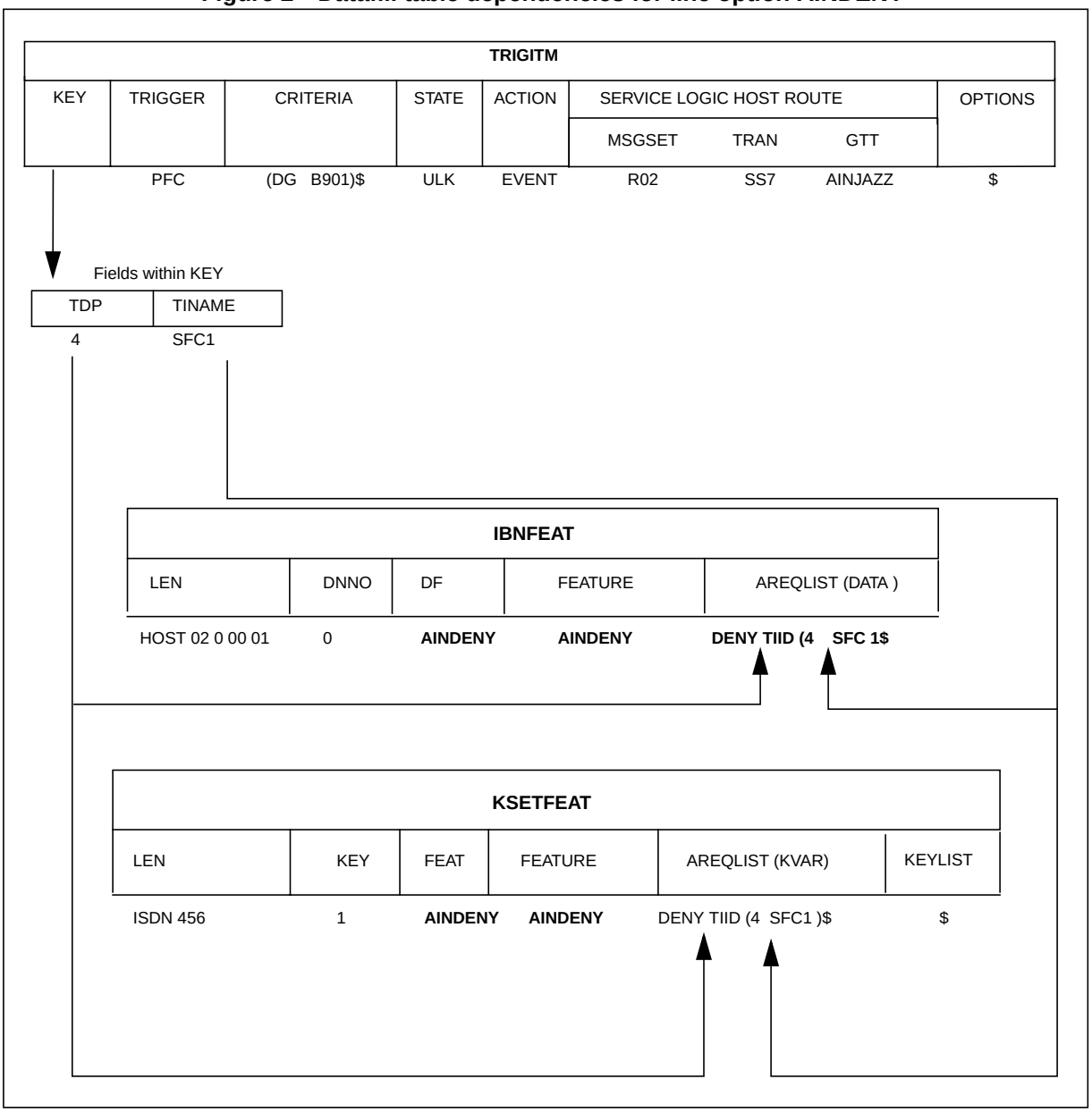
lines listed in table IBNLINES. All additions, deletions and changes to this table must be entered using the Service Order System (SERVORD).

RES lines which subscribe to the AINDENY option will have the subscription entry in table IBNFEAT.

29.2.2 Datafill sequence and implications

Current datafill order is unchanged. For a particular TIID to be denied on a line, table TRIGITM must be datafilled first. It is not possible to datafill a TINAME in the subscription table before it has been defined at the appropriate TDP in table TRIGITM. Please refer to Figure 2.

Figure 2 Datafill table dependencies for line option AINDENY



29.2.3 Table size

Unchanged.

29.2.4 Table fields

The following table lists fields for table IBNFEAT. A new line option AINDENY is created by this activity. When AINDENY is entered against the fields DF and FEATURE, a vector of DENY requests will be prompted for.

Each DENY request consists of the subfields ACTION, SCOPE and ELEMENT. The vector of DENY requests is referred to as AREQLIST. This corresponds to the DATA field.

Table 1 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
DF	Unchanged	Refinement	The list of line options	To deny triggering the line option AINDENY is datafilled
FEATURE	Unchanged	Refinement	The list of line options	To deny triggering the line option AINDENY is datafilled
ACTION	New	Subfield	{ DENY, RESTORE }	To deny a particular TIID or a trigger type, enter DENY. To restore triggering on a particular TIID or trigger type, enter RESTORE.
SCOPE	New	Subfield	{ TIID, ALL }	To deny/restore a TIID, enter the particular TIID. To deny/restore a particular trigger type, enter ALL.
ELEMENT	New	Subfield	valid values depend on the specified value of sub-field SCOPE	When SCOPE=TIID, enter a valid TIID When SCOPE=ALL, enter either of the trigger types, PFC or SFC.

29.2.5 Datafill example

The following example shows sample datafill of a line subscribed to AINDENY option in table IBNFEAT. Please refer to Table 2.

Table 2 Example of AINDENY option in table IBNFEAT

LEN	DNNO	DF	FEATURE	DATA
				AREQLIST
HOST 00 00 01 13	0	AINDENY	AINDENY	(DENY TIID 4 PFC123)
HOST 00 00 01 14	0	AINDENY	AINDENY	(DENY TIID 4 SFC234) (DENY ALL PFC)

29.2.5.1 Table release history update

A new data feature option AINDENY is added in NA015.

29.2.6 Supplementary information

Table IBNFEAT is a read-only table that must be provisioned through Servord. Please refer to the SO section of this document for more information on modifications to the Service Order system.

29.2.7 Translation verification tools

Please refer to the CI section of this document for more information on modifications to the tool TRAVER.

29.3 Table name: KSETFEAT

Key Set Line Feature Table

29.3.1 Functional description

Table KSETFEAT lists the line features that are assigned to the business sets and data units (DU) listed in table KSETLINE. This table also lists the line features that are assigned to the Meridian digital telephone sets and DUs listed in table DNINV.

ISDN BRI lines which subscribe to the AINDENY option will have the subscription entry in table KSETFEAT.

29.3.2 Datafill sequence and implications

Current datafill order unchanged. For a particular TIID to be denied on a logical terminal, table TRIGITM must be datafilled first. It is not possible to datafill a TINAME in the subscription table before it has been defined at the appropriate TDP in table TRIGITM, refer to Figure 2.

29.3.3 Table size

Unchanged.

29.3.4 Table fields

The following table lists fields for table KSETFEAT. A new line option AINDENY is created by this activity. When AINDENY is entered against the field FEATURE, a vector of DENY requests will be prompted for. Each DENY request consists of the subfields ACTION, SCOPE and ELEMENT. The vector of DENY requests is referred to as AREQLIST. This corresponds to the DATA field.

Table 3 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
FEATURE	Unchanged	Refinement	The list of line options	To deny triggering the line option AINDENY is datafilled
ACTION	New	Subfield	{ DENY, RESTORE }	To deny a particular TIID or a trigger type, enter DENY. To restore triggering on a particular TIID or trigger type, enter RESTORE.
SCOPE	New	Subfield	{ TIID, ALL }	To deny/restore a TIID, enter the particular TIID. To deny/restore a particular trigger type, enter ALL.
ELEMENT	New	Subfield	valid values depend on the specified value of sub-field SCOPE	When SCOPE=TIID, enter a valid TIID When SCOPE=ALL, enter either of the trigger types, PFC or SFC.

29.3.5 Datafill example

The following example shows sample datafill of a logical terminal subscribed to AINDENY option in table KSETFEAT. Please refer to Table 4..

Table 4 Example of AINDENY option in table KSETFEAT

FEATKEY			FEATURE	KVAR
LEN	KEY	FEAT		
ISDN 456	1	AINDENY	AINDENY	(DENY TIID 4 PFC12)
ISDN 556	1	AINDENY	AINDENY	(DENY TIID 4 SFC2) (DENY ALL PFC)

29.3.5.1 Table release history update

A new data feature option AINDENY is added in NA015.

29.3.6 Supplementary information

Table KSETFEAT is a read-only table that must be provisioned through Servord. Please refer to the SO section of this document for more information on modifications to the Service Order system.

29.3.7 Translation verification tools

Please refer to the CI section of this document for more information on modifications to the tool TRAVER.

30: Data schema changes (DS)

30.1 Table information

30.1.1 Table name: TRIGITM

TRIGger ITeM

30.1.1.1 Functional description

30.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

30.1.1.3 Table size

Table size unchanged

30.1.1.4 Table fields

The following table lists fields for table TRIGITM. The fields highlighted by **BOLD** are the new changes introduced by this activity.

The TRIGITM Table Data Structure is given below:

>RAN

1 TDP	TI_EXTERNAL_TDP_TYPE
2 TINAME	EIGHT_CHAR_VECTOR
3 TRIGGER	TI_EXTERNAL_TRIGGER_TYPE
4 TRIGDATA	AREA REFINEMENTS
5 CRITERIA	TI_CRIT_VECTOR
6 STATE	TI_STATE_TYPE
7 ACTION	AIN_ACTION
8 SLHR	AREA REFINEMENTS
9 OPTIONS	**TI_OPTIONS_VECTORLOGICAL** TUPLE

TYPE: TRIGITM_LOGICAL_TUPLE

The portion in BOLD is impacted by this activity. The OPTIONS vector has three selectors, LARP, POTUS, DFLTRT. This activity affects only the LARP option. The changes done to the TI_OPTIONS_VECTOR are only to the LARP option area.

>PRINTTYPE TI_OPTIONS_VECTOR

TYPE IS TI_OPTIONS_VECTOR VECTOR OF UP TO 3 MULTIPLES WITH

OPTION {DFLTRT,POTUSE,LARP} REFINEMENTS:
{DFLTRT} MULTIPLE WITH
SELECTOR {ANNDN,ANN,DN,E911ESN} REFINEMENTS:
{ANNDN} MULTIPLE WITH
ANNIDX RANGE 1 to 65535
DN VECTOR OF UP TO 15 DIGIT'S
{E911ESN} MULTIPLE WITH
ESN {0 TO 15999}
{DN} MULTIPLE WITH
DN VECTOR OF UP TO 15 DIGIT'S
{ANN} MULTIPLE WITH
ANNIDX RANGE 1 to 65535
{LARP} MULTIPLE WITH
LINEATTR LINEATTR_KEY
XLAPLAN XLAPLAN_KEY
RATEAREA RATEAREA_KEY
PIC IC_INC_CARRIER_NAME
LPIC IC_INC_CARRIER_NAME
REDIR MULTIPLE WITH
REDIR {N,Y} REFINEMENTS:
{Y} MULTIPLE WITH
FWDATTR {N,Y} REFINEMENTS:
{Y} MULTIPLE WITH
REDIR_PARTY_ID VECTOR OF UP TO 15 DIGIT'S
REDIR_REASON {UNKNOWN, BUSY, NOREPLY, UNCOND}
TCM TABLE OF 2 DIGIT'S
CHARGE_NUMBER VECTOR OF UP TO 15 DIGIT'S
{N} TI_NIL_REDIR_FWDATTR_DATA_AREA
{N} MULTIPLE WITH
FWDATTR {N,Y} REFINEMENTS:
{Y} MULTIPLE WITH
TCM TABLE OF 2 DIGIT'S
CHARGE_NUMBER VECTOR OF UP TO 15 DIGIT'S

```
                {N}        TI_NIL_NOREDIR_FWDATTR_DATA_AREA
    {POTUSE}           MULTIPLE WITH
          POTUSE       {E911,TFS}
```

This activity only effect the TI_LARP_LOGICAL_OPTION_AREA. The changes are highlighted in BOLD.

```
>PRINTTYPE TI_LARP_LOGICAL_OPTION_AREA
TYPE IS TI_LARP_LOGICAL_OPTION_AREA MULTIPLE WITH
        LINEATTR                        LINEATTR_KEY
        XLAPLAN                         XLAPLAN_KEY
        RATEAREA                        RATEAREA_KEY
        PIC                             IC_INC_CARRIER_NAME
        LPIC                            IC_INC_CARRIER_NAME
        REDIR                 MULTIPLE WITH
           REDIR              {N,Y} REFINEMENTS:
           {Y}                MULTIPLE WITH
              FWDATTR         {N,Y} REFINEMENTS:
              {Y}             MULTIPLE WITH
                    REDIR_PARTY_ID VECTOR OF UP TO 15
                                                DIGIT'S
                    REDIR_REASON {UNKNOWN, BUSY,
                                                NOREPLY, UNCOND}
                    TCM         TABLE OF 2 DIGIT'S
                    CHARGE_NUMBER  VECTOR OF UP TO 15
                                                DIGIT'S
              {N}               TI_NIL_REDIR_FWDATTR_DATA_AREA
           {N}                MULTIPLE WITH
              FWDATTR         {N,Y} REFINEMENTS:
              {Y}             MULTIPLE WITH
                    TCM         TABLE OF 2 DIGIT'S
                    CHARGE_NUMBER  VECTOR OF UP TO 15
                                                DIGIT'S
              {N}         TI_NIL_NOREDIR_FWDATTR_DATA_AREA
```

If the option is LARP for SDS/N11/PFC triggers for the entry in table TRIGITM then the user will see two new prompts REDIR and FWDATTR. Where FWDATTR is a selector for the forwarding attributes.

Table 1 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
REDIR	New	Subfield	N,Y	This field is Redirection field. This field is a BOOLEAN and can be datafilled as ‘Y’ or ‘N’. The default value is ‘N’.
FWDATTR	New	Selector	N,Y	This field is Forwarding Attribute field. This is a selector field. The field is a BOOLEAN and can be datafilled as ‘Y’ or ‘N’. The default value is ‘N’.
REDIR_REASON	New	refinement of FWDATTR	UCOND,UNKNOWN, BUSY, NOREPLY	This field is Redirecting Reason. This field can be datafilled by any values specified in Entry. The default value is ‘UNCOND’ This field will not be prompted if FWDATTR=’N’ This field will not be prompted if REDIR=’N’ and FWDATTR=’Y’
REDIR_PARTY_ID	New	refinement of FWDATTR	0 TO 15 DIGITS	This field is Redirecting Party ID. This field can be datafilled by any valid 3 to 15 digit. The default is ‘$’. This field will not be prompted if FWDATTR=’N’ This field will not be prompted if REDIR=’N’ and FWDATTR=’Y’ This field cannot have a “nil-value” ie. ‘$’ if Trigger = PFC.

Table 1 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
TCM	New	refinement of FWDATTR	0 TO 2 DIGITS	This field is Travelling Class Mark. This field can be datafilled by any 2 digit number. The default value ‘$’ This field will be prompted if REDIR=’N’ and FWDATTR=’Y’ or REDIR=’Y’ and FWDATTR=’Y’. **Note**: The values 11 and 12 are reserved and 10 is spare
CHARGE_NUMBER	New	refinement of FWDATTR	0 TO 15 DIGITS	This field is the Charge Number. This field can be datafilled by any valid 3 to 15 digits. The default value is ‘$’ This field will be prompted if REDIR=’N’ and FWDATTR=’Y’ or REDIR=’Y’ and FWDATTR=’Y’.

30.1.1.5 Datafill Example1

The following example shows sample datafill for table TRIGITM, when REDIR='N' and FWDATTR='N'. Please refer to "Table 2 Datafilling LARP option in table TRIGITM" on page 186.

Table 2 Datafilling LARP option in table TRIGITM

LARP OPTION						
LINEATTR	XLAPLAN	RATEAREA	PIC	LPIC	REDIR	FWDATTR
123	613_P621_123	613_LATA1_123	ATT	MCI	N	N

Where:

123 is the Line Attribute Index from the table LINEATTR

613_P621_123 is the XLAPLAN from table XLAPLAN, the pretranslator name is derived from this index

613_LATA1_123 is the RATEAREA from the table RATEAREA, LCANAME is derived from this index

ATT is the Primary Inter eXchange Carrier, should be datafilled in table OCCINFO

MCI is the Local Primary IntereXchange Carrier, should be datafilled in table OCCINFO

N indicates that this LARP is not considered as a redirection

N indicates no Forwarding Attributes are applicable.

30.1.1.6 Datafill Example 2

When REDIR=’N’ and FWDATTR=’Y’ only Charge_Number and TCM parameters are prompted. Please refer to “Table 3 Datafilling LARP option in table TRIGITM” on page 187.

Table 3 Datafilling LARP option in table TRIGITM

LARP OPTION								
LINEATTR	XLAPLAN	RATEAREA	PIC	LPIC	REDIR	FWDATTR	TCM	CHARGE NUMBER
123	613_P621_123	613_LATA1_123	ATT	MCI	N	Y	15	6136212121

Where:

123 is the Line Attribute Index from the table LINEATTR

613_P621_123 is the XLAPLAN from table XLAPLAN, the pretranslator name is derived from this index

613_LATA1_123 is the RATEAREA from the table RATEAREA, LCANAME is derived from this index

ATT is the Primary Inter eXchange Carrier, should be datafilled in table OCCINFO

MCI is the Local Primary IntereXchange Carrier, should be datafilled in table OCCINFO

N indicates that LARP is not considered as redirection

Y indicates that Forwarding attributes are applicable

15 is the TCM value will be used by the response processing in the absence of TCM parameter in the SCP response

6136212121 indicates the charge number to be used in the response processing in the absence of charge number parameter in the SCP response

30.1.1.7 Datafill Example 3

When REDIR='Y' and FWDATTR='Y', RedirectingReason, RedirectingPartyID, TCM and ChargeNumber fields are prompted. Please refer to "Table 4 Datafilling LARP option in table TRIGITM" on page 188.

Table 4 Datafilling LARP option in table TRIGITM

LARP OPTION										
LINEATTR	XLAPLAN	RATEAREA	PIC	LPIC	REDIR	FWDATTR	REDIR REASON	REDIR PARTY ID	TCM	CHARGE NUMBER
123	613_P621_123	613_LATA1_123	ATT	MCI	Y	Y	UNCOND	6136213333	15	6136212121

Where:

123 is the Line Attribute Index from the table LINEATTR

613_P621_123 is the XLAPLAN from table XLAPLAN, the pretranslator name is derived from this index

613_LATA1_123 is the RATEAREA from the table RATEAREA, LCANAME is derived from this index

ATT is the Primary Inter eXchange Carrier, should be datafilled in table OCCINFO

MCI is the Local Primary IntereXchange Carrier, should be datafilled in table OCCINFO

N indicates that LARP is not considered as redirection

Y indicates that Forwarding attributes are applicable

UNCOND indicates the Redirecting Reason, this will be used by the response processing in the absence of redirecting reason parameter in the SCP response message

6136213333 indicates the redirecting party ID, this value will be used in the response processing in the absence of redirecting party id in the SCP response.

15 is the TCM value will be used by the response processing in the absence of TCM parameter in the SCP response

6136212121 indicates the charge number to be used in the response processing in the absence of charge number parameter in the SCP response

30.1.1.8 Table release history update

Table TRIGITM was introduced in NA010 by AU2932. The LARP option enhancement was done by the activity 59008267 in NA012.

30.1.1.9 Translation verification tools

The following example shows the output from <ToolName> when it is used to verify <abbreviated name of table>.

<abbreviated name of table> does not use translation verification tools.

31: Data schema changes (DS)

31.1 Table information

31.1.1 Table name: ACDGRP

Automatic Call Distribution Group

31.1.1.1 Functional description

NA

31.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

31.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
ACDGRP	0	1024	Protected

31.1.1.4 Table fields

The following table lists new sub-field in CDN option for table ACDGRP.

Table 2 Table field descriptions for table ACDGRP

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
CDN	New	CDN_THROUTE	Y,N	CDN_THROUTE if 'Y' ,routes the call to THROUTE.

31.1.1.5 Datafill example

The following example shows sample datafill for CDN option in table ACDGRP:

example :Changing CDN option for ACDGRP XYZ.

TABLE: ACDGRP

>cha options

MACHINES NOT IN SYNC - DMOS NOT ALLOWED

JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>y

OPTION: CDN

>

DEFAULTGRP: ACDGRP2

>

RESPTM: 15

>

CDN_THROUTE:

>y

OPTION:

>$

CAUTION - FIELD MAXWAIT will be overwritten with the default value

due to the CDN option

TUPLE TO BE ADDED:

XYZ PFDEFAULT 0 OFRT 99

OFRT 99 0 N 9 0

N

N NONE N

N

(CDN ABC 45 Y)$

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>y

TUPLE ADDED

JOURNAL FILE INACTIVE

31.1.1.6 Table release history update

New sub-field (CDN_THROUTE type bool) is added in CDN option for table ACDGRP.

31.1.1.7 Supplementary information

NA

31.1.1.8 Translation verification tools

ACDGRP does not use translation verification tools.

32: Data schema changes (DS)

32.1 Table information

32.1.1 Sourcing of patch NPA03

32.1.1.1 Table name: LCASCRCN

Local Call Area Screening Control Table

32.1.1.1.1 Functional description

The functionality of the table is not changed. This activity only adds a new field to the table.

32.1.1.1.2 Datafill sequence and implications

A new field STRIPNPA of type bool is added.Current datafill order is unchanged.Extra datafilling for the new field has to be done .

32.1.1.1.3 Table size

This activity does not change the table size.

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
LCASCRCN	UNCHANGED	UNCHANGED	

32.1.1.1.4 Table fields

The following table lists fields for table LCASCRCN.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
STRIPNPA	New	None	Y / N	Strip the NPA from the Called Number. This field is used by AIN response translation to determine if the NPA has to be stripped or not from the 10 digit number returned by the SCP. If STRIPNPA bool is set to 'Y', the NPA of the called number is stripped. If STRIPNPA bool is set to 'N' the NPA of the called number is not stripped.

32.1.1.1.5 Datafill example

The following example shows sample datafill for table LCASCRCN:

```
NPALOCNM LCASCR PFXSELEC PFXFOR10 LOCALOVR STRIPNPA
-------------------------------------------------
518 HULL (3) OPTL N N N
519 OTWA (11) OPTL N N Y
```

32.1.1.1.6 Table release history update

A new field STRIPNPA of type bool is added to the table LCASCRCN.

32.1.1.1.7 Supplementary information

This field is ignored by translations unless SOC AIN00026 is ON.

32.1.1.1.8 Translation verification tools

The following example shows the output from TRAVER to verify that the new field STRIPNPA added in table LCASCRCN is correctly displayed .Thetable LCASCRCN & the tuple selected is shown in bold in the figure .

Figure 1 When STRIPNPA bool in set to 'N'

```
traver l 6671031 n cdn na 6136211031 ainres r02 ar digconv  b
Warning: Routing characteristics are present.
         Originator must be able to send in
         characteristics specified.
TABLE RTECHAR
 . LECNA (CDN NA $) ( BC 3_1KHZ (CDN NA)$)$
TABLE IBNLINES
HOST 01 0 02 11 0 DT STN RES 6671031 404 613_PUB_404 L613_LATA1_0
613 $
TABLE LINEATTR
404 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 613_PUB_404 L613_LATA1_0
$
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_PUB_404 NSCR 613 PUB TSPS Y RESG613 0 0 $ $
TABLE RATEAREA
L613_LATA1_0 L613 NIL LATA1 $
  .....
  .....
  .....

TABLE XLAMAP
 . Tuple not found. Default is use original XLANAME.
TABLE IBNXLA: XLANAME RX613
TUPLE NOT FOUND
Default from table XLANAME:
RX613
  (NET N N 0 N NDGT N Y GEN ( LATTR 414 613_EAP1_414 L613_LATA1_0)
  (EA NILC Y 0) $ $)$ 9
TABLE DIGCOL
NDGT specified: digits collected individually
TABLE LINEATTR
414 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 613_EAP1_414 L613_LATA1_0
$
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_EAP1_414 C667 613 EAP1 TSPS Y RESG613 0 0 $ $
TABLE RATEAREA
L613_LATA1_0 L613 NIL LATA1 $
TABLE PXLAMAP
 . Tuple not found. Default to old pretranslator name.
 . NOTE: ISDN Digit Conversion has been performed:
 .       Resulting digits are: 16136211031
TABLE STDPRTCT
EAP1 ( 1) ( 0) 3
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
  .....
  .....
TABLE LCASCRCN
613 L613 ( 0) OPTL Y Y N
 . SUBTABLE LCASCR
 . SUBTABLE DATA MISSING
TABLE CLSVSCRC
KEY NOT FOUND
TABLE LATAXLA
TUPLE NOT FOUND
ASSUMED TO BE DEFAULT INTRALATA, INTRASTATE, STD
TABLE TRIGGRP
CDPCODE INFOANAL
  .....
```

32.1.1.2 Table name: LCAINFO

Local Call Area Six Digit Screening Table

32.1.1.2.1 Functional description

The functionality of the table is not changed. This activity only adds a new field to the table.

32.1.1.2.2 Datafill sequence and implications

A new field STRIPNPA of type bool is added.Current datafill order is unchanged.Extra datafilling for the new field has to be done.

32.1.1.2.3 Table size

This activity does not change the table size.

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
LCAINFO	UNCHANGED	UNCHANGED	

32.1.1.2.4 Table fields

The following table lists fields for table LCAINFO.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
STRIPNPA	New	None	Y / N	Strip the NPA from the Called Number. This field is used by AIN response translation to determine if the NPA has to be stripped or not from the 10 digit number returned by the SCP. If STRIPNPA bool is set to ‘Y’, the NPA of the called number is stripped. If STRIPNPA bool is set to ‘N’ the NPA of the called number is not stripped.

32.1.1.2.5 Datafill example

The following example shows sample datafill for table LCASCRCN:

```
LCANAME PFXSELEC LOCALOVR DPCTNAME STRIPNPA
----------------------------------------
ABCDEFG OPTL N PFXFOR10 N
NEWLCA OPTL N PFXFOR10 Y
```

32.1.1.2.6 Table release history update

A new field STRIPNPA of type bool is added to the table.

32.1.1.2.7 Supplementary information

This field is ignored by translations unless SOC AIN00026 is ON.

32.1.1.2.8 Translation verification tools

The following example shows the output from TRAVER to verify that the new field STRIPNPA added in table LCAINFO is correctly displayed .Thetable LCAINFO & the tuple selected is shown in bold in the figure .

Figure 2 When STRIPNPA bool is set to 'Y'

```
traver l 6671031 n cdn na 6136211031 ainres r02 ar digconv  b
Warning: Routing characteristics are present.
         Originator must be able to send in
         characteristics specified.
TABLE RTECHAR
 . LECNA (CDN NA $) ( BC 3_1KHZ (CDN NA)$)$
TABLE IBNLINES
HOST 01 0 02 11 0 DT STN RES 6671031 404 613_PUB_404 L613_LATA1_0
613 $
TABLE LINEATTR
404 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 613_PUB_404 L613_LATA1_0
$
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_PUB_404 NSCR 613 PUB TSPS Y RESG613 0 0 $ $
TABLE RATEAREA
L613_LATA1_0 TRIAL NIL LATA1 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
TUPLE NOT FOUND
TABLE CUSTSTN
RESG613 AIN AIN CDPCODE
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFCTRIG
TABLE NCOS
RESG613 0 0 0 RNCOS $
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT,
AND DIGCOL
RESG613 NXLA RX613 RESGSTAR 0 RES
TABLE DIGCOL
RES specified: RES digit collection
TABLE XLAMAP
 . Tuple not found. Default is use original XLANAME.
  .....
  .....
TABLE RATEAREA
L613_LATA1_0 TRIAL NIL LATA1 $
TABLE PXLAMAP
 . Tuple not found. Default to old pretranslator name.
 . NOTE: ISDN Digit Conversion has been performed:
 .       Resulting digits are: 6211031
TABLE STDPRTCT
EAP1 ( 1) ( 0) 3
 . SUBTABLE STDPRT
  .....
  .....
  .....
TABLE LCAINFO
TRIAL OPTL N PFXFOR10 Y
TABLE LCA6SCRN
TRIAL 613 621 621 Y
TABLE PFXTREAT
OPTL NP Y NP UNDT
TABLE CLSVSCRC
613 C667 NP 2 N NONE ( 1)
  .....
  .....
  .....
```

32.1.2 Sourcing of patch LNP40

32.1.2.1 Table name: CUSTSTN

Customer Station Table

32.1.2.1.1 Functional description

The functionality of the table is not changed. This activity only adds a new option ‘BRITONUN’ in the customer option list for table CUSTSTN.

32.1.2.1.2 Datafill sequence and implications

Current datafill order unchanged.

32.1.2.1.3 Table size

This activity does not change the table size.

Table 5 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
CUSTSTN	UNCHANGED	UNCHANGED	

32.1.2.1.4 Table Options

The following table lists new customer group option for table CUSTSTN.
.

Table 6 Table option descriptions

Option	New or Changed	Subfield or refinement	Entry	Explanation and action
BRITONUN	BRITONUN	None	OPTNAME	This option for a particular customer group provides the capability to disable CDN (TON) based routing for BRI originators when the incoming setup message has “national” Type of Number. It resolves the conflict between BRI and AIN/ LNP translations by changing the type of number of BRI calls from “national” to “unknown”.

32.1.2.1.5 Datafill example

The following example shows sample datafill for table CUSTSTN:

```
CUSTNAME OPTNAME OPTION
-----------------------
PRADEFAULT BRITONUN BRITONUN
COMKODAK BRITONUN BRITONUN
```

32.1.2.1.6 Table release history update

A new customer group option ‘BRITONUN’ is added to the table.

32.1.2.1.7 Supplementary information

During software upgrade , if patch LNP40 is active on the dump side then the option BRITONUN is automatically added in table CUSTSTN for all the customer groups on the switch.

32.1.2.1.8 Translation verification tools

Not applicable.

32.1.3 Routing of LNP calls to datafilled treatment on FOD.

32.1.3.1 Table name: LNPOPTS

Local Number Portability Options Table.

32.1.3.1.1 Functional description

Added a new tuple to LNPOPTS table.

32.1.3.1.2 Datafill sequence and implications

The LNPOPTS table is a protected table. The tuples are added during IPL time. Addition or deletion of tuples are disallowed.The order of tuples appearing in the table is alphabetical and the new tuple appears on the top of the listing.The order of the remaining tuples are unchanged.

32.1.3.1.3 Table size

The tuple count in table has changed from seven to eight.

Table 7 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
LNPOPTS	UNCHANGED	UNCHANGED	Memory is automatically allocated for the tuples.

32.1.3.1.4 Tuple Information

The LNPOPTS table allows only datafilling of the options field of a tuple present in the table.

In the new tuple added, the options field is the ‘Extended treatment’.The conditional information that permits a change operation to datafill the treatment changed from its default value, is to turn the LNP SOC option LNP00202 to ON state.

The following table lists new tuple for table LNPOPTS.

Table 8 Tuple Information

Tuple	New or Changed	Subfield or refinement	Entry	Explanation and action
ACG_10D_ TRMT ACG_10D_ TRMT AINF	New	Selector	Selector.	The value is selected from the list of available ‘Extended Treatments’.The value datafilled is used to route the LNP calls blocked by 10digit ACG controls. The default value is the AINF treatment(AIN_FINAL_TREATMENT).

32.1.3.1.5 Datafill example

The following example shows sample datafill for table LNPOPTS:

```
KEY OPTIONS
-----------
ACG_10D_TRMT ACG_10D_TRMT AINF
```

32.1.3.1.6 Table release history update

A new tuple **ACG_10D_TRMT ACG_10D_TRMT AINF** is added to the LNPOPTS table. The treatment(AINF) can be changed by the user from the ‘Extended Treatments’ list.

32.1.3.1.7 Supplementary information

The added tuple effects the Call Processing behavior of LNP calls blocked by 10Digit ACG controls. The behavior depends on the state of the LNP00200 and LNP00202 SOC states. When the LNP00202 state is ON, the above mentioned LNP calls are routed to the treatment datafilled in tuple. When LNP00202 is IDLE and its parent SOC LNP00200 is ON, the calls are routed to AINF treatment. If both the SOCs are IDLE, the calls are routed to the AINF treatment.

32.1.3.1.8 Translation verification tools

Not applicable.

33: Data schema changes (DS)

33.1 Table information

33.1.1 Table name: TOPSPARM

TRAFFIC OPERATOR POSITION SYSTEM PARAMETER.

33.1.1.1 Functional description

N/A.

33.1.1.2 Datafill sequence and implications

There is no requirement to datafill tables in a specific order.

33.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSPARM	1	128	

33.1.1.4 Table fields

The following table lists fields for table TOPSPARM.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
APS_DISPLAY_DOLLAR_ SIGN	New	None	“Y” or “N”.	The long name of new parameter is ATTENDANT PAY STATION DISPLAY DOLLAR SIGN. Its default value is “Y ”. If it is “N” only charges value is printed, without “$” sign.

33.1.1.5 Datafill example

The following example shows sample datafill for table TOPSPARM:

```
>table TOPSPARM
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: TOPSPARM
>pos APS_DISPLAY_DOLLAR_SIGN
 APS_DISPLAY_DOLLAR_SIGN       Y

>cha
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>y
PARMVAL: Y
>n
TUPLE TO BE CHANGED:
 APS_DISPLAY_DOLLAR_SIGN    N
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y
TUPLE CHANGED
JOURNAL FILE INACTIVE

>lis
PARMNAME                          PARMVAL
------------------------------------------------------------
APS_DISPLAY_DOLLAR_SIGN    N
>
```

33.1.1.6 Table release history update

The new APS_DISPLAY_DOLLAR_SIGN parameter is added to table TOPSPARM.

33.1.1.7 Supplementary information

N/A.

33.1.1.8 Translation verification tools

N/A.

34: Data schema changes (DS)

34.1 Table information

34.1.1 Table name: DNSCRN

34.1.1.1 Functional description

34.1.1.1.1 General The ATTROPTS field of the DNSCRN table will be increased by two range values, SCRGRP1 and SCRGRP2.

34.1.1.1.2 Field Information

Table 29

FIELD NAME	RANGE OF VALUES	STATUS	DEFAULT VALUES
ATTROPTS	CLISI,CLILTID1,CLILTID2,**SCRGRP1, SCRGRP2**,NIL	Changed	N/A

34.1.1.1.3 Description of changed or new fields

The ATTROPTS field in table DNSCRN is used to associate attributes with a directory number. The SCRGRP1 and SCRGRP2 attributes are used by call processing for screening purposes. Each of these attributes can accommodate multiple SCRGRPs ranging from 1 to 6 on a per DN basis. Each SCRGRP will have the following subfield:

SCRGRP_INDEX_RANGE'S - This sub field contains the information of the screening group which contains the configuration of LTIDs to be screened against for that DN. The scrgrp name can be up to 16 characters. Valid group names are listed in the field SCRGNAME of table SCRGRP.

The scrgrp must already be datafilled in table SCRGRP before it can be added in table DNSCRN.

34.1.1.2 Datafill sequence and implications

Tables must be datafilled in the following sequence:

- Table LTDEF
- Table SCRGRP
- Table DNSCRN
-

34.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
DNSCRN	0	unchanged	see below

The EI section of document AR0100 gives the data store requirements for table DNSCRN without regard to any additional data store required by the attributes.

In this document, the addtional memory requirements for the attribute is given. To add the total memory requirements for the complete contents of the table, simply compute the memory requirements as outlined in AR0100 and add the memory requirements given in this document.

This activity adds two new data attributes, SCRGRP1 and SCRGRP2. The store impact is based solely on the number of times each of the attributes appear in table DNSCRN. However, there is some initial overhead even if the attributes do not appear in the table.

This overhead is 19.5 KWords for each attribute. The total is 39 KWords.

The added store used when the attributes are datafilled can be calculated as follows for each attribute. This is shown in the EI section of document AR0100:

((# of SCRGRP1 entries/32768) * 2100 Words) + ((# SCRGRP1 entries/2048) * 8192 Words)

The total store impact from both attributes introduced by this activity can be calculated using the followoing formula:

((# of SCRGRP1 entries/32768) * 2100 Words) + ((# SCRGRP2 entries/ 2048)* 8192 Words)

+ ((# of SCRGRP2 entries/32768) * 2100 Words) + ((# SCRGRP1 entries/ 2048)* 8192 Words)

+ 39000 Words

The formula given is accurate when strictly adding the attributes to the tuples in the table. If some of the attributes are then deleted, the above formula may not provide an exact mesure of the store requirement. As such, an additional 20% store impact should be included in the calculations to compensate for the case of deletion.

The formula to calculate store impact for the data attributes now becomes:

{((# of SCRGRP1 entries/32768) * 2100 Words) + ((# of SCRGRP1 entries/ 2048)* 8192 Words)

+ ((# of SCRGRP2 entries/32768) * 2100 Words) + ((# of SCRGRP2 entries/ 2048)* 8192 Words)

+ 39000 Words} * 1.2

The maximum number of entries for both attributes is 12 per tuple. There are 8,000,000 tuples in table DNSCRN. The maximum store required is:

{((8000000 * 12/32768) * 2100)+((8000000 * 12/2048) * 8192) + 3900} * 1.2

= (6152K +384000K + 39K) * 1.2 Words

= 468229 KWords

34.1.1.4 Table fields

The following table lists fields for table DNSCRN

FIELD NAME	RANGE OF VALUES	STATUS	DEFAULT VALUES
DNSCRN_KEY	MULTIPLE WITH		
DNDIGS	VECTOR UP TO 24 {0, 1, 2, 3, 4, 5, 6, 7, 8, 9} 'S	No Change	No change
ATTROPTS			
DATATYPE	{NIL,CLISI, CLILTID1, CLILTID2, **SCRGRP1, SCRGRP2**}	**Changed**	No Change
REFINEMENT:			
{NIL}	No Change	No Change	No Change
{CLISI}	No Change	No Change	No Change
{CLILTID1}	No Change	No Change	No Change
{CLILTID2}	No Change	No Change	No Change
{SCRGRP1}	**New**	**New**	N/A
CLIOPTS	VECTOR OF UP TO 6 SCRGRP_INDEX_RANGES	**New**	N/A
{SCRGRP2}	**New**	**New**	N/A
CLIOPTS	VECTOR OF UP TO 6 SCRGRP_INDEX_RANGES	**New**	N/A

34.1.1.5 Datafill example

The following example shows sample datafill for table DNSCRN

Table 30 Table DNSCRN Datafill Examples

DN	ATTROPTS
2222	$
1112224444	(CLISI) (SCRGRP1 (PRIGRP 5) (PRIGRP2) $) $
1112225555	(CLISI) (CLILTID1 (ISDN 1) (ISDN 2) (ISDN 3) (ISDN 4) (ISDN 5) (ISDN 6)) (SCRGRP2 (PRIGRP4) (PRIGRP6) (PRIGRP7 $) $
3333	(CLISI) (SCRGRP2 (PRIGRP4) (PRIGRP10) $) $
9054523896	(CLISI) (CLILTID2 (ISDN 3) (ISDN 4) $) $
6133934513	(CLISI) (SCRGRP1 (RTPPRI1) (RTPPRI2) $) (SCRGRP2 (PRIGRP8) (PRIGRP9) $) $

34.1.1.6 Table release history update

Feature A59023407 adds two new attributes to Table Dnscrn, SCRGRP1 and SCRGRP2.

34.1.1.7 Supplementary information

None.

34.1.1.8 Translation verification tools

Not Applicable.

34.1.2 Table name: SCRGRP

34.1.2.1 Functional description

New table SCRGRP is used to store screening groups (SCRGRPs)for PRI CGN/RN Screening. These screening groups consists of up to 180 NI-2/ NTNA ltids. These screening groups are referenced by Table DNSCRN.

34.1.2.2 Datafill sequence and implications

Tables must be datafilled in the following sequence:

- Table LTDEF
- Table SCRGRP
- Table DNSCRN

34.1.2.3 Table size

Table 2 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
SCRGRP	0	1024	2.05 K Words/tuple

Each tuple of this table is stored physically as an array of 32766 booleans. This array represents every possible LTID combination(LTGRP * LTNUM). The implementation of this table allows a DN to be screened against up to 2172 ltids. Having to search sequentially would cause a significant real time hit.

The proposed implemenation of having an entry for every possible ltid allows PRI screening to just index into the array to determine if the originating ltid is datafilled. Although this signficantly increases the size of this table, it more importantly reduces the real time impact of this feature .Maximum store requirements is:

1024 * 2050 words/tuple = 2.098 M Words

34.1.2.4 Table fields

The following table lists fields for table SCRGRP.

Table 3 Table SCRGRP

FIELD NAME	RANGE OF VALUES	STATUS	DEFAULT VALUES
SCRGNAME	VECTOR OF UP TO 16 CHAR'S	NEW	N/A
SCRGRPS		NEW	N/A
LTGRP	LOGICAL_TERMINAL_GROUP_NUMBER		
LTNUM	{1 TO 1022}		

34.1.2.5 Datafill example

The following example shows sample datafill for table SCRGRP

Figure 1 Table SCRGRP

```
SCRGNAME        SCRGRPS
PGRP1           ( ISDN 1) (ISDN 2) ... ( ISDN 220)$
PGRP2           ( SPRI 1) (SPRI 2) ... ( SPRI 220)$
```

34.1.2.6 Table release history update

This is a new table introduced by NA015 PRI DN Screening LTID Enhancement feature.

34.1.2.7 Supplementary information

None.

34.1.2.8 Translation verification tools

Not Applicable.

35: Data schema changes (DS)

35.1 Table information

35.1.1 Table name: LTDEF

35.1.1.1 Functional description

An additional value was added for the VARIANT field - N449PRI. If N449PRI is chosen for the VARIANT, the craftsperson must choose a corresponding ISSUE.

35.1.1.2 Table size

No resizing is required

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
LTDEF	0	unchanged	

35.1.1.3 Table fields

The following table lists fields for table LTDEF.

Table 2 Table LTDEF

FIELD NAME	RANGE OF VALUES	STATUS	DEFAULT VALUES
LTKEY			
LTERM_INDEX	MULTIPLE WITH		
LTGRP	LOGICAL_TERMINAL_GROUP_NUMBER	No change	None
LTNUM	{1 TO 1022}		
LTAP			
LT_ACCESS_PRIVILEGE	{B,D,PB,BD,2B,2BD}	No change	None

Table 2 Table LTDEF

FIELD NAME	RANGE OF VALUES	STATUS	DEFAULT VALUES
CLASSREF			
LTDEF_LTCLASS_AREA	MULTIPLE WITH		
LTCLASS	{BRAKS,BRAFS, PRA,BRAMFT} :	NO CHANGE	NONE
PRA}	MULTIPLE WITH		
NUMBCHNL	{1 TO 2015}	NO CHANGE	NONE
NUMCALLS	{1 TO 2015}	NO CHANGE	NONE
INCCALLS	{0 TO 2015}	NO CHANGE	NONE
OUTCALLS	{0 TO 2015}	NO CHANGE	NONE
VARISSUE	MULTIPLE WITH		
VARIANT	{NTNAPRI,U449PRI,U459PRI,N449PRI,NIPRI}	NEW	NONE
{NTNAPRI}	MULTIPLE WITH		
ISSUE	{V1}	NO CHANGE	NONE
{N449PRI}	MULTIPLE WITH		
ISSUE	{V1}	NEW	NONE
{NIPRI}	MULTIPLE WITH		
ISSUE	{NI2V1}	NO CHANGE	NONE
{U449PRI}	MULTIPLE WITH		
ISSUE	{V1}	NO CHANGE	NONE
{U459PRI}	MULTIPLE WITH		
ISSUE	{V1}	NO CHANGE	NONE

35.1.2 Table name: PRIPROF

35.1.2.1 Functional description

An additional value was added for the VARIANT field - N449PRI. If N449PRI is chosen for the VARIANT, the craftsperson must choose a corresponding ISSUE.

35.1.2.2 Table size

No table resizing is necessary

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
PRIPROF	0	unchanged	

35.1.2.3 Table fields

The following table lists field for table PRIPROF.

Table 4 Table PRIPROF

FIELD NAME	RANGE OF VALUES	STATUS	DEFAULT VALUES
PROFNAME PRIPROF_KEY PROFILE_NAME	 MULTIPLE WITH VECTOR OF UP TO 8 CHAR'S	 NO CHANGE	 NO CHANGE
VARINFO {NTNAPRI} ISSUE {N449PRI} ISSUE {NIPRI} ISSUE {U449PRI} ISSUE {U459PRI} ISSUE	 MULTIPLE WITH {V1} MULTIPLE WITH {V1} MULTIPLE WITH {NI2V1} MULTIPLE WITH {V1} MULTIPLE WITH {V1}	 NO CHANGE NEW NO CHANGE NO CHANGE NO CHANGE	 NONE NONE NONE NONE NONE

35.1.2.4 Datafill example

Table LTDEF

ISDN 500 B PRA 5 5 1 1 **N449PRI V1** NIL (NOPMD) $

Table PRIPROF

ATT4ESS **N449PRI V1** $

35.1.2.5 Table release history update

Feature A59023416 adds an option, N449PRI, to tables LTDEF and PRIPROF.

35.1.2.6 Supplementary information

NONE

35.1.2.7 Translation verification tools

NONE

36: Data schema changes (DS)

36.1 Table information

36.1.1 Table name: XPMIPMAP

XPM IP MAP

36.1.1.1 Functional description

This table provides a mechanism for datafilling IP characteristics for specified SX05 equipped XPM.

36.1.1.2 Datafill sequence and implications

36.1.1.3 Table size

The new field Routmon can be changed while the XPM is Inservice. These change will result in the referenced XPM go ISTb when the standard CM/ XPM audit checks static data between the XPM and CM. Static data download of the changes to the field will NOT take effect until the next RTS.

36.1.1.4 Table fields

Field	New or Changed	Entry	Explanation and action
XPMTYPE	Unchanged	TM2,TM4,ATM,TM8,MTM,DCM, OAU,STM,T8A,TMA,MMA,LM, RSM,TAN,DES,DCA,DCM250, LGC,LCM,DTC,MSB6,LTC, SMR,SMS,SMU,RCT,MSB7, CSC,RMM,IDTC,DCT,RCC, RCS,RCU,ESA,SVR,ILGC, ILTC,RMSC,PTM,DLM,ADTC, PDTC,PHN,IAC,SMSR,ILCM, LCMI,TDTC,TLGC,TLTC,ALGC, VSR,LIM,LIU7,TRCC,PLGC, SPM,SDM,ELCM,LRU,TACC, TMS,LDT,FRIU,FRCC,CFP, TPC,PND,RCCI,ARCC,ALCM,S MA,FILP,AP,HSI,HSI2,DTCI, EIU,IDT,LCME,DA,ORDB,ICP, EXND,HSLR,RMU,ELIU,CFI, IPE,XLIU,PRCC,DTM, ICRM,APU,RCC2,DFI,SRU, ITAC,HLIU,GSMP,VPU,SRCC, HSIE,NIU,RCO2,STS,SPX,CTM, SMA2,GPP,AMC,AIM,OSN,OSN M,OSAC,CAU,CIU,CAVU,ILD, TRLE,ACE,STAR,NLCM,VLCM, IPGW,SPAP,SVR7,RTR7,MLIU, AIU,AIU7,UEN	Type of XPM. Currently only DTC and PDTC are datafillable.
XPMNO	Unchanged	0 - 255	XPM Number.
AUTONEG	Unchanged	10BT or AUTO	Indicates to the XPM whether to run at 10BaseT ethernet speeds or automatically determine whether to run at 10BaseT or 100BaseT. If 10BT is selected the XPM always runs at 10BT. If AUTO is datafilled, the XPM determines what ethernet speed to run at after negotiation with the network.
SUBNMASK	Unchanged	0 0 0 0 - 255 255 255 255	Subnet mask.

Field	New or Changed	Entry	Explanation and action
ROUTMON	**New**	**Y ,N**	**Indicates to the XPM whether to activate or deactivate its dynamic re-routing capability .** **Y = Activated dynamic rerouting capability and N = Inactived dynamic rerouting capability.**
IPCONFIG	Unchanged	CM, BOOTP, or DHCP	IP Configuration. Indicates whether the XPM is configured by CM datafill or by the network via the bootstrap protocol (BOOTP) or the domain host configuration protocol (DHCP). When BOOTP or DHCP is specified then the XPM is responsible for its configuration.
ACTADDR	Unchanged	0 0 0 0 - 247 255 255 255	Active Address. The IP address of the active XPM units. Note this address must be evenly divisible by 4. For example 47 142 225 40 would be valid while 47 142 225 41 would be invalid. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
INADDR	Unchanged	0 0 0 0 - 247 255 255 255	Inactive Address. The IP address of the inactive XPM unit. The inactive address is always field ACTADDR+1. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.

Field	New or Changed	Entry	Explanation and action
UNIT0	Unchanged	0 0 0 0 - 247 255 255 255	The IP address of the XPM unit 0. The inactive address is always field ACTADDR+2. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
UNIT1	Unchanged	0 0 0 0 - 247 255 255 255	The IP address of the XPM unit 1. The inactive address is always field ACTADDR+3. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
GWINDEX	Unchanged	0 - 255	Gateway Index. The index into table XPMIPGWY. This field can contain up to 10 gateway indexes. Note the same gateway index is allowed to be entered more than once for a single tuple. A “$” alone indicates no gateway router is needed. Multiple XPMIPMAP tuples may point to the same gateway index.
DNSINFO	Unchanged	Y, N	Y indicates that a DNS name as well as at least a single DNS server IP address is datafilled. This field is not currently used.

Field	New or Changed	Entry	Explanation and action
DNSNAME	Unchanged	String up to 64 characters	The Domain name. The allowable characters are alphanumerics, dash, and a period [‘A...Z’, ‘0..9’, ‘-’, ‘.’] The name should be entered with single quotes to assure the name is accepted by table control. A domain name greater than 64 chars will either be not accepted as input or may be truncated at 64 characters. This field is not currently used.
SRVADDRS	Unchnaged	A list from 1 to 5 IP addresses (0 0 0 0 - 247 255 255 255)	The IP addresses of the DNS servers. Note the same IP address is allowed to be entered more than once. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used. This field is not currently used.

36.1.1.5 Dump and restore

During an ONP from old load not having this feature to a new load equiped with this feature, the new field will be added and assigned a default value of Y.

36.1.1.6 Datafill example

TABLE XPMIPMAP :

XPMNAME AUTONEG SUBNMASK **ROUTMON** IPCONFIG

DTC 3 AUTO 255 255 255 0 **Y** CM 95 92 9 100 95 92 9 101 95 92 9 102 95 92 9 103 (2) (3) $ N

DTC 5 AUTO 255 255 255 192 **N** BOOTP

DTC 8 AUTO 255 255 255 192 **Y** DHCP

36.1.1.7 Table release history update

- A new field Routmon is added to the table in Tops15.

36.1.1.8 Supplementary information

Refer to A59007541(DS Section)

36.1.1.9 Translation verification tools

XPMIPMAP does not use translation verification tools..

37: Data schema changes (DS)

37.1 Table information

37.1.1 Table name: LCMDRINV

Line Concentrating Module Drawer Inventory

37.1.1.1 Functional description

Unchanged.

37.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

The new RLDNAME field (see section 11.1.1.4) requires that table LCMDRINV be datafilled after table SITE and before table LNINV, as already guaranteed by the current datafill order.

37.1.1.3 Table size

Unchanged.

37.1.1.4 Table fields

The following table lists **new/changed** fields for table LCMDRINV.

The fields listed below are visible only when a Remote Line Drawer (RLD) is datafilled, i.e. when the LDCPEC is NTTR70AA or NTTR70AB.

Table 1 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
RLDSITE	Changed	N/A	Unchanged	Field name is changed to: LOCATION
RLDNAME	New	SITE	A site name defined in table SITE	indicates physical location of the RLD
		FRAME	0 TO 511	indicates the RLD frame number
		UNIT	0 TO 2	indicates the RLD unit number

37.1.1.5 Datafill example

The following example shows sample datafill for table LCMDRINV.
The STAR Hub is “LORN 04 0”.
The new RLDNAME field is presented in ***red italic*** face.
In the RLD at physical drawers 3, RLDNAME is “ARPT 04 03”, i.e. it is located in a different site than the Hub.
In the RLD at physical drawers 15, RLDNAME is “LORN 04 0”, i.e. it is located in the same site of the STAR Hub.

Table LCMDRINV:

```
LORN 04 0
(0 NILDRWR ) (1 NILDRWR ) (2 NILDRWR )
(3 NTTR70AA NTTR45AA 0 RLD11AN 2 DEFAULT 20 AIRPORT ARPT 04 01)
(4 NILDRWR ) (5 NILDRWR ) (6 NILDRWR ) (7 NILDRWR ) (8 NILDRWR )
(9 NILDRWR ) (10 NILDRWR ) (11 NILDRWR ) (12 NILDRWR ) (13 NILDRWR )
(14 NILDRWR )
(15 NTTR70BA NTTR45BA 22 RLD14AM 2 DEFAULT 20 AIRPORT LORN 04 00)
(16 NILDRWR ) (17 NILDRWR ) $
```

37.1.1.6 Table release history update

Field RLDNAME is added in the RLD refinement, to indicate the RLD site, frame number and unit number.

The RLDSITE field is renamed to LOCATION.

37.1.1.7 Supplementary information

At data transfer to the new load, the new RLDNAME field will be automatically datafilled with the site, frame and unit of the hosting STAR Hub. The craftsperson will have to change the RLDNAME and the sub tending line definitions as desired.

Changing the RLDNAME in LCMDRINV is not limited by the RLD state or by the existence of lines on this RLD. This concept is needed to enable changing of the RLDNAME after the first ONP to the CM 15 load.

When changing the RLDNAME, it should be clear to the customer that:

— The RLDNAME should at any moment reflect the real site of the RLD.

— Any existing subtending line will be displayed in table LNINV with the new site, frame and unit.

37.1.1.8 Translation verification tools

LCMDRINV does not use translation verification tools.

37.1.2 Table name: LNINV

Line Inventory.

37.1.2.1 Functional description

Unchanged.

37.1.2.2 Datafill sequence and implications

Current datafill order unchanged.

This activity requires that table LNINV be datafilled after table LCMDRINV, as already guaranteed by current datafill order.

37.1.2.3 Table size

Unchanged.

37.1.2.4 Table fields

No new field is added.

This activity provides the possibility to define a RLD line using the RLD site, frame & unit that are defined in table LCMDRINV RLDNAME field.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
LEN	format unchanged. range changed.	SITE	new: RLD site.	For RLD lines only, the RLD site, frame and unit that are defined in table LCMDRINV RLDNAME field are acceptable as the LEN site, frame and unit. The format of the LEN field is not changed.
		FRAME	new: RLD frame	
		UNIT	new: RLD unit	

37.1.2.5 Datafill example

The following example shows sample datafill for table LNINV:

```
ARPT 04 01 06 00 6X17AC STDLN WORKING N NL N NIL
```

The line in this example is defined off RLD physical drawer 3 presented in the example in section 11.1.1.5.

37.1.2.6 Table release history update

The possibility to datafill a RLD line using the RLD site, frame number and unit number in the LEN is added.

37.1.2.7 Supplementary information

None.

37.1.2.8 Translation verification tools

LNINV does not use translation verification tools.

38: Data schema changes (DS)

38.1 Table information

38.1.1 Table name: MNCKTPAK

Management Network Circuit Pack

38.1.1.1 Functional description

Contains SPM node circuit pack data

38.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

38.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
MNCKTPAK	0	1662	Memory allocated in the OAM Database for MNCKTPAK tuples

38.1.1.4 Table fields

The following table lists changed fields for table MNCKTPAK.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
cpkinfo	changed	refinement	CEM, ATM, VSP, STM, OC3, IEM, DLC, DSP, MGP	Circuit pack info. Contains unit no, group id, working or spare, alarm control info and resource info

38.1.1.5 Datafill example

The following example shows sample datafill for table MNCKTPAK:

```
CPKKEY                                                    CPKINFO
                        PEC  RELEASE       LOAD
-------------------------------------------------------------------------------
       SPM  0 0  3 MGP 0 1 WORKING $ (SYSB CR RPT) (MANB MJ RPT)
                   (ISTB MN RPT) (PROTFAIL CR RPT) $
                   NTLX67AA       01 MGP0000
```

38.1.1.6 Table release history update

Information for the MGP pack type was added.

38.1.1.7 Supplementary information

None

38.1.1.8 Translation verification tools

MNCKTPAK does not use translation verification tools.

39: Data schema changes (DS)

39.1 Table information

39.1.1 Table name: OCGRP

39.1.1.1 Functional description

No change.

39.1.1.2 Datafill sequence and implications

Prior to this feature, only offices with office numbers between 1 and 31 are allowed to be used in this table. This feature updates this table to allow offices with office numbers between 32 and 62 to be datafilled in this table.

This table can now have up to 62 tuples.

The current datafill order is unchanged.

39.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
OCGRP	0	62	The size of this table is doubled from its previous size.

39.1.1.4 Table fields

No Change.

39.1.1.5 Datafill example

The following example shows sample datafill for table OCGRP:

OFFICE	OFCTYPE	VLGRP	DLOVRLAY	BCSLEVEL
HOST	HOST	TOCVLIC1	HDLC TOCDLIC1	50
IPHOST1	HOST	IPVLTOHOST	IP	50
HOST4	HOST	TOCVLIC4	LAPD TOCDLIC4	50
REMOTE	REMOTE	TOCVLOG1	HDLC TOCDLOG1	50

39.1.1.6 Table release history update

The following information was added:

- This table now allows offices with office numbers between 1 and 62 to be datafilled.
- This table can now have up to 62 tuples.

39.1.1.7 Supplementary information

N/A

39.1.1.8 Translation verification tools

N/A

39.1.2 Table name: OCDLGRP

39.1.2.1 Functional description

No change.

39.1.2.2 Datafill sequence and implications

The range for the table index is expanded to 0 to 62.

The maximum number of tuples for this table is increased to 63 (0 to 62).

The current datafill order is unchanged.

39.1.2.3 Table size

Table 2 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
OCDLGRP	0	63	The size of this table is almost doubled from its previous size.

39.1.2.4 Table fields

No Change.

39.1.2.5 Datafill example

The following example shows sample datafill for table OCDLGRP:

INDEX	GRPNAME	LAPDATTR
1	TOCDLIC3	NT
2	TOCDLOG3	TE
3	TOCDLIC4	NT
4	TOCDLOG4	TE

39.1.2.6 Table release history update

The following information was added:

- The range for the table index is expanded to 0 to 62.
- This table can now have up to 63 tuples.

39.1.2.7 Supplementary information

N/A

39.1.2.8 Translation verification tools

N/A

39.1.3 Table name: OCIPDL

39.1.3.1 Functional description
No change.

39.1.3.2 Datafill sequence and implications

This table can now have up to 496 tuples.

The current datafill order is unchanged.

39.1.3.3 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
OCIPDL	0	(8 x 62) = 496	The size of this table is doubled from its previous size.

39.1.3.4 Table fields
No Change.

39.1.3.5 Datafill example
The following example shows sample datafill for table OCIPDL:

IPDLKEY	COMID	IPADDR	PORT
IPHOST1 0	600	192 168 6 4	6024
IPHOST1 1	601	192 168 6 4	6025
IPHOST1 2	602	192 168 6 4	6026

39.1.3.6 Table release history update
The following information was added:

- This table can now have up to 496 tuples.

39.1.3.7 Supplementary information
N/A

39.1.3.8 Translation verification tools
N/A

39.1.4 Table name: VLMEM

39.1.4.1 Functional description
No change.

39.1.4.2 Datafill sequence and implications

This table can now have up to 126914 tuples.

The current datafill order is unchanged.

39.1.4.3 Table size

Table 4 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
VLMEM	0	(2047 x 62) = 126914	The size of this table is doubled from its previous size.

39.1.4.4 Table fields
No Change.

39.1.4.5 Datafill example
The following example shows sample datafill for table VLMEM:

VLKEY	VLGRP	VLEXTRK
HOST 1	TOCVLIC1	1
HOST 2	TOCVLIC1	2
HOST 3	TOCVLIC1	3

39.1.4.6 Table release history update
The following information was added:

- This table can now have up to 126914 tuples.

39.1.4.7 Supplementary information
N/A

39.1.4.8 Translation verification tools
N/A

40: Data schema changes (DS)

40.1 Table information

40.1.1 Table name: ISUPTRK

ISUP Trunk

40.1.1.1 Functional description

The ISUPTRK defines attributes of ISUP IT and ATC trunks for use by TOPS.

This feature adds a new field called BRANDCHC (Brand Choice). This field will determine if the call is branded based on the CIC or SPID if both are present on the call. Note that this functionality requires UNBN0101 and UNBN0103 SOCs active.

40.1.1.2 Datafill sequence and implications

Unchanged.

40.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
ISUPTRK	unchanged	unchanged	increased by two bits

40.1.1.4 Table fields

The following table lists fields added by this feature for table ISUPTRK:

Figure 1 Table field descriptions

Field	New or Changed	Entry	Subfield	Entry	Explanation and action
BRANDCHC	New	N	No refinement		
		Y	CHOICE	CIC, SPID	Specifies whether front-end branding will be done based on CIC or SPID.

40.1.1.5 Datafill example

The following example shows sample datafill for table SPIDDB:

```
TABLE: ISUPTRK
          GRPKEY              CONNTYPE LCANAME          BILLCD CALLSRC
ANI2CLI        RLT SNTPDRST DNLKUP DISPLAY ININTWRK  BRANDCHC
-------------------------------------------------------------------------
      ISUP2WIT           TYPE_A  IEC     NLCA      TOPSBC   0    ORIG
      Y      NONE          N      N       0     NONE    Y SPID
```

40.1.1.6 Table release history update

Field BRANDCHC is added to table ISUPTRK.

40.1.1.7 Supplementary information

None.

40.1.1.8 Translation verification tools

Not applicable.

40.1.2 Table name: TOPSTOPT

TOPS Trunk Options

40.1.2.1 Functional description

The TOPSTOPT defines attributes of TOPS trunks for use by TOPS.

This feature adds a new field called DISPSPID (Display SPID). This field will determine if the SPID display information from table SPIDDB should be sent to the OPP-compatible position on carrier calls.

Similar functionality is already available today via TOPSPARM parameter OPP_ALWAYS_SEND_SPID_INFO; however, DISPSPID allows the activation of this functionality on a trunk group basis whereas the parameter is on an office-wide basis.

40.1.2.2 Datafill sequence and implications

Unchanged.

40.1.2.3 Table size

Table 2 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPSTOPT	unchanged	unchanged	increased by one bit

40.1.2.4 Table fields

The following table lists fields added by this feature for table TOPSTOPT:

Figure 2 Table field descriptions

Field	New or Changed	Entry	Explanation and action	Default
DISPSPID	New	N,Y	Specifies whether or not display information should be sent to the OPP-compatible position on carrier calls.	N

40.1.2.5 Datafill example

The following example shows sample datafill for table SPIDDB:

```
TABLE: TOPSTOPT
>list all
TOP
         GRPKEY            ORGAREA             DISPCLG  ADASERV    ADASANS
ANITOCLI OLNSQRY DCIBIDX LNPCLGAM    XLASCHEM        SPIDPRC     TRKSPID
    BILLSCRN     ANIFSPL MAXCONNS DISPSPID
-------------------------------------------------------------------------
      ISUP2WIT                  N                    Y     NONE         NA
      Y     NONE       0        N          N                Y          N
          N            N        0        Y

      T1II61ISUP                N                    Y     NONE         NA
      N     NONE       0        N          N                Y          N
          N            N        0        N
```

40.1.2.6 Table release history update

Field DISPSPID is added to table TOPSTOPT.

40.1.2.7 Supplementary information

None.

40.1.2.8 Translation verification tools

Not applicable.

40.1.3 Table name: TOPAMAOP

TOPS AMA Options

40.1.3.1 Functional description

The RECORD_DNIS_IN_MODULE_315 parameter is added to table TOPAMAOP. This parameter controls the generation of Module Code 315 when a Generic Address Parameter (GAP) is received in the IAM with a type of address equal to Dialed Number.

40.1.3.2 Datafill sequence and implications

Unchanged.

40.1.3.3 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TOPAMAOP	unchanged	increased by one tuple	increased by one tuple

40.1.3.4 Table fields

The following table lists fields added by this feature for table TOPAMAOP:

Figure 3 Table field descriptions

Field	New or Changed	Entry	Entry	Explanation and action	Default
AMAOPT	Changed	RECORD_DNIS_IN_MODULE_315	Y, N	Specifies whether or not a module code 315 is generated when a GAP parameter with Type of Adddress equal to Dailed Number is appended to the AMA record.	N

40.1.3.5 Datafill example

The following example shows sample datafill for table SPIDDB:

```
TABLE: TOPAMAOP
>list 3
                          AMAOPT
                                                          OPTINFO
------------------------------------------------------------------
            RECORD_BSP_SPID_INFO                            ALL
            RECORD_RLT_REL_MODULE_123                         N
            RECORD_DNIS_IN_MODULE_315                         Y
```

40.1.3.6 Table release history update

Parameter RECORD_DNIS_IN_MODULE_315 is added to table TOPAMAOP.

40.1.3.7 Supplementary information

None.

40.1.3.8 Translation verification tools

Not applicable.

41: Data schema changes (DS)

41.1 Table information

- Table LGRPINV will contain the site, relationship between metallic test access point and vertical connection related with LGs
- Table MTAVERT will support the ability to assign a metallic test access vertical to a LG Node.

41.1.1 Table name: LGRPINV

Logical Group Inventory table.

41.1.1.1 Datafill sequence and implications

Current datafill order unchanged.

41.1.1.2 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
LGRPINV	0	1024	Memory is dynamically allocated.

41.1.1.3 Table fields

The following table lists fields for table LGRPINV.

New field LGRPOPTS has been introduced in table LGRPINV and ‘MTSTAPT’ is the new LGRP option.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
LGRPOPTS	NEW	LGRPOPTS	MTSTAPT or $	New field. For 'MTSTAPT' option, prompt for additional information :-site and vert_info.
		SITE_NAME	1 to 4 Chars	Gateway Site.
		VERT_INFO	(vertical number, mtapt number) or $	up to 8 vert_info entries can be data filled against a LG. vertical number {0 to 1023} mtapt number {0 to 48}

41.1.1.4 Datafill example

The following example shows sample datafill for table LGRPINV.

```
GRPNO       SRVRNAME    GRPTYPE   LGRPOPTS

------------------------------------------------------------

LG    00 0          GWC   0       S     (MTSTAPT BRTP (1 1)(2 3)...(8 32)$)$
```

Figure 1 LGRPOPTS datafill example.

```
>table lgrpinv
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: LGRPINV

>format pack
<line length>:   76 columns can be output per line.
<pack mode>:     Pack mode is ON.
<indent column>: Indented lines will begin in column 1.
<first column>:  The first column of output is column 1.
>heading

GRPNO SRVRNAME GRPTYPE LGRPOPTION
---------------------------------
>add
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>y
GRPNO:
>lg 00 0
SRVRNAME:
>gwc 0
GRPTYPE:
>s
LGRPOPT:
>mtstapt
SITE_NAME:
>brtp
VERT_INFO:
>2 3
VERT_INFO:
>4 5
VERT_INFO:
>6 7
VERT_INFO:
>8 9
VERT_INFO:
>$
TUPLE TO BE ADDED:
LG 00 0 GWC 0 S
(MTSTAPT BRTP ( 2 3) (4 5) (6 7) (8 9) $)$
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>
>Y
TUPLE ADDED
```

41.1.1.5 Table release history update

The following information is added to the table

1. Field LGRPOPTS to table LGRPINV.

41.1.1.6 Supplementary information

Error Messages

- When try to delete LG node while verticals are datafilled against a LG in table MTAVERT.

  ERROR: Verticals are data filled in MTAVERT, must be deleted before LGRP node.

- When try to datafill duplicate verticals against a LG.

  ERROR: Duplicate verticals are data filled

- When no verticals are data filled for MTSTAPT option.

  ERROR: At least one vertical should be data filled.

- When try to change a tuple to delete vertical assignment. i.e., verticals are data filled in table MTAVERT and trying to change those verticals from LGRPINV table.

  ERROR: Can not delete verticals from LGRPINV with out first deleting verticals from table MTAVERT.

41.1.1.7 Translation verification tools

None

41.1.2 Table name: MTAVERT

41.1.2.1 Datafill sequence and implications

Current datafill order unchanged.

41.1.2.2 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
MTAVERT	0	1024	Memory is allocated dynamically for the newly defined data structure and statically allocated for the existing ones.

41.1.2.3 Table fields

The following table lists fields for table MTAVERT.If the entry in sub field VERTSEL is ‘G’, datafill field as shown in the field description table.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
VERTCONN	Changed	VERTSEL SELECTOR LINEMOD	S, M or G L, E, T or O LG 00 0	If G, it indicates Group type vertical connectivity. For G, only O and LG are valid SELECTOR and LINEMOD respectively. Up to 32 entries can be data filled.

41.1.2.4 Datafill example

The following example shows sample datafill for table MTAVERT.

```
VERT            VERTCONN

-----------------------------

2          G (O LG 00 0) (O LG 00 1) (O LG 02 2) $
```

Figure 2 MTAVERT datafill example.

```
>table mtavert
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: MTAVERT

>format pack
<line length>:   76 columns can be output per line.
<pack mode>:     Pack mode is ON.
<indent column>: Indented lines will begin in column 1.
<first column>:  The first column of output is column 1.
>heading
VERT VERTCONN
-------------

>add
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>y
VERT:
>2
VERTSEL:
>g
SELECTOR:
>o
LINEMOD:
>lg 00 0
SELECTOR:
>o
LINEMOD:
>lg 00 01
SELECTOR:
>o
LINEMOD:
>lg 02 2
SELECTOR:
>$
TUPLE TO BE ADDED:
  2          G (O LG 00 0 ) (O LG 00 1 ) (O LG 02 2 ) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>
>Y
TUPLE ADDED
JOURNAL FILE INACTIVE
```

41.1.2.5 Table release history update

The following information is added to the table

1. Selector G to the sub field VERTSEL of table MTAVERT.

41.1.2.6 Supplementary information

Error Messages

- When try to change the vertical connection type. (G, M or S)

  ERROR:Must delete tuple first to change connection type.

- When try to datafill a LCD type other than LG against a group type vertical.

  ERROR: Device(s) specified not of type allowed to share a vertical.

- If the allocation of storage for physical data lg_tan_lm_data was not done properly during IPL time and trying to add a tuple to mtavert with vertical connection type as G.

  ERROR: LG_TAN_LM_DATA is not allocated

- This message will be displayed if there are some internal data corruption verified during add or update operation.

  ERROR: Data mismatch with internal data.

- When try to datafill more than 8 vertical assignments to a particular LG.

  ERROR: The limit has crossed for one of the LG
  Only up to 8 verticals can be data filled against a LG

- When try to change a vertical assignment or duplication in vertical assignment.

  ERROR: VERTICAL exists for one of the LG

- When try to datafill a wrong vertical assignment.

  ERROR: VERTICAL is not data filled in LGRPINV for some of the LGRPs.

- When no LCDs are data filled for a vertical connection type.

  ERROR: Missing connectivity, require at least ONE item in list

- When try to datafill a vertical selector as other than ‘O’ (Odd type) against ‘G’ type verticals.

  ERROR: Wrong selector for a item in list

41.1.2.7 Translation verification tools

None

42: Data schema changes (DS)

42.1 Table information

42.1.1 Table name: TRKOPTS

TRunK OPTionS

42.1.1.1 Functional description

Trunk specific options are assigned to a specified trunk CLLI in Table TRKOPTS.

42.1.1.2 Datafill sequence and implications

Current datafill order unchanged.

42.1.1.3 Table size

Table 1 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
TRKOPTS	Unchanged	Unchanged	Unchanged

42.1.1.4 Table fields

The following table lists fields for table TRKOPTS.

Table 2 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
OPTKEY	Changed	No	new option RLT	Indicates if the trunk supports Release Link Trunking

42.1.1.5 Datafill example

The following example shows sample datafill for table TRKOPTS:

Table TRKOPTS
OPTKEY OPTINFO

ISUP2WIT RLT RLT

42.1.1.6 Table release history update

Adding new option RLT for ISUP IT trunk to Table TRKOPTS.

42.1.1.7 Supplementary information

None

42.1.1.8 Translation verification tools

Table TRKOPTS does not use translation verification tools.

42.1.2 Table name: CUSTHEAD

CUSTomer HEAD

42.1.2.1 Functional description

Customer group datafill.

42.1.2.2 Datafill sequence and implications

Current datafill order unchanged.

42.1.2.3 Table size

Table 3 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
CUSTHEAD	Unchanged	Unchanged	Unchanged

42.1.2.4 Table fields

Unchanged.

Table 4 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action

42.1.2.5 Datafill example

RLT2DIAL is blocked from datafill in table CUSTHEAD. This is the only change to CUSTHEAD by this feature. If an attempt is made to datafill RLT2DIAL the following message is generated:

"Cannot Specify RLT2DIAL - Reserved for Release Link Trunking"

42.1.2.6 Table release history update

Adding error message for RLT2DIAL.

42.1.2.7 Supplementary information

None

42.1.2.8 Translation verification tools

N/A

42.1.3 Table name: CUSTNTWK

CUSTomer NeTWorK

42.1.3.1 Functional description

Customer network datafill.

42.1.3.2 Datafill sequence and implications

Current datafill order unchanged.

42.1.3.3 Table size

Table 5 Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
CUSTNTWK	Unchanged	Unchanged	Unchanged

42.1.3.4 Table fields

Unchanged.

Table 6 Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action

42.1.3.5 Datafill example

RLT2DIAL is blocked from datafill in table CUSTNTWK. This is the only change to CUSTNTWK by this feature. If an attempt is made to datafill RLT2DIAL the following message is generated:

"Cannot Specify RLT2DIAL - Reserved for Release Link Trunking"

42.1.3.6 Table release history update

Adding error message for RLT2DIAL.

42.1.3.7 Supplementary information

None

42.1.3.8 Translation verification tools

N/A

Command Interface Highlights

Directory	Commands	Comments	Featid
TOPSPOS	QUIT, POST, LISTSET, TST, BSY, RTS, OFFL, NEXT, FRLS, LISTALMS, INFO, ABTK	New	a59006653
ETHR	QUIT, TST, BSY, RTS, LOADFW, UNEQ, ALARM, INDICAT, QUERY, ABTK	New	a59019176
USNBD	CCR AD, CCR LIST, UNB_OFCWIDE, HELP	Changed	a59021965
"	AGENCY ADD, AGENCY LIST, AGENCY DEL, TEST	New	"
USNBD	SURV ADD, SURV DEL, SURV LIST, SURV ACT, SURV DEACT, CCR ADD, CCR DEL, CCR ASSOC, CCR DISAS-SOC, CCR LIST, CDC ADD, CDC DEL, CDC ASSOC, CDC DISASOC, CDC LIST	Changed	a59021979
CI	QESN	Changed	a59021993
REVXLVER	REVXLVER	Changed	a59022041
TSTQUERY	TSTQUERY	Changed	a59022523
AINTRACE	AINTRACE	Changed	"
Not applicable	TRAVER, QDN, QLEN, QLT	Changed	a59022533
CI	TRAVER	New	a59022554
CI	QLEN, QLENWRK	Changed	a59023787

Command Interface Highlights

Directory	Commands	Comments	Featid
MGP	QUIT, LISTSET, TST, BSY, RTS, OFFL, LOAD-MOD, SELECT, QUERY-MOD, LISTALM, PROT, RESETMOD, NEXT, WAIT, ABTK, POST	New	a59024393
Not applicable	REVXLVER	Changed	a59026486

a59006653
a59019176
a59021965
a59021979
a59021993
a59022041
a59022523
a59022533
a59022554
a59023787
a59024393
a59026486

SERVORD List of Features

43: Command interface changes (CI)

43.1 Directory: TOPSPOSDIR

43.1.1 Directory description

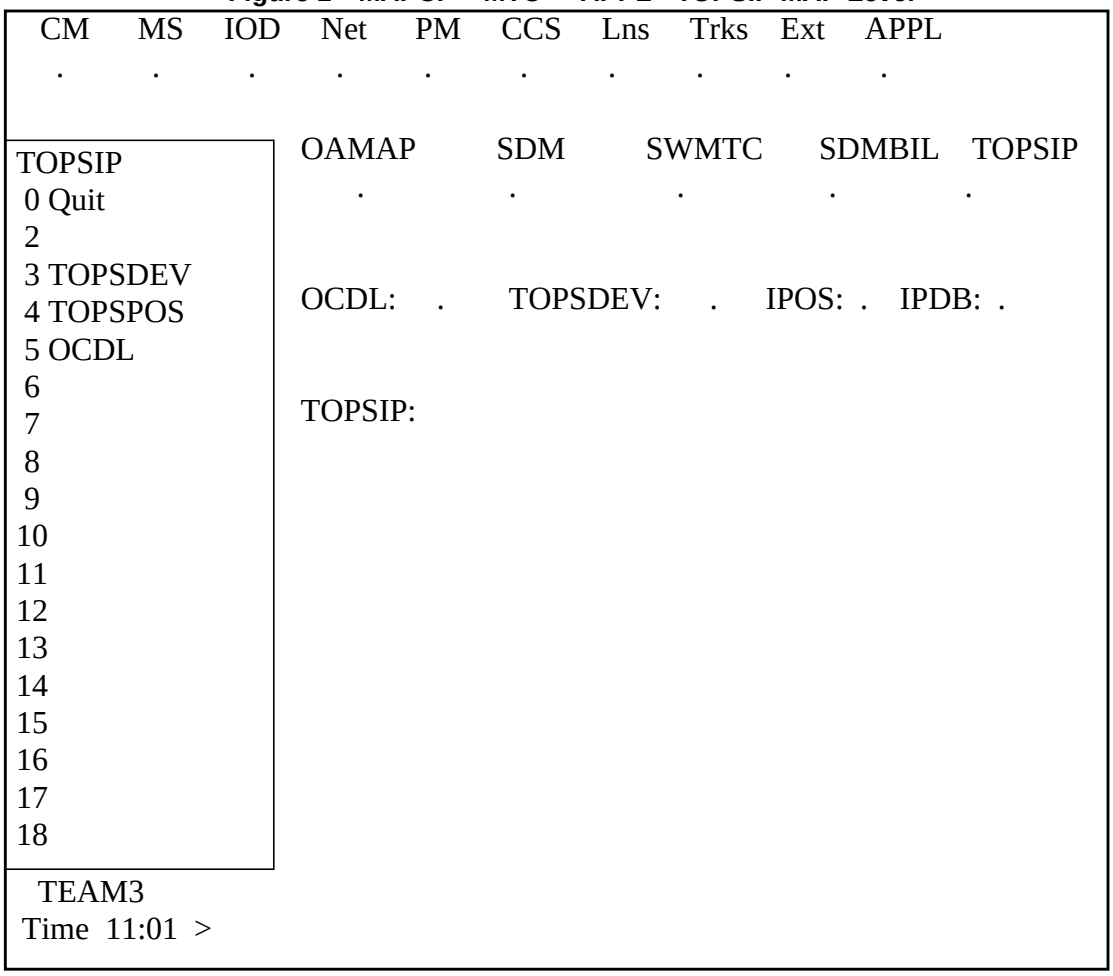
This level of the MAP provides maintenance for OPP compliant IP positions connected to a managed IP network.

43.1.2 Accessing directory: TOPSPOS

43.1.2.1 Access to directory or MAP level and return to CI

Whenever the OCDL command is entered from the MAPCI -> MTC -> APPL->TOPSIP MAP level, the TOPSPOS MAP level is accessed. The TOPSPOS command appears at the TOPSIP MAP level as menu item number 4 as shown in the following figure:

Figure 1 MAPCI -> MTC -> APPL->TOPSIP MAP Level



Use the following command sequence to access this directory:

MAPCI;MTC;APPL;TOPSIP;TOPSPOS:

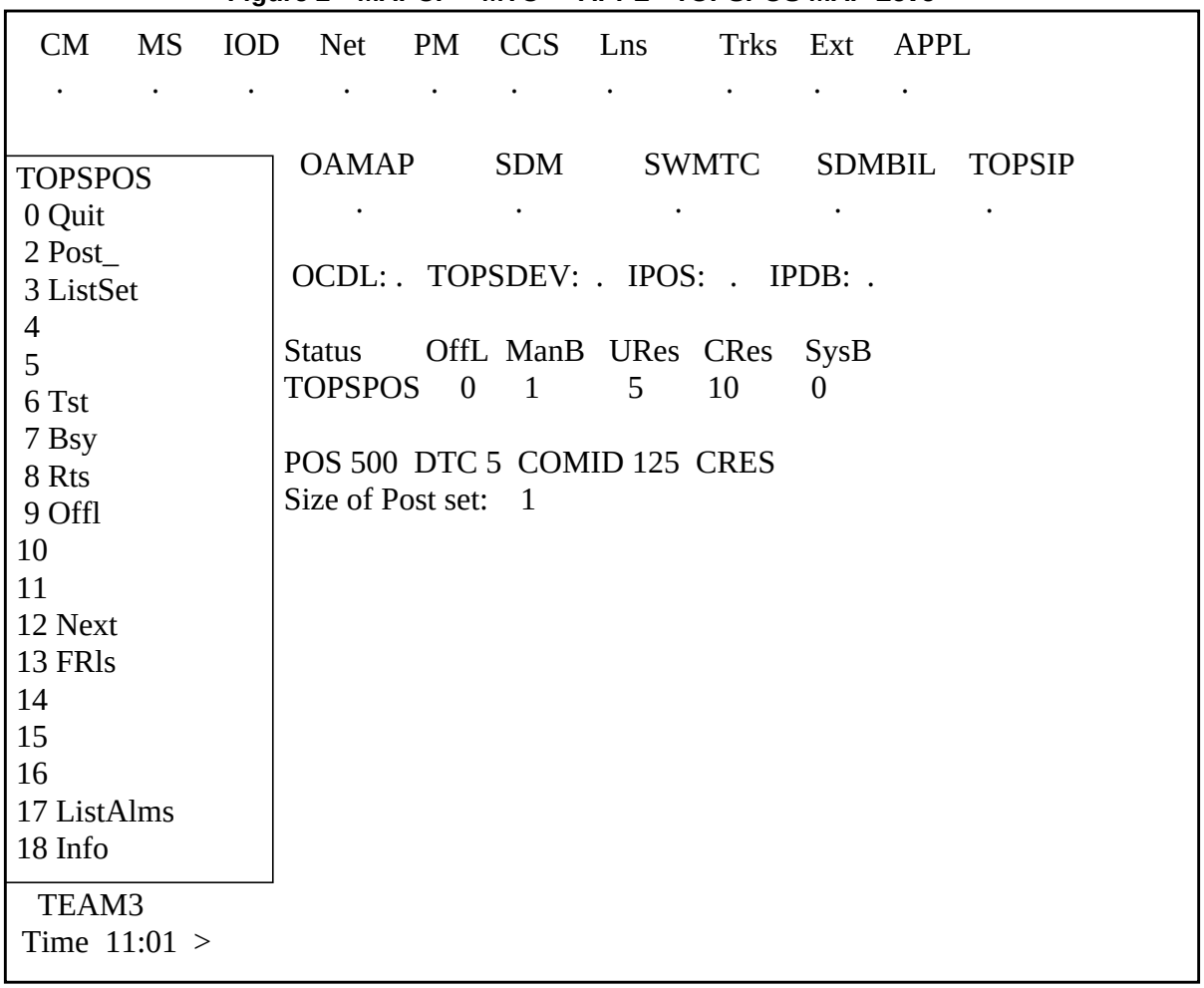
The TOPSPOS command appears at the TOPSIP MAP level as menu item number 4.

To return to the CI environment from this directory, the QUIT command must be issued from the command line of the TOPSPOS MAP level with one of the two possible parameters.

- QUIT ALL

- QUIT MAPCI

Figure 2 MAPCI -> MTC -> APPL->TOPSPOS MAP Leve



This level provides commands and status displays to maintain the IP TOPS Positions. A count of number of TOPS positions in a given state is displayed below the TOPSIP alarm banner. Below this, the status of the currently posted TOPS Position is displayed. Below this, the size of the post set is shown.

43.2 Command: QUIT

43.2.1 Command type: Listed MENU

43.2.2 Command target: BRISC / XACORE

43.2.3 Command availability: RES

43.2.4 Command description

The QUIT command is used to exit from the TOPSPOS MAP level and to return to a previous level.

43.2.5 Command syntax

QUIT [<n levels | incrname | ALL>]

Table 1 QUIT command parameters and variables

Command	Parameters and variables
QUIT	[<n levels | incrname | ALL>]
Parameters and variables	**Description**
n levels	Specifies the number of MAP levels to quit.
incrname	The name of a MAP level increment that must precede the current increment in nesting. The TOPSPOS level, and preceding levels back to and including <incrname> are quit out of, leaving the user in the MAP level entered prior to <incrname>.
ALL	Specifies that the user wants to quit all MAP levels and return to the CI level.

43.2.6 Qualifications and warnings

None

43.2.7 Responses

43.2.7.1 QUIT Success

This response means the QUIT command was successfully executed. The system replaces the TOPSPOS MAP level with a different level.

43.2.7.2 QUIT Failure

The QUIT command has failed. An invalid level number or increment was entered for the variable parameter. The number entered exceeds the number of MAP levels from which to quit, or the increment has not been entered by the user.

43.2.8 Map Output

Table 2 MAP outputs with associated meanings and actions

Change to a different map level **Meaning**: The QUIT command was successfully executed. **System or user actions:** Control is returned to the level specified by the user. No user action is required in response to the return of control to the different level.
QUIT -- Unable to quit requested number of levels **Meaning**: An invalid level number or increment was entered for the variable parameter. **System or user actions:** Control remains at the TOPSPOS MAP level. The user should re-enter the command using the appropriate level number.
QUIT -- Increment not found **Meaning**: An invalid level number or increment was entered for the variable parameter. **System or user actions:** Control remains at the TOPSPOS MAP level. The user should re-enter the command using the appropriate increment.

43.2.9 Example

Table 3 Usage examples for QUIT command

Description of task:	Quit out of all levels and return to the CI level
Command: MAP Response:	QUIT ALL The display changes back to the CI level
Description of task:	Quit out of the TOPSPOS level
Command: MAP Response:	QUIT or QUIT TOPSPOS Control is changed to the TOPSIP MAP level

43.3 Command: POST

43.3.1 Command type: Listed MENU

43.3.2 Command target: BRISC /XACORE

43.3.3 Command availability: RES

43.3.4 Command description

The POST command allows the craftsperson to post an OPP-compliant position on the DMS LAN for maintenance purposes.

43.3.5 Command syntax

POST <IPPOS_ Selector>	P	[<PosNo> .. {0 TO 9999}	
	S	[<State> ... {OFFL, MANB, URES, CRES, IDL, CPB, CPD, SYSB}	
	PM	[<PMType> ...{DTC	[<ALL> {ALL}]
			[PMNo>... {0 TO 255}]
	C	[<COMID ... 0 TO 255}]	
	ALL		

Table 4 POST command parameters and variables

Command	**Parameters and variables**
Post	P {<PosNo>} S {<State>} PM {<PMType>} {<PMno>} C {<COMID>} ALL
Parameters and variables	**Description**
P PosNo	Post IP position number(s) as provisioned in table TOPSPOS.
S State	Post all IP positions in the specified state(s)..

Table 4 POST command parameters and variables (Continued)

Command	Parameters and variables
PM PMType PMNo	Post all IP positions connected to the specified IP XPM(s).
C COMID	Post all IP positions using the specified COMID(s).
ALL	Post all IP positions

43.3.6 Qualifications and warnings

Post parameters based on Position Numbers, Position States, COMIDs, PM Numbers or the ALL parameter only places IP datafilled positions (not TMS based positions) in the post set. Only TOPS IP positions can be posted from the TOPSPOS MAP level.

43.3.7 Responses

43.3.7.1 Either incorrect optional parameter(s) or too many parameters

The user did not enter the correct parameter(s) for the POST command.

43.3.7.2 No Parameters - Could Not Create Post Set

The user did not specify a parameter when using the POST command.

43.3.7.3 <Position Number> Invalid - Could Not Create Post Set

The user specified a position number NOT provisioned in table TOPSPOS.

43.3.7.4 <Position Number> not configured for IP in TOPSPOS

The user did not specify a position number that is datafilled IP in TOPSPOS.

43.3.7.5 <PM No> Invalid - Could not Create Post Set

The user did not specify a PM No provisioned in table LTCINV, or no positions using that PM No are datafilled in table TOPSPOS.

43.3.7.6 <COMID> Invalid - Could not Create Post Set

The user did not specify a COMID provisioned in table IPCOMID, or no positions using that COMID are datafilled in table TOPSPOS.

43.3.7.7 Successful Post of Position(s)

The position number along with the XPM, COMID and state are displayed.

43.3.8 MAP Output

Table 5 MAP outputs with associated meanings and actions

Either incorrect optional parameter(s) or too many parameters. **Meaning**: The user entered the wrong parameter(s) **System or user actions:** The system issues the message to the user. The user can enter the HELP command to get more information on the POST command.
No Parameters - Could not create Post Set. **Meaning**: The user did not specify a required parameter. **System or user actions:** The system issues the message to the user. The user can enter the HELP command to get more information on the POST command.
<Position Number> Invalid - Could not Create Post Set **Meaning**: The user did not specify a position number datafilled in table TOPSPOS. **System or user actions:** The system issues the message to the user. The user checks table TOPSPOS.
<Position Number> not configured for IP. **Meaning**: The user did not specify a position number that is datafilled as IP in table TOPSPOS. **System or user actions:** The system issues the message to the user. The user checks table TOPSPOS.
<PM Number> is invalid - Could not create post set **Meaning**: The user did not specify a PM Number with position numbers that are datafilled with IP in table TOPSPOS. **System or user actions:** The system issues the message to the user. The user checks table LTCINV and TOPSPOS.
<COMID> Invalid - Could not Create Post Set. **Meaning**: The user did not specify a COMID datafilled in table IPCOMID, or no positions using that COMID are datafilled in table TOPSPOS. **System or user actions:** The system issues the message to the user. The user checks tables IPCOMID and TOPSPOS.

Table 5 MAP outputs with associated meanings and actions

POS <Position Number> <PM Type> < PM No> COMID <COMID> <Position State> **Size of Post Set: <Number>** **Meaning**: The post command was executed successfully. **System or user actions:** The system posts a set of positions as a response to the successful execution of the post command. The first position in the post set is displayed for the user.

43.3.9 Example

Table 6 Usage examples for POST command

Description of task:	Post all TOPS IP positions that are ManB (e.g. 5)
Command: MAP Response:	Post S ManB POS 600 DTC 5 COMID 66 ManB Size of Post Set: 5

43.4 Command: LISTSET

43.4.1 Command type: Listed MENU

43.4.2 Command target: BRISC/XACORE

43.4.3 Command availability: RES

43.4.4 Command description

The LISTSET command allows the craftsperson to list all of the positions in the post set.

43.4.5 Command syntax

LISTSET

Table 7 LISTSET command parameters and variables

Command	Parameters and variables
LISTSET	None
Parameters and variables	**Description**

43.4.6 Qualifications and warnings

None

43.4.7 Responses

43.4.7.1 No Position Posted

The post set is empty.

43.4.7.2 LISTSET does NOT utilize any parameters

The user entered parameters, but the LISTSET command does NOT allow parameters.

43.4.8 MAP Output

Table 8 MAP outputs with associated meanings and actions

{Positions in the post set are listed.} **Meaning**: The post set is listed with position number, XPM, COMID and state. **System or user actions:** The system lists all positions in the post set for the user.
No Position Posted **Meaning**: The post set is empty. **System or user actions:** Post desired positions and attempt the LISTSET command again.
LISTSET does NOT utilize any parameters **Meaning**: The user entered parameter(s) and the LISTSET command does not utilize any. **System or user actions:** The system updates the display. The users can re-enter the LISTSET command without any parameters.

43.4.9 Example

Table 9 Usage examples for LISTSET command

Description of task:	List all positions in the post set (e.g. 3).
Command: MAP Response:	LISTSET POS 305 DTC 5 COMID 66 MANB POS 307 DTC 5 COMID 66 SYSB POS 355 DTC 5 COMID 66 URES

43.5 Command: TST

43.5.1 Command type: Listed MENU

43.5.2 Command target: BRISC/XACORE

43.5.3 Command availability: RES

43.5.4 Command description

The TST command can be executed while in the CRES state to initiate a position test request. The results of the test returned from the position are displayed at the MAP. The displayed results consist of the IP data link of the position and the round trip time of the test (which represents the time for message response).

The TST command will time-out after 5 seconds if no response is received. If the test fails, a message is displayed for the user and the command prompt appears.

43.5.5 Command syntax

TST

Table 10 TST command parameters and variables

Command	Parameters and variables
TST	None
Parameters and variables	**Description**

43.5.6 Qualifications and warnings

None

43.5.7 Responses

43.5.7.1 TST does NOT utilize any parameters

The TST command does not have parameters. The user must re-enter the command without parameters.

43.5.7.2 TST Passed: Round trip time: <number> msec

The TST command was successful.

43.5.7.3 Request Invalid: Position must be CRES

The position must be in the CRES state in order to issue the TST command.

43.5.7.4 No Position Posted

The user entered the TST command, while no position(s) were posted.

43.5.7.5 TST Failed: <test_fail_message>

The test was issued, but failed because of the reason specified by the <test_fail_message> parameter. The <test_fail_message> will be “XPM not in-service”, “Message send failure”, or “No response timeout”. If a reply is received from the position, table MTCTEST will be referenced for text, or if datafill for the return code from the position does not exist, “RC = <number>” is displayed.

43.5.8 MAP Output

Table 11 MAP outputs with associated meanings and actions

TST does NOT utilize any parameters **Meaning**: The user entered parameter(s) and the TST command does not utilize any. **System or user actions:** The system updates the display. The users can re-enter the TST command without any parameters.
TST Passed **Meaning**: A position test request was successful. **System or user actions:** The system sends a TST request to the position, the position replies with a test successful response.
Request Invalid: Position must be CRES **Meaning**: The position must be in the CRES state in order to execute the TST command. **System or user actions:** The system issues the message to the user. The user must wait for an in-service message to be received from the position before the position can transition to the CRES state.
No Position Posted **Meaning**: There is no position posted. **System or user actions:** The system issues the message to the user. The user must post position(s) before issuing the TST command.
TST Failed: Error = <test_fail_message> **Meaning**: The test failed because of the reason specified by tst_failed_msg. The possible values for tst_failed_msg are: **No response timeout**-- This means the DMS timed out waiting on a reply to the TST message from the position. **Invalid Request** -- This may occur if the position has transitioned to a state other than CRES once the TST command was entered. **Position_unavailable_for_diags** -- This is an example of getting a return code response from the position, and referencing table MTCTEST for text. The text is out of table MTCTEST. **No datafill for this error code in table MTCTEST** **RC = 152** -- This is an example of getting a return code response from the position, and referencing table MTCTEST for text, but the return code happens to not be datafilled. **System or user actions:** The system issues the message to the user. The user should investigate the problems with the IP XPM, Network or the IP Position.

43.5.9 Example

Table 12 Usage examples for TST command

Description of task:	TST the posted position
Command: MAP Response:	TST TST Passed

43.6 Command: BSY

43.6.1 Command type: Listed MENU

43.6.2 Command target: BRISC/XACORE

43.6.3 Command availability: RES

43.6.4 Command description

The BSY command allows a craftsperson to manual busy (MANB) the posted position(s). The BSY command is valid for positions in the OFFL, URES, CRES, IDL, CPB, SYSB state. Multiple positions are busied by executing the BSY command with the ALL option.

If a position is in the OFFL, URES, CRES, IDL, or SYSB state, it will be moved to the MB state. If a position is in the CPB state, it will be moved to the CPD state and when the call at the position is released move to the ManB state.

When a position is in the MANB state, it cannot accept any OPP messages or calls.

An IP Position may not be changed from OFFL to MANB state, if the SOC OSB00102 is not ON or if the SOC usage limit is exceeded.

43.6.5 Command syntax

BSY [ALL]

Table 13 BSY command parameters and variables

Command	Parameters and variables
BSY	[ALL]
Parameters and variables	**Description**
ALL	BSY all posted positions.

43.6.6 Qualifications and warnings

None

43.6.7 Responses

43.6.7.1 BSY Passed

The posted position transitions to the ManB state without any errors.

43.6.7.2 CPD Mtce

The posted position is currently handling a call. The position attempts busy as soon as the call is no longer present.

43.6.7.3 Request Invalid: Position <number> is MANB

The posted position is currently in the ManB state and cannot be busied

43.6.7.4 No Position Posted

The user entered the BSY command, while no position(s) were posted.

43.6.7.5 Either incorrect optional parameter(s) OR too many parameters

The user did not enter the correct parameter(s).

43.6.7.6 SOC is idle

The SOC is idle

43.6.7.7 Exceed SOC usage limit

No more IP positions can be changed from the OFFL state to the ManB state.

43.6.8 MAP Output

Table 14 MAP outputs with associated meanings and actions

BSY Passed **Meaning**: The position(s) transitions to the ManB state without any errors. **System or user actions:** The system issues a message to update the display to ManB.
CPD Mtce **Meaning**: The position is currently handling a call and will attempt busy when the call is freed. **System or user actions:** The position transitions to CPD because a call is present on the position. Once the call at the position has ended, the system updates the MAP to indicate a ManB state.
Request Invalid: Position <number> is ManB **Meaning**: The positions is currently ManB. **System or user actions:** The system issues the message to the user. The user can enter the HELP command to get more information on the BSY command.
No Position Posted **Meaning**: There are no positions posted. As a result nothing is busied. **System or user actions:** The system issues the message to the user. The user must post position(s) before issuing the BSY command.

43.6.8 MAP Output

Table 14 MAP outputs with associated meanings and actions

SOC is idle **Meaning**: The SOC is idle **System or user actions:** The system issues the message to the user. Turn the SOC on first, then BSY the position.
Exceed SOC usage limit **Meaning**: No more IP positions can be changed from the OFFL state to the ManB state. **System or user actions:** The system issues the message to the user. Increase SOC limit on the number of IP Positions that may be used.

43.6.9 Example

Table 15 Usage examples for BSY command

Description of task:	Busy all posted positions (e.g. 3) with a successful response
Command: MAP Response:	BSY ALL BSY Passed BSY Passed BSY Passed

43.7 Command: RTS

43.7.1 Command type: Listed MENU

43.7.2 Command target: BRISC/XACORE

43.7.3 Command availability: RES

43.7.4 Command description

When successful, the RTS command brings an IP position to the Unconnected Restricted Idle (URES) state. The position must be in the ManB state when the RTS is issued.

The RTS command is successful if the data port (socket) associated with the position's COMID is either opened succcessfully or is already open.

If the data port (socket) associated with the position's COMID cannot be opened, the command fails and the position is marked SysB.

43.7.5 Command syntax

RTS [ALL]

Table 16 RTS command parameters and variables

Command	Parameters and variables
RTS	[ALL]
Parameters and variables	**Description**
ALL	RTS all posted positions.

43.7.6 Qualifications and warnings

None

43.7.7 Responses

43.7.7.1 RTS passed

The RTS command is successful.

43.7.7.2 Request Invalid: Position <number> must be ManB

The position <number> was not in the ManB state. The position must be in the ManB state in order to issue the RTS command.

43.7.7.3 Either incorrect optional parameter(s) or too many parameters

The user did not enter the correct parameter(s).

43.7.7.4 No Position Posted

The user entered the RTS command, while no position(s) were posted.

43.7.7.5 RTS Failed: <RTS_fail_message>

The RTS failed because the CM was unable to open a socket for the position, or the XPM used for the posted position's data connectivity is not in-service. See the following table for more details on the messages.

43.7.8 MAP Output

Table 17 MAP outputs with associated meanings and actions

RTS passed **Meaning**: The RTS command was successful, and the position is marked URES. **System or user actions:** The system issues the message to the user and updates the MAP display.
Request Invalid: Position <number> must be ManB **Meaning**: The position is not in the ManB state. The position must be in the ManB state in order to issue the RTS command. **System or user actions:** The system issues the message to the user. The user may execute the BSY command to cause the position to transition to ManB, and then attempt the RTS command again.
Either incorrect optional parameter(s) or too many parameters **Meaning**: The user entered the wrong parameter(s). **System or user actions:** The system issues the message to the user. The user can enter the HELP command to get more information on the RTS command.
No Position Posted **Meaning**: There are no positions posted. No action is taken. **System or user actions:** The system issues the message to the user. The user must post position(s) before issuing the RTS command.
RTS Failed: <RTS_fail_message> **Meaning**: The RTS command was not successful. The possible values for rts_fail_message are: **Socket open failed --** This means the socket for this position could not be opened. **XPM not in-service -**-This means the XPM used for the posted position's data connectivity is not in-service. **System or user actions:** The system issues the message to the user and updates the MAP display.

43.7.9 Example

Table 18 Usage examples for RTS command

Description of task:	RTS all posted positions (e.g. 3)

Command:	RTS ALL
MAP Response:	RTS Passed RTS Passed RTS Passed

43.8 Command: OFFL

43.8.1 Command type: Listed MENU

43.8.2 Command target: BRISC /XACORE

43.8.3 Command availability: RES

43.8.4 Command description

The OFFL command allows the craftsperson to put an IP position(s) in the OFFL state from the ManB state. Positions can only be deleted from table TOPSPOS while in the OFFL state.

43.8.5 Command syntax

OFFL [ALL]

Table 19 OFFL command parameters and variables

Command	Parameters and variables
OFFL	[ALL]
Parameters and variables	**Description**
ALL	Cause ALL posted positions to transition to OFFL state

43.8.6 Qualifications and warnings

None

43.8.7 Responses

43.8.7.1 OFFL Passed

This response means the position transitions to the OFFL state without any errors.

43.8.7.2 Request Invalid: Position <number> must be ManB

This response means the position will not transition to the OFFL state because it is in a state other than Manual Busy. The user must issue the BSY command before the OFFL command.

43.8.7.3 No position posted

This response means there were no positions posted to be changed.

43.8.7.4 Either incorrect optional parameter(s) OR too many parameters

The user did not enter the correct parameter(s).

43.8.8 MAP Output

Table 20 MAP outputs with associated meanings and actions

OFFL Passed **Meaning**: The OFFL command was successful without any errors. **System or user actions:** The position transitions to the OFFL state. The system issues the message and updates the MAP display. There are no user actions for this response.
Request Invalid: Position must be ManB **Meaning**: The OFFL command could not be executed because the position was not ManB. **System or user actions:** The system displays the response message.The user must issue the BSY command to busy the position before executing the OFFL command.
No Position Posted **Meaning**: The OFFL command could not be executed without a position posted. **System or user actions:** The system displays the response message.The user may issue a POST command and then attempt the OFFL command again.
Either incorrect optional parameter(s) or too many parameters **Meaning**: The user entered the wrong parameter(s). **System or user actions:** The system issues the message to the user. The user can enter the HELP command to get more information on the OFFL command.

43.8.9 Example

Table 21 Usage examples for OFFL command

Description of task:	Off-line Position 500
Command: MAP Response:	POST P 500; OFFL OFFL Passed

43.9 Command: NEXT

43.9.1 Command type: Listed MENU

43.9.2 Command target: BRISC/XACORE

43.9.3 Command availability: RES

43.9.4 Command description

The NEXT command allows the craftsperson to step to the next position in the post set.

43.9.5 Command syntax

NEXT

Table 22 NEXT command parameters and variables

Command	Parameters and variables
NEXT	None
Parameters and variables	**Description**

43.9.6 Qualifications and warnings

None

43.9.7 Responses

43.9.7.1 Next Position Posted

The next position in the post set replaces the display of the currently posted position.

43.9.7.2 End of post set

Either the post set was empty or no more positions are in the post set.

43.9.7.3 Next does NOT utilize any parameters

The user entered parameters, but the NEXT command does NOT allow parameters.

43.9.8 MAP Output

Table 23 MAP outputs with associated meanings and actions

POS <Position Number> <PMType> <PM No> COMID <COMID> <STATE> **Meaning**: The next position in the post set replaces the display of the currently posted position. **System or user actions:** Continue maintenance on the newly posted position.
End of post set **Meaning**: Either the post set was empty or no more positions are in the post set. **System or user actions:** The system issues the message to the user.
Next does NOT utilize any parameters **Meaning**: The user entered the wrong parameter(s). **System or user actions:** The system issues the message to the user. The user can enter the HELP command to get more information on the NEXT command.

43.9.9 Example

Table 24 Usage examples for NEXT command

Description of task:	Post the Next position in the post set
Command: MAP Response:	NEXT POS 305 DTC 5 COMID 66 MANB

43.10 Command: FRLS

43.10.1 Command type: Listed MENU

43.10.2 Command target: BRISC/XACORE

43.10.3 Command availability: RES

43.10.4 Command description

The Force ReLeaSe command allows the user to ManB a position that is either CPB or CPD. When positions are in other states, FRLS functions the same as the BSY command.

43.10.5 Command syntax

FRLS

Table 25 FRLS command parameters and variables

Command	Parameters and variables
FRLS	None
Parameters and variables	**Description**

43.10.6 Qualifications and warnings

Use of this command causes any calls present at the position to be terminated.

43.10.7 Responses

43.10.7.1 FRLS does not utilize any parameters

This response informs the user that FRLS does not utilize parameters.

43.10.7.2 request(s) submitted

The Mtce Flag appears and the position goes CPD. The MAP displays the above message and the prompt is issued to the user. When the FRLS command is completed, the position transitions to ManB and the conversation area of the MAP will appear as follows:

Message Display 1:

POS <Position Number> DTC <PMNo> COMID <COMID> CPD Mtce
Size of Post set: 1
FRLS
request(s) submitted

>

Message Display 2:

POS <Position Number> DTC <PMNo> COMID <COMID> ManB
>

43.10.8 MAP Output

Table 26 MAP outputs with associated meanings and actions

FRLS does NOT utilize any parameters **Meaning**: A request to force release the position has been submitted with parameters. **System or user actions:** The system updates the display. The user can re-enter the FRLS command without any parameters.
request(s) submitted **Meaning**: A request to force release the position has been submitted. Once the force release is completed, the position transitions to the ManB state. **System or user actions:** The system updates the display to display the Mtce flag as well as transitions the position state to CPD then ManB.

43.10.9 Example

Table 27 Usage examples for FRLS command

Description of task:	A call is at position 300 and the craftsperson wants to get rid of the call.
Command: MAP Responses:	FRLS request(s) submitted

43.11 Command: LISTALMS

43.11.1 Command type: Listed MENU

43.11.2 Command target: BRISC/XACORE

43.11.3 Command availability: RES

43.11.4 Command description

The LISTALMS command allows the craftsperson to list all alarm conditions for all TOPS IP positions, and TOPS IP position audit processes.

43.11.5 Command syntax

LISTALMS

Table 28 LISTALMS command parameters and variables

Command	Parameters and variables
LISTALMS	None
Parameters and variables	**Description**

43.11.6 Qualifications and warnings

None

43.11.7 Responses

43.11.7.1 LISTALMS does NOT utilize any parameters

The user entered parameters, but the LISTALMS command does NOT allow parameters.

43.11.7.2 No TOPS IP Alarms Found

There are no existing TOPS IP position alarm conditions.

43.11.7.3 Positions and Alarm Conditions Listed

The positions with their alarm conditions are listed.

43.11.8 MAP Output

Table 29 MAP outputs with associated meanings and actions

LISTALMS does NOT utilize any parameters **Meaning**: The user entered parameter(s) and the LISTALMS command does not utilize any. **System or user actions:** The system updates the display. The users can re-enter the LISTALMS command without any parameters.
No TOPS IP Alarms Found **Meaning**: No alarm conditions exist for any TOPS IP position. **System or user actions:** The system updates the display.
Positions and Alarm Conditions Listed **Meaning**: Positions and their alarm conditions are listed for the user. **System or user actions:** The system updates the display. The user can begin to troubleshoot the alarm conditions listed. These alarm conditions are the TPSysB and TPExDB alarms.

43.11.9 Example

Table 30 Usage examples for LISTALMS command

Description of task:	List all alarm conditions for TOPS IP positions.
Command: MAP Response:	LISTALMS POS 310 SYSB POS 355 EXDB: DA POS 360 EXDB: DA POS 401 SYSB

43.12 Command: INFO

43.12.1 Command type: Listed MENU

43.12.2 Command target: BRISC/XACORE

43.12.3 Command availability: RES

43.12.4 Command description

This command displays the following information for the posted position:

- the last known IP address of the position,
- the XPM name and number,
- the IP address and port number of the DMS peripheral used to provide IP connectivity to the position,
- the operator voice trunk and state,
- any alarm conditions (SysB or ExDB (DA)) that exist for the posted position, and
- the SysB Reason.

This command is only allowed for the posted position listed on the MAP (one at a time), it cannot not be executed for the entire posted set.

Note: This command is invalid if the position is in the NEQ state.

43.12.5 Command syntax

INFO

Table 31 INFO command parameters and variables

Command	Parameters and variables
INFO	None

43.12.6 Qualifications and warnings

None

43.12.7 Responses to INFO command

43.12.7.1 INFO does NOT utilize any parameters

The INFO command does not have parameters. The user must re-enter the command without parameters.

43.12.7.2 INFO executed in an invalid state

The user entered the INFO command while the position was NEQ.

43.12.7.3 No Position Posted

The user entered the INFO command while no position was posted.

43.12.7.4 INFO Passed

The following position information is displayed in the order presented below:

Table 32

Last Known Position IP Address:	[0-255].[0-255].[0-255].[0-255]:[0-65535]
XPM IP Address:	[0-255].[0-255].[0-255].[0-255]
Voice Trunk	[CLLI] [Trunk Number]
Alarm Conditions:	[None, SysB, ExDB: [DA]
SysB Reason:	[None, PeripheralConnectivity, AppInConnectivity]

Note: “Unknown” can be displayed for the last known position IP address and XPM IP address. "Not Applicable" can be displayed for the voice trunk when one is not associated with the position.

43.12.8 MAP Output

Table 33 MAP outputs with associated meanings and actions

INFO does NOT utilize any parameters **Meaning**: The users entered parameters when this command does not take parameters. **System or user actions:** The system issues the message to the user. The user must re-enter the command without any parameters.
INFO executed in an invalid state **Meaning**: The position is in the NEQ state. **System or user actions:** The system issues the message to the user. The user must datafill the position in table topspos before it can execute the INFO command.
No Position Posted **Meaning**: There are no positions posted. **System or user actions:** The system issues the message to the user. The user must post a position before issuing the INFO command.
INFO Passed **Meaning**: The INFO command is successful. **System or user actions:** Display the following information for the posted position: Last Known Position IP Address: [0-255].[0-255].[0-255].[0-255] XPM IP Address: [0-255].[0-255].[0-255].[0-255] Alarm Conditions: [None, SysB, ExDB: [DA]] SysB Reason: [None, PeripheralConnectivity, ApplnConnectivity] There is no user action because this command is for informational purposes only.

43.12.9 Example

Table 34 Usage examples for INFO command

Description of task:	Use the INFO command to display information on Posted position 500
Command: MAP Response:	INFO Last Known Position IP Address: 47.121.3.46 XPM: DTC 10 XPM IP Address: 47.121.4.55 Alarm Conditions: SysB SysB Reason: AppInConnectivity

43.13 Command: ABTK

43.13.1 Command type: Unlisted MENU

43.13.2 Command target: BRISC/XACORE

43.13.3 Command availability: RES

43.13.4 Command description

The ABTK (abort task) command provides the capability to terminate all active maintenance tasks on the position.

43.13.5 Command syntax

ABTK

Table 35 ABTK command parameters and variables

Command	Parameters and variables
ABTK	None.
Parameters and variables	**Description**

43.13.6 Qualifications and warnings

None.

43.13.7 Responses

43.13.7.1 ABTK executed

The display indicates that maintenance actions on the position have been terminated by removing the “mtce” flag.

43.13.7.2 ABTK does NOT utilize any parameters

The user entered parameters, but the ABTK command does NOT allow parameters.

43.13.8 MAP Output

Table 36 MAP outputs with associated meanings and actions

{No MAP Output} **Meaning**: The display will indicate the maintenance actions on the position are terminated by removing the “mtce” flag. **System or user actions:** The system terminates maintenance and removes the mtce flag.
ABTK does NOT utilize any parameters **Meaning**: The user entered the wrong parameter(s). **System or user actions:** The system issues the message to the user. The user can re-enter the ABTK command without any parameters.

43.13.9 Example

Table 37 Usage examples for ABTK command

Description of task:	Abort the current maintenance task.
Command: MAP Response:	ABTK <removal of the “Mtce” flag>

44: Command interface changes (CI)

44.1 Command Interface

The Maintenance and Administration Position (MAP) refers to the component of the OAM interface that allows the craftsperson to access and manipulate the states of the DMS maintainable hardware components in real time. Real time status information is provided via the MAP display while commands and responses are handled by the MAP Command Interface (MAPCI).

The changes made to the MAPs by this feature are:

- New Ethernet (ETHR) MAP level is introduced.
- New "ETHR" command is introduced to the existing XAC MAP level (this is the navigational command that allows moving to the new ETHR level from other XAC MAP levels).
- Existing IO MAP level is modified to include the ethernet packlets in its display.
- Existing XAC, and IO MAP level commands are modified (as required) to support the ethernet packlets and links.

44.1.1 Change to existing XA-Core Port/Link maintenance.

As well as introducing a new MAP level to maintain the ethernet packlet this feature also introduces a change to the way in which ports/links are currently maintained using the XA-Core OAM infrastructure. This change to the port/link maintenance strategy only affects the ethernet ports and links.

Currently the XA-Core OAM system represents the combination of a port (i.e., a hardware component on XA-Core) and a link (i.e., the transmission medium connecting the XA-Core to other nodes) as a single entity. This OAM strategy makes diagnosing port or link faults difficult since the MAPs and Logs cannot accurately indicate where the fault exists.

In an effort to improve fault isolation and system recovery the ethernet MAP level will show ports and links as separate entities. As with the old strategy, busying a port will cause applications to stop using the link, as well as disabling the port hardware. However, the craftsperson will now be able to

busy only the link. This will cause the application to stop using the link, but keeps the hardware inservice.

Table 31 Link Availability on Packlet/Port/Link state changes

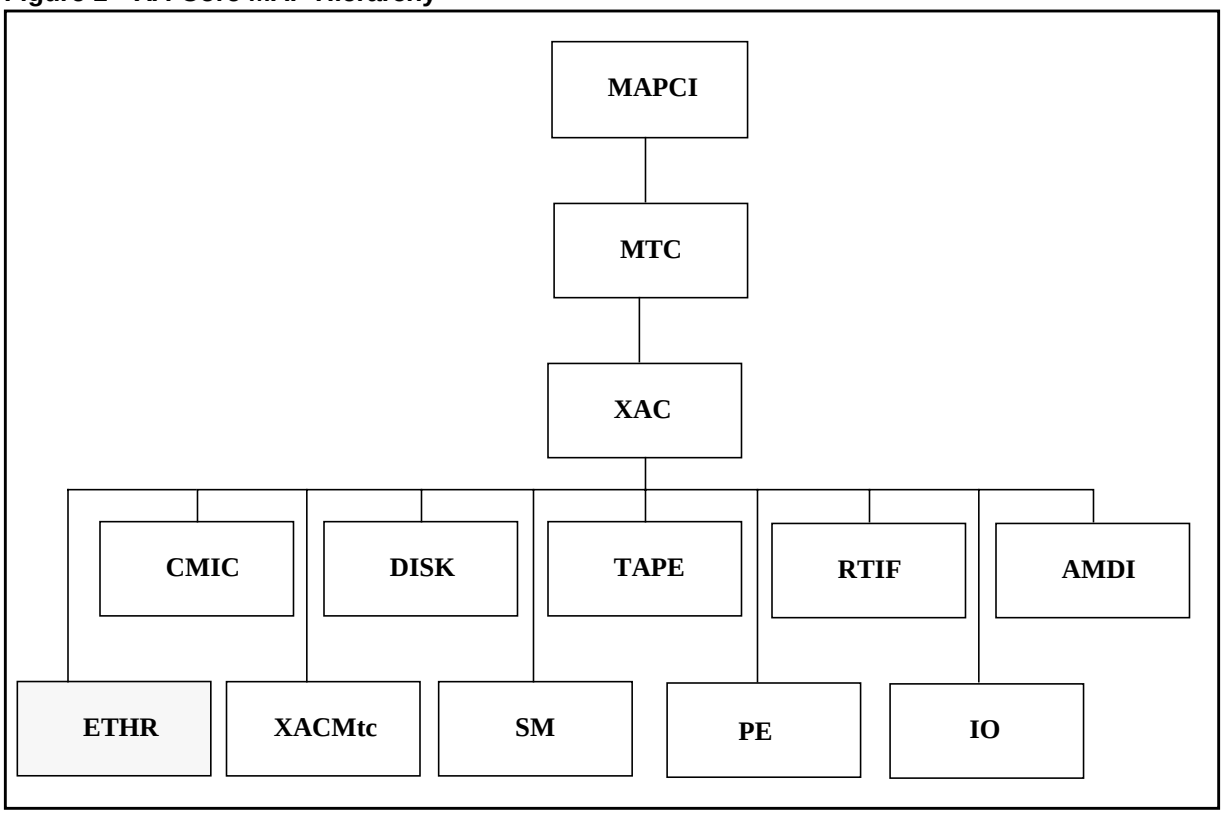
Packlet State	Port State	Link State	Link available to applications
Insv	Insv	Insv	YES
Insv	Insv	OOS	NO
Insv	OOS	OOS	NO
OOS	OOS	OOS	NO

As an example of enhanced fault isolation consider the following. Currently if a fiber/cable is defective the MAP shows the link (which actually represents both port and link) as SysB. Because of this ambiguity the craftsperson may mistakenly attempt to replace the entire packlet. Under the new strategy, if a cable/fiber is defective only the link level will be indicated as SysB, thereby alerting the craftsperson of a link problem.

44.1.2 MAP Hierarchy

The XA-Core MAPs use the familiar MAPCI based user interface. The new ETHR MAP is a child level of the existing XAC MAP. The resulting hierarchy is shown below:

Figure 1 XA-Core MAP Hierarchy



44.1.2.1 MAP Command Options Supported for Ethernet Packlets

Nowait

The “Nowait” command option allows maintenance commands to be executed without the craftsperson having to wait until the command has completed before issuing the next command. This option is generally used only for commands which may take a long time to execute.

Noprompt

The “Noprompt” command option eliminates warnings that would normally be displayed to prompt the craftsperson before the command is executed.

Force

The “Force” command option allows the craftsperson to override the maintenance software checks which would normally prevent an action from being executed. The craftsperson will not be permitted to use a Force option if the resulting action causes an E1 condition.

For information on which commands use which options, refer below to the commands listed under each MAP level.

44.1.2.2 XAC MAP Level

The XA-Core (XAC) MAP level has been modified to include the navigational command “ETHR” to allow the craftsperson to enter the ethernet MAP level. The ethernet MAP level can be accessed from any other XA-Core MAP level by entering “ETHR”, or from the XAC by entering “12”.

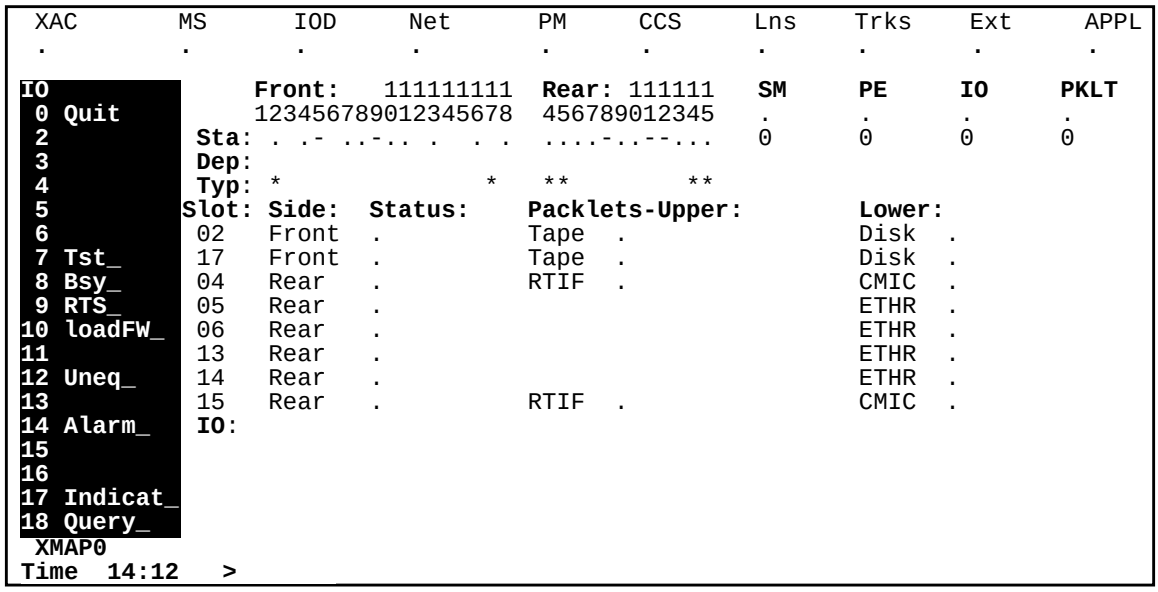
```
 XAC       MS      IOD     Net      PM     CCS     Lns    Trks    Ext     APPL
  .        .       .       .        .      .       .      .       .       .

XAC            Front:   111111111  Rear: 111111   SM     PE     IO     PKLT
 0 Quit        123456789012345678  456789012345   .      .      .      .
 2 Card_    Sta: . .- ..-.. .  . .  ....-..--...  0      0      0      0
 3 XACMtc   Dep:
 4 SM
 5 PE
 6 IO
 7 CMIC
 8 RTIF
 9 Tape
10 Disk
11 AMDI
12 ETHR
13
14 Alarm_
15
16
17 Indicat_
18 Query_
 XMAP0
Time  14:12   >
```

44.1.2.3 IO MAP Level

The XA-Core Input/Output (IO) MAP screen is displayed by selecting the IO option from the main XA-Core level MAP screen (MAPCI;MTC;XAC;IO). The IO MAP is used to perform maintenance actions against the XA-Core IO cards (the common equipment and their associated packlets (disk, tape, CMIC, RTIF, AMDI, or ETHR)) and to navigate the XA-Core IO MAP screens.

The changes introduced by this feature, to the IO MAP level, are limited to the display of ethernet status in the packlet status field. No functional components of this MAP level have been changed.

Figure 2 Sample IO MAP Level Display



44.1.3 Ethernet MAP Level (ETHR)

The XA-Core ethernet MAP screen is displayed by selecting the ETHR option from the main XA-Core level MAP screen (MAPCI;MTC;XAC;ETHR). The ETHR MAP is used to perform maintenance actions against the XA-Core IO ETHR packlet cards and their links.

Figure 3 Sample ETHR MAP Level Display

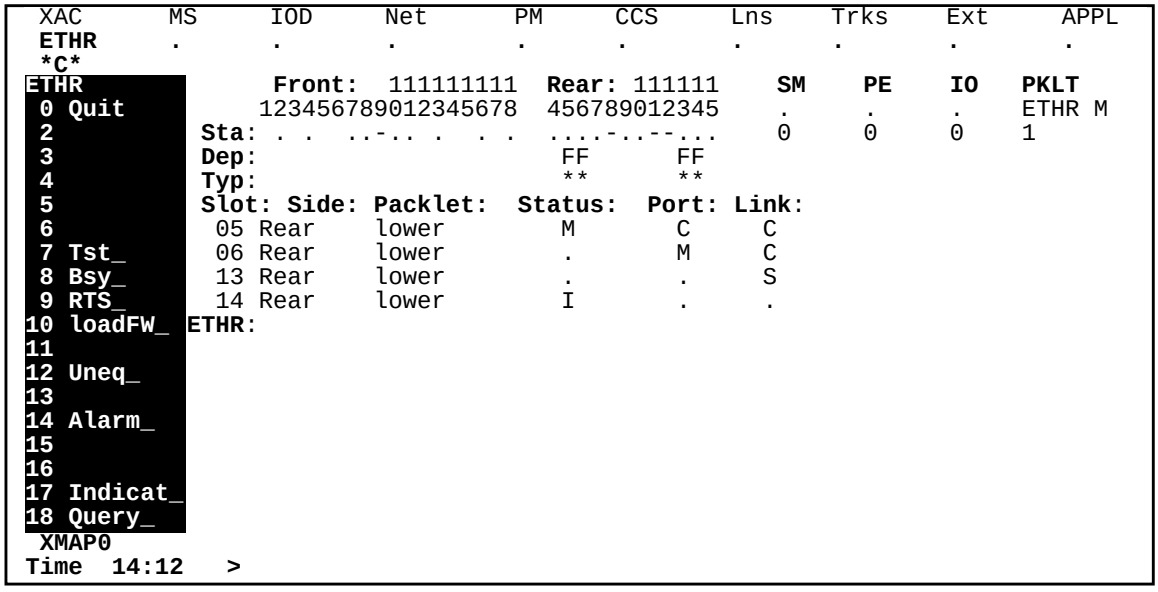


Table 32 Commands Specific to the ETHR MAP Level

Command	Meaning	Type	Options	Device
Quit	Quit the current level and return to the previous level.	Navigational	None	n/a
Tst_	Test an Input/Output (IO) ethernet packlet card (or its port/link). The type of IO ethernet test performed depends on the state of the packlet card or device (in-service or out-of-service) and the type of device: 1) If the card is in service, perform a non-destructive test. 2) If the card is out of service, perform more extensive tests.	Operational	Nowait Noprompt	Packlet, Port, and Link
Bsy_	Manually busy (take out of service) an ethernet packlet. The action will affect the state of the link. Before the Bsy request is carried out, a busy impact assessment is conducted in software to determine if it is safe to do so (based on redundancy requirements associated with the link). The Force option can be used to override the busy impact only if the action does not create a critical alarm condition.	Operational	Force Noprompt	Packlet, Port, and Link
RTS_	Return To Service an ethernet packlet.	Operational	NoWait	Packlet, Port, and Link
loadFW_	Upgrade packlet firmware	Operational	NoWait	Packlet

Table 32 Commands Specific to the ETHR MAP Level

Command	Meaning	Type	Options	Device
Uneq_	Deprovision packlet from the inventory. Packlet must first be physically removed from the shelf.	Operational	None	Packlet
Alarm_	Enable, Disable, or Query XA-Core maintenance level alarms. No parameters supplied results in an alarm query.	Operational/ Informational	None	n/a
Indicat_	Either turn on all XA-Core shelf LEDs to allow the craftsperson to visually ensure that all are functioning properly (use parameter TEST, no alarm will be raised), or allow the craftsperson to indicate which busied XA-core card should be removed first (by causing its red LED to wink). If a red LED is already winking when the TEST parameter is issued, that red LED will continue to wink while all the other LEDs are lit. To turn off the indicate function, use the CLEAR parameter, then the system will automatically return the LEDs to their normal operating state. Any attempt to indicate a card that is not ready for removal (i.e. its green LED is on and red LED is off) will be rejected.	Informational	None	Packlet
Query_	List information for a card (selected by slot and packlet number). The type of information listed could vary by card type, but for every card, list the PEC, serial number. A parameter of “Type <subsystem> {SM, PE, IO}” lists all of the slots in the shelf that contain cards of the type requested.	Informational	None	Packlet

44.1.4 New/modified commands

Table 1 New or modified commands

Command name	NEW, CHANGED OR DELETED	New name (if renamed)	Directory/MAP level name	MENU/NON-MENU /HIDDEN
ETHR	new		MAPCI;MTC;XAC	Menu
Quit	new		MAPCI;MTC;XAC;ETHR	Menu
Tst	new		MAPCI;MTC;XAC;ETHR	Menu
Bsy	new		MAPCI;MTC;XAC;ETHR	Menu
Rts	new		MAPCI;MTC;XAC;ETHR	Menu
loadFW	new		MAPCI;MTC;XAC;ETHR	Menu

Table 1 New or modified commands (Continued)

Command name	NEW, CHANGED OR DELETED	New name (if renamed)	Directory/MAP level name	MENU/NON-MENU /HIDDEN
Uneq	new		MAPCI;MTC;XAC;ETHR	Menu
Alarm	new		MAPCI;MTC;XAC;ETHR	Menu
Indicat	new		MAPCI;MTC;XAC;ETHR	Menu
Query	new		MAPCI;MTC;XAC;ETHR	Menu
abtk	new		MAPCI;MTC;XAC;ETHR	Hidden

44.1.4.1 XAC MAP Menu Commands

Menu commands appear on the MAP command menu. Non-menu commands do not appear on the MAP menu list. Enter both menu and non-menu commands in the command interpreter input area. You can enter either the command name or the menu number that matches the command.

Table 2 Summary of new XAC MAP level commands

Command	Menu #	Type	Function
ETHR	12	Nav	Display the AMDI MAP level.

44.1.4.2 ETHR

The ETHR command instructs the XA-Core system to display the ETHR MAP level.

44.1.4.2.1 Menu selection number

12

44.1.4.2.2 Type

Navigational

44.1.4.2.3 Parameters

There are no command parameters.

44.1.4.2.4 Options

There are no command options.

44.1.4.2.5 Command format examples

Example use of the ETHR command is shown in Table 50. The ETHR command syntax is shown in the example below:

COMMAND

Table 3 ETHR command examples

Command Example	Command Description
> ETHR	Exit from the current MAP session and display the ETHR MAP level.

44.1.5 IO MAP Level

The XA-core Input/Output (IO) MAP screen is displayed by selecting the IO option from the main XA-core level MAP screen (MAPCI;MTC;XAC;IO). The IO MAP is used to perform maintenance actions against the XA-Core IO cards (the common equipment and their associated packlets (disk, tape, CMIC, RTIF, ETHR, or AMDI)) and to navigate the XA-core IO MAP screens.

The only changes made to the IO MAP were done to display the ETHR iop and packlet information within the command interpreters output area. No new maintenance commands have been added to this MAP level.

Figure 4 Sample IO MAP Level Display

```
 XAC       MS       IOD      Net       PM      CCS      Lns     Trks     Ext      APPL
 .         .        .        .         .       .        .       .        .        .

IO                  Front:   111111111  Rear: 111111   SM      PE      IO      PKLT
 0 Quit             123456789012345678  456789012345   .       .       .       .
 2                  Sta: . .  .. .. .  . .  .. . .. . ..    0       0       0       0
 3                  Dep:
 4                  Typ: *              *   **        **
 5                 Slot: Side:  Status:    Packlets-Upper:        Lower:
 6                  02   Front  .          Tape  .                Disk  .
 7 Tst_             17   Front  .          Tape  .                Disk  .
 8 Bsy_             04   Rear   .          RTIF  .                CMIC  .
 9 RTS_             05   Rear   .                                 ETHR  .
10                  14   Rear   .                                 ETHR  .
11                  15   Rear   .          RTIF  .                CMIC  .
12                  IO:
13
14 Alarm_
15
16
17 Indicat_
18 Query_
 XMAP0
Time  14:12   >
```

44.1.6 ETHR MAP Level

The XA-Core ETHR MAP screen is displayed by selecting the ETHR option from the main XA-Core level MAP screen (MAPCI;MTC;XAC;ETHR). The ETHR MAP is used to perform maintenance actions against the XA-Core IO ETHR packlet cards and their links.

Figure 5 Sample ETHR MAP Level Display

```
 XAC      MS     IOD     Net      PM     CCS     Lns    Trks    Ext     APPL
 .        .      .       .        .      .       .      .       .       .

ETHR           Front:  111111111  Rear: 111111    SM    PE    IO   PKLT
 0 Quit       123456789012345678  456789012345    .     .     .    .
 2           Sta: . .  .. .. .  . .  .. . .. . ..    0     0     0    0
 3           Dep:
 4           Typ:                      *       *
 5           Slot: Side: Packlet:  Status:  Port: Link:
 6            05 Rear    lower        .       .     .
 7 Tst_       14 Rear    lower        .       .     .
 8 Bsy_     AMDI:
 9 RTS_
10
11
12
13
14 Alarm_
15
16
17 Indicat_
18 Query_
 XMAP0
Time  14:12   >
```

44.1.6.1 Alarm_

The Alarm_ command is a common menu command. The Alarm_ command allows you to perform the following tasks:

- permit notification for selected alarms.
- disable notification for selected alarms.
- query the XA-Core system to identify alarm conditions or examine the status of alarms.

44.1.6.1.1 Menu selection number
14

44.1.6.1.2 Type
Operational or Informational

44.1.6.1.3 Parameters

The Alarm_ command requires command parameters. If you do not enter any parameters or you enter invalid parameters, the MAP terminal prompts you to enter a correct parameter value. The Alarm_ command requires at least one of the following command parameters:

Alarm_name
Use the <alarm_name> parameter to indicate the name of the XA-Core system alarm. You can use the <alarm_name> parameter with the <disable> and <enable> parameters.

All
Use the <all> parameter to enable or disable notification for all alarms (usewith the <enable> or <disable> parameter.

Disable
Use the <disable> parameter to prevent the XA-Core system from displaying alarm notification messages on the MAP screen. You can disable either one alarm at a time or all alarms. Use the <disable> parameter with the Alarm_ command and <alarm_name> parameter to disable a single alarm. Use the <disable> parameter with the <all> parameter to disable all XA-Core alarms. The <disable> parameter remains active until you enable the alarm or the system performs a restart.

Enable
Use the <enable> parameter to instruct the XA-Core system to dsiplay an alarm notification message on the MAP terminal. You can enable either one alarm or all alarms. Use the <enable> parameter together with the Alarm_ command and <alarm_name> parameter to enable a sinlge alarm. Use the <enable> parameter with the <all> parameter to enable all XA-Core alarms.

Raised
Use the <raised> parameter to display all active alarms, the alarm severity and enabled/disabled status. You can use the <raised> parameter with the [enabled] or [disabled] options. If you do not enter any options, the XA-Core system MAP displays all active, enabled and disabled alarms.

44.1.6.1.4 Options

You can enter one of the following command options in the command statement:

Disabled
Use the [disabled] option with the <raised> parameter. The option instructs the XA-Core system to display all active alarms that have a disabled status.

Enabled
Use the [enabled] option with the <raised> parameter. The option instructs the XA-Core system to display all active alarms that have an enabled status.

44.1.6.1.5 Command format examples

Example use of the Alarm_ command is shown below. The Alarm_ command syntax is as follows:

COMMAND <parameter> [option]

Table 4 Alarm_ command examples

Command Examples	Command Description
> Alarm ethr	ALARM <alarm_name>: Display the alarm severity and status for a single alarm.
> Alarm all	ALARM <all>: Display the alarm severity and status for all alarms.
> Alarm all disable	ALARM <all> <disable>: Disable notification for all alarms.
> Alarm ethr disable	ALARM <alarm_name> <disable>: Disable notification for a single alarm.
> Alarm all enable	ALARM <all> <enable>: Enable notification for all alarms.
> Alarm ethr enable	ALARM <alarm_name> <enable>: Enable notification for a single alarm.
> Alarm raised	ALARM <raised>: Display all active alarms.
> Alarm raised enabled	ALARM <raised> [enabled]: Display active alarms that have an enabled status.
> Alarm raised disabled	ALARM <raised> [disabled]: Display active alarms that have a disabled status.

44.1.6.2 Bsy_

The Bsy_ command places an InSv, SysB or CBsy ethernet interface packlet in a ManB state.

44.1.6.2.1 Menu selection number
7

44.1.6.2.2 Type
Operational

44.1.6.2.3 Parameters

The Bsy_ command requires command parameters. If you do not enter any parameters or you enter invalid parameters, the MAP terminal displays an error message. The MAP terminal prompts you to enter a correct parameter value. The Bsy_ command requires the following command parameters:

nn
Use the <nn> (slot number) parameter value to indicate the number of the physical shelf slot - 0 to 18.

s
Use the <s> (side) parameter value to indicate the packlet location in the physical shelf - front (f) or rear (r).

p
Use the <p> (position) parameter value to indicate the packlet location in an input/output processor (IOP) - upper (u) or lower (l).

port
Use the port parameter to indicate the physical port on the packlet.

link
Use the link parameter to indicate the physical port on the packlet.

44.1.6.2.4 Options

You can enter one of the following command options in the command statement:

Force
The [force] option instructs the XA-Core system to bypass redundancy checks and continue to execute the command. The XA-Core system ignores the [force] option if you attempt to place the last remaining ethernet packlet in a ManB state.

Use the [force] option with caution. An outage is imminent if the last remaining ethernet link cannot communicate with the network.

Noprompt
Use the [noprompt] option to bypass system prompts and continue to execute the command. Use the [noprompt] option with caution. System messages and prompts help you to prevent loss of information.

44.1.6.2.5 Command format examples

Example use of the Bsy_ command is shown below. The Bsy_ command syntax is as follows:

COMMAND <parameter> [option]

Table 5 Bsy_ command examples

Command Example	Command Description
> BSY 14 r l	BSY <nn> <s> <p>: Place the Ethernet packlet in a ManB state.
> BSY 14 r l port	BSY <nn> <s> <p> <port>: Place port on the Ethernet packlet in a ManB state.
> BSY 14 r l link	BSY <nn> <s> <p> <link>: Place link on the Ethernet packlet in a ManB state.
> BSY 14 r l force	BSY <nn> <s> <p> [force]: Place the Ethernet packlet in a ManB state. Ignore reduced redundancy options.
> BSY 14 r l noprompt	BSY <nn> <s> <p> [noprompt]: Place the Ethernet packlet in a ManB state. Block warning/prompt messages.
> BSY 14 r l force noprompt	BSY <nn> <s> <p> [force] [noprompt]: Place the Ethernet packlet in a ManB state. Ignore possible error conditions. Block warning/prompt messages.

44.1.6.3 Indicat_

The Indicat_ command is a common command. The command causes LEDs on CPs or packlets to wink or illuminate. The command allows you to locate a device on the physical shelf or to make sure all LEDs work. CPs and packlets must be in a ManB state before you use the Indicat_ card command.

> ***Note:*** If you use the Indicat_ command with the <test> or <testall> parameters, CPs and packlets do not have to be in a ManB state.

44.1.6.3.1 Menu selection number
17

44.1.6.3.2 Type
Informational

44.1.6.3.3 Parameters

The Indicat_ command requires parameters. If you do not enter any parameters or you enter invalid parameters, the MAP terminal displays an error message. The MAP terminal prompts you to enter a correct parameter value.

The Indicat_ command requires at least two of the shelf location parameters. In addition to the shelf location parameters, you can enter one of the following parameters:

Card
Use the <card> parameter to cause the red triangular LED of a ManB CP or packlet to wink. You can use the [timer] option with the <card> parameter.

Clear
Use the <clear> parameter to return LEDs to a normal working state on a single winking or testing CP or packlet. Use the <clear> parameter with the shelf location parameters.

Clearall
Use the <clearall> parameter to return all winking or testing LEDs on all CPs or packlets to a normal working state.

Test
Use the <test> parameter to illuminate all LEDs on a single CP or packlet. The CP or packlet does not have to be in a ManB state. LEDs already winking on other CPs or packlets continue to wink. Use the <test> parameter with the shelf location parameters. You can use the <test> parameter with the [timer] option.

Testall
Use the <testall> parameter to light all LEDs on all CPs and packlets. The CPs and packlets do not have to be in a ManB state. LEDs already winking on other CPs or packlets continue to wink. You can use the <testall> parameter with the [timer] option. Do not use the shelf location parameters with the <testall> parameter.

nn
Use the <nn> (slot number) parameter value to indicate the number of the physical shelf slot - 0 to 18.

s
Use the <s> (side) parameter value to indicate the CP or packlet location in the physical shelf - front (f) or rear (r).

p
Use the <p> (position) parameter value to indicate the packlet location in an input/output processor (IOP) - upper (u) or lower (l).

44.1.6.3.4 Options

You can enter the following option in the command statement:

Timer
Use the [timer] option to indicate the time (in minutes) to light or wink LEDs. The XA-Core system turns the LEDs off when the time expires. The minimum time period is 1 min. The maximum time period is 999 min. If you do not define a time period, the default time period is 120 min.

Use the [timer] option as follows:
- use the [timer] option with the <card> parameter to wink a red LED on a single CP or packlet for a period of time.
- use the [timer] option with the <test> parameter to illuminate all LEDs on a CP or packlet for a period of time.
- use the [timer] option with the <testall> parameter to illuminate all LEDs on all CPs and packlets for a period of time.

44.1.6.3.5 Command format examples

Example use of the Indicat_ command is shown below. The Indicat_ command syntax is as follows:

COMMAND <parameter> [option]

Table 6 Indicat_ command examples

Command Example	Command Description
> INDICAT card 6 r u	INDICAT <card> <nn> <s> <p>: Wink red LED on a single ManB packlet.
> INDICAT card 6 r u 5	INDICAT <card> <nn> <s> <p> [timer]: Wink red LED on a single ManB packlet for 5 min.
> INDICAT clear 6 r u	INDICAT <clear> <nn> <s> <p>: Return LEDs on a single packlet to a normal working state.
> INDICAT clearall	INDICAT <clearall>: Return all LEDs on all CPs and packlets to a normal working state.
> INDICAT test 6 r 5	INDICAT <test> <nn> <s> [timer]: Light all LEDs on a single CP for 5 min. If the command does not include the [timer] option, the XA-Core default time value is 120 min.
> INDICAT testall 5	INDICAT <testall> [timer]: Light all LEDs on all CPs and packlets for 5 min. The amber LEDs on the shelf interface modules (SIM) CPs do not light. The <test> parameter does not cause an audible alarm nor alarm notification on the MAP terminal. CPs or packlets now under test continue to wink
> INDICAT testall	INDICAT <testall>: Light all LEDs on all CPs and packlets for 120 min.

44.1.6.4 Query_

The Query_ command is a common command. The Query_ command causes the MAP terminal to display the following information for a single CP or packlet:

- product engineering code (PEC)
- serial number
- firmware version
- Ethernet Address
- IP Address
- 2 optional IP addresses (assigned dynamically by system)

The parameters determine the type of information displayed.

44.1.6.4.1 Menu selection number

18

44.1.6.4.2 Type

Informational

44.1.6.4.3 Parameters

The Query_ command requires command parameters. If you do not enter any parameters or you enter invalid parameters, the MAP terminal displays an error message. The MAP terminal prompts you to enter a correct parameter value.

If you use the Query_ command with the <card> parameter, enter the shelf location parameters. If you use the Query_ command with the <type> parameter do not enter the shelf location parameters.

Card

Use the <card> parameter to instruct the XA-Core system to perform a query on a CP or packlet. Display the description to the MAP terminal. You must use the <card> parameter with the CP or packlet shelf location parameters.

nn

Use the <nn> (slot number) parameter value to indicate the number of the physical shelf slot - 0 to 18.

s

Use the <s> (side) parameter value to indicate the CP or packlet location in the physical shelf - front (f) or rear (r).

p
Use the <p> (position) parameter value to indicate the packlet location in an input/output processor (IOP) - upper (u) or lower (l).

Subsystem_name
Use the <subsystem_name> parameter to indicate the name of a subsystem. The value of the subsystem name is either SM, PE, or IO. Use the <subsystem_ name> parameter only with the <type> parameter.

Type
Use the <type> parameter to indicate that the query applies to a subsystem of type SM, PE, or IO. Use the <type> parameter with the <subsystem name> parameter. The MAP terminal displays the location of all CPs that match the subsystem type. Do not enter shelf location parameters.

44.1.6.4.4 Options

There are no command options.

44.1.6.4.5 Command format examples

Example use of the Query_ command is shown below. The Query_ command syntax is as follows:

COMMAND <parameter>

Table 7 Query_ command examples

Command example	Command description
> QUERY card 6 r	QUERY <card> <nn> <s>: Display the PEC, serial number, insertion/activation dates software load, firmware version and working state for the CP.
> QUERY card 6 r u	QUERY <card> <nn> <s> <p>: Display the PEC, serial number, insertion/ activation dates, software load, firmware version and working state for the packlet.
> QUERY type io	QUERY <type> <subsystem_name>: Display subsystem name and location of all CPs and packlets that match the subsystem type.

44.1.6.5 Quit

The Quit command is a common command. The Quit command instructs the XA-Core system to exit from the current MAP session. You can exit to any MAP level that is higher in the MAP level hierarchy.

> ***Note:*** Note: The XA-Core system continues to execute any previous commands entered.

44.1.6.5.1 Menu selection number
0

44.1.6.5.2 Type
Navigational

44.1.6.5.3 Parameters
The Quit command parameters are optional.

All
Use the <all> parameter to terminate all XA-Core MAP sessions and display the CI prompt.

Incrname
Use the <incrname> parameter to end the current MAP session and display a MAP level higher in the MAP system hierarchy. Enter a MAP level name. The XA-Core system displays the MAP level that is one level higher in the MAP system hierarchy than the <incrname> (increment name) value.

Nlevel
Use the <nlevel> parameter to end the current MAP session and display a MAP level higher in the MAP system hierarchy. Enter a number value to represent the number of DMS MAP levels to step-back in the MAP system hierarchy.

44.1.6.5.4 Options

There are no command options.

44.1.6.5.5 Command format examples

Example use of the Quit command is shown below. The Quit command syntax is as follows:

COMMAND <parameter>

Table 8 Quit command examples

Command example	Command description
> QUIT mtc	Use the Quit command with no parameters to exit from the current MAP session. Display a MAP level that is one level above the current MAP session level.
> QUIT mtc	QUIT <incrname>: Exit the current MAP session. Display the MAP level that is one level above the indicated MAP level name.
> QUIT 2	QUIT <nlevel>: Exit the current MAP session. Display the MAP level that is two levels above the current MAP session in the MAP hierarchy.
> QUIT all	QUIT <all>: Exit from all MAP sessions and display the CI prompt.

44.1.6.6 RTS_

The RTS_ command instructs the XA-Core system to test and return a ManB ethernet interface packlet to service.

44.1.6.6.1 Menu selection number
9

44.1.6.6.2 Type
Operational

44.1.6.6.3 Parameters
The RTS_ command requires parameters. If you do not enter any parameters or you enter invalid parameters, the MAP terminal displays an error message. The MAP terminal prompts you to enter a correct parameter value.

The RTS_ command requires the following parameters:

nn
Use the <nn> (slot number) parameter value to indicate the number of the physical shelf slot - 0 to 18.

s
Use the <s> (side) parameter value to indicate the packlet location in the physical shelf - front (f) or rear (r).

p
Use the <p> (position) parameter value to indicate the packlet location in an input/output processor (IOP) - upper (u) or lower (l).

link_no
Use the <link_no> (link number) parameter to indicate the link on the packlet.

44.1.6.6.4 Options

You can enter the following options in the command statement.

Nowait
Use the [nowait] option with the RTS_ command. Display the MAP prompt to allow you to enter other commands while the system returns the Ethernet packlet to service.

44.1.6.6.5 Command format examples

Example use of the RTS command is shown below. The RTS command syntax is as follows:

COMMAND <parameter> [option]

Table 9 RTS_ command examples

Command example	Command description
> RTS 14 r l	RTS <nn> <s> <p>: Test and return the ManB Ethernet packlet to service.
> RTS 6 r l port	RTS <nn> <s> <p>: Test and return the ManB Ethernet Link to service.
> RTS 6 r l link	RS <nn> <s> <p> <link_no>: Test and return the ManB Ethernet link to service.
> RTS 14 r l nowait	RTS <nn> <s> <p> [nowait]: Test and return the ManB Ethernet packlet to service. Display the MAP prompt and enter other commands.

44.1.6.7 Tst_

The Tst_ (Test) command instructs the XA-Core system to perform tests on the Ethernet interface packlet. The type of test performed depends on the working state (in-service or out-of-service) of the packlet.

An InSv test performs non-destructive tests. An OOS test performs both destructive and non-destructive tests.

44.1.6.7.1 Menu selection number
6

44.1.6.7.2 Type
Operational

44.1.6.7.3 Parameters
The Tst_ command requires parameters. If you do not enter any parameters or you enter invalid parameters, the MAP terminal displays an error message. The MAP terminal prompts you to enter a correct parameter value.

The Tst_ command requires the following command parameters.

Device
Use the <device> parameter value to name the device on the ethernet packlet . The ethernet packlet has two devices: port and link.

nn
Use the <nn> (slot number) parameter value to indicate the number of the physical shelf slot - 0 to 18.

s
Use the <s> (side) parameter value to indicate the packlet location in the physical shelf - front (f) or rear (r).

p
Use the <p> (position) parameter value to indicate the packlet location in an input/output processor (IOP) - upper (u) or lower (l).

44.1.6.7.4 Options

You can enter the following command option in the command statement:

Nowait

Use the [nowait] option to display a MAP prompt and allow you to enter other commands while the system performs the tests.

44.1.6.7.5 Command format examples

Example use of the Tst_ command is shown below. The Tst_ command syntax is as follows:

COMMAND <parameter> [option]

Table 10 Tst_ command examples

Command Example	Command Description
> TST 14 r l	TST <nn> <s> <p>: Perform a test on the packlet. The packlet can be InSv or OOS for this test.
> TST 14 r l nowait	TST <nn> <s> <p> [nowait]: Perform a test on the packlet. Display the MAP prompt and enter other MAP commands. The packlet can be InSv or OOS for this test.
> TST 6 r l link	TST <nn> <s> <p> <device> : Perform a test on the packlet device. The packlet must be InSv for this test.
> TST 14 r l port	TST <nn> <s> <p> <device> : Perform a test on the packlet device. The packlet must be InSv for this test.

44.2 XA-Core OAM Supplied Non-Menu CIs

The following CIs exist, but do not appear on any MAP screen in the MAP Commands menu area. These OAM supplied CIs are only used for special maintenance purposes on an occasional basis.

Table 11 Non-Menu OAM CIs

CI	Meaning
PRINTMAP	Display the current contents of the MAP (used with non-MAP devices such as TTYs).
AbTk	Abort the task currently executing on a specific card or packlet (realistically, there will only be a small number of tasks that will execute long enough to allow the system software to abort the function).

44.3 New/modified commands

Table 12 New or modified commands

Command name	NEW, CHANGED OR DELETED	New name (if renamed)	Directory/MAP level name	MENU/NON-MENU /HIDDEN
ETHR	New		MAPCI;MTC;XAC	Menu
Quit	New		MAPCI;MTC;XAC;ETHR	Menu
Tst	New		MAPCI;MTC;XAC;ETHR	Menu
Bsy	New		MAPCI;MTC;XAC;ETHR	Menu
Rts	New		MAPCI;MTC;XAC;ETHR	Menu
Alarm	New		MAPCI;MTC;XAC;ETHR	Menu
Indicat	New		MAPCI;MTC;XAC;ETHR	Menu
Query	New		MAPCI;MTC;XAC;ETHR	Menu

45: Command interface changes (CI)

45.1 Directory: USNBD

45.1.1 Directory description

The CI commands under the USNBD directory level has been modified to support Switched ISUP CCCs. USNBD is a resident directory.

45.1.2 Accessing directory: USNBD

45.1.2.1 Access to directory or MAP level and return to CI

Enter USNBD at the CI prompt to enter USNBD directory level. To return to the CI environment, enter QUIT.

45.2 Command: HELP

45.2.1 Command type: NON-MENU

45.2.2 Command target: BRISC

45.2.3 Command availability: RES

45.2.4 Command description

This command provide the purpose and the correct syntax of the USNBD sub-commands.

45.2.5 Command syntax

Table 1 HELP command parameters and variables

Command	Parameters and variables
HELP	HELP INFORMATION Parms: [<SUBCOMMAND> {**CCR**, CDC, **HELP**, QUIT, SURV, USER, **UNB_OFCWIDE**, **AGENCY,** **TEST**}]
Parameters and variables	**Description**
CCR HELP UNB_OFCWIDE AGENCY TEST	The acceptable sub-command names on which the help can be provided.

45.2.6 Qualifications and warnings

No new warnings are introduced.

45.2.7 Responses

45.2.7.1 Response:

HELP INFORMATION
Parms: [<SUBCOMMAND> {CCR,
CDC,
HELP,
QUIT,
SURV,
USER,
UNB_OFCWIDE,
AGENCY,
TEST}]

Meaning:

A list of USNBD subcommands is displayed when HELP has no parameters or when the HELP parameter is supplied (help on help).

System or user actions:
None.

45.2.7.2 Response:

MANAGES OR LISTS AGENCY TRANSLATION DATA
Parms: <command> {ADD <AGENCY-NAME> STRING
<STS> STRING
<PRETRANS> STRING
<LCA> STRING
<BILLNO> STRING,
DEL <AGENCY-NAME> STRING,
LIST}

Meaning:
Succeed in providing help on AGENCY command.

System or user actions:
None.

45.2.7.3 Response:

TEST AND VERIFY THE SWITCHED CCC LINKS
Parms: <CCR> {1 TO 500}

Meaning:
Succeed in providing help on TEST command.

System or user actions:
None.

45.2.8 Example

Table 2 Usage examples for HELP command

Description of task:	USER executes HELP command on USNBD prompt.

Command: MAP Response:	HELP HELP INFORMATION Parms: [<SUBCOMMAND> {CCR, CDC, HELP, QUIT, SURV, USER, UNB_OFCWIDE, AGENCY, TEST}]

Table 3 Usage examples for HELP command with TEST option.

Description of task:	User executes HELP command with TEST option to get details on the TEST command
Command: MAP Response:	HELP TEST TEST AND VERIFY THE SWITCHED CCC LINKS Parms: <CCR> {1 TO 500}

45.3 Command: UNB_OFCWIDE

45.3.1 Command type: NON-MENU

Admin command “UNB_OFCWIDE” is modified to accept new sub-command “TEST_CALL_BILLNO” and option “LIST”.

45.3.2 Command target: BRISC

45.3.3 Command availability: RES

45.3.4 Command description:

This has new sub-command `TEST_CALL_BILLNO' with options ‘ADD’, ‘REL’, ‘DEL’ and ‘LIST’. These options enable admin to add, replace, delete and list the test call billing number used for generating billing records for billable test calls.

New ‘LIST’ option lists all the USNBD Office wide parameters.

45.3.5 Command syntax

Table 4 UNB_OFCWIDE **command parameters and variables**

Command	**Parameters and variables**
UNB_OFCWIDE	Next par is: <command> {HELDMON <heldmon_opts> {ON, OFF, STATUS}, **TEST_CALL_BILLNO <tc_options> {ADD <billno> STRING**, **REP <billno> STRING,** **DEL,** **LIST},** **LIST**}
Parameters and variables	**Description**
TEST_CALL_BILLNO	The TEST_CALL_BILLNO sub-command enables to add/delete/replace/list the test call bill number on an office wide basis. UNB_OFCWIDE TEST_CALL_BILLNO ADD <billno>: Adds the 10 digit TEST call billing number on office wide basis. UNB_OFCWIDE TEST_CALL_BILLNO REP <billno>: Replaces the 10 digit TEST call billing number on office wide basis. UNB_OFCWIDE TEST_CALL_BILLNO DEL: Deletes the 10 digit TEST call billing number on office wide basis. UNB_OFCWIDE TEST_CALL_BILLNO LIST: Lists the 10 digit TEST call billing number**.**
LIST	Lists all the USNBD office wide parameters.

45.3.6 Qualifications and warnings

No new warnings are introduced.

45.3.7 Responses

45.3.7.1 Response:

TEST_CALL_BILLNO ADD FAILED: BILLING NUMBER MUST BE OF 10 DIGITS.

Meaning:

The length of the specified TEST call billing number is invalid.

System or user actions:
Enter proper 10 digit TEST call billing number.

45.3.7.2 Response:

TEST_CALL_BILLNO REP FAILED: BILLING NUMBER MUST BE OF 10 DIGITS.

Meaning:
The length of the specified TEST call billing number is invalid.

System or user actions:
Enter proper 10 digit TEST call billing number.

45.3.7.3 Response:

TEST_CALL_BILLNO ADD FAILED: TEST_CALL_BILLNO ALREADY SPECIFIED.
USE REP OPTION TO REPLACE THE TEST CALL BILLING NUMBER.

Meaning:
Can not add new TEST_CALL_BILLNO when TEST_CALL_BILLNO has been already added.

System or user actions:
Use replace option “REP” to add the new TEST_CALL_BILLNO.

45.3.7.4 Response:

TEST_CALL_BILLNO REP FAILED: TEST_CALL_BILLNO NOT SPECIFIED.
USE ADD OPTION TO ADD THE TEST CALL BILLING NUMBER.

Meaning:
Can not replace new TEST_CALL_BILLNO when the TEST_CALL_BILLNO is not defined.

System or user actions:
Use add option “ADD” to add the new TEST_CALL_BILLNO.

45.3.7.5 Response:

TEST_CALL_BILLNO DEL FAILED: TEST_CALL_BILLNO NOT SPECIFIED.

Meaning:
Can not delete the TEST_CALL_BILLNO when it is not defined.

System or user actions:

None.

45.3.7.6 Response:

TEST_CALL_BILLNO ADD DONE.

Meaning:
Succeeded in adding the TEST call billing number.

System or user actions:
None.

45.3.7.7 Response:

TEST_CALL_BILLNO REP DONE.

Meaning:
Succeeded in replacing the TEST call billing number.

System or user actions:
None.

45.3.7.8 Response:

TEST_CALL_BILLNO DEL DONE.
WARNING: BILLABLE TEST CALLS MAY FAIL.

Meaning:
TEST call bill number is deleted.

System or user actions:
None.

45.3.7.9 Response:

TEST_CALL_BILLNO: <TEST call billing number>
TEST_CALL_BILLNO LIST DONE.

Meaning:
Current values of USNBD office wide TEST_CALL_BILLNO is displayed.

System or user actions:

None.

45.3.7.10 Response:

PARNAME PARVAL

HELDMON <status>

TEST_CALL_BILLNO <TEST call billing number>

UNB_OFWIDE LIST DONE.

Meaning:
Current values of USNBD office wide parameters are displayed.

System or user actions:
None.

45.3.8 Example

Table 5 Successful addition of TEST_CALL_BILLNO

Description of task:	To add test call billing number on office wide
Command: MAP Response:	UNB_OFCWIDE TEST_CALL_BILLNO add 1111111111 TEST_CALL_BILLNO ADD DONE.

Table 6 Successful deletion of TEST_CALL_BILLNO

Description of task:	To delete test call billing number.
Command: MAP Response:	UNB_OFCWIDE TEST_CALL_BILLNO DEL TEST_CALL_BILLNO DEL DONE. WARNING: BILLABLE TEST CALLS MAY FAIL.

Table 7 Listing of UNB office wide parameters

Description of task:	To list all USNBD parameters on office wide basis.

Command: MAP Response:	UNB_OFCWIDE LIST PARNAME PARVAL ---------- HELDMON OFF TEST_CALL_BILLNO NIL UNB_OFCWIDE LIST DONE.

45.4 Command: TEST

45.4.1 Command type: NON-Menu

45.4.2 Command target: BRISC

45.4.3 Command availability: RES

45.4.4 Command description.

This command verifies that the Switched ISUP CCC links to the recorder can be established properly.

45.4.5 Command syntax

TEST <CCC> <CR>

Table 8 TEST command parameters and variables

Command	Parameters and variables
TEST	Next par is: <CCC> {1 TO 500} Enter: <CCC>
Parameters and variables	**Description**
CCR	Index of the CCR. This index can take value form 1 to 500

45.4.6 Qualifications and warnings

No new warnings are introduced.

45.4.7 Responses

45.4.7.1 Response:

TEST FAILED: UNAUTHORIZED COMMAND.

Meaning:
User is not authorized to use TEST command or user is not associated with the agency of the CCR.

System or user actions:
None.

45.4.7.2 Response:

TEST FAILED: USNBD IS NOT ACTIVE.

Meaning:
USNBD SOC is IDLE.

System or user actions:
Turn the USNBD SOC ON.

45.4.7.3 Response:

TEST FAILED: USNBD RECOVERY IN PROGRESS, PLEASE TRY AGAIN LATER.

Meaning:
After a RESTART (cold or reload), USNBD performs some initialization. The TEST command cannot be used during that short period of time.

System or user actions:
Try again few seconds later.

45.4.7.4 Response:

TEST FAILED: USNBD DATA TRANSFER IN PROGRESS, PLEASE TRY AGAIN LATER.

Meaning:
A load application is in progress. The TEST command is not allowed while USNBD data is being transferred.

System or user actions:
Try again later, when the load application is completed.

45.4.7.5 Response:

TEST FAILED: INTERNAL ERROR.

Meaning:
USNBD is not able to claim FLAG for executing TEST command.

System or user actions:
Try again later.

45.4.7.6 Response:

TEST FAILED: CCR ALREADY ASSOCIATED.

Meaning:
The TEST command cannot be performed because the specified CCC is currently associated to surveillance.

System or user actions:
Disassociate the CCR and then perform the test.

45.4.7.7 Response:

TEST FAILED: CCR DOES NOT EXIST.

Meaning:
The specified CCR does not exist.

System or user actions:
Verify if CCR is present with the CCR LIST command.

45.4.7.8 Response:

TEST FAILED: CANNOT TEST DEDICATED CCR.

Meaning:
The specified CCR is a dedicated type of CCR.

System or user actions:
None.

45.4.7.9 Response:

TEST FAILED: TEST_CALL_BILLNO MISSING.
TEST CALL DONE.

Meaning:
The TEST command cannot be performed because the call to the specified CCC is billable and USNBD office wide parameter TEST_CALL_BILLNO is not specified.

System or user actions:
Specify TEST_CALL_BILLNO using “UNBOFCWIDE TEST_CALL_BILLNO ADD” command.
Re-execute the TEST command.

45.4.7.10 Response:

TEST CALL FAILED: AGENCY DATA NOT FOUND.

Meaning:

The TEST command cannot be performed because the translation data for the specified CCC's agency is not defined.

System or user actions:
Use "AGENCY ADD" command to specify the translation data for the CCR's agency.
Re-execute the TEST command.

45.4.7.11 Response:

TEST FAILED: CCC DN <DN> UNALLOCATED.

Meaning:
The called party cannot be reached. The specified number is not currently assigned.

System or user actions:
Verify that the right CCC DN is entered.
Verify the DN with the agency.

45.4.7.12 Response:

TEST FAILED: NO ROUTE TO CCC DN <DN>.

Meaning:
The network is unable to route the call to the requested destination.

System or user actions:
Verify that the right CCC DN is entered.
Verify translation/routing tables with TRAVER.
Verify the DN with the agency.

45.4.7.13 Response:

TEST FAILED: CCC DN <DN> IS OUT OF ORDER.

Meaning:
The interface to the destination of the specified link is not functioning correctly.
System or user actions:
Verify that the right CCC DN is entered.
Verify the recorder interface with the agency.
Verify the DN with the agency.

45.4.7.14 Response:

TEST FAILED: CCC DN <DN> CIRCUIT IS NOT AVAILABLE.

Meaning:
There is no appropriate circuit currently available to handle the call for the specified link.

System or user actions:
Verify that the right CCC DN is entered.
Verify trunks are available (idle) in required route(s) as identified using the TRAVER command, then retry.
Verify the DN with the agency.

45.4.7.15 Response:

TEST FAILED: NETWORK FOR CCC DN <DN> IS TEMPORARILY OUT OF ORDER.

Meaning:
The specified link could not be established because the network is not functioning properly for an indefinite period of time.

System or user actions:

Try again later.

45.4.7.16 Response:

TEST FAILED: NETWORK CONGESTION FOR CCC DN <DN>.

Meaning:
The specified link could not be established because the network is experiencing a period of high traffic.

System or user actions:
Try again later.

45.4.7.17 Response:

TEST FAILED: TEST_CALL_BILLNO MISSING.

Meaning:
The specified CCC DN TEST call is a billable call and there is no TEST_CALL_BILLNO parameter defined in UNB_OFCWIDE.

System or user actions:
Identify if the call is intended to be billable.
If so, define a TEST_CALL_BILLNO with UNB_OFCWIDE.
If not, find a valid non-billable DN and re-assign it to the current CCC.

45.4.7.18 Response:

TEST FAILED: EXTENSION BLOCK NOT AVAILABLE.

Meaning:
There are no more FBS extension blocks available to make the connection for the specified CCC link.

System or user actions:
None.

45.4.7.19 Response:

TEST FAILED: DMS RESOURCES NOT AVAILABLE.

Meaning:
Some of the DMS resources are not available at this time in order to make the connection for the specified CCC link.

System or user actions:
Verify logs for AUD594. Verify if no more VIDS are available.

45.4.7.20 Response:

TEST FAILED: COMMUNICATION PROBLEM, PLEASE TRY AGAIN.

Meaning:
After issuing the TEST command, there was no response received, within the maximum time allowed, to acknowledge the proper establishment of the specified CCC link. This should be a temporary situation.

System or user actions:
Try again later.

45.4.7.21 Response:

TEST FAILED: TRANSLATIONS FAILED FOR CCC DN <DN>.

Meaning:
The specified DN does not translate properly.

System or user actions:
Verify that the right CCC DN is entered.
Verify translation tables with TRAVER.
Verify the DN with the agency.

45.4.7.22 Response:

TEST FAILED: ROUTING FAILED FOR CCC DN <DN>.

Meaning:
A route cannot be found for the specified DN digits.

System or user actions:
Verify that the right CCC DN is entered.
Verify translation/routing tables with TRAVER.
Verify the DN with the agency.

45.4.7.23 Response:

TEST FAILED: UNSUPPORTED TRUNK TYPE FOR CCC DN <DN>.

Meaning:
The trunk type used to route to the specified DN is not supported. The trunk types should be ISUP trunks (TO, IT, T2).

System or user actions:
Verify the translations are correct using TRAVER. If necessary, change translations to route to a supported trunk type.

45.4.7.24 Response:

TEST FAILED: CCC DN <DN> IS BUSY.

Meaning:
The specified DN is in Call Processing Busy state.

System or user actions:
Verify that the right CCC DN is entered.
If this is a DN locally defined on the switch, Post the DN at the MAP - LTP level to determine the connected line or trunk and take any necessary steps to release the line.
Verify, with the agency, if the recorder is off-hook.
Verify the DN with the agency.

45.4.7.25 Response:

TEST FAILED: MESSAGING PROBLEM- DN <DN>.

Meaning:
The connection to the specified DN cannot be made due to some FBS messaging problem.

System or user actions:
Verify if SWERR LOGS are being generated and refer them to your support group.

45.4.7.26 Response:

TEST FAILED: DISCONNECTED DURING CALL SETUP TO CCC DN <DN>.

Meaning:
The link associated with the DN answered and then disconnected.

System or user actions:
Verify that the right CCC DN is entered.
Verify the recorder interface (to the line) with the agency.
Verify the DN with the agency.

45.4.7.27 Response:

TEST FAILED: NO ANSWER FROM CCC DN <DN>.

Meaning:
The link associated with the DN did not return an answer within the maximum time allowed.

System or user actions:
Verify that the right CCC DN is entered.
Verify the recorder interface (to the line) with the agency.
Verify the DN with the agency.

45.4.7.28 Response:

TEST FAILED: NO CSIDE LINKS FOR CCC DN <DN>.

Meaning:
The internal DMS linkage is out of service between the Network and the Peripheral Module (PM) to which the specified link (DN) is assigned.

System or user actions:
Refer problem to the maintenance personnel responsible for that DMS switch for corrective action.

45.4.7.29 Response:

TEST FAILED: UNKNOWN PROBLEM.

Meaning:
Due to some unknown problem (not a resource or communication problem), the link could not be established for the specified DN. This should be temporary.

System or user actions:
Verify logs LOSTXXX, PM180, SWERR.

45.4.7.30 Response:

SUCCESSFUL TEST CALL FOR CCC DN <DN>.
TEST CALL DONE.

Meaning:
The specified CCC link has been properly established for the TEST command.

System or user actions:
Once the link has been properly established, the feature will disconnect the link and place it in an idle state.

45.4.8 Example

45.4.8.1 Unsuccessful test

Assume, paired CCR 1 is defined with one valid DN (613-663-1001) and one DN with some routing problem (613-663-1002).

Table 9 Unsuccessful test

Description of task:	User verifies the CCR connectivity using the TEST command
Command: MAP Response:	TEST 1 SUCCESSFUL TEST CALL FOR CCC DN 6136631001 TEST FAILED: ROUTING FAILED FOR CCC DN 6136631002 TEST CALL DONE.

45.4.8.2 Successful test

Assume, CCR 1 is defined with valid DNs 416-463-1001 and 416-463-1002

Table 10 Successful test

Description of task:	User verifies the CCR connectivity using the TEST command
Command: MAP Response:	TEST 2 SUCCESSFUL TEST CALL FOR CCC DN 4164631001 SUCCESSFUL TEST CALL FOR CCC DN 4164631002 TEST CALL DONE.

45.5 Command: CCR ADD

45.5.1 C**ommand type:**

CCR ADD command is a non-menu command associated with the USNBD directory. In NA015, it is modified to prompt for access type for LINE CCRs.

45.5.2 Command target: BRISC

45.5.3 Command availability: RES

45.5.4 Command description.

CCR ADD command is used to create a Call Content Resource. This feature adds the new parameter ‘access’ to the existing CCR ADD command. Different validations are applied depending on whether the access is switched or dedicated.

When CCR is Dedicated:

The existing DN validations are performed and accepts only 10 digits CCC DN.

When CCR is Switched:

The following validations will be performed on each CCC DN, each DN must be ten or eleven digits in length.

- DN1 and DN2 must be distinct for paired type of CCR
- DN must not be present on the host switch

as opposed to dedicated access, each directory number is not required to be a POTS line off the switch hosting the agency recorder.

45.5.5 Command syntax

Table 11 CCR ADD command parameters and variables

Command	Parameters and variables
CCR ADD index	Next par is: <ccr_content> {VOICE <ccr_definition> {COMBINED <ccr_id> {LINE **<Access> {SW <CCC1 -> 10 or 11-digit DN> ST DE <CCC1 -> 10-digit DN> STRING <signaling> {N, Y}},** TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999}}, PAIRED <ccr_id> {LINE **<Access> {SW <CCC1 -> 10 or 11-digit DN> STRI <CCC2 -> 10 or 11-digit DN> STRI DE <CCC1 -> 10-digit DN> STRING <CCC2 -> 10-digit DN> STRING <signaling> {N, Y}},** TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999} <CCC2 -> CLLI> STRING <CCC2 -> trunk number> {0 TO 9999}}} <ccc_tag> {N, Y}, PACKET <ccr_id> {LINE <PVC1 -> 10-digit DN> STRING <PVC1 -> LCN> {0 TO 4095} <PVC2 -> 10-digit DN> STRING <PVC2 -> LCN> {0 TO 4095}, TRUNK <PVC1 -> CLLI> STRING <PVC1 -> trunk number> {0 TO 9999} <PVC1 -> LCN> {0 TO 4095} <PVC2 -> CLLI> STRING <PVC2 -> trunk number> {0 TO 9999} <PVC2 -> LCN> {0 TO 4095}}, <agency> STRING}
Parameters and variables	**Description**
Access	Access type takes two values “SW” for switched and “DE” for dedicated type of CCR.

Table 11 CCR ADD command parameters and variables (Continued)

Command	Parameters and variables
CCC1	This variable is modified to accept 10 digits for dedicated and 10 to 11 digits for switched type of CCR
CCC2	This variable is modified to accept 10 digits for dedicated and 10 to 11 digits for switched type of CCR
agency	Agency information of the CCR. This is prompted, only if the added by ADMIN. If user adds the CCR, the user agency is taken as CCR agency. The maximum size of agency name is 16. This parameter is added by Agency Separator feature.

45.5.6 Qualifications and warnings

No new warnings are introduced.

45.5.7 Responses

45.5.7.1 Response:

CCR ADD FAILED: SWITCHED CCC DN MUST BE OF 10 OR 11 DIGITS.

Meaning:
CCC DN(s) specified in the CCR ADD command for switched access type of CCR are not of 10 to 11 digits length.

System or user actions:
Find a new valid remote CCC DN. Replace the local directory number originally entered by the new one. Re-issue the CCR ADD subcommand with the new parameters.

45.5.7.2 Response:

CCR ADD FAILED: SWITCHED CCC DN <DN> PRESENT ON THE HOST SWITCH.

Meaning:
With switched access, CCC DN given as parameters to the CCR ADD subcommand should not be a local DN.

System or user actions:
Find a new valid remote CCC DN. Replace the local directory number originally entered by the new one. Re-issue the CCR ADD subcommand with the new parameters

45.5.8 Example

Table 12 Usage examples for CCR ADD command (with switched access)

Description of task:	User adds a switched CCR.
Command: MAP Response:	CCR ADD 1 VOICE COMBINED LINE SW 16136631001 N CCR ADD DONE.

Table 13 Usage examples for CCR ADD command (with dedicated access)

Description of task:	User adds a dedicated CCR.
Command: MAP Response:	CCR ADD 1 VOICE COMBINED LINE DE 6136631001 N Y CCR ADD DONE

Table 14 Usage examples for CCR ADD command (with CCC DN present on host switch)

Description of task:	USER adds a CCR with CCC DN present on host switch.
Command: MAP Response:	CCR ADD 1 VOICE COMBINED LINE SW 4164631001 N CCR ADD FAILED: SWITCHED CCC DN 4164631001 PRESENT ON THE HOST SWITCH

45.6 Command: CCR LIST

45.6.1 Command type:

CCR LIST command is a non-menu command associated with the USNBD directory.

45.6.2 Command target: BRISC

45.6.3 Command availability: RES

45.6.4 Command description.

CCR LIST command is used to list surveillances. For all options for list sub-command, the access information of CCR is also displayed.

45.6.5 Command syntax

No change to CCR LIST command syntax has been made.

45.6.6 Qualifications and warnings

No new warnings are introduced.

45.6.7 Responses

No new responses are generated.

45.6.8 Example

Table 15 Usage examples for CCR LIST command

Description of task:	User lists all CCRs in a switch. CCR 1 with switched and CCR 2 with dedicated access type.
Command: MAP Response:	CCR LIST ALL Index Content CCRtype Acc CCRid CCC1 [CCC2] [Sig] [Tag] [SIN] ---------- 1 VOICE COMBINED LINE SW 19006671021 N N 2 VOICE COMBINED LINE DE 6136631001 N N CCR LIST DONE.

45.7 Command: AGENCY ADD

45.7.1 C**ommand type:**

AGENCY ADD command is a non-menu command associated with the USNBD directory. In NA015, it is created to prompt for agency information for SWITCHED ISUP CCCs.

45.7.2 Command target: BRISC

45.7.3 Command availability: RES

45.7.4 Command description.

Associates STS, PRETRANSLATOR, LCANAME and BILLNO with a particular agency specified with this command.

45.7.5 Command syntax

Table 16 AGENCY ADD command parameters and variables

Command	Parameters and variables
AGENCY ADD	Next par is: <command> {ADD <AGENCY-NAME> STRING <STS> STRING <PRETRANSLATOR> STRING <LCA> STRING <BILLNO> STRING,
Parameters and variables	**Description**
AGENCY-NAME	Agency having access to switched ISUP CCCs to their remote recording device.
STS	Serving Translation Scheme
PRETRANSLATOR	PRETRANSLATOR Name
LCA	Local Calling Area Screening Name
BILLNO	10 digits billing number used for generating billing record for the SWITCHED ISUP CCC call pertaining to the specified agency.

45.7.6 Qualifications and warnings

No new warnings are introduced.

45.7.7 Responses

45.7.7.1 Response:

AGENCY FAILED: UNAUTHORIZED COMMAND.

Meaning:
User is not authorized to use AGENCY command.

System or user actions:
None.

45.7.7.2 Response:

AGENCY FAILED: USNBD IS NOT ACTIVE.

Meaning:
USNBD SOC is IDLE.

System or user actions:
Turn the USNBD SOC ON.

45.7.7.3 Response:

AGENCY FAILED: USNBD RECOVERY IN PROGRESS, PLEASE TRY AGAIN LATER.

Meaning:
After a RESTART (cold or reload), USNBD performs some initialization. The AGENCY command cannot be used during that short period of time.

System or user actions:
Try again few seconds later.

45.7.7.4 Response:

AGENCY FAILED: USNBD DATA TRANSFER IN PROGRESS, PLEASE TRY AGAIN LATER.

Meaning:
A load application is in progress. The AGENCY command is not allowed while USNBD data is being transferred.

System or user actions:
Try again later, when the load application is completed.

45.7.7.5 Response:

AGENCY ADD FAILED: INTERNAL ERROR.

Meaning:
USNBD is not able to claim FLAG for executing AGENCY ADD command.

System or user actions:
Try again later.

45.7.7.6 Response:

AGENCY ADD FAILED: UNAUTHORIZED COMMAND.

Meaning:
User is not authorized to add the translation data for the specified agency command.

System or user actions:
None.

45.7.7.7 Response:

AGENCY ADD DONE.

Meaning:
Agency is added successfully with the specified translation data.

System or user actions:
None.

45.7.7.8 Response:

AGENCY ADD FAILED: STS NOT FOUND IN TABLE HNPACONT

Meaning:
STS specified in the AGENCY ADD command does not exist in table HNPACONT.

System or user actions:

Verify that the user assigns the correct STS value with the agency via AGENCY command. If the current agency STS is correct, it should be validated that the value does not exist in the table HNPACONT. The user should invoke the operating company procedure to add the missing datafill to the table. Then re-issue the AGENCY ADD command.

45.7.7.9 Response:

AGENCY ADD FAILED: PRETRANSLATOR NOT FOUND IN TABLE STDPRTCT

Meaning:
PRETRANSLATOR specified in the AGENCY ADD command does not exist in table STDPRTCT.

System or user actions:
Verify that the user assigns the correct PRETRANSLATOR value with the agency using AGENCY ADD command. If the current agency PRETRANSLATOR is correct, it should be validated that the value does not exist in the table STDPRTCT. The user should invoke the operating company procedure to add the missing datafill to the table. Then re-issue the AGENCY ADD command.

45.7.7.10 Response:

AGENCY ADD FAILED: LCANAME NOT FOUND IN TABLE LCASCRCN OR LCA INFO.

Meaning:
LCANAME specified in the AGENCY ADD command does not exist in table LCASCRCN or LCA.

System or user actions:
Verify that the user assigns the correct LCANAME value with the agency via AGENCY command. If the current agency LCANAME is correct, it should be validated that the value does not exist in the table LCASCRCN or LCA. The

user should invoke the operating company procedure to add the missing datafill to the table. Then re-issue the AGENCY ADD command.

45.7.7.11 Response:

AGENCY ADD FAILED: BILLING NUMBER MUST BE OF 10 DIGITS.

Meaning:
10 digit bill number is not specified in the AGENCY ADD command.

System or user actions:
Re-issue the AGENCY ADD command with proper 10 digit bill number.

45.7.7.12 Response:

AGENCY ADD FAILED: AGENCY CAPACITY EXCEEDED FOR SWITCHED ISUP CCCS.

Meaning:
User is trying to add 9th agency with switched ISUP CCC feature.

System or user actions:
None.

45.7.7.13 Response:

AGENCY ADD FAILED: AGENCY ALREADY EXISTS.

Meaning:
User is trying to add agency data with similar agency name that already exists.

System or user actions:
None.

45.7.7.14 Response:

AGENCY ADD FAILED: AGENCY NAME SHOULD NOT EXCEED 16 CHARS.

Meaning:
User is trying to add agency data with agency name of more than 16 characters.

System or user actions:
Re-execute the command with agency name less than or equals to 16 characters.

45.7.8 Example

Table 17 Usage examples for AGENCY ADD command

Description of task:	User adds a agency.

Command: MAP Response:	AGENCY ADD agency1 613 p621 l667 1234567890 AGENCY ADD DONE.

Table 18 Usage examples for AGENCY ADD command (Trying to add 9th agency)

Description of task:	User adds a AGENCY. Number of agencies exceeds the maximum allowed size.
Command: MAP Response:	AGENCY ADD agency9 613 p621 l667 1234567890 AGENCY ADD FAILED:AGENCY CAPACITY EXCEEDED FOR SWITCHED ISUP CCCS.

45.8 Command: AGENCY DEL

45.8.1 Command type:

AGENCY DEL command is a non-menu command associated with the USNBD directory.

45.8.2 Command target: BRISC

45.8.3 Command availability: RES

45.8.4 Command description.

AGENCY DEL command is created to delete the translation data related to specified agency.

45.8.5 Command syntax

Table 19 CDC DEL command parameters and variables

Command	**Parameters and variables**
AGENCY DEL	Next par is: <AGENCY-NAME> STRING
Parameters and variables	**Description**
AGENCY-NAME	Agency having access to switched ISUP CCCs for their remote recording device.

45.8.6 Qualifications and warnings

No new warnings are introduced.

45.8.7 Responses

45.8.7.1 Response:

AGENCY DEL FAILED: INTERNAL ERROR.

Meaning:
USNBD is not able to claim FLAG for executing AGENCY DEL command.

System or user actions:
Try again later.

45.8.7.2 Response:

AGENCY DEL FAILED: UNAUTHORIZED COMMAND.

Meaning:
User is not valid user of the agency specified in the AGENCY DEL command.

System or user actions:
None.

45.8.7.3 Response:

AGENCY DEL FAILED: SWITCHED CCR ARE ASSOCIATED.

Meaning:
Agency data used for translation pertaining to specified agency can not be deleted when the switched CCR for the specified agency are associated to the surveillance.

System or user actions:
Disassociate all the switched CCR for agency.
Re-execute the command.

45.8.7.4 Response:

AGENCY DEL DONE.

Meaning:
Agency data used for translation pertaining to specified agency is deleted.

System or user actions:
None.

45.8.7.5 Response:

AGENCY DEL FAILED: NO MATCHING AGENCY FOUND

Meaning:
Agency specified in the AGENCY DEL command does not exists.

System or user actions:
Verify that the agency exists using AGENCY LIST command.

45.8.8 Example

Table 20 Usage examples for AGENCY DEL command (agency1 is present)

Description of task:	User deletes a AGENCY.
Command: MAP Response:	AGENCY DEL agency1 AGENCY DEL DONE.

Table 21 Usage examples for AGENCY DEL command (agency2 is not present)

Description of task:	User tries to delete a AGENCY that does not exists.
Command: MAP Response:	AGENCY DEL agency2 AGENCY DEL FAILED: NO MATCHING AGENCY FOUND

45.9 Command: AGENCY LIST

45.9.1 Command type:

This feature adds a non-menu command AGENCY LIST to the USNBD directory.

45.9.2 Command target: BRISC

45.9.3 Command availability: RES

45.9.4 Command description.

This command is created to display the STS, PRETRANSLATOR, LCANAME and Billing number currently associated to the agencies.

45.9.5 Command syntax

Table 22 AGENCY LIST command parameters and variables

Command	Parameters and variables
AGENCY LIST	None
Parameters and variables	**Description**
None	-

45.9.6 Qualifications and warnings

No new warnings are introduced.

45.9.7 Responses

45.9.7.1 Response:

AGENCY LIST FAILED: INTERNAL ERROR.

Meaning:
USNBD is not able to claim FLAG for executing AGENCY LIST command.

System or user actions:
Try again later.

45.9.7.2 Response:

NO MATCHING AGENCY FOUND
AGENCY LIST DONE.

Meaning:
Translation data specific to the agency not found.

System or user actions:
None.

45.9.7.3 Response:

AGENCY-NAME STS PRETRANSLATOR LCANAME BILLNO

<agency> <sts> <pretranslator> <lcaname> <billno>
AGENCY LIST DONE.

Meaning:
The value of sts,pretranslator, lcaname and billno are listed for the agency.

System or user actions:
None.

45.9.8 Example

Table 23 Usage examples for AGENCT LIST command

Description of task:	AGENCT lists all agencies in a switch having access to switched ISUP CCCs.
Command: MAP Response:	AGENCY LIST AGENCY-NAME STS PRETRANSLATOR LCANAME BILLNO ---------- AGENCY1 613 P621 L667 1234567890 AGENCY2 416 P463 L467 0987654321 AGENCY LIST DONE.

46: Command interface changes (CI)

46.1 Conventions

In this document, the following conventions are used

- User means USNBD Non-ADMIN user.
- ADMIN means USNBD ADMIN User.
- Data means USNBD static data, i.e, USER or SURV or CDC or CCR information.
- Data agency means agency to which the data belongs to.
- User agency means the agency to which the user belongs to.

46.2 Directory: USNBD

46.2.1 Directory description

The CI commands under the USNBD directory level has been modified to support agency separator. USNBD is a resident directory.

46.2.2 Accessing directory: USNBD

46.2.2.1 Access to directory or MAP level and return to CI

Enter USNBD at the CI prompt to enter USNBD directory level. To return to the CI environment, enter QUIT.

46.3 Command: USER ADD

46.3.1 Command type: NON-MENU

USER ADD command is a non-menu command associated with the USNBD directory.

46.3.2 Command target: BRISC

46.3.3 Command availability: RES

46.3.4 Command description

USER ADD command is used to create a USNBD user. It supports a boolean to indicate whether added user is ADMIN or not.

This command is enhanced to indicate the agency of the user if the added user is not ADMIN.

This feature also makes the ADMIN field mandatory.

46.3.5 Command syntax

Table 1 USER ADD command parameters and variables

Command	**Parameters and variables**
USER ADD	Parms: <command> { <user_id> STRING [<admin> {N [<Agency> STRING], Y}]
Parameters and variables	**Description**
user_id	ID of the user to be added
admin	Whether the user is Admin or not. This feature makes this field mandatory.
Agency	**Agency information of the user. This is prompted, only if the added user is not ADMIN.(i.e, admin field is 'N'). The maximum allowed length of agency name is 16.**

46.3.6 Qualifications and warnings

No new warnings are introduced.

46.3.7 Responses

<‘ **INVALID AGENCY NAME**’>: **Meaning**: The agency name entered by the ADMIN exceeds the maximum allowed size of agency. **System or user actions:** NONE

46.3.8 Example

Table 2 Usage examples for USER ADD command (When Non-ADMIN user is added)

Description of task:	ADMIN tries to add a Non-ADMIN user to USNBD user list.
Command: MAP Response:	USER ADD CMAP12 N **AGENCY1** USER ADD DONE.

Table 3 Usage examples for USER ADD command (When Non-ADMIN user is added)

Description of task:	ADMIN tries to add a Non-ADMIN user to USNBD user list. Agency name exceeds the maximum allowed size.
Command: MAP Response:	USER ADD CMAP12 N **ASDFGHJKLZXCCVVBNMASDFG** USER ADD FAILED: INVALID AGENCY NAME.

Table 4 Usage examples for USER ADD command (When ADMIN user is added)

Description of task:	ADMIN tries to add a ADMIN user to USNBD user list.
Command: MAP Response:	USER ADD CMAP12 Y USER ADD DONE.

46.4 Command: USER LIST

46.4.1 Command type: NON-MENU

USER LIST command is a non-menu command associated with the USNBD directory.

46.4.2 Command target: BRISC

46.4.3 Command availability: RES

46.4.4 Command description

USER LIST command is used to list USNBD users.

This command is enhanced and 2 new options were introduced.

1. ALL: to list all valid USNBD users
2. AGENCY: This option lists all the users belonging to a particular agency.

Both the options display the agency of the user.

46.4.5 Command syntax

Table 5 USER LIST command parameters and variables

Command	**Parameters and variables**
USER LIST	Parms: **<user_list_opt> {ALL, AGENCY <agency> STRING}**
Parameters and variables	**Description**
user_list_option	option for LIST command
agency	Agency Name.

46.4.6 Qualifications and warnings

No new warnings are introduced.

46.4.7 Responses

<‘**NO MATCHING USER FOUND** ’>:

Meaning: No Matching User found. No user belongs to the given agency.

System or user actions:

NONE

46.4.8 Example

Table 6 Usage examples for USER LIST command (With ALL option)

Description of task:	To list all USNBD user.
Command: MAP Response:	USER LIST ALL USER ADMIN **AGENCY** ---------- CMAP10 N **AGENCY1** CMAP12 N **AGENCY2** CMAP7 Y - USER LIST DONE

Table 7 Usage examples for USER LIST command (With AGENCY option)

Description of task:	To list all USNBD user belonging to a particular agency.
Command: MAP Response:	USER LIST **AGENCY AGENCY1** USER ADMIN **AGENCY** ---------- CMAP10 N **AGENCY1** USER LIST DONE.

Table 8 Usage examples for USER LIST command (With AGENCY option and No user belonging to that agency)

Description of task:	To list all USNBD user belonging to a particular agency. No User belonging to that agency.
Command: MAP Response:	USER LIST AGENCY AGENCY4 NO MATCHING USER FOUND USER LIST DONE.

46.5 Command: SURV ADD

46.5.1 Command type:

SURV ADD command is a non-menu command associated with the USNBD directory. In NA015, it is modified to prompt for agency information for ADMIN user.

46.5.2 Command target: BRISC

46.5.3 Command availability: RES

46.5.4 Command description.

SURV ADD command is used to create a surveillance profile. This command is enhanced to prompt for agency information of the subject when ADMIN adds a new surveillance.

When a user adds a surveillance, the agency of user is taken as agency of surveillance. There is no change in syntax of this sub-command for user from NA014 to NA015.

46.5.5 Command syntax

Table 9 SURV ADD command parameters and variables

Command	Parameters and variables
SURV ADD (For ADMIN)	Next par is: <handle> {DN <subject_dn> STRING, KEY [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99} <KEY> {1 TO 64}, LEN [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99}, LTID <LTGRP> STRING <LTNUM> {0 TO 1022}} Enter: <handle> <case_id> <SIN> <MRP> <calling_party_num_delivery> <inband_delivery> <feature_status_periodic> <surveillance_status_periodic> **<agency>**

Table 9 SURV ADD command parameters and variables (Continued)

Command	Parameters and variables
SURV ADD (For User)	Next par is: <handle> {DN <subject_dn> STRING, KEY [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99} <KEY> {1 TO 64}, LEN [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99}, LTID <LTGRP> STRING <LTNUM> {0 TO 1022}} Enter: <handle> <case_id> <SIN> <MRP> <calling_party_num_delivery> <inband_delivery> <feature_status_periodic> <surveillance_status_periodic>
Parameters and variables	**Description**
DN/KEY/LEN/ LTTID	DN/KEY/LEN/LTID of the Subject
case_id	case ID of the surveillance
SIN	Surveillance Identification Number
MRP	Boolean indicating whether Monitoring Replacement Party is supported.
calling_party_num_delivery	Boolean indicating whether Calling Number Delivery is supported.
inband_delivery	Boolean indicating whether Inband Digits Delivery is supported.
feature_status_periodic	Boolean indicating whether feature status message is delivered.
surveillance_status_periodic	Boolean indicating whether surveillance status message is delivered.
agency	**Agency information of the surveillance. This is prompted, only if the ADMIN adds the surveillance. If user adds the surveillance, user agency is taken as surveillance agency. The maximum allowed length of agency name is 16.**

46.5.6 Qualifications and warnings

No new warnings are introduced.

46.5.7 Responses

<‘ **INVALID AGENCY NAME**’>: **Meaning**: The agency name entered by the ADMIN exceeds the maximum allowed size of agency field **System or user actions:** NONE

46.5.8 Example

Table 10 Usage examples for SURV ADD command (For ADMIN)

Description of task:	ADMIN adds a new surveillance.
Command: MAP Response:	SURV ADD DN 6136631001 CASE1 SIN1 Y Y Y N N **AGENCY1** SURV ADD DONE.

Table 11 Usage examples for SURV ADD command (For ADMIN)

Description of task:	ADMIN adds a new surveillance. Agency name exceeds the maximum allowed size.
Command: MAP Response:	SURV ADD DN 6136631001 CASE1 SIN1 Y Y Y N N **ASDFGHJKLZXCVBNMASDFGG** SURV ADD FAILED: INVALID AGENCY NAME.

Table 12 Usage examples for SURV ADD command (For User)

Description of task:	User adds a new surveillance
Command: MAP Response:	SURV ADD DN 6136631001 CASE1 SIN1 Y Y Y N N SURV ADD DONE.

46.6 Command: SURV DEL

46.6.1 Command type:

SURV DEL command is a non-menu command associated with the USNBD directory.

46.6.2 Command target: BRISC

46.6.3 Command availability: RES

46.6.4 Command description.

SURV DEL command is used to delete a surveillance profile. This command is modified for user. User is allowed to delete only the surveillance pertaining to user's agency. ADMIN has the privilege to delete any surveillance.

46.6.5 Command syntax

Table 13 SURV DEL command parameters and variables

Command	**Parameters and variables**
SURV DEL	Parms: <command> <SIN> STRING
Parameters and variables	**Description**
SIN	Surveillance Identification Number

46.6.6 Qualifications and warnings

No new warnings are introduced.

46.6.7 Responses

<' **USER AGENCY NOT SAME AS SURVEILLANCE AGENCY**'>:

Meaning: Agency of the user (who executes the command) is different the agency of the Surveillance.

System or user actions:

NONE

46.6.8 Example

Table 14 Usage examples for SURV DEL command (user agency = surveillance agency)

Description of task:	User deletes a surveillance. User Agency = Surveillance Agency = AGENCY1
Command: MAP Response:	SURV DEL SIN1 SURV DEL DONE.

Table 15 Usage examples for SURV DEL command (user agency ^= surveillance agency)

Description of task:	User delete a surveillance belonging to another agency. User agency = Default; Surveillance Agency = AGENCY1
Command: MAP Response:	SURV DEL SIN2 SURV DEL FAILED: USER AGENCY NOT SAME AS SURVEILLANCE AGENCY.

46.7 Command: SURV ACT

46.7.1 Command type:

SURV ACT command is a non-menu command associated with the USNBD directory.

46.7.2 Command target: BRISC

46.7.3 Command availability: RES

46.7.4 Command description.

SURV ACT command is used to activate a surveillance. This command is modified for user. User is allowed to activate only the surveillance pertaining to user’s agency. ADMIN has the privilege to activate any surveillance.

46.7.5 Command syntax

Table 16 SURV ACT command parameters and variables

Command	**Parameters and variables**
SURV ACT	Parms: <command> <SIN> STRING
Parameters and variables	**Description**
SIN	Surveillance Identification Number

46.7.6 Qualifications and warnings

No new warnings are introduced.

46.7.7 Responses

Refer Section 15.6.7.

46.7.8 Example

Table 17 Usage examples for SURV ACT command (user agency = surveillance agency)

Description of task:	User activates a surveillance. user agency = surveillance agency = DEFAULT
Command: MAP Response:	SURV ACT SIN1 SURV ACT DONE.

Table 18 Usage examples for SURV ACT command (user agency ^= surveillance agency)

Description of task:	User activates a surveillance. user agency = AGENCY1; surveillance agency = DEFAULT
Command: MAP Response:	SURV ACT SIN2 SURV ACT FAILED: USER AGENCY NOT SAME AS SURVEILLANCE AGENCY.

46.8 Command: SURV DEACT

46.8.1 C**ommand type:**

SURV DEACT command is a non-menu command associated with the USNBD directory.

46.8.2 Command target: BRISC

46.8.3 Command availability: RES

46.8.4 Command description.

SURV DEACT command is used to deactivate a surveillance. This command is modified for user. User is allowed to deactivate only the surveillance pertaining to user's agency. ADMIN has the privilege to deactivate any surveillance.

46.8.5 Command syntax

Table 19 SURV DEACT command parameters and variables

Command	**Parameters and variables**
SURV DEACT	Parms: <command> <SIN> STRING
Parameters and variables	**Description**
SIN	Surveillance Identification Number

46.8.6 Qualifications and warnings

No new warnings are introduced.

46.8.7 Responses

Refer Section 15.6.7

46.8.8 Example

Table 20 Usage examples for SURV DEACT command (user agency = surveillance agency)

Description of task:	User deactivates a surveillance. user agency = surveillance agency = AGENCY2
Command: MAP Response:	SURV DEACT SIN1 SURV DEACT DONE.

Table 21 Usage examples for SURV DEACT command (user agency ^= surveillance agency)

Description of task:	User deactivates a surveillance. user agency = AGENCY2; surveillance agency = AGENCY1

Command:	SURV DEACT SIN2
MAP Response:	SURV DEACT FAILED: USER AGENCY NOT SAME AS SURVEILLANCE AGENCY.

46.9 Command: SURV LIST

46.9.1 Command type:

SURV LIST command is a non-menu command associated with the USNBD directory.

46.9.2 Command target: BRISC

46.9.3 Command availability: RES

46.9.4 Command description.

SURV LIST command is used to list surveillances. The following modifications are made:

For ADMIN,

- For all options for list sub-command, the agency information of surveillance is also displayed.
- Displays all matching surveillances.
- A new list option, ***agency*** is introduced for ADMIN. This option lists all the surveillance belonging to a particular agency.

For User

- For user, the command is modified to list only the matching surveillance pertaining to user's agency.

46.9.5 Command syntax

Table 22 SURV LIST command parameters and variables

Command	Parameters and variables
SURV LIST (For ADMIN)	Next par is: <Surv_list_opt> {ALL, ACT, INACT, SIN <SIN> STRING, DN <subject_dn> STRING, KEY [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99} <KEY> {1 TO 64}, LEN [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99}, LTID <LTGRP> STRING <LTNUM> {0 TO 1022}, **AGENCY <agency> STRING}**
SURV LIST (For USER)	Next par is: <Surv_list_opt> {ALL, ACT, INACT, SIN <SIN> STRING, DN <subject_dn> STRING, KEY [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99} <KEY> {1 TO 64}, LEN [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99}, LTID <LTGRP> STRING <LTNUM> {0 TO 1022}}
Parameters and variables	**Description**
SIN	Surveillance Identification Number

Table 22 SURV LIST command parameters and variables (Continued)

Command	Parameters and variables
DN/KEY/LEN/ LTID	DN/KEY/LEN/LTID of the subject
agency	Agency information of the Subject. The maximum allowed length of the agency name is 16.

46.9.6 Qualifications and warnings

No new warnings are introduced.

46.9.7 Responses

No new responses are generated.

46.9.8 Example

Table 23 Usage examples for SURV LIST command (For ADMIN)

Description of task:	ADMIN lists all surveillance in a switch.

Command: MAP Response:	SURV LIST ALL Subject CaseID SIN MRP Clg_dlvry Inband_dlvry (Feat_status Interval) (Surv_status Interval) **agency** Status {Associated_CDC} {Associated_CCRs} --- DN 4164771051 case1 sin1 N N N (N 0) (N 0) **AGENCY1** ACTIVE { } { 1 } DN 4164771052 case2 sin2 N N N (N 0) (N 0) **DEFAULT** ACTIVE { } { 2 } DN 4164771053 case3 sin3 N N N (N 0) (N 0) **AGENCY1** ACTIVE { } { 3 } DN 4164771054 case4 sin4 N N N (N 0) (N 0) **AGENCY2** ACTIVE { } { 4 } DN 4164771055 case5 sin5 N N N (N 0) (N 0) **AGENCY3** ACTIVE { } { 5 }

Table 24 Usage examples for SURV LIST command (For USER)

Description of task:	User lists all surveillance in a switch. User agency = AGENCY1.
Command: MAP Response:	SURV LIST ALL Subject CaseID SIN MRP Clg_dlvry Inband_dlvry (Feat_status Interval) (Surv_status Interval) Status {Associated_CDC} {Associated_CCRs} --- DN 4164771051 case1 sin1 N N N (N 0) (N 0) ACTIVE { } { 1 } DN 4164771053 case3 sin3 N N N (N 0) (N 0) ACTIVE { } { 3 }

Table 25 Usage examples for SURV LIST command - Agency option (For ADMIN)

Description of task:	ADMIN lists all surveillance belonging to a particular agency using *agency* option.
Command: MAP Response:	SURV LIST AGENCY DEFAULT Subject CaseID SIN MRP Clg_dlvry Inband_dlvry (Feat_status Interval) (Surv_status Interval) **agency** Status {Associated_CDC} {Associated_CCRs} --- DN 4164771052 case2 sin2 N N N (N 0) (N 0) **DEFAULT** ACTIVE { } { 1 }

Table 26 Usage examples for SURV LIST command - Agency option (For User)

Description of task:	User lists all surveillance belonging to a particular agency using *agency* option.
Command: MAP Response:	SURV LIST **AGENCY AGENCY1** The *AGENCY* is not a valid option for USER.

46.10 Command: CCR ADD

46.10.1 C**ommand type:**

CCR ADD command is a non-menu command associated with the USNBD directory. In NA015, it is modified to prompt for agency information for ADMIN user.

46.10.2 Command target: BRISC

46.10.3 Command availability: RES

46.10.4 Command description.

CCR ADD command is used to create a Call Content Resource. This command is enhanced to prompt for agency information of the subject when ADMIN adds a new CCR.

When a user adds a CCR, the agency of user is taken as agency of CCR. There is no change in syntax of this sub-command for user from NA014 to NA015.

46.10.5 Command syntax

Table 27 CCR ADD command parameters and variables

Command	Parameters and variables
CCR ADD (For ADMIN)	Next par is: <index> <ccr_content> {VOICE <ccr_definition> {COMBINED <ccr_id> {LINE <CCC1 -> 10-digit DN> STRING <signaling> {N, Y}, TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999}}, PAIRED <ccr_id> {LINE <CCC1 -> 10-digit DN> STRING <CCC2 -> 10-digit DN> STRING <signaling> {N, Y}, TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999} <CCC2 -> CLLI> STRING <CCC2 -> trunk number> {0 TO 9999}}} <ccc_tag> {N, Y}, PACKET <ccr_id> {LINE <PVC1 -> 10-digit DN> STRING <PVC1 -> LCN> {0 TO 4095} <PVC2 -> 10-digit DN> STRING <PVC2 -> LCN> {0 TO 4095}, TRUNK <PVC1 -> CLLI> STRING <PVC1 -> trunk number> {0 TO 9999} <PVC1 -> LCN> {0 TO 4095} <PVC2 -> CLLI> STRING <PVC2 -> trunk number> {0 TO 9999} <PVC2 -> LCN> {0 TO 4095}}, **<agency> STRING}**

Table 27 CCR ADD command parameters and variables (Continued)

Command	Parameters and variables
CCR ADD (For User)	Next par is: <index> <ccr_content> {VOICE <ccr_definition> {COMBINED <ccr_id> {LINE <CCC1 -> 10-digit DN> STRING <signaling> {N, Y}, TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999}}, PAIRED <ccr_id> {LINE <CCC1 -> 10-digit DN> STRING <CCC2 -> 10-digit DN> STRING <signaling> {N, Y}, TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999} <CCC2 -> CLLI> STRING <CCC2 -> trunk number> {0 TO 9999}}} <ccc_tag> {N, Y}, PACKET <ccr_id> {LINE <PVC1 -> 10-digit DN> STRING <PVC1 -> LCN> {0 TO 4095} <PVC2 -> 10-digit DN> STRING <PVC2 -> LCN> {0 TO 4095}, TRUNK <PVC1 -> CLLI> STRING <PVC1 -> trunk number> {0 TO 9999} <PVC1 -> LCN> {0 TO 4095} <PVC2 -> CLLI> STRING <PVC2 -> trunk number> {0 TO 9999} <PVC2 -> LCN> {0 TO 4095}}
Parameters and variables	**Description**
index	Index of the CCR
ccr_content	Type of CCR, VOICE or PACKET, COMBINED OR PAIRED, LINE OR TRUNK etc.
agency	**Agency information of the CCR. This is prompted, only if the added by ADMIN. If user adds the CCR, the user agency is taken as CCR agency. The maximum size of agency name is 16.**

46.10.6 Qualifications and warnings

No new warnings are introduced.

46.10.7 Responses

<‘ **INVALID AGENCY NAME**’>: **Meaning**: The agency name entered by the ADMIN exceeds the maximum allowed size of agency. **System or user actions:** NONE

46.10.8 Example

Table 28 Usage examples for CCR ADD command (For ADMIN)

Description of task:	ADMIN adds a CCR.
Command: MAP Response:	CCR ADD 1 VOICE COMBINED LINE 6136631001 N Y **AGENCY1** CCR ADD DONE.

Table 29 Usage examples for CCR ADD command (For ADMIN)

Description of task:	ADMIN adds a CCR. Agency name exceeds the maximum allowed size.
Command: MAP Response:	CCR ADD 1 VOICE COMBINED LINE 6136631001 N Y **ASDFGHJKLZXCVBNMASDFGH** CCR ADD FAILED: INVALID AGENCY NAME

Table 30 Usage examples for CCR ADD command (For User)

Description of task:	USER adds a CCR.
Command: MAP Response:	CCR ADD 1 VOICE COMBINED LINE 6136631001 N Y CCR ADD DONE.

46.11 Command: CCR DEL

46.11.1 C**ommand type:**

CCR DEL command is a non-menu command associated with the USNBD directory.

46.11.2 Command target: BRISC

46.11.3 Command availability: RES

46.11.4 Command description.

CCR DEL command is used to delete a CCR. This command is modified for user. User is allowed to delete only the CCR pertaining to user's agency. ADMIN has the privilege to delete any CCR.

46.11.5 Command syntax

Table 31 CCR DEL command parameters and variables

Command	**Parameters and variables**
CCR DEL	Next par is: <index> {1 TO 500}
Parameters and variables	**Description**
index	index of CCR

46.11.6 Qualifications and warnings

No new warnings are introduced.

46.11.7 Responses

<' **USER AGENCY NOT SAME AS CCR AGENCY**'>:

Meaning: Agency of the user (who executes the command) is different the agency of the CCR.

System or user actions:

NONE

46.11.8 Example

Table 32 Usage examples for CCR DEL command (user agency = CCR agency)

Description of task:	User Deletes a CCR. user agency = CCR agency = DEFAULT
Command: MAP Response:	CCR DEL 10 CCR DEL DONE.

Table 33 Usage examples for CCR DEL command (user agency ^= CCR agency)

Description of task:	User Deletes a CCR. user agency = DEFAULT; CCR agency = AGENCY2
Command: MAP Response:	CCR DEL 9 CCR DEL FAILED: USER AGENCY NOT SAME AS CCR AGENCY.

46.12 Command: CCR ASSOC

46.12.1 Command type:

CCR ASSOC command is a non-menu command associated with the USNBD directory.

46.12.2 Command target: BRISC

46.12.3 Command availability: RES

46.12.4 Command description.

CCR ASSOC command is used to associate a CCR to a surveillance. The following modifications are made to the command.

— The ASSOC command is allowed only if CCR agency is same as Surveillance Agency. This is applicable for both ADMIN and user.

— User is allowed to associate only the CCR pertaining to user's agency. ADMIN has the privilege to associate any CCR, provided the agency of CCR is same as agency of Surveillance.

46.12.5 Command syntax

Table 34 CCR DEL command parameters and variables

Command	**Parameters and variables**
CCR ASSOC	Next par is: <index> {1 TO 500} Enter: <index> <sin>
Parameters and variables	**Description**
index	index of CCR.
sin	Surveillance Identification Number

46.12.6 Qualifications and warnings

No new warnings are introduced.

46.12.7 Responses

<‘ **USER AGENCY NOT SAME AS CCR AGENCY**’>: **Meaning**: Agency of the user (who executes the command) is different the agency of the CCR. **System or user actions:** NONE
<‘ **CCR AGENCY NOT SAME AS SURVEILLANCE AGENCY**’>: **Meaning**: Agency of the CCR is different the agency of the Surveillance. **System or user actions:** NONE

46.12.8 Example

Table 35 Usage examples for CCR ASSOC command (For user)

Description of task:	User associates a CCR. User agency = Surv agency = CCR agency = AGENCY1
Command: MAP Response:	CCR ASSOC 1 SIN1 CCR ASSOC DONE.

Table 36 Usage examples for CCR ASSOC command (For user)

Description of task:	User associates a CCR. User agency = CCR Agency = AGENCY1. Surv agency = DEFAULT
Command: MAP Response:	CCR ASSOC 1 SIN3 CCR ASSOC FAILED: CCR AGENCY NOT SAME AS SURVEILLANCE AGENCY.

Table 37 Usage examples for CCR ASSOC command (For user)

Description of task:	User associates a CCR. User agency = AGENCY1; CCR Agency = Surv agency = DEFAULT

Command: MAP Response:	CCR ASSOC 1 SIN3 CCR ASSOC FAILED: USER AGENCY NOT SAME AS CCR AGENCY.

Table 38 Usage examples for CCR ASSOC command (For user)

Description of task:	User associates a CCR. CCR agency = AGENCY1; USER Agency = Surv agency = DEFAULT
Command: MAP Response:	CCR ASSOC 1 SIN3 CCR ASSOC FAILED: USER AGENCY NOT SAME AS CCR AGENCY.

Table 39 Usage examples for CCR ASSOC command (For user)

Description of task:	User associates a CCR. User agency = AGENCY1; CCR Agency = AGENCY2; Surv agency = DEFAULT
Command: MAP Response:	CCR ASSOC 1 SIN3 CCR ASSOC FAILED: USER AGENCY NOT SAME AS CCR AGENCY.

Table 40 Usage examples for CCR ASSOC command (For ADMIN)

Description of task:	ADMIN associates a CCR. Surv agency = CCR agency = DEFAULT
Command: MAP Response:	CCR ASSOC 1SIN1 CCR ASSOC DONE.

Table 41 Usage examples for CCR ASSOC command (For ADMIN)

Description of task:	ADMIN associates a CCR. Surv agency =AGENCY2. CCR agency = AGENCY1

Command:	CCR ASSOC 2 SIN4
MAP Response:	CCR ASSOC FAILED: CCR AGENCY NOT SAME AS SURVEILLANCE AGENCY.

46.13 Command: CCR DISASSOC

46.13.1 Command type:

CCR DISASSOC command is a non-menu command associated with the USNBD directory.

46.13.2 Command target: BRISC

46.13.3 Command availability: RES

46.13.4 Command description.

CCR DISASSOC command is used to disassociate a CCR from a surveillance. This command is modified for user. User is allowed to disassociate only the CCR pertaining to user's agency. ADMIN has the privilege to disassociate CCR belonging to any agency.

46.13.5 Command syntax

Table 42 CCR DISASSOC command parameters and variables

Command	**Parameters and variables**
CCR DISASSOC	Next par is: <index> {1 TO 500}
Parameters and variables	**Description**
index	index of CCR

46.13.6 Qualifications and warnings

No new warnings are introduced.

46.13.7 Responses

Refer Section 15.11.7

46.13.8 Example

Table 43 Usage examples for CCR DISASSOC command (For user)

Description of task:	User agency = CCR agency = AGENCY1;

Command: MAP Response:	CCR DISASSOC 1 CCR DISASSOC DONE.

Table 44 Usage examples for CCR DISASSOC command (For user)

Description of task:	User disassociates a CCR. User agency = AGENCY1; CCR agency = DEFAULT;
Command: MAP Response:	CCR DISASSOC 3 CCR DISASSOC FAILED: USER AGENCY NOT SAME AS CCR AGENCY.

Table 45 Usage examples for CCR DISASSOC command (For ADMIN)

Description of task:	User disassociates a CCR. CCR Agency = DEFAULT;
Command: MAP Response:	CCR DISASSOC 2. CCR DISASSOC DONE.

46.14 Command: CCR LIST

46.14.1 Command type:

CCR LIST command is a non-menu command associated with the USNBD directory.

46.14.2 Command target: BRISC

46.14.3 Command availability: RES

46.14.4 Command description.

CCR LIST command is used to list surveillances. The following modifications are made:

For ADMIN,

- For all options for list sub-command, the agency information of surveillance is also displayed.
- Displays all matching CCRs.
- A new list option, ***agency*** is introduced for ADMIN. This option lists all the CCRs belonging to a particular agency.

For User,

— For user, the command is modified to list only the matching CCR pertaining to user's agency.

46.14.5 Command syntax

Table 46 CCR LIST command parameters and variables

Command	Parameters and variables
CCR LIST (For ADMIN)	Next par is: <ccr_list_opt> {ALL, ASSOC, UNASSOC, FREE, **AGENCY <agency> STRING}**
CCR LIST (For User)	Next par is: <ccr_list_opt> {ALL, ASSOC, UNASSOC, FREE}
Parameters and variables	**Description**
agency	Agency information of the CCR

46.14.6 Qualifications and warnings

No new warnings are introduced.

46.14.7 Responses

No new responses are generated.

46.14.8 Example

Table 47 Usage examples for CCR LIST command (For ADMIN)

Description of task:	ADMIN lists all CCRs in a switch.

Command: MAP Response:	CCR LIST ALL Index Content CCRtype CCRid CCC1 [CCC2] [Sig] [Tag] [SIN] **Agency** --- 1 VOICE COMBINED LINE 4164671001 N Y B **AGENCY1** 2 VOICE COMBINED LINE 4164671002 N Y B **DEFAULT** 3 VOICE COMBINED LINE 4164671004 N Y B **AGENCY2** 4 VOICE COMBINED LINE 4164671003 N Y B **AGENCY1** 5 VOICE COMBINED LINE 4164671007 N Y B **AGENCY3**

Table 48 Usage examples for CCR LIST command (For USER)

Description of task:	User lists all CCRs in a switch. User agency = AGENCY1.
Command: MAP Response:	CCR LIST ALL Index Content CCRtype CCRid CCC1 [CCC2] [Sig] [Tag] [SIN] --- 1 VOICE COMBINED LINE 4164671001 N Y B 4 VOICE COMBINED LINE 4164671003 N Y B

Table 49 Usage examples for CCR LIST command - Agency option (For ADMIN)

Description of task:	ADMIN lists all CCRs belonging to a particular agency using *agency* option.

Command: MAP Response:	CCR LIST **AGENCY AGENCY1** Index Content CCRtype CCRid CCC1 [CCC2] [Sig] [Tag] [SIN] **Agency** --- 1 VOICE COMBINED LINE 4164671001 N Y B **AGENCY1** 4 VOICE COMBINED LINE 4164671003 N Y B **AGENCY1**

Table 50 Usage examples for CCR LIST command - Agency option (For User)

Description of task:	User lists all CCRs belonging to a particular agency using *agency* option.
Command: MAP Response:	CCR LIST **AGENCY DEFAULT** *AGENCY* is not a valid option for USER.

46.15 Command: CDC ADD

46.15.1 Command type:

CDC ADD command is a non-menu command associated with the USNBD directory. In NA015, it is modified to prompt for agency information for ADMIN user.

46.15.2 Command target: BRISC

46.15.3 Command availability: RES

46.15.4 Command description.

CDC ADD command is used to create a Call Data Channel. This command is enhanced to prompt for agency information of the subject when ADMIN adds a new CDC

When a user adds a CDC, the agency of user is taken as agency of CDC. There is no change in syntax of this sub-command for user from NA014 to NA015.

46.15.5 Command syntax

Table 51 CDC ADD command parameters and variables

Command	Parameters and variables
CDC ADD (For ADMIN)	Next par is: <index> {1 TO 200} Enter: <index> <MPCindex> <MPClinknumber> <address> <protocol1> <protocol2> <protocol3> <protocol4> **<agency>**
CDC ADD (For User)	Next par is: <index> {1 TO 200} Enter: <index> <MPCindex> <MPClinknumber> <address> <protocol1> <protocol2> <protocol3> <protocol4>
Parameters and variables	**Description**
index	index of CDC
MPCindex	MPC link Index
MPClinknumber	MPC link number
address	MPC link address
protocol1, protocol2, protocol3, protocol4	Protocol
agency	**Agency information of the CDC. This is prompted only if ADMIN adds the CDC. If user adds the CDC, the user agency is taken as CDC agency. The maximum allowed length of agency name is 16.**

46.15.6 Qualifications and warnings

No new warnings are introduced.

46.15.7 Responses

<‘ **INVALID AGENCY NAME**’>:

Meaning: The agency name entered by the ADMIN exceeds the maximum allowed size of agency.

System or user actions:

NONE

46.15.8 Example

Table 52 Usage examples for CDC ADD command (For ADMIN)

Description of task:	ADMIN adds a CDC.

Command: MAP Response:	CDC ADD 1 2 3 11111111 3 1 128 1 **AGENCY1** CDC ADD DONE.

Table 53 Usage examples for CDC ADD command (For ADMIN)

Description of task:	ADMIN adds a CDC. Agency name exceeds the maximum allowed size.
Command: MAP Response:	CDC ADD 1 2 3 11111111 3 1 128 1 **ASDFGHJKLZXCVBNMASDFG** CDC ADD FAILED: INVALID AGENCY NAME

Table 54 Usage examples for CDC ADD command (For User)

Description of task:	User adds a CDC.
Command: MAP Response:	CDC ADD 1 2 3 11111111 3 1 128 1 CDC ADD DONE.

46.16 Command: CDC DEL

46.16.1 Command type:

CDC DEL command is a non-menu command associated with the USNBD directory.

46.16.2 Command target: BRISC

46.16.3 Command availability: RES

46.16.4 Command description.

CDC DEL command is used to delete a CDC. This command is modified for user. User is allowed to delete only the CDC pertaining to user's agency. ADMIN has the privilege to delete any CDC.

46.16.5 Command syntax

Table 55 CDC DEL command parameters and variables

Command	Parameters and variables
CDC DEL	Next par is: <index> {1 TO 500}
Parameters and variables	**Description**
index	index of CDC.

46.16.6 Qualifications and warnings

No new warnings are introduced.

46.16.7 Responses

<‘ **USER AGENCY NOT SAME AS CDC AGENCY**’>:

Meaning: Agency of the user (who executes the command) is different the agency of the CDC.

System or user actions:

NONE

46.16.8 Example

Table 56 Usage examples for CDC DEL command (user agency = CDC agency)

Description of task:	User deletes a CDC. User agency = CDC agency = AGENCY1.
Command: MAP Response:	CDC DEL 10 CDC DEL DONE.

Table 57 Usage examples for CDC DEL command (user agency ^= CDC agency)

Description of task:	User tries to delete a CDC belonging to different agency. User agency = Default. CDC agency = AGENCY1
Command: MAP Response:	CDC DEL 9 CDC DEL FAILED: USER AGENCY NOT SAME AS CDC AGENCY.

46.17 Command: CDC ASSOC

46.17.1 Command type:

CDC ASSOC command is a non-menu command associated with the USNBD directory.

46.17.2 Command target: BRISC

46.17.3 Command availability: RES

46.17.4 Command description.

CDC ASSOC command is used to associate a CDC to a surveillance. The following modifications are made to the command.

- The ASSOC command is allowed only if CDC agency is same as Surveillance Agency. This is applicable for both ADMIN and user.
- User is allowed to associate the CDC pertaining to user's agency. ADMIN has the privilege to associate any CDC, provided the agency of CCR is same as the agency of Surveillance

46.17.5 Command syntax

Table 58 CDC ASSOC command parameters and variables

Command	**Parameters and variables**
CDC ASSOC	Next par is: <index> {1 TO 200} Enter: <index> <SIN>
Parameters and variables	**Description**
index	index of CDC.
sin	Surveillance Identification Number.

46.17.6 Qualifications and warnings

No new warnings are introduced.

46.17.7 Responses

<' **USER AGENCY NOT SAME AS CDC AGENCY**'>:

Meaning: Agency of the user (who executes the command) is different the agency of the CDC.

System or user actions:

NONE

<‘ **CDC AGENCY NOT SAME AS SURVEILLANCE AGENCY**’>: **Meaning**: Agency of the CDC is different the agency of the Surveillance. **System or user actions:** NONE

46.17.8 Example

Table 59 Usage examples for CDC ASSOC command (For user)

Description of task:	User associates a CDC. User agency = Surv agency = CDC agency = AGENCY1
Command: MAP Response:	CDC ASSOC 1 SIN1 CDC ASSOC DONE.

Table 60 Usage examples for CDC ASSOC command (For user)

Description of task:	User associates a CDC.User agency = CDC agency = AGENCY1. Surv Agency = AGENCY2
Command: MAP Response:	CDC ASSOC 1 SIN2 CDC ASSOC FAILED: CDC AGENCY NOT SAME AS SURVEILLANCE AGENCY.

Table 61 Usage examples for CDC ASSOC command (For user)

Description of task:	User associates a CDC. User agency = DEFAULT; CDC agency = Surv Agency = AGENCY2
Command: MAP Response:	CDC ASSOC 1 SIN2 CDC ASSOC FAILED: USER AGENCY NOT SAME AS CDC AGENCY.

Table 62 Usage examples for CDC ASSOC command (For user)

Description of task:	User associates a CDC. CDC agency = DEFAULT; USER agency = Surv Agency = AGENCY2

Command: MAP Response:	CDC ASSOC 1 SIN2 CDC ASSOC FAILED: USER AGENCY NOT SAME AS CDC AGENCY.

Table 63 Usage examples for CDC ASSOC command (For user)

Description of task:	User associates a CDC. User agency = AGENCY2; CDC agency = AGENCY1. Surv Agency = DEFAULT
Command: MAP Response:	CDC ASSOC 1 SIN2 CDC ASSOC FAILED: USER AGENCY NOT SAME AS CDC AGENCY.

Table 64 Usage examples for CDC ASSOC command (For ADMIN)

Description of task:	ADMIN associates a CDC. Surv agency = CDC agency = AGENCY1
Command: MAP Response:	CDC ASSOC 1 SIN1 CDC ASSOC DONE.

Table 65 Usage examples for CDC ASSOC command (For ADMIN)

Description of task:	ADMIN associates a CDC. Surv agency =AGENCY2. CDC agency = AGENCY1
Command: MAP Response:	CDC ASSOC 2 SIN4 CDC ASSOC FAILED: CDC AGENCY NOT SAME AS SURVEILLANCE AGENCY.

46.18 Command: CDC DISASSOC

46.18.1 Command type:

CDC DISASSOC command is a non-menu command associated with the USNBD directory.

46.18.2 Command target: BRISC

46.18.3 Command availability: RES

46.18.4 Command description.

CDC DISASSOC command is used to disassociate a CDC from a surveillance. This command is modified for user. User is allowed to disassociate only the CDC pertaining to user's agency. ADMIN has the privilege to disassociate CDC belonging to any agency.

46.18.5 Command syntax

Table 66 CDC DISASSOC command parameters and variables

Command	**Parameters and variables**
CDC DISASSOC	Next par is: <SIN> STRING
Parameters and variables	**Description**
SIN	Surveillance Identification Number

46.18.6 Qualifications and warnings

No new warnings are introduced.

46.18.7 Responses

Refer Section 15.16.7

46.18.8 Example

Table 67 Usage examples for CDC DISASSOC command (user agency = CDC agency)

Description of task:	User disassociates a CDC. User agency = CDC agency = Default.
Command: MAP Response:	CDC DISASSOC SIN1 CDC DISASSOC DONE.

Table 68 Usage examples for CDC DISASSOC command (user agency ^= CDC agency)

Description of task:	User disassociates a CDC. user Agency = DEFAULT; CDC AGENCY = AGENCY1;

Command:	CDC DISASSOC SIN2
MAP Response:	CDC DISASSOC FAILED: USER AGENCY NOT SAME AS CDC AGENCY.

46.19 Command: CDC LIST

46.19.1 Command type:

CDC LIST command is a non-menu command associated with the USNBD directory.

46.19.2 Command target: BRISC

46.19.3 Command availability: RES

46.19.4 Command description.

CDC LIST command is used to list CDCs. The following modifications are made:

For ADMIN

- For all options for *list* sub-command, the agency information of CDC is also displayed.
- Displays all matching CDCs.
- A new list option, ***agency*** is introduced for ADMIN. This option lists all the CDCs belonging to a particular agency.

For user,

- The command is modified to list only the matching CDC pertaining to user's agency.

46.19.5 Command syntax

Table 69 CDC LIST command parameters and variables

Command	Parameters and variables
CDC LIST (For ADMIN)	Next par is: <cdc_list_opt> {ALL, ASSOC, UNASSOC, FREE, **AGENCY <agency> STRING}**
CDC LIST (For User)	Next par is: <cdc_list_opt> {ALL, ASSOC, UNASSOC, FREE}
Parameters and variables	**Description**
agency	Agency name.

46.19.6 Qualifications and warnings

No new warnings are introduced.

46.19.7 Responses

No new responses are generated.

46.19.8 Example

Table 70 Usage examples for CDC LIST command (For ADMIN)

Description of task:	ADMIN lists all CDCs in a switch.
Command: MAP Response:	CDC LIST ALL Index MPClink Address Protocol [Associated SINs] **Agency** --- 1 6 2 22222222 1 1 1 1 **AGENCY1** 2 6 2 22222222 2 2 2 2 **AGENCY2** 3 6 2 22222222 3 3 3 3 **AGENCY1** 4 6 2 22222222 4 4 4 4 **DEFAULT**

Table 71 Usage examples for CDC LIST command (For USER)

Description of task:	User lists all CDCs in a switch. User agency = AGENCY1

Command: MAP Response:	CDC LIST ALL Index MPClink Address Protocol [Associated SINs] ---------- 1 6 2 22222222 1 1 1 1 3 6 2 22222222 3 3 3 3

Table 72 Usage examples for CDC LIST command - Agency option (For ADMIN)

Description of task:	ADMIN lists all CDCs belonging to a particular agency using *agency* option
Command: MAP Response:	CDC LIST **AGENCY DEFAULT** Index MPClink Address Protocol [Associated SINs] **Agency** ---------- 4 6 2 22222222 4 4 4 4 **DEFAULT**

Table 73 Usage examples for CDC LIST command - Agency option (For User)

Description of task:	ADMIN lists all CDCs belonging to a particular agency using *agency* option. There is no CDC belonging to that agency.
Command: MAP Response:	CDC LIST **AGENCY AGENCY2** *AGENCY* is not a valid option for USER.

46.20 Command: HELP Command

46.20.1 Command type:

HELP command is a non-menu command associated with the USNBD directory.

46.20.2 Command target: BRISC

46.20.3 Command availability: RES

46.20.4 Command description.

HELP command is used to get the syntax of all sub-commands and options. The **CCR, CDC, SURV, USER** options of the HELP command are modified for ADMIN. For ADMIN this command displays

— **agency** field for all *add* sub-commands

— **agency** option for all *list* sub-command.

There is no modification for USER.

46.20.5 Command syntax

Table 74 Usage examples for HELP USER command (For ADMIN)

Command	Parameters and variables
HELP	HELP INFORMATION Parms: [<SUBCOMMAND> {CCR, CDC, HELP, QUIT, SURV, USER, UNB_OFCWIDE}]
Parameters and variables	**Description**
Subcommand	USNBD sub-commands.

46.20.6 Qualifications and warnings

No new warnings are introduced.

46.20.7 Responses

None.

46.20.8 Example

Table 75 Usage examples for HELP USER command (For ADMIN)

Description of task:	This will display all the valid sub-commands and options of USER command

Command: MAP Response:	HELP USER MANAGE OR LIST USNBD USERS Parms: <command> {ADD <user_id> STRING <admin> {N **<Agency> STRING**, Y}, DEL <user_id> STRING, LIST <user_list_opt> {**ALL,** **AGENCY <agency> STRING**}}

Table 76 Usage examples for HELP CCR command (For ADMIN)

Description of task:	This will display all the valid sub-commands and options of CCR command

Command: MAP Response:	HELP CCR >help ccr MANAGES OR LISTS CCRs Parms: <command> {ADD <index> {1 TO 500} <ccr_content> {VOICE <ccr_definition> {COMBINED <ccr_id> {LINE <CCC1 -> 10-digit DN> STRING <signaling> {N, Y}, TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999}}, PAIRED <ccr_id> {LINE <CCC1 -> 10-digit DN> STRING <CCC2 -> 10-digit DN> STRING <signaling> {N, Y}, TRUNK <CCC1 -> CLLI> STRING <CCC1 -> trunk number> {0 TO 9999} <CCC2 -> CLLI> STRING <CCC2 -> trunk number> {0 TO 9999}}} <ccc_tag> {N, Y}, PACKET <ccr_id> {LINE <PVC1 -> 10-digit DN> STRING <PVC1 -> LCN> {0 TO 4095} <PVC2 -> 10-digit DN> STRING <PVC2 -> LCN> {0 TO 4095}, TRUNK <PVC1 -> CLLI> STRING <PVC1 -> trunk number> {0 TO 9999} <PVC1 -> LCN> {0 TO 4095} <PVC2 -> CLLI> STRING <PVC2 -> trunk number> {0 TO 9999} <PVC2 -> LCN> {0 TO 4095}}} **<Agency> STRING**,

	DEL <index> {1 TO 500}, LIST <ccr_list_opt> {ALL, ASSOC, UNASSOC, FREE, **AGENCY <AGENCY> STRING**}, ASSOC <index> {1 TO 500} <sin> STRING, DISASSOC <index> {1 TO 500}}

Table 77 Usage examples for HELP CDC command (For ADMIN)

Description of task:	This will display all the valid sub-commands and options of CDC command
Command: MAP Response:	HELP CDC MANAGES OR LISTS CDCs Parms: <command> {ADD <index> {1 TO 200} <MPCindex> {0 TO 255} <MPClinknumber> {0 TO 3} <address> STRING <protocol1> {0 TO 255} <protocol2> {0 TO 255} <protocol3> {0 TO 255} <protocol4> {0 TO 255} **<Agency> STRING**, ASSOC <index> {1 TO 200} <SIN> STRING, DISASSOC <SIN> STRING, DEL <index> {1 TO 200}, LIST <CDC_list_opt> {ALL, ASSOC, UNASSOC, FREE, **AGENCY <AGENCY> STRING**}}

Table 78 Usage examples for HELP SURV command (For ADMIN)

Description of task:	This will display all the valid sub-commands and options of SURV command

Command: MAP Response:	HELP SURV MODIFY OR VIEW SURVEILLANCES Parms: <command> {ADD <handle> {DN <subject_dn> STRING, KEY [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99} <KEY> {1 TO 64}, LEN [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99}, LTID <LTGRP> STRING <LTNUM> {0 TO 1022}} <case_id> STRING <SIN> STRING <MRP> {N, Y} <calling_party_num_delivery> {N, Y} <inband_delivery> {N, Y} <feature_status_periodic> {N, Y [<Feature_Status_Interval> {15 TO 1440}]} <surveillance_status_periodic> {N, Y [<Surveillance_Status_Interval> {60 TO 1440}]} **<Agency> STRING**, DEL <SIN> STRING,

	LIST <Surv_list_opt> {ALL, ACT, INACT, SIN <SIN> STRING, DN <subject_dn> STRING, KEY [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99} <KEY> {1 TO 64}, LEN [<SITE > STRING] <FRAME> {0 TO 511} <UNIT> {0 TO 9} <DRAWER> {0 TO 99} <CIRCUIT> {0 TO 99}, LTID <LTGRP> STRING <LTNUM> {0 TO 1022}, **AGENCY <agency> STRING}**, ACT <SIN> STRING, DEACT <SIN> STRING}

47: Command interface changes (CI)

47.1 Command: QESN

47.1.1 Command type: Non-Menu

47.1.2 Command target: BRISC

47.1.3 Command availability: RES

47.1.4 Command description

QESN is used to display the ESN associated with the given TN. Currently this command takes the NPA and TN and queries the On-Board SRDB (E911SRDB) to retrieve the associated ESN.

This command is will be modified to allow the user to query the Off-Board Selective Routing Database (OFBSR) when that database is available. A boolean parameter will be added to the command syntax to allow the user to identify which database to query.

47.1.5 Command syntax

Table 1 QESN command parameters and variables

Command	**Parameters and variables**
QESN	<NPA> {0 TO 999} <TN> {2000000 TO 9999999} **<OFBSR> {N, Y}**
Parameters and variables	**Description**
NPA	Numbering Plan Area
TN	7 digit ANI
OFBSR	**Boolean indicating whether the OFBSR Database will be queried. Default will be set to 'N'**

47.1.6 Qualifications and warnings

No new warnings are introduced.

47.1.7 Example

Table 2 Usage examples for QESN command (On-Board SRDB)

Description of task:	E911SRDB table is used for the ESN query.
Command: MAP Response:	QESN 613 6210180 **N** 613 6210180 ESN 113

Table 3 Usage examples for QESN command (Off-Board SRDB)

Description of task:	OFBSR database is used for the ESN query.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN 113

Table 4 QESN command output - No response from OFBSR

Description of task:	OFBSR database is used for the ESN query and USE_ONBOARD_SRDB is NOT datafilled in Table E911OFC. OFBSR query fails. Table E911SRDB is NOT checked.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN QUERY TO OFBSR FAILED

Table 5 QESN command output - No response from OFBSR

Description of task:	OFBSR database is used for the ESN query and USE_ONBOARD_SRDB is datafilled in Table E911OFC. OFBSR query fails. Lookup is performed in table E911SRDB and entry was found.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN 113

Table 6 QESN command output - No response from OFBSR

Description of task:	OFBSR database is used for the ESN query and USE_ONBOARD_SRDB is datafilled in Table E911OFC. OFBSR query fails. Lookup is performed in table E911SRDB and entry was NOT found.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN QUERY TO OFBSR FAILED - NOT ASSIGNED IN E911SRDB.

Table 7 QESN command output - Unable to send query to OFBSR.

Description of task:	OFBSR database is used for the ESN query and USE_ONBOARD_SRDB is NOT datafilled in Table E911OFC. OFBSR not queried. Table E911SRDB is NOT checked.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN QUERY NOT SENT TO OFBSR

Table 8 QESN command output - Unable to send query to OFBSR

Description of task:	OFBSR database is used for the ESN query and USE_ONBOARD_SRDB is datafilled in Table E911OFC. OFBSR not queried. Lookup is performed in table E911SRDB and entry was found.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN 113

Table 9 QESN command output - Unable to send query to OFBSR

Description of task:	OFBSR database is used for the ESN query and USE_ONBOARD_SRDB is datafilled in Table E911OFC. OFBSR not queried. Lookup is performed in table E911SRDB and entry was NOT found.
Command: MAP Response:	QESN 613 6210180 **Y** 613 6210180 ESN QUERY NOT SENT TO OFBSR - NOT ASSIGNED IN E911SRDB.

48: Command interface changes (CI)

48.1 Directory: MAP level

48.2 Command: REVXLVER

48.2.1 Command type: Unlisted MENU

48.2.2 Command target: All

48.2.3 Command availability: RES

48.2.4 Command description

The REVXLVER utility is a low level internal diagnostic tool, that simulates Reverse Translation from a user specified origination to a user specified destination. REVXLVER examines and displays translation data for Reverse Translation call processing. It can also display the Reverse Translation number result.

This activity enhances the REVXLVER tool to support reverse translation of variable length DNs upto 18 digits in MMP market. This option will be available only for Dialable DN (DDN) reverse translations.

48.2.5 Command syntax

The existing syntax for checking reverse translations for DDN is as follows:

REVXLVER DDN <DN> <DIGITS> <TRACE> [<NETNAME>]

After enhancements, this syntax will be modified as

REVXLVER DDN <DN> <DIGITS> <TRACE> [<NETNAME>]

[<INTL>]

The new INTL parameter is optional.

If the user types INTL, the tool will simulate reverse translations with international characteristics. If the user does not use the INTL parameter, by default reverse translations for a national call will be simulated. The INTL parameter will be available only when this feature DDN International Interworking is active in the office.

48.2.6 Qualifications and warnings

48.2.7 Response

Table 1 MAP outputs with associated meanings and actions

OPTION INTL NOT SUPPORTED, DDN_INTERNATIONAL IS NOT AVAILABLE IN THE OFFICE **PLEASE CHECK DDN_INTERNATIONAL IN TABLE OFCVAR** **Meaning**: International DDN feature is not active in the office. The INTL parameter cannot be used. **System or user actions:** Set the office parameter DDN_INTERNATIONAL TRUE in table OFCVAR.

48.2.8 Example

1. With the Result INTERNAT 0 00 N in DNREVXLA

```
>revxlver ddn 6340103 441036340203 b INTL

TABLE IBNLINES
   HOST 00 0 01 03 0 DT STN IBN 6340103 LONS634 0 0 103 $
TABLE CUSTNTWK
   LONS634 AUSIN634 3 (AUSIN634 CXLA 9) (PUBLIC CXLA 10)
   (CLID OFFNET) (RNID OFFNET)
TABLE DNREVXLA
   CXLA 0 9 (INTERNAT 0 00 N)
                    (DEFAULT 0 0 N)
TABLE DNREGION
INTERNAT DIGIT MANIPULATION RESULT USED

DELIVERY DIGITS

00441036340203

+++ REVXLVER: SUCCESSFUL TRACE
```

2. Without new international result (for example INTERNAT 0 00 N) in table DNREVXLA.

```
>revxlver ddn 6340103 441036340203 b INTL

TABLE IBNLINES
```

```
   HOST 00 0 01 03 0 DT STN IBN 6340103 LONS634 0 0 103 $
TABLE CUSTNTWK
   LONS634 AUSIN634 3 (AUSIN634 CXLA 9) (PUBLIC CXLA 10)
   (CLID OFFNET) (RNID OFFNET)
TABLE DNREVXLA

**WARNING** INTERNAT RESULT NOT DATAFILLED IN DNREVXLA

+++ REVXLVER: UNSUCCESSFUL TRACE
```

3. With the office parameter DDN_INTERNATIONAL set to N

```
>revxlver ddn 6340103 441036340203 b INTL

OPTION INTL NOT SUPPORTED, INTERNATIONAL DDN NOT AVAILABLE IN
OFFICE, PLEASE CHECK DDN_INTERNATIONAL IN TABLE OFCVAR.
```

49: Command interface changes (CI)

49.1 Directory: TstQuery

49.1.1 Directory description

TSTQuery is a menu-driven utility that enables operating company personnel to send AIN test queries to an SCP and display the incoming responses from the SCP.

TSTQuery provides the following capabilities:

• populate the parameters of an AIN query message

• read query message information from a file

• save query message information to a file

• send the query message

• allow responses to conversation messages

• generate a log of the outgoing and incoming messages

• overwrite the T1 timer for a given test query

• support of CCS7 and Ethernet transport protocol

• on-line help

49.1.2 Accessing directory: TstQuery

49.1.2.1 Access to directory or MAP level and return to CI

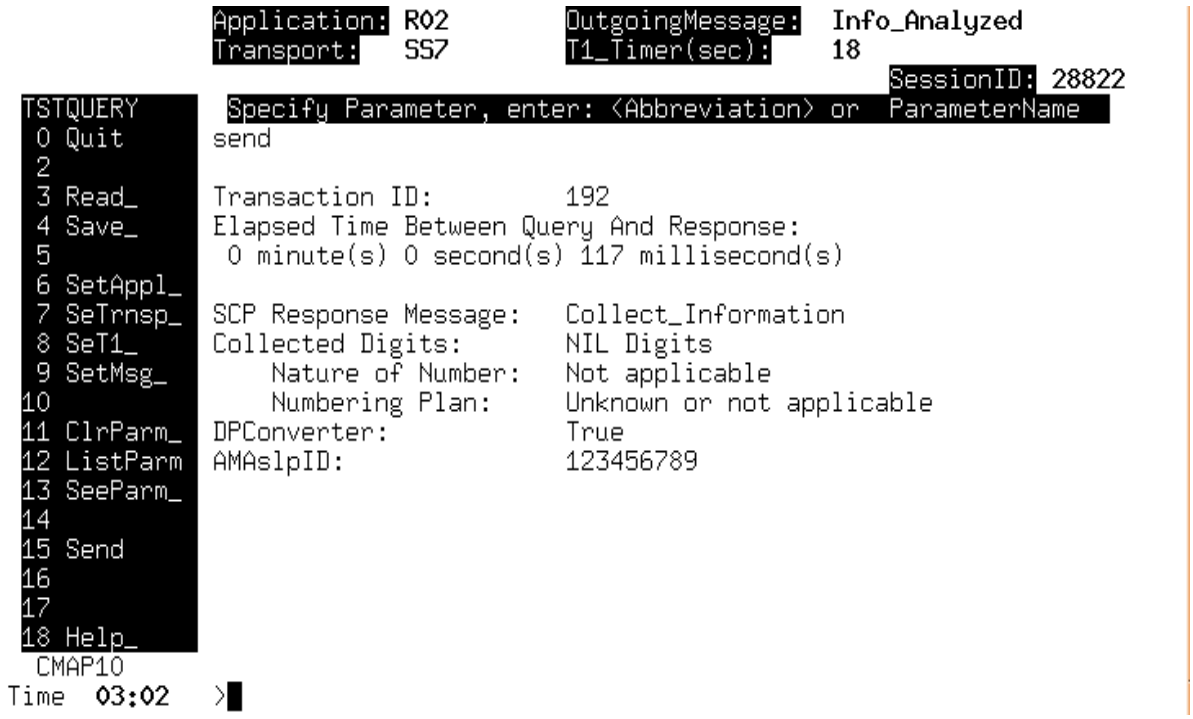
To run the TSTQuery utility, enter the TESTTOOL menu in the MAPCI utility and select the TSTQUERY option from the menu. Please refer to “Figure 1 TstQuery Menu” on page 414.

Alternatively, access TSTQuery from the CI level of the MAP terminal by typing

>MAPCI;TESTTOOL;TSTQUERY

then press the enter key.

Figure 1 TstQuery Menu



The TstQuery tool is enhanced to support the display of DPConverter parameter in the Send_To_Resource and Collect_Info message from the SCP.

49.2 Directory: AINTraceDIR

49.2.1 Directory description

AIN TCAP message tracing (AINTrace) is a single-user CI tool available through the maintenance and administrative position (MAP) terminal. It allows the user to display/view CCS7 TCAP messages that are send to or from and SCP or ADJUNCT. AIN messages can be captured by selecting either the agent type or message type that is desired. The captured TCAP messages are stored in AINT log and are then displayed in hexadecimal format, text format, or both.

The DP Converter feature does not change the AINTRACE command. The DP Converter feature enhances AINTRACE to display DPConverter parameter in Collect_Info / Send_To _Resource messege.

50: Command interface changes (CI)

50.1 Directory:

No new directories are created. No existing directories are affected.

50.2 Command: TRAVER

50.2.1 Command type: <NON-MENU, Listed MENU, Unlisted MENU>

This command is of NON-MENU type and is available at all directory levels.

50.2.2 Command target:

DMS 100 SUPERNODE

50.2.3 Command availability:

There is no restriction on the usage of TRAVER.

50.2.4 Command description

TRAVER is a tool that traverses through all the translation tables and displays the resulting route for a call. TRAVER can operate in three modes: TRACE, NO_TRACE and BOTH.

When TRAVER is operating in the TRACE mode, the content of the translation tables is displayed as TRAVER traverses through them.

In the NO_TRACE mode, the content of the translation tables is not displayed. TRAVER operating in NO_TRACE mode only displays the translation result.

In the BOTH mode, TRAVER first operates in the TRACE mode and displays the content of all the translation tables it traverses. Then TRAVER switches to

NO_TRACE mode and appends the translation results to the end of the TRACE results.

50.2.5 Command syntax

There is no change in the TRAVER command syntax.

50.2.6 Qualifications and warnings

N/A

50.2.7 Responses

50.2.7.1 Response to PFC/SFC triggers with AINDENY on the line

At the AIN Info Analyzed TDP, for customer group based PFC and SFC triggers, when TRAVER detects that the line is subscribed to AINDENY line option, it prints the following message and routes the call to AINF treatment.

AIN Info Analyzed TDP: trigger criteria not met.

Line is subscribed to option AINDENY. Triggering denied.

50.2.8 Example

Table 1 PFC trigger - AINDENY with request to DENY a TIID

```
>TRAVER L 6136216138 B360 B
TABLE IBNLINES
HOST 00 0 02 18 0 DT STN RES 6216138 263 613_AIN2_263 L613_LATA1_0 613 $
TABLE LINEATTR
263 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 613_AIN2_263 L613_LATA1_0 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_AIN2_263 FR01 613 AIN2 TOPS Y RESG263 0 0 $
TABLE RATEAREA
L613_LATA1_0 L613 NIL LATA1 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
HOST 00 0 02 18 0 AIN AIN TIID (4 PFC360 ON) $
TABLE CUSTSTN
RESG263 AIN AIN TIID
TABLE OFCVAR
AIN_OFFICE_TRIGGRP TIID
AIN Orig Attempt TDP: no subscribed trigger.
```

```
TABLE NCOS
RESG263 0 0 0 RNCOS $
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
RESG263 NXLA RXCMN263 RXCFNXXX 0 RES
TABLE DIGCOL
RES specified: RES digit collection
NCOS FEAT XLA name is NIL. Go to next XLA name.
TABLE IBNXLA: XLANAME RXCFNXXX
RXCFNXXX 360 FTR 3 AIN IMMED
Checking AIN PFC Trigger Items as PFC is compatible with current call
 .  . TABLE CUSTTIID
 .  . RESG263 4 PFC360 ON
 .  . TABLE IBNFEAT
 .  . HOST 00 0 02 18 0 AINDENY AINDENY (DENY TIID 4 PFC360) $
 .  . TABLE TRIGITM
 .  . 4 PFC360 PFC TRANS (DG B360) $ ULK EVENT R02 SS7 AINROCK $
 .  .  . TABLE C7GTTYPE
 .  .  . AINROCK ANSI7 5 $
 .  .  . TABLE IBNFEAT
 .  .  . TUPLE NOT FOUND
 .  .  . TABLE C7GTT
 .  .  . AINROCK 6137224011 6137224011 SSNONLY (AINTEST) $
AIN Info Analyzed TDP: trigger criteria not met.
Line is subscribed to option AINDENY. Triggering denied.

+++ TRAVER: SUCCESSFUL CALL TRACE +++


DIGIT TRANSLATION ROUTES

AIN Info Analyzed TDP: trigger criteria not met.
Line is subscribed to option AINDENY. Triggering denied.

TREATMENT ROUTES.  TREATMENT IS: AINF
1 T120
2 LKOUT

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

Table 2 SFC trigger - AINDENY with request to DENY the trigger

```
>TRAVER L 6136216138 C690 B
TABLE IBNLINES
HOST 00 0 02 18 0 DT STN RES 6216138 263 613_AIN2_263 L613_LATA1_0 613 $
TABLE LINEATTR
263 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 613_AIN2_263 L613_LATA1_0 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
```

```
613_AIN2_263 FR01 613 AIN2 TOPS Y RESG263 0 0 $
TABLE RATEAREA
L613_LATA1_0 L613 NIL LATA1 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
HOST 00 0 02 18 0 AIN AIN TIID (4 SFC690 ON) $
TABLE CUSTSTN
RESG263 AIN AIN TIID
TABLE OFCVAR
AIN_OFFICE_TRIGGRP TIID
AIN Orig Attempt TDP: no subscribed trigger.
TABLE NCOS
RESG263 0 0 0 RNCOS $
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
RESG263 NXLA RXCMN263 RXCFNXXX 0 RES
TABLE DIGCOL
RES specified: RES digit collection
NCOS FEAT XLA name is NIL. Go to next XLA name.
TABLE IBNXLA: XLANAME RXCFNXXX
RXCFNXXX 690 FTR 3 AIN IMMED
Checking AIN SFC Trigger Items as PFC is compatible with current call
 .  . TABLE CUSTTIID
 .  . RESG263 4 SFC690 ON
 .  . TABLE IBNFEAT
 .  . HOST 00 0 02 18 0 AINDENY AINDENY (DENY ALL SFC) $
 .  . TABLE TRIGITM
 .  . 4 SFC690 SFC TRANS (DG C690) $ ULK EVENT R02 SS7 AINROCK $
 .  .  . TABLE C7GTTYPE
 .  .  . AINROCK ANSI7 5 $
 .  .  . TABLE IBNFEAT
 .  .  . TUPLE NOT FOUND
 .  .  . TABLE C7GTT
 .  .  . AINROCK 6137224011 6137224011 SSNONLY (AINTEST) $
AIN Info Analyzed TDP: trigger criteria not met.
Line is subscribed to option AINDENY. Triggering denied.

+++ TRAVER: SUCCESSFUL CALL TRACE +++


DIGIT TRANSLATION ROUTES

AIN Info Analyzed TDP: trigger criteria not met.
Line is subscribed to option AINDENY. Triggering denied.

TREATMENT ROUTES.  TREATMENT IS: FNAL
1 T120
2 LKOUT
```

```
+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

Table 3 PFC trigger - with AINDENY - no trace mode

```
>TRAVER L 6137224011 B360 nt

+++ TRAVER: SUCCESSFUL CALL TRACE +++


DIGIT TRANSLATION ROUTES

AIN Info Analyzed TDP: trigger criteria not met.
Line is subscribed to option AINDENY. Triggering denied.

TREATMENT ROUTES.  TREATMENT IS: FNAL
1 T120
2 LKOUT

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

50.3 Command: QDN

50.3.1 Command type:

This command is of NON-MENU type and is available at all directory levels.

50.3.2 Command target:

DMS 100 SUPERNODE

50.3.3 Command availability:

There is no restriction on the usage of QDN

50.3.4 Command description

QDN is a line query command which displays the properties of a DN. It displays information pertaining to the line like the line equipment number, the node number and terminal number. It also shows various attributes associated with the DN along with the customer group to which the line belongs and various options subscribed against the line’s customer group and line options subscribed against the DN.

The line query command QDN will be enhanced to display the information as to whether the DN has AINDENY assigned to it.

50.3.5 Command syntax

There is no change in the QDN command syntax

50.3.6 Qualifications and warnings

N/A

50.3.7 Examples

A simple display of the QDN command for a DN with AINDENY assigned to it will be as shown in Table 4. This example shows that the line is subscribed to the AINDENY option with DENY requests to deny triggering for the TIID, 4 PFC1 and all TIIDs for the trigger type SFC.

Table 4 Example of a QDN output for a DN with AINDENY option

```
>qdn 6216130
------------------------------------------------------------------
DN:     6216130
TYPE: SINGLE PARTY LINE
SNPA: 613   SIG: DT    LNATTIDX: 200
LINE EQUIPMENT NUMBER:     HOST  01 0 10 31
LINE CLASS CODE:      1FR
IBN TYPE: STATION
CUSTGRP:        RESG200     SUBGRP: 0  NCOS: 0
LINE TREATMENT GROUP:     0
CARDCODE:  6X17BA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    112
PM TERMINAL NUMBER :    352
OPTIONS:
DGT NAME PUBLIC PUB6130 PRIVATE PVT6130
RES OPTIONS:
AINDENY DENY TIID 4 PFC1 DENY ALL SFC
AIN TIID
Customer Group Options:
AIN TIID
```

50.4 Command: QLEN

50.4.1 Command type:

This command is of NON-MENU type and is available at all directory levels

50.4.2 Command target:

DMS 100 SUPERNODE

50.4.3 Command availability:

There is no restriction on the usage of QLEN.

50.4.4 Command description

QLEN is a line query command which displays the properties of a LEN. It displays information pertaining to the line like the directory number, the node number and terminal number. It also shows various attributes associated with the LEN along with the customer group to which the line belongs and various options subscribed against the line's customer group and line options subscribed against the LEN.

The line query command QLEN will be enhanced to display the information as to whether the LEN has AINDENY assigned to it.

50.4.5 Command syntax

There is no change in the QLEN command syntax.

50.4.6 Qualifications and warnings

N/A

50.4.7 Examples

A simple display of the QLEN command for a RES line with AINDENY assigned to it would be as shown in Table 5. This example shows that the line is subscribed to the AINDENY option with DENY requests to deny triggering for the TIIDs, 4 SFC15 and 4 PFC1 and all TIIDs for the trigger type PFC.

Table 5 Example of a QLEN output for a line with AINDENY option

```
>qlen  HOST  00 1 01 20
------------------------------------------------------------
LEN:     HOST  00 1 01 20
TYPE: SINGLE PARTY LINE
SNPA: 613
DIRECTORY NUMBER:    6213711
LINE CLASS CODE:      1FR
IBN TYPE: STATION
CUSTGRP:        RESG200     SUBGRP: 0  NCOS: 0
SIGNALLING TYPE:  DIGITONE
LINE TREATMENT GROUP:     0
LINE ATTRIBUTE INDEX:     400
CARDCODE:  6X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    144
PM TERMINAL NUMBER :    53
OPTIONS:
DGT
RES OPTIONS:
AINDENY DENY TIID 4 SFC15 DENY TIID 4 PFC1 DENY ALL PFC
CUSTOMER GROUP OPTIONS:
AIN TIID
OFFICE OPTIONS:
U3WC AIN TIID

------------------------------------------------------------
```

50.5 Command: QLT

50.5.1 Command type:

This command is of NON-MENU type and is available at all directory levels

50.5.2 Command target:

DMS 100 SUPERNODE

50.5.3 Command availability:

There is no restriction on the usage of QLT.

50.5.4 Command description

QLT is a line query command which displays the properties of a logical terminal. It displays information pertaining to the logical terminal like the directory number and the line equipment number. It also shows various

attributes associated with the logical terminal along with the customer group to which the line belongs and various options subscribed against the line's customer group and line options subscribed against the logical terminal.

The line query command QLT will be enhanced to display the information as to whether the logical terminal has AINDENY assigned to it.

50.5.5 Command syntax

There is no change in the QLT command syntax.

50.5.6 Qualifications and warnings

N/A

50.5.7 Examples

A simple display of the QLT command for an ISDN line with AINDENY assigned to it will be as shown in Table 6.This example shows that the ISDN line is subscribed to the AINDENY option with a DENY request to deny triggering for the TIID, 4 PFC123.

A simple display of the QLEN command for an ISDLN BRI line with AINDENY assigned to it would be as shown in the Table 6.

Table 6 Example of a QLT output for an ISDN line with AINDENY option

```
>qlt ISDN 429
------------------------------------------------------------------
LTID:  ISDN      429
SNPA: 613
DIRECTORY NUMBER:     7223009
LT GROUP NO: 0
LTCLASS:  BRAFS    DEFAULT LOGICAL TERMINAL: N
EKTS: N   CACH: N
SLBRI: N
BEARER SERVICE ALLOWED: VOICE   VBD   CMD
CS: Y PS: N
ELN: N
VERSION: FUNCTIONAL  ISSUE: 2
TSPID:         6137223009
LEN: HOST  02 0 06 23    TEI: DYNAMIC
CUSTGRP:        COMKODAK  SUBGRP: 0  NCOS: 0  RING: Y
LINE CLASS CODE: ISDNKSET
MAXKEYS: 64
OPTIONS:
AINDENY DENY TIID PFC123
CUSTOMER GROUP OPTIONS:
AIN TIID
OFFICE OPTIONS:
AIN TIID

   KEY       DN
   ---       --
     1       DN          6137223009

   KEY     FEATURE
   ---     -------
     1     AINDENY DENY TIID PFC123 $
------------------------------------------------------------------
```

51: Command interface changes (CI)

51.1 Directory: None

None

51.2 Command: TRAVER

51.2.1 Command type: NON-MENU

51.2.2 Command target: All

51.2.3 Command availability: RES

51.2.4 Command description

The translations verification (TRAVER) utility allows telephone operating company personnel to examine, for maintenance and verification purposes, the translation and routing data of a simulated call. The routing and translation data is displayed for a single leg of a call, and the originating and terminating agents of the call leg are specified by the user.

The command line looks as given below:

> TRAVER L 6136671001 N CDN NA 6136671002 AINRES R02 AR **LARP <TDP> <TINAME>** B/T/NT

The LARP option in the AIN Response Translation of the TRAVER is used to verify the Line Attribute Response Processing on a SDS/PFC/N11 triggers.The <TDP> <TINAME> of the applicable SDS/N11/PFC trigger having line attributes entry in table TRIGITM is entered on the TRAVER command line under the LARP option, for AINRES response translation.

The option highlighted in **BOLD** is introduced by this activity. The TRAVER command syntax document is as shown below.

```
>Q TRAVER

PERFORMS TRANSLATION VERIFICATION ON <DIGITS>
AS IF RECEIVED ON ORIGINATOR <ORIG>. TRACE GIVES A TRACE
OF THE TRANSLATION TABLES IF <T>, AND GIVES THE ROUTE
AND DIGIT-TO-OUTPULSE DISPLAY IF <NT>
[<AIN_OPTIONS> {AIN [<AIN_CHG> {AINCHG <DIGITS> STRING}]
     [<AIN_MQG> {AINMQG}]}]
[<AIN_INFO> {AINRES <VERSION> {R01,
            R02,
            ICSX}
     <RES_TYPE> {NORES,
          AR [<PREFIX_OPTION> {PREFIX}]
               [<CARRIER USAGE> {CU <OPTIONS> {0 TO 2}}]
               [<NATURE OF CARRIER> {NOC <OPTIONS> {NIL,
                                    LOCAL,
                                    INTRALT,
                                    INTERL}}]
                  [<LARP> {LARP <TDP> {0 TO 255}
                                <TINAME> STRING}],
          FC [<PREFIX_OPTION> {PREFIX}]
            [<CARRIER USAGE> {CU <OPTIONS> {0 TO 2}}]
            [<NATURE OF CARRIER> {NOC <OPTIONS> {NIL,
                                    LOCAL,
                                    INTRALT,
                                    INTERL}}],
          CONT,
          AT,
          STR,
          COLINF <COLLECTED_DIGITS> STRING,
          ETC <SCP_DIGITS> STRING,
          CONNECT <SCP_DIGITS> STRING}
     [<DIG_CONV_TEST> {DIGCONV}]
     [<FGD_ORIG> {FGD [<CIC_SZ3> {CIC3}]}]}]
```

51.2.5 Qualifications and warnings

When the LARP option is datafilled, two TRAVERs are performed to verify the trigger. The first TRAVER encounters trigger SDS/N11/PFC with the overriding line attributes specified by the LARP option and a warning is displayed indicating a second TRAVER is required.

This activity implements the second TRAVER support to simulate the response processing. The customer can select the trigitm entry having the LARP option of the first TRAVER by entering the <tdp> <tiname> under the LARP option of the AIN Response Translation on the TRAVER command line.

51.2.6 Example 1 : SDS with LARP option

From a POTS line (DN 4164671001), dial 4164631009. The call triggers at SDS on the digits 4164631009 and queries the database. Overriding line attributes are on trigger SDS, and a second TRAVER with the AINRES option must be performed to simulate the response processing. A warning message will be displayed indicating that a response TRAVER has to be performed with the command line having the LARP option followed by the trigger attributes (TDP and TINAME) for which the LARP option has been provisioned. Please refer to “Table 1 Traver example for SDS with LARP” on page 427. which illustrates the output of the TRAVER.

Table 1 Traver example for SDS with LARP

Example 1 TRAVER output
>TRAVER L 4671001 4164631009 B
TABLE LINEATTR
518 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 416_P621_418 L467_LATA1_418 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
416_P621_418 C467 416 P621 TSPS N $ $
TABLE RATEAREA
L467_LATA1_418 L467 NIL LATA1 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP TIID

Table 1 Traver example for SDS with LARP

Example 1 TRAVER output
AIN Orig Attempt TDP: no subscribed trigger. TABLE STDPRTCT P621 (1) (0) 1 . SUBTABLE STDPRT WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO DOCUMENTATION. . 416 420 NT NP 0 NA $. SUBTABLE AMAPRT . KEY NOT FOUND . DEFAULT VALUE IS: NONE OVRNONE N TABLE HPCPATTN TUPLE NOT FOUND TABLE HNPACONT 416 Y 999 1 (52) (1) (4) (0) 4 $. SUBTABLE HNPACODE . 416 416 HNPA 0 . 463 463 DN 416 463 TABLE TOFCNAME 416 463 $ TABLE DNINV 416 463 1009 D BLDN TABLE DNFEAT TUPLE NOT FOUND TABLE DNATTRS TUPLE NOT FOUND TABLE DNGRPS TUPLE NOT FOUND TABLE TMTCNTL LNT (46)

Table 1 Traver example for SDS with LARP

Example 1 TRAVER output
. SUBTABLE TREAT
. BLDN Y T OFRT 50
. TABLE OFRT
. 50 S D VCA
. S D *OFLO
. S D LKOUT
. EXIT TABLE OFRT
LNP Info: Called DN is not resident.
LNP Info: HNPA results are used.
TABLE LCASCRCN
416 L467 (3) OPTL N N
. SUBTABLE LCASCR
. 416 416
TABLE LCASCRCN
416 L467 (3) OPTL N N
. SUBTABLE LCASCR
. 463 463
TABLE PFXTREAT
OPTL NP Y NP UNDT
TABLE CLSVSCRC
416 C467 NP 2 N NONE (1)
. SUBTABLE CLSVSCR
. KEY NOT FOUND
AIN Info Collected TDP: no subscribed trigger.
Checking AIN SDS Trigger Items as SDS is compatible with current call
. . TABLE OFCTIID
. . 4 SDSCUL ON
. . TABLE TRIGITM
. . 4 SDSLARP SDS (DG 4164631009) $ ULK EVENT R02 SS7 AINPOP
. . (LARP 101 416_P621_418 L467_LATA1_418 GTE MCI Y N) $

Table 1 Traver example for SDS with LARP

Example 1 TRAVER output
. . . TABLE C7GTTYPE . . . AINPOP ANSI7 6 $ . . . TABLE C7GTT . . . AINPOP 4164631009 4164631009 PCSSN (SIMTOOL_RTESET SIMTOOL3 0) $ SSN **WARNING: LARP option datafilled for SDS trigger. Perform** **a response TRAVER with LARP 4 SDSLARP on the following command line** **after the AR response.** AIN Info Analyzed TDP: trigger criteria met. Querying the database would occur now. Use the AINMQG option to save the query to a file for use in TstQuery. Use the AINRES option for further information +++ AIN TRAVER: SUCCESSFUL CALL TRACE +++ **WARNING: LARP option datafilled for SDS trigger. Perform** **a response TRAVER with LARP 4 SDSLARP on the following command line** **after the AR response.** AIN Info Analyzed TDP: trigger criteria met. Querying the database would occur now. Use the AINMQG option to save the query to a file for use in TstQuery. Use the AINRES option for further information +++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

51.2.6.1 Example 2: Response Processing with POTS agent as originator

From a POTS line (DN 6136671001), dial 6136671001 with the LARP option on the command line followed by the trigger attributes (TDP and TINAME) of the trigger for which the LARP option has been provisioned. A warning message is displayed indicating that the Originator's line attributes (LINEATTR, XLAPLAN and RATEAREA) will be overridden by those provided by the LARP option from Table TRIGITM. The warning message is followed by the display of the LARP provisioned line attributes which are used for further translations. Please refer to "Table 2 Respnse Translation with LARP option example" on page 431. which illustrates the output of the TRAVER.

Table 2 Respnse Translation with LARP option example

Example 2 TRAVER output
>TRAVER L 6671001 N CDN NA 6136671001 AINRES R02 AR LARP 4 SDSLARP B
Warning: Routing characteristics are present.
Originator must be able to send in
characteristics specified.
Warning: Originator's Line attributes are being overridden
by those provided by the LARP option from the
corresponding tuple in TABLE TRIGITM
TABLE RTECHAR
. LECNA (CDN NA $) (BC 3_1KHZ (CDN NA)$)$
TABLE LINEATTR
101 1MR NONE NT 0 11 NILSFC 0 NIL NIL 00 613_P621_0 L613_NILLA_1 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE XLAPLAN
613_P621_0 FR01 613 P621 TSPS N $ $
TABLE RATEAREA
L613_LATA1_0 L613 NIL LATA1 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS

Table 2 Respnse Translation with LARP option example

Example 2 TRAVER output
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP TIID
TABLE PXLAMAP
. LECNA P621 (XLA EAP1)$
TABLE STDPRTCT
EAP1 (1) (0) 1
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 613667 613669 NT NP 0 NA $
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE HPCPATTN
TUPLE NOT FOUND
TABLE HNPACONT
613 Y 939 2 (60) (1) (84) (0) 2 $
. SUBTABLE HNPACODE
. 613667 6136737100 HNPA 0
. 667 667 DN 613 667
TABLE TOFCNAME
613 667 $
TABLE DNINV
613 667 1001 L HOST 01 0 00 02
TABLE DNFEAT
TUPLE NOT FOUND

Table 2 Respnse Translation with LARP option example

Example 2 TRAVER output
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
LNP Info: Called DN is resident.
LNP Info: Called DN has native NPANXX.
LNP Info: HNPA results are used.
TABLE LCASCRCN
613 L613 (44) OPTL N N
. SUBTABLE LCASCR
. 613 613
TABLE LCASCRCN
613 L613 (44) OPTL N N
. SUBTABLE LCASCR
. 667 667
TABLE PFXTREAT
OPTL NP Y NP UNDT
TABLE CLSVSCRC
KEY NOT FOUND
Checking AIN SDS Trigger Items as SDS is compatible with current call
AIN Info Analyzed TDP: trigger criteria not met.
AIN Term Attempt TDP: no subscribed trigger.
+++ TRAVER: SUCCESSFUL CALL TRACE +++
WARNING: Line Attributes of Originator are being overridden
by those provided by the LARP option from the
corresponding tuple in TABLE TRIGITM
DIGIT TRANSLATION ROUTES

Table 2 Respnse Translation with LARP option example

Example 2 TRAVER output
1 LINE 6136671001 ST TREATMENT ROUTES. TREATMENT IS: GNCT 1 *OFLO 2 LKOUT +++ TRAVER: SUCCESSFUL CALL TRACE +++

52: Command interface changes (CI)

52.1 Directory: CI level

52.1.1 Directory description

Unchanged

52.1.2 Accessing directory: <directory name>

N/A

52.1.2.1 Access to directory or MAP level and return to CI

N/A

52.2 Command: QLEN, QLENWRK

52.2.1 Command type: Unchanged

52.2.2 Command target: Unchanged

52.2.3 Command availability: Unchanged

52.2.4 Command description: Unchanged

52.2.5 Command syntax: Unchanged

52.2.6 Qualifications and warnings: Unchanged

52.2.7 Responses

52.2.7.1 QLEN / QLENWRK output for RLD line

For RLD lines only, a new line is added in the QLEN / QLENWRK output, indicating the site of the hosting STAr Hub. This line is printed next to the RLD site indication.

In addition, both the RLD LOCATION field and the new RLD site name are printed as the RLD site indication (today only the existing RLDSITE field is printed).

Table 1 MAP outputs with associated meanings and actions

RLD LINE LOCATION: aaaaaaaa SITE: bbbb HUB SITE: xxxx **Meaning**: The line is an RLD line, located at “aaaaaaaa”. Site name used for line definitions is “bbbb”. The hosting STAR Hub of the RLD is located at site “xxxx”. **System or user actions:** None needed.

52.2.8 Example

Table 2 Usage examples for <CommandName> command

Description of task:	Query the LEN “ARPT 4 3 6 0”
Command: MAP Response:	QLEN ARPT 4 3 6 0 ---------- LEN: ARPT 04 03 06 00 RLD LINE **LOCATION: AIRPORT SITE: ARPT** **HUB SITE: LORN** TYPE: SINGLE PARTY LINE SNPA: 613 **.....**

53: Command interface changes (CI)

53.1 Directory: SPMMGPDIR

53.1.1 Directory description

This is a resident directory which provides access to the MGP RM type commands,

53.1.2 Accessing directory: spmmgpdir

53.1.2.1 Access to directory or MAP level and return to CI

To access:

MAPCI;MTC;PM;POST SPM <node_no>; SELECT MGP <unit_no>

or

MAPCI;MTC;PM;POST SPM <node_no>;SELECT MGP all

To return to CI:

QUIT ALL

53.2 Command: Quit

53.2.1 Command type: Listed MENU

53.2.2 Command target: SUPERNODE

53.2.3 Command availability: RES

53.2.4 Command description

Quits the MGP map level

53.2.5 Command syntax

Quit

Table 1 Quit command parameters and variables

Command	**Parameters and variables**
quit	Parameter is: < nlevels | incrname | ALL >
Parameters and variables	**Description**
nlevels	number of levels
incrname	increment name
all	quit back to CI

53.2.6 Qualifications and warnings

None

53.2.7 Responses

53.2.7.1 No response - just quits requested number of levels

.

Table 2 MAP outputs with associated meanings and actions

<RESPONSE>: <description> **Meaning**: **System or user actions:**
<RESPONSE>: <description> **Meaning**: **System or user actions:**

53.2.8 Example

Table 3 Usage examples for <CommandName> command

Description of task:	
Command: MAP Response:	

53.3 Command: ListSet

53.3.1 Command type: Listed MENU

53.3.2 Command target: SUPERNODE

53.3.3 Command availability: RES

53.3.4 Command description

List the contents of the post set

53.3.5 Command syntax

listset

Table 4 listset command parameters and variables

Command	**Parameters and variables**
listset	none
Parameters and variables	**Description**

53.3.6 Qualifications and warnings

none

53.3.7 Responses

Table 5 MAP outputs with associated meanings and actions

MGP 0 **Meaning**: MGP 0 is in the post set **System or user actions:** None

53.3.8 Example

Table 6 Usage examples for listset command

Description of task:	list the posted set
Command: MAP Response:	listset MGP 0

53.4 Command: Tst

53.4.1 Command type: Listed MENU

53.4.2 Command target: SUPERNODE

53.4.3 Command availability: RES

53.4.4 Command description

Test the selected circuit pack(s). This command would invoke the diagnostic tests on the circuit pack. The ‘all’ option applies to all the selected CPKs. If CPKs are selected via a command ‘select MGP all’, then ‘tst all’ will run the tests on both CPKs. If the selection is done by ‘select MGP 0’, then ‘tst all’ would only apply to CPK 0 which would essentially be same as executing the tst command without any parameter. If the ‘tst’ command is executed without any parameter, tests would be run on the CPK that is currently displayed on the screen.

53.4.5 Command syntax

```
Tst: Test the selected CPK(s).
Parms: [<All> {ALL}]
       [<Prompt> {NOPROMPT}]
       [<Options> {NOWAIT,
```

```
NOREPLY}]
```

Table 7 Tst command parameters and variables

Command	Parameters and variables
Tst	<all> all <Prompt> noprompt <options> nowait, noreply
Parameters and variables	**Description**
all	Tests all the selected circuit packs
noprompt	Suppress the yes/no prompts
nowait	Cursor is returned without waiting for the command to complete.
noreply	Suppress the replies to the command

53.4.6 Qualifications and warnings

None

53.4.7 Responses

Table 8 MAP outputs with associated meanings and actions

Command rejected. The CPK is offline. **Meaning**: The tests can not be performed when the state of the CPK is offline. **System or user actions:** None
SPM 1 MGP 0 Test: Request has been submitted. SPM 1 MGP 0 Test: Command Completed. **Meaning**: The test request was submitted and the command was completed successfully. **System or user actions**: None
This operation will be executed on 2 MGPs Please confirm (“YES”, “Y”, “NO”, or “N”): y SPM 1 MGP 0 Test: Request has been submitted. SPM 1 MGP 0 Test: Command Completed. SPM 1 MGP 1 Test: Request has been submitted. SPM 1 MGP 1 Test: Command Completed. **Meaning**: The ‘tst all’ command was executed after selecting two MGPs (select MGP all). The test requests were submitted for both MGPs and the command was completed successfully. **System or user actions**: None

53.4.8 Example

Table 9 Usage examples for Tst command

Description of task:	Test the posted MGP pack set without prompting for a confirmation or providing a reply
Command: MAP Response:	Tst all noprompt noreply None

53.5 Command: Bsy

53.5.1 Command type: Listed MENU

53.5.2 Command target: SUPERNODE

53.5.3 Command availability: RES

53.5.4 Command description

Change the state of a selected module to out-of-service (ManB). This command is used to change the state to ManB from an offline state as well as from an INSV state.

53.5.5 Command syntax

```
Bsy: Busy the selected CPK(s).
Parms: [<Force> {FORCE}]
       [<All> {ALL}]
       [<Prompt> {NOPROMPT}]
       [<Options> {NOWAIT,
                   NOREPLY}]
```

Table 10 Bsy command parameters and variables

Command	Parameters and variables
Bsy	<Force> FORCE <All> ALL <Prompt> NOPROMPT <Options> NOWAIT, NOREPLY
Parameters and variables	**Description**
FORCE	Busy without checking for conditions such as state of host node
ALL	All the selected circuit packs
NOWAIT	Cursor is returned without waiting for the command to complete.
NOREPLY	Suppress the replies to the command

53.5.6 Qualifications and warnings

Changing from INSV to ManB may have an impact on service

53.5.7 Responses

Table 11 MAP outputs with associated meanings and actions

SPM 0 MGP 0 Busy: Request has been submitted. SPM 0 MGP 0 Busy: Command completed. OFFL or MANB force succeeded **Meaning**: The request to busy MGP 0 was submitted and successfully completed **System or user actions:** None
This operation will be executed on 2 MGPs Please confirm (“YES”, “Y”, “NO”, or “N”): y SPM 0 MGP 0 Busy: Request has been submitted. SPM 0 MGP 0 Busy: Command completed. OFFL or MANB force succeeded SPM 0 MGP 1 Busy: Request has been submitted. SPM 0 MGP 1 Busy: Command completed. OFFL or MANB force succeeded **Meaning**: The requests to manually busy both CPKs was submitted and successfully completed. **System or user actions:** None

53.5.8 Example

Table 12 Usage examples Bsy command

Description of task:	Busy the MGP pack without checking for preconditions
Command: MAP Response:	Bsy force SPM 0 MGP 0 Busy: Request has been submitted. SPM 0 MGP 0 Busy: Command completed. OFFL or MANB force succeeded

53.6 Command: RTS

53.6.1 Command type: Listed MENU

53.6.2 Command target: SUPERNODE

53.6.3 Command availability: RES

53.6.4 Command description

Change the state of a selected circuit pack to in-service (INSV).

53.6.5 Command syntaxRts: Return the selected CPK(s) to service.

```
Parms: [<Force> {FORCE}]
       [<All> {ALL}]
       [<Prompt> {NOPROMPT}]
       [<Options> {NOWAIT,
                   NOREPLY}]
```

Table 13 RTS command parameters and variables

Command	Parameters and variables
RTS	<Force> FORCE <All> ALL <Prompt> NOPROMPT <Options> NOWAIT, NOREPLY
Parameters and variables	**Description**
FORCE	RTS without performing any diagnostics
ALL	All the selected circuit packs
NOWAIT	Cursor is returned without waiting for the command to complete.
NOREPLY	Suppress the replies to the command

53.6.6 Qualifications and warnings

None

53.6.7 Responses

Table 14 MAP outputs with associated meanings and actions

SPM 0 MGP 0 RTS: Request has been submitted. SPM 0 MGP 0 RTS: Command completed. **Meaning**: Request to RTS MGP 0 was submitted and successfully completed **System or user actions:** None
This operation will be executed on 2 MGPs Please confirm (“YES”, “Y”, “NO”, or “N”): y SPM 0 MGP 0 RTS: Request has been submitted. SPM 0 MGP 0 RTS: Command completed. SPM 0 MGP 1 RTS: Request has been submitted. SPM 0 MGP 1 RTS: Command completed. **Meaning**: The requests to RTS both CPKs was submitted and successfully completed. **System or user actions:** None

53.6.8 Example

Table 15 Usage examples for RTS command

Description of task:	RTS MGP 0 without performing diagnostics
Command: MAP Response:	RTS force SPM 0 MGP 0 RTS: Request has been submitted. SPM 0 MGP 0 RTS: Command completed.

53.7 Command: Offl

53.7.1 Command type: Listed MENU

53.7.2 Command target: SUPERNODE

53.7.3 Command availability: RES

53.7.4 Command description

Change the state of a selected circuit pack from ManB to offline.

53.7.5 Command syntax

```
Offl: Offline the selected CPK(s).
Parms: [<All> {ALL}]
       [<Prompt> {NOPROMPT}]
       [<Options> {NOWAIT,
                   NOREPLY}]
```

Table 16 Offl command parameters and variables

Command	Parameters and variables
Offl	<All> ALL <Prompt> NOPROMPT <Options> NOWAIT, NOREPLY
Parameters and variables	**Description**
ALL	All the selected circuit packs
NOWAIT	Cursor is returned without waiting for the command to complete.
NOREPLY	Suppress the replies to the command

53.7.6 Qualifications and warnings

None

53.7.7 Responses

Table 17 MAP outputs with associated meanings and actions

SPM 0 MGP 0 Offline: Request has been submitted. SPM 0 MGP 0 Offline: Command completed. OFFL or MANB force succeeded **Meaning**: Request to busy MGP 0 was submitted and successfully completed **System or user actions:** None
This operation will be executed on 2 MGPs Please confirm (“YES”, “Y”, “NO”, or “N”): y SPM 0 MGP 0 Offline: Request has been submitted. SPM 0 MGP 0 Offline: Command completed. OFFL or MANB force succeeded SPM 0 MGP 1 Offline: Request has been submitted. SPM 0 MGP 1 Offline: Command completed. OFFL or MANB force succeeded **Meaning**: Request to busy selected MGPs was submitted and successfully completed **System or user actions:** None

53.7.8 Example

Table 18 Usage examples for Offl command

Description of task:	Offl the selected MGP
Command: MAP Response:	SPM 0 MGP 0 Offline: Request has been submitted. SPM 0 MGP 0 Offline: Command completed. OFFL or MANB force succeeded

53.8 Command: LoadMod

53.8.1 Command type: Listed MENU

53.8.2 Command target: SUPERNODE

53.8.3 Command availability: RES

53.8.4 Command description

Load the selected module with the specified load.

53.8.5 Command syntax

```
LoadMod: load the circuit pack.
Parms: [<File Name> STRING]
       [<InSvld> {INSVLD}]
       [<Mate> {MATE <Mate Unit> {0 TO 27}}]
       [<All> {ALL}]
       [<Options> {NOWAIT,
                   NOREPLY}]
```

Table 19 LoadMod command parameters and variables

Command	Parameters and variables
LoadMod	<File name> STRING <InSvLd> INSVLD <Mate> MATE <Mate Unit> {0 TO 27} <All> ALL <Options> NOWAIT, NOREPLY
Parameters and variables	**Description**
STRING	Name of load file
INSVLD	Load while insv
MATE	Load mate unit
ALL	All the selected circuit packs
NOWAIT	Cursor is returned without waiting for the command to complete.
NOREPLY	Suppress the replies to the command

53.8.6 Qualifications and warnings

None

53.8.7 Responses

Table 20 MAP outputs with associated meanings and actions

SPM 0 MGP 0 Load: Request has been submitted **Meaning**: Request to load has been submitted **System or user actions:** None
<RESPONSE>: <description> **Meaning**: **System or user actions:**

53.8.8 Example

Table 21 Usage examples for LoadMod command

Description of task:	Load the selected MGP with load MGP0001
Command: MAP Response:	LoadMod MGP0001 SPM 0 MGP 0 Load: Request has been submitted

53.9 Command: Next

53.9.1 Command type: Listed MENU

53.9.2 Command target: SUPERNODE

53.9.3 Command availability: RES

53.9.4 Command description

Go to the next of the selected circuit packs

53.9.5 Command syntax

```
Next:  Step to next CPK in post set.
Parms: [<CPK TYPE> {CPKTYPE}]
```

Table 22 Next command parameters and variables

Command	Parameters and variables
Next	<CPK TYPE> CPKTYPE

Table 22 Next command parameters and variables (Continued)

Command	Parameters and variables
Parameters and variables	**Description**
CPKTYPE	Circuit pack type

53.9.6 Qualifications and warnings

None

53.9.7 Responses

53.9.7.1 No response - display goes to the next cpk in the post set

.

Table 23 MAP outputs with associated meanings and actions

<RESPONSE>: <description> **Meaning**: **System or user actions:**
<RESPONSE>: <description> **Meaning**: **System or user actions:**

53.9.8 Example

Table 24 Usage examples for next command

Description of task:	Step to next cpk in the post set

Command: MAP Response:	Next none

53.10 Command: QueryMod

53.10.1 Command type: Listed MENU

53.10.2 Command target: SUPERNODE

53.10.3 Command availability: RES

53.10.4 Command description

This command queries a specified module (circuit pack) in an SPM.

53.10.5 Command syntax

```
QueryMod: Query misc info about the CPK.
```

Table 25 QueryMod command parameters and variables

Command	**Parameters and variables**
QueryMod	none
Parameters and variables	**Description**

53.10.6 Qualifications and warnings

None

53.10.7 Responses

Table 26 MAP outputs with associated meanings and actions

Command rejected. The CPK is offline. **Meaning**: The circuit pack cannot be queried when it is offline **System or user actions:** None
SPM 0 MGP 0 Query: Request has been submitted. SPM 0 MGP 0 Query: Command rejected. Host node is in an invalid state, isolated or has MIP posted. **Meaning**: The circuit pack cannot be queried in a busy state **System or user actions:** None
SPM 0 MGP 0 Query: Request has been submitted. MGP 0 InSv Act Loc: Row N FrPos 31 ShPos 6 ShId 0 Slot 3 Default Load: MGP0000 Actual Load: MGP0000 **Meaning**: Query command was submitted and queried successfully **System or user actions**: None

53.10.8 Example

Table 27 Usage examples for QueryMod command

Description of task:	Query MGP 0
Command: MAP Response:	QueryMod SPM 0 MGP 0 Query: Request has been submitted. MGP 0 InSv Act Loc: Row N FrPos 31 ShPos 6 ShId 0 Slot 3 Default Load: MGP0000 Actual Load: MGP0000

53.11 Command: ListAlm

53.11.1 Command type: Listed MENU

53.11.2 Command target: SUPERNODE

53.11.3 Command availability: RES

53.11.4 Command description

This command displays the list of alarms associated with the selected module (circuit pack) in an SPM. If no parameter is specified, the entire list of alarms, associated with the selected module, is displayed. However, if an alarm number is specified as parameter to this command, details of the specified alarm are displayed.

53.11.5 Command syntax

```
Display alarms for the posted entity.
All alarms can be listed by severity by
entering the command without parms or
by a single severity using parameters
1-4. The non-reportable alarms can be
included in either case.

This command provides the following
options:
1. CR : List all Critical alarms.
2. MJ : List all Major alarms.
3. MN : List all Minor alarms.
4. NA : List all No-Alarm alarms.
5. NRPT: Include non-reportable alarms in output.
Parms: [<Option> {CR [<Action> {NRPT}],
                  MJ [<Action> {NRPT}],
                  MN [<Action> {NRPT}],
                  NA [<Action> {NRPT}],
                  NRPT}]
```

Table 28 ListAlm command parameters and variables

Command	**Parameters and variables**
ListAlm	<option> CR, MJ, MN, NA, NRPT
	<action> NRPT
Parameters and variables	**Description**
CR	Critical
MJ	Major
MN	Minor
NA	No_Alarm

Table 28 ListAlm command parameters and variables (Continued)

Command	Parameters and variables
NRPT	No Report

53.11.6 Qualifications and warnings

None

53.11.7 Responses

Table 29 MAP outputs with associated meanings and actions

ListAlm: SPM 0 mgp 0 SEVERITY ALARM ACTION --- Critical None Major MANB RPT Minor None No_Alarm None **Meaning**: Circuit pack in manbusy and to be reported in alarm banner **System or user actions:** None
ListAlm: SPM 0 mgp 0 SEVERITY ALARM ACTION --- Critical None Major None Minor None No_Alarm None **Meaning**: Circuit pack in insv with no alarms **System or user actions:** None

53.11.8 Example

Table 30 Usage examples for ListAlm command

Description of task:	list major alarms against mgp 0

Command: MAP Response:	listalm mj SEVERITY ALARM ACTION ---------- Major MANB RPT

53.12 Command: Prot

53.12.1 Command type: Listed MENU

53.12.2 Command target: SUPERNODE

53.12.3 Command availability: RES

53.12.4 Command description

This command brings up the protection screen for the SPM whose screen the ‘prot’ commands is issued from.

53.12.5 Command syntax

```
Prot: Enter the Protection level MAP.
```

Table 31 Prot command parameters and variables

Command	**Parameters and variables**
Prot	None
Parameters and variables	**Description**

53.12.6 Qualifications and warnings

None

53.12.7 Responses

53.12.7.1 No response - enters the protection level map

.

Table 32 MAP outputs with associated meanings and actions

<RESPONSE>: <description> **Meaning**: **System or user actions:**
<RESPONSE>: <description> **Meaning**: **System or user actions:**

53.12.8 Example

Table 33 Usage examples for Prot command

Description of task:	
Command: MAP Response:	

53.13 Command: ResetMod

53.13.1 Command type: NON-MENU

53.13.2 Command target: SUPERNODE

53.13.3 Command availability: RES

53.13.4 Command description

Resets the selected circuit pack

53.13.5 Command syntax

```
ResetMod: Reset the selected CPK(s).
Parms: [<Reset Type> {FW}]
```

```
[<All> {ALL}]
[<Options> {NOWAIT,
            NOREPLY}]
```

Table 34 ResetMod command parameters and variables

Command	**Parameters and variables**
ResetMod	<Reset Type> FW <All> ALL <Options> NOWAIT, NOREPLY
Parameters and variables	**Description**
FW	Reset Firmware on pack
ALL	Reset All posted circuit packs
NOWAIT	Cursor is returned without waiting for the command to complete.
NOREPLY	Suppress the replies to the command

53.13.6 Qualifications and warnings

None

53.13.7 Responses

Table 35 MAP outputs with associated meanings and actions

SPM 0 MGP 2 Reset: Request has been submitted. SPM 0 DSP 2 Reset: Command completed. **Meaning**: ResetMod request was submitted and completed successfully **System or user actions:** None
SPM 0 MGP 2 Reset: Request has been submitted. SPM 0 DSP 2 Reset: Command rejected. Invalid device state. **Meaning**: Circuit pack is in an invalid state such as manbusy to perfrom this command **System or user actions:** None

53.13.8 Example

Table 36 Usage examples for ResetMod command

Description of task:	Reset the firmware on the circuit pack
Command: MAP Response:	resetmod fw SPM 0 MGP 2 Reset: Request has been submitted. SPM 0 DSP 2 Reset: Command completed.

53.14 Command: Wait

53.14.1 Command type: NON-MENU

53.14.2 Command target: SUPERNODE

53.14.3 Command availability: RES

53.14.4 Command description

Turns the wait mode on or off or queries the wait mode

53.14.5 Command syntax

```
Wait: Turn Wait mode on or off. Or query Wait mode.
Parms: [<Wait Options> {ON,
```

```
OFF,
QUERY}]
```

Table 37 Wait command parameters and variables

Command	Parameters and variables
Wait	<Wait option> ON, OFF, QUERY
Parameters and variables	**Description**
ON	Turns wait mode on
OFF	Turns wait mode off
QUERY	Queries wait mode

53.14.6 Qualifications and warnings

None

53.14.7 Responses

Table 38 MAP outputs with associated meanings and actions

Wait Mode is OFF **Meaning**: Self-explanatory **System or user actions:** None
Wait Mode is ON **Meaning**: Self-explanatory **System or user actions:** None

53.14.8 Example

Table 39 Usage examples for Wait command

Description of task:	Query the wait mode

Command: MAP Response:	Wait query Wait Mode is ON

53.15 Command: Abtk

53.15.1 Command type: NON-MENU

53.15.2 Command target: SUPERNODE

53.15.3 Command availability: RES

53.15.4 Command description

Aborts a requested task on the circuit pack

53.15.5 Command syntax

```
Abtk: Abort all active tasks on the CPK.
```

Table 40 Abtk command parameters and variables

Command	Parameters and variables
Abtk	None
Parameters and variables	**Description**

53.15.6 Qualifications and warnings

ABTKing of this maintenance activity is not supported

53.15.7 Responses

Table 41 MAP outputs with associated meanings and actions

SPM 0 MGP 2 Abtk: Command rejected. ABTKing of this maintenance activity not supported **Meaning**: A circuit pack is activity is in progress which cannot be aborted **System or user actions:** None
SPM 0 MGP 2 Abtk: Command passed. **Meaning**: Abort task was successful **System or user actions:** None

53.15.8 Example

Table 42 Usage examples for Abtk command

Description of task:	Abort a user requested circuit pack activity
Command: MAP Response:	Abtk SPM 0 MGP 2 Abtk: Command passed.

54: Command interface changes (CI)

54.1 Directory:

None

54.1.1 Directory description

54.1.2 Accessing directory: <directory name>

54.1.2.1 Access to directory or MAP level and return to CI

54.2 Command: REVXLVER

54.2.1 Command type: NON-MENU

54.2.2 Command target: SUPERNODE, BRISC

54.2.3 Command availability: RES

54.2.4 Command description

REVXLVER is a datafill verification utility similar to TRAVER that simulates reverse translation from a specified originator to a specified destination. REVXLVER examines and displays translation data for reverse translation call processing. It also can display the reverse translation number result.

54.2.5 Command syntax

This feature introduces a new REVXLVER parameter to be used for RLT calls. Using REVXLVER with the RLT option will take the 10 digit national number and use Reverse Translation Simplification to convert the number to a dialable format.

Table 1 <CommandName> command parameters and variables

Command	Parameters and variables
REVXLVER	RLT parameter is added to the CI command REVXLVER.
Parameters and variables	**Description**
RLT	REVXLVER with the RLT option converts a 10 digit national number to the diallable format based on Reverse Translation Simplification.

54.2.6 Qualifications and warnings

None

54.2.7 Responses

54.2.7.1 <response>

.Using the REVXLVER with the RLT option will generate the following output:

```
REVXLVER RLT 6211234 5196212060
Using Reverse Translator:
RLT2DIAL
The resulting DN using new reverse translations is:
6212060
```

Table 2 MAP outputs with associated meanings and actions

<RESPONSE>: N/A **Meaning**: System or user actions:
<RESPONSE>: <description> **Meaning**: System or user actions:

54.2.8 Example

Table 3 Usage examples for <CommandName> command

Description of task:	N/A
Command: MAP Response:	

Operational Measurements Highlights

OM Groups	Status	Comments	Featid
XACORE	Changed	Added new ethernet peg OM registers to handle ethernet packlet, port and link faults.	a59019176
XACSRVC	New	Moved some of the XACORE OMs into this group in order to make room for Ethernet OMs. Added new ethernet usage OMs to handle loss of link redundancy.	"
SCAISRV4	New	A new message Call-held is added to the table SCAISSRV so a new register HELDU is made to peg.	a59022448
RLT	New	Counts number of office wide attempts to use RLT in the EAEO.	a59026486

a59019176
a59022448
a59026486

55: Operational measurement changes (OM)

55.1 Group XACORE

55.1.1 OM description

The XA-Core system now has two(2) OM groups. The first, which already exists, is named XACORE. The second, which needed to be added by this feature, is named XACSVRC to represent service oriented XA-Core OM.

XA-Core peg registers record the number of fault conditions on the XA-Core. XA-Core usage registers record the length of time a fault or alarm condition exists on the XA-Core.

55.1.2 Release history update

OM group XACORE is being modified in release CSP14.

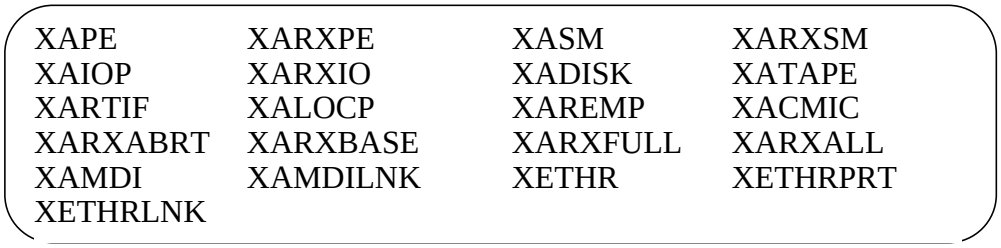
Three peg registers (XETHR, XETHRPRT, and XETHRLNK) have been added to the XACORE OM group. The peg registers count faults on the ethernet packlets, ports and links respectively, while the usage register measure the duration of major alarm condition on the ethernet links.

Due to OM system size limitations, some of the XACORE have been moved to a new group XACSRVC. The following OMs have been removed from the XACORE group and added to the XACSRVC group: XAPEMAJU, XAPECRIU XASSMPXU, XAMSMPXU, XARSMPXU, XASMCRIU, XALKMAJU, XAMDMAJU, XAMDCRIU, XATRAP, XASWINI, XAMWINI, XASCINI, XAMCINI

55.1.3 Registers

OM group XACORE registers display on the MAP terminal as follows:

Figure 1 OM Group XACORE Display



55.1.4 Group structure

OM group XACORE provides one tuple per office.

Key field: EXTENDED_ARCHITECTURE_CORE.

Info field: None

55.1.5 Associated OM groups

This OM group is associated to the XACSRVC OM group..

55.1.6 Associated functional groups

There is an association between OMgroup XACORE and the BASE0001 functional group.

55.1.7 Associated functionality codes

There are no associated functionality codes.

55.1.8 OM logic flow

55.1.8.1 Flow chart: OM group XACORE Registers

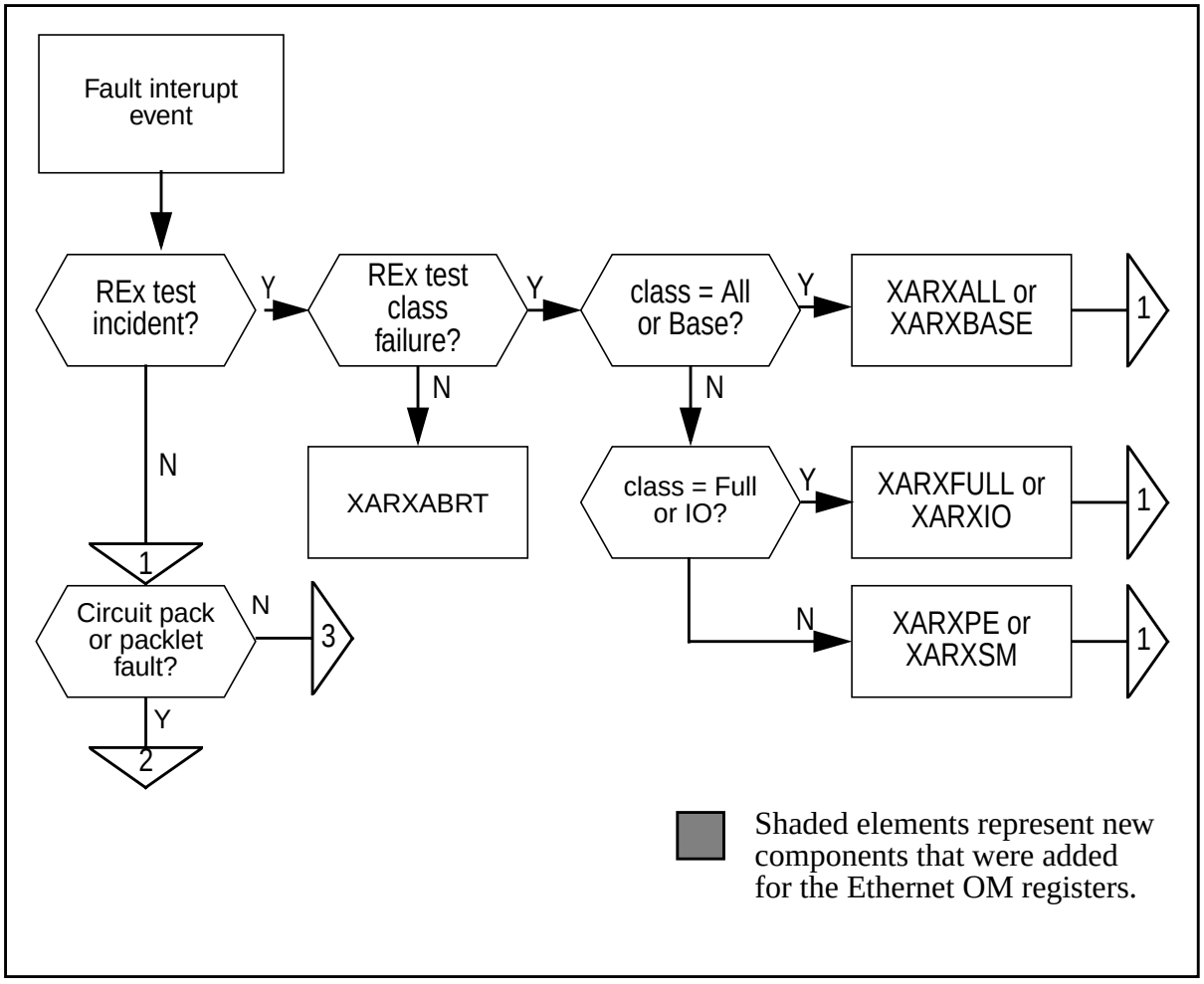
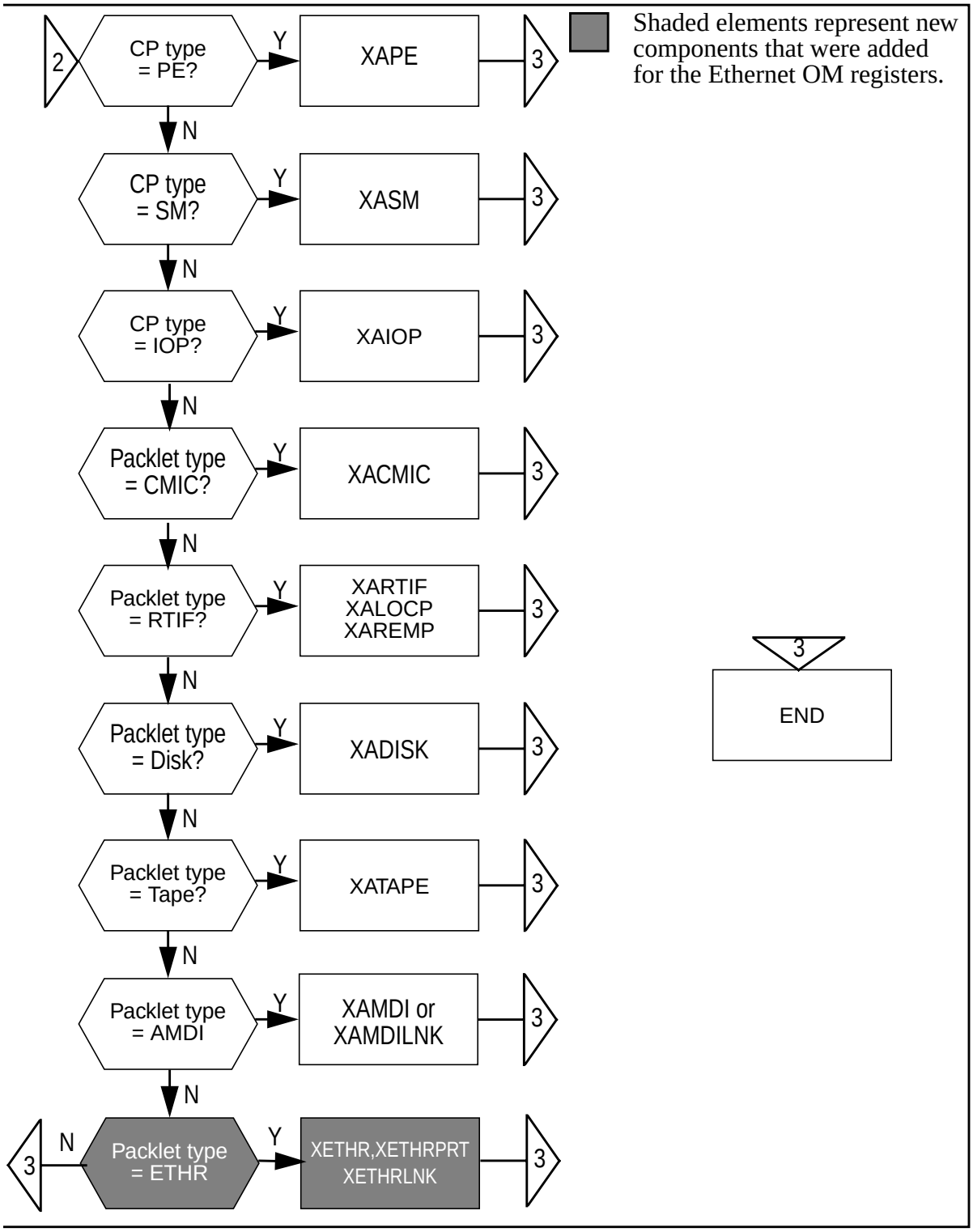


Figure 2 Flow chart: OM group XACORE Registers (Continued)



55.1.9 Register XETHR

55.1.9.1 Register description

The XA-Core ethernet (XETHR) peg register counts the number of critical ethernet packlet faults detected on the XA-Core.

55.1.9.2 Register XETHR release history update

Release CSP14 introduces register XETHR.

55.1.9.3 Associated registers

Register XETHRMJU records the length of time an ETHR major condition exists on the XA-Core.

55.1.9.4 Associated logs

The system generates the ethernet log report (XAC329) when an ethernet packlet, port or link goes out of service.

The system generates the Ethernet Condition Cleared log report (XAC629) when the ethernet fault clears and the packlet, port or link returns to service.

55.1.10 Register XETHRPRT

55.1.10.1 Register description

The XA-Core Ethernet Port (XETHRPRT) peg register counts the number of critical ethernet port faults detected on the XA-Core.

55.1.10.2 Register XETHRPRT release history update

Release CSP14 introduces register XETHRPRT.

55.1.10.3 Associated registers

Register XETHRMJU records the length of time an ETHR major condition exists on the XA-Core.

55.1.10.4 Associated logs

The system generates the Ethernet log report (XAC329) when an ethernet packlet, port or link goes out of service.

The system generates the Ethernet Condition Cleared log report (XAC629) when the ethernet fault clears and the packlet, port or link returns to service.

55.1.11 Register XETHRLNK

55.1.11.1 Register description

The XA-Core Ethernet Link (XETHRLNK) peg register counts the number of critical ethernet link faults detected on the XA-Core.

55.1.11.2 Register XETHRLNK release history update

Release CSP14 introduces register XETHRLNK.

55.1.11.3 Associated registers

Register XETHRMJU records the length of time an ETHR major condition exists on the XA-Core.

55.1.11.4 Associated logs

The system generates the Ethernet log report (XAC329) when an ethernet packlet, port or link goes out of service.

The system generates the Ethernet Condition Cleared log report (XAC629) when the ethernet fault clears and the packlet, port or link returns to service.

55.2 Group XACSRVC

55.2.1 OM description

The XA-Core system now has two(2) OM groups. The first, which already exists, is named XACORE. The second, which needed to be added by this feature, is named XACSVRC to represent service oriented XA-Core OM. This section describes the latter.

XA-Core peg registers record the number of fault conditions on the XA-Core. XA-Core usage registers record the length of time a fault or alarm condition exists on the XA-Core.

55.2.2 Release history update

OM group XACSRVC is being added in release CSP14.

Two usage registers (XETHRMJU and XETHRCRU) have been added to the XACORE OM group. The usage register measure the duration of major alarm condition on the ethernet links.

Due to OM system size limitations, some of the XACORE have been moved to this OM group. The following OMs have been removed from the XACORE group and added to the XACSRVC group: XAPEMAJU, XAPECRIU XASSMPXU, XAMSMPXU, XARSMPXU, XASMCRIU, XALKMAJU, XAMDMAJU, XAMDCRIU, XATRAP, XASWINI, XAMWINI, XASCINI, XAMCINI

55.2.3 Registers

OM group XACORE registers display on the MAP terminal as follows:

Figure 3 OM Group XACORE Display

XAPEMAJU	XAPECRIU	XASSMPXU	XAMSMPXU
XARXMPXU	XASMCRIU	XALKMAJU	XAMDMAJU
XAMDCRU	XETHRMJU	XETHRCRU	XATRAP
XASWINI	XAMWINI	XASCINI	XAMCINI

55.2.4 Group structure

OM group XACSRVC provides one tuple per office.

Key field: EXTENDED_ARCHITECTURE_CORE.

Info field: None

55.2.5 Associated OM groups

This OM group is associated with the XACORE OM group..

55.2.6 Associated functional groups

There is an association between OMgroup XACSRVC and the BASE0001 functional group.

55.2.7 Associated functionality codes

There are no associated functionality codes.

55.2.8 OM logic flow

55.2.8.1 Flow chart: OM group XACSRVC registers

Figure 4 OM group XACSRVC usage registers

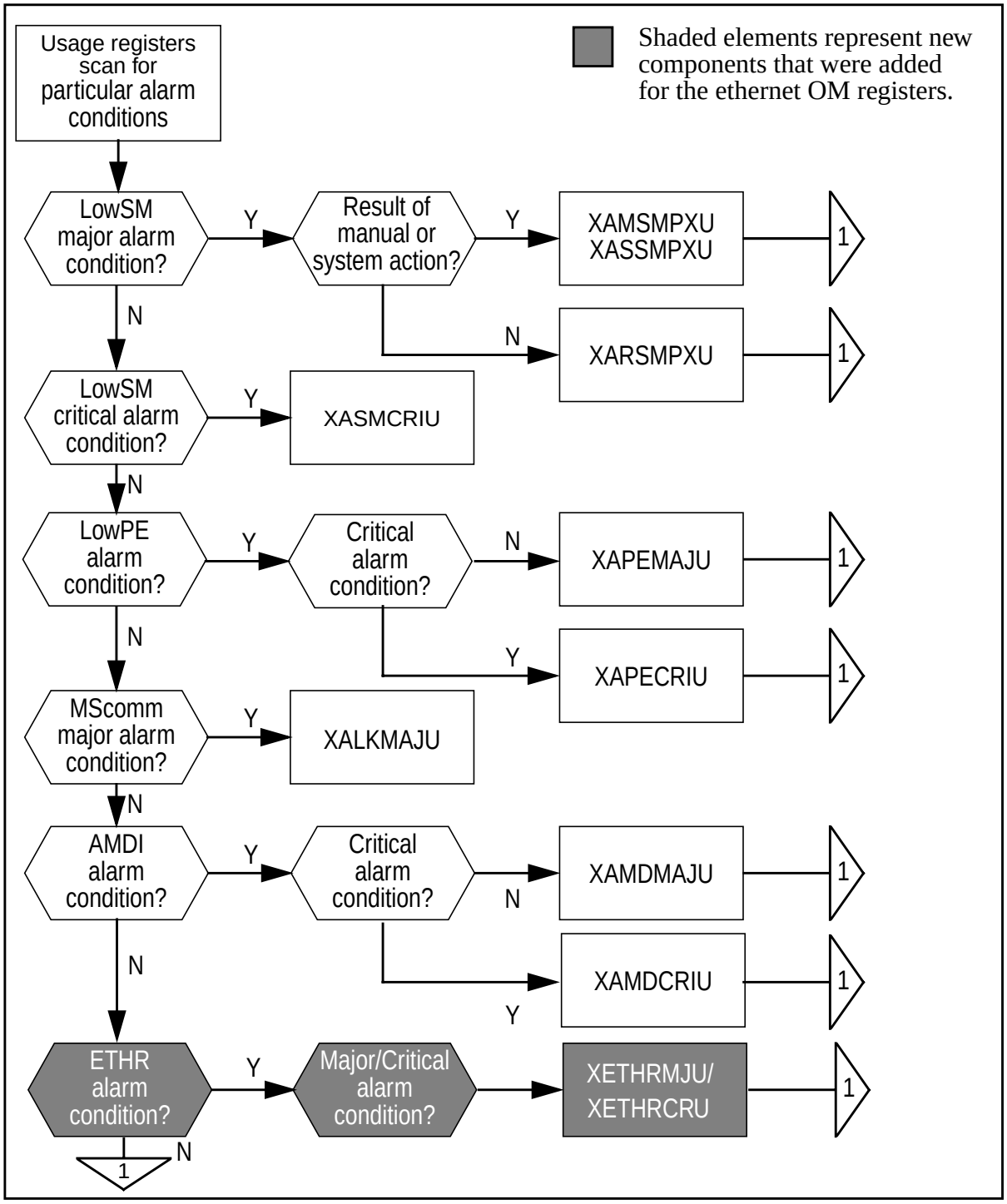
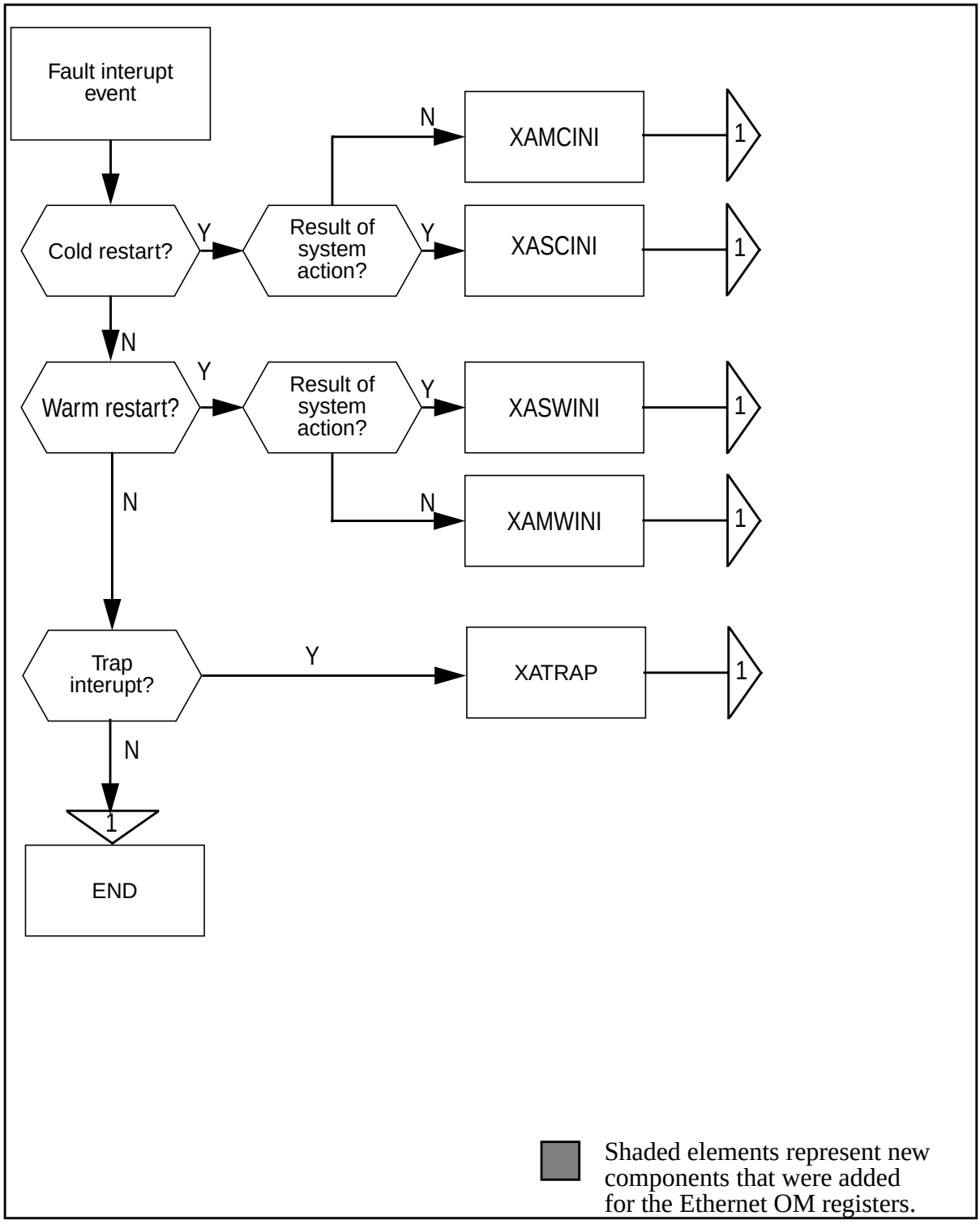


Figure 5 OM group XACSRVC usage registers (Continued)



55.2.9 Register XETHRMJU

55.2.9.1 Register description

The XA-Core Ethernet Major Usage (XETHRMJU) register records the length of time (in 100 second increments) that an ETHR major alarm condition exists on the XA-Core.

55.2.9.2 Register XETHRMJU release history update

Release CSP14 introduces register XETHRMJU.

55.2.9.3 Associated registers

Register XETHR increments when a fault is detected on an ethernet packlet.

Register XETHRPRT increments when a fault is detected on an ethernet port.

Register XETHRLNK increments when a fault is detected on an ehternet link.

55.2.9.4 Associated logs

The system generates the Ethernet log report (XAC329) when an ethernet packlet, port or link goes out of service.

The system generates the Ethernet Condition Cleared log report (XAC629) when the ethernet fault clears and the packlet, port or link returns to service.

55.2.10 Register XETHRCRU

55.2.10.1 Register description

The XA-Core Ethernet Critical Usage (XETHRCRU) register records the length of time (in 100 second increments) that an ETHR critical alarm condition exists on the XA-Core.

55.2.10.2 Register XETHRCRU release history update

Release CSP14 introduces register XETHRCRU.

55.2.10.3 Associated registers

Register XETHR increments when a fault is detected on an ethernet packlet.

Register XETHRPRT increments when a fault is detected on an ethernet port.

Register XETHRLNK increments when a fault is detected on an ehternet link.

55.2.10.4 Associated logs

The system generates the Ethernet log report (XAC329) when an ethernet packlet, port or link goes out of service.

The system generates the Ethernet Condition Cleared log report (XAC629) when the ethernet fault clears and the packlet, port or link returns to service.

56: Operational measurement changes (OM)

56.1 Group SCAISRV4

56.1.1 OM description

SCAISRV4

Switch Computer Application Interface service 4

56.1.2 Release history update

OM group SCAISRV4 is being modified in NA015. One new register namely HELDU are being added to this OM group.

56.1.3 Registers

OM group SCAISRV4 registers display on the MAP terminal as follows:

Figure 1 OM Group SCAISRV4 Display

```
SCAISRV4

CLASS:   ACTIVE
START:1998/11/30 14:00:00 MON; STOP: 1998/11/30 15:45:48 MON;
SLOWSAMPLES:        6 ; FASTSAMPLES:        54 ;

     KEY (SCAI_GROUP)
       CHWRAPRR   CHWRAPRE   CHFRCERR   CHFRCERE
       REAGNPRR   REAGNPRE   CNTRLREL  NCTRLREL
     HELDU



         0   SCAI_GRP1
               1            3            0            2
               0            0            1            1
               2
```

56.1.4 Group structure

OM group SCAISRV4 provides tuples for each SCAIGRP

Key field: SCAI_GROUP

Info field:None

Number of tuples:One per SCAI group

The key field identifies the SCAI group name which is a unique character string with a maximum length of 16 characters. The SCAI group is defined in table SCAIGRP.

56.1.5 Associated OM groups

SCAISERV,SCAISRV2,SCAISRV3 are related.All these groups provide OM data on SCAI service usage.

56.1.6 Associated functional groups

None

56.1.7 Associated functionality codes

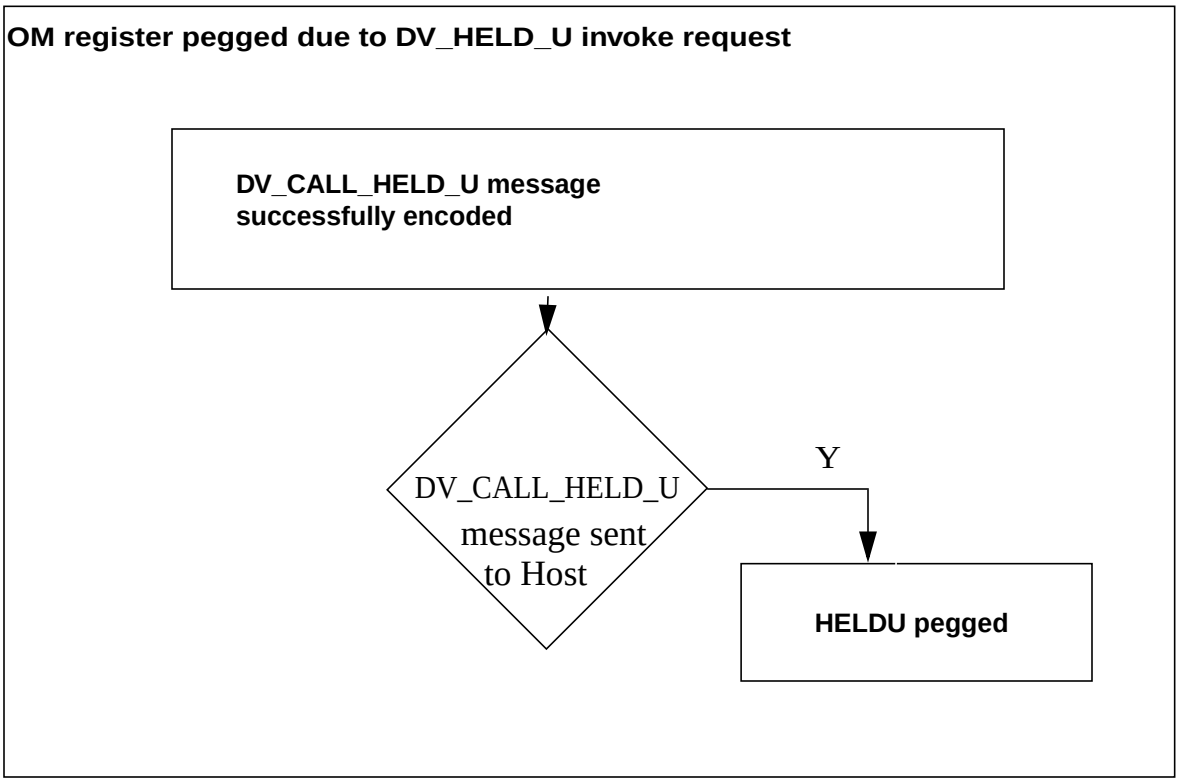
Table 1 Functionality codes associated with OM group <shortGRPNAME>

Functionality	Code

56.1.8 OM logic flow

56.1.8.1 Flow chart: OM group SCAISRV4 registers

Figure 2 Figure 2:OM group SCAISRV4 register HELDU



56.1.9 Register HELDU

56.1.9.1 Register description

Register : HELDU

Message : Call Held U

HELDU is a peg register.This register is pegged each time the SCAI application on the switch sends the DV_CALL_HELD_U message to the host application

56.1.9.2 Associated registers

None

56.1.9.3 Associated logs

None

57: Operational measurement changes (OM)

57.1 Group RLT

57.1.1 OM description

The OM group, RLT, records the number of Release Link Trunking attempts in the EAEO on an office wide basis. OM group RLT contains only one register. It is RLTATMPT.

57.1.2 Release history update

OM group RLT is new for release CNA15.

57.1.3 Registers

OM group RLT registers display on the MAP terminal as follows:

Figure 1 OM Group RLT Display

```
RLT
CLASS:   ACTIVE
START:2001/02/06 14:30:00 TUE; STOP: 2001/02/06 14:31:39 TUE;
SLOWSAMPLES:        1 ; FASTSAMPLES:        10 ;
      KEY (REGISTER_INDEX_RANGE)
        RLTATMPT

   0              1
```

57.1.4 Group structure

OM group RLT provides only one tuple for the EAEO.

Key field: REGISTER_INDEX_RANGE is an integer in the range 0 to 0

Info field: Not Applicable

57.1.5 Associated OM groups

None

57.1.6 Associated functional groups

The following functional groups are associated with OM group RLT: None.

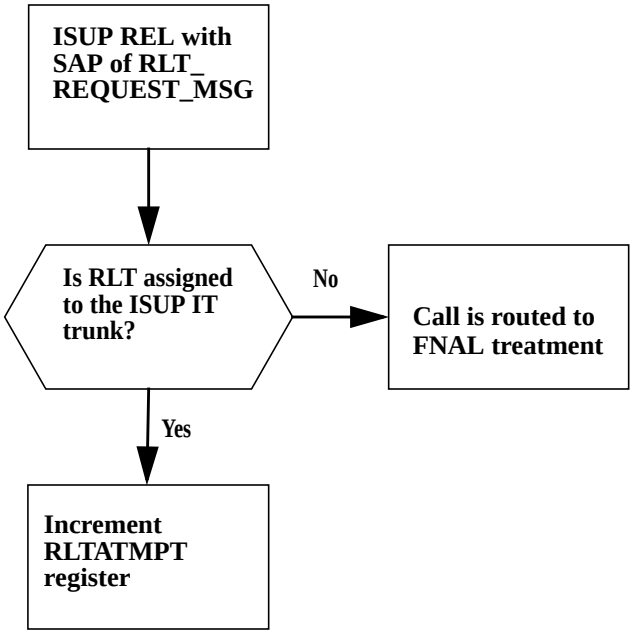
57.1.7 Associated functionality codes

Table 1 Functionality codes associated with OM group RLT

Functionality	Code

57.1.8 OM logic flow

57.1.8.1 Flow chart: OM group RLT registers



57.1.9 Register RLTATMPT

57.1.9.1 Register description

Register RLTATMPT represents the count of attempts to utilize RLT. It represents that an ISUP REL with a SAP of RLT_REQUEST_MSG has been received and that the ISUP IT trunk has the RLT option assigned in Table TRKOPTS.

57.1.9.2 Register RLTATMPT release history update

Register RLTATMPT is new in release 15.

57.1.9.3 Associated registers

None

57.1.9.4 Associated logs

None

Service Order Highlights

Featid	Comments
a59022058	This feature makes DLCM compatible with the LCC IBN, M5312, M5316, M6310, M6320, and PSET.
a59022651	The behavior of the ServOrd CDN command changes. This change prevents the command from being rejected. If the new DN is entered using the CDN command, is associated with an ANCT or an OPRT type of intercept.
a59022657	After code changes are implemented, the behavior of the Default Signalling Type is changed. The intent of the changes allow customers to select the signalling type of their choice. Since not all customers want this feature/behavior, the capability is provided to control this feature using office parameter DEFAULT_SIGNALLING_TYPE. This feature is implemented only for non-keyset lines.

a59006653
a59006658
a59015863
a59015896
a59017604
a59017625
a59020499
a59020826
a59021965
a59021972
a59021979
a59021986
a59021993
a59022041
a59022240
a59022288
a59022293
a59022361
a59022437
a59022448
a59022453
a59022523
a59022533
a59022554
a59022576
a59022651
a59022657
a59022792
a59022816
a59023032
a59023163
a59023407
a59023416
a59023612
a59024289
a59024393
a59024668
a59025809
a59025965
a59026113
a59026166
a59026377
a59026480
a59026486
s10381047
s10387512

58: Service orders (SO)

58.1 Service order change details

58.1.1 LCC and options

Table 1 Meridian digital centrex feature assignment requirements

Feature	500 2500	MDC SET	MDC Business Set Set Relationship							
			SET	SUBSET	KEY	DN	DEDKEY	LAMP	CODE	DISPLAY
CMG CALL MANAGEMENT GROUP	Y	Y				Y				

58.2 New commands

58.2.1 How service order options are presented

58.2.1.1 Description

The ADO command is used to add the CMG option to a RES/IBN/P-Phone line. By adding the CMG option on a line, a new CMG group can be created from that line or the line can be added to an already existing CMG group.

58.2.1.2 Example

Figure 1 Adding the CMG option using the ADO command for a P-Phone.

```
>ado
SONUMBER:     NOW  97  4 27 AM
>
DN_OR_LEN:
>7512532 (associate line)
OPTKEY:
>1
OPTION:
>cmg
LINK_DN_OR_LEN:
>7512531 (subscriber line)
OPTKEY:
>$
OPTION:
>$
COMMAND AS ENTERED:
ADO NOW 97 4 27 AM 7512532 ( 1 CMG 7512531) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 2 Adding the CMG option using the ADO command for an IBN line

```
>ado
SONUMBER:     NOW  97  4 27 AM
>
DN_OR_LEN:
>7502514 (associate line)
OPTION:
>cmg
LINK_DN_OR_LEN:
>7502511 (subscriber line)
DENY_SDN:
>Y
OPTION:
>$
COMMAND AS ENTERED:
ADO NOW 97 4 27 AM 7502514 ( CMG 7502511 Y) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 3 Adding the CMG option using the EST command for a P-Phone

```
>est
SONUMBER:     NOW  97  4 27 AM
>
GROUPTYPE:
>CMG
LINK_DN_OR_LEN:
>7512531
CMG_DN_OR_LEN:
>7512532
COMMAND AS ENTERED:
EST NOW 97 4 27 AM CMG 7512531 ( 7512532)
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 4 Adding the CMG option using the EST command for an IBN line

```
>est
SONUMBER:     NOW  97  4 27 AM
>
GROUPTYPE:
>CMG
CMG_DN_OR_LEN:
>7512531
DENY_SDN:
>Y
CMG_DN_OR_LEN:
>7512532
DENY_SDN:
>Y
COMMAND AS ENTERED:
EST NOW 97 4 27 AM CMG ( 7512531 Y)
( 7512532 Y)
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 5 Adding the CMG option using the ADD command for a P-Phone

```
>add
SONUMBER:     NOW  97  4 27 AM
>
GROUPTYPE:
>CMG
LINK_DN_OR_LEN:
>7512531
CMG_DN_OR_LEN:
>7512532
COMMAND AS ENTERED:
ADD NOW 97 4 27 AM CMG 7512531 ( 7512532)
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 6 Adding the CMG option using the ADD command for an IBN line

```
>add
SONUMBER:     NOW  97  4 27 AM
>
GROUPTYPE:
>CMG
LINK_DN_OR_LEN:
>7502511
CMG_DN_OR_LEN:
>7502514
DENY_SDN:
>Y
COMMAND AS ENTERED:
ADD NOW 97 4 27 AM CMG 7502511 ( 7502514 Y )
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 7 Adding the CMG option using the NEW command for a P-Phone

```
>new
SONUMBER:     NOW  97  4 27 AM
>
DN:
>7512531
LCC_ACC:
>M5312
GROUP:
>cgb
SUBGRP:
>0
NCOS:
>0
SNPA:
>909
KEY:
>1
RINGING:
>y
LATANAME:
>lata1
LTG:    0
>
LEN_OR_LTID:
>HOST  01 0 19 30
OPTKEY:
>1
OPTION:
>cmg
LINK_DN_OR_LEN:
>7512532
OPTKEY:
>$
COMMAND AS ENTERED:
NEW NOW 0 6 16 PM 7512531 M5312 CGB 0 0 909 1 Y LATA1 0
HOST 01 0 19 30 ( 1 CMG 7512532 ) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 8 Adding the CMG option using the NEW command for an IBN line

```
>new
SONUMBER:     NOW   0  6 16 PM
>
DN:
>7502511
LCC_ACC:
>ibn
GROUP:
>cga
SUBGRP:
>0
NCOS:
>0
SNPA:
>909
LATANAME:
>lata1
LTG:    0
>
LEN_OR_LTID:
>HOST  00 0 14 08
OPTION:
>cmg
LINK_DN_OR_LEN:
>7502514
DENY_SDN: Y
>
OPTION:
>$
COMMAND AS ENTERED:
NEW NOW 0 6 16 PM 7502511 IBN CGA 0 0 909 LATA1 0 HOST 00
0 14 08 ( CMG 7502514 Y ) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>y
```

Figure 9 Deleting the CMG option using the DEL command on a P-Phone

```
>del
SONUMBER:     NOW  97  4 27 AM
>
GROUPTYPE:
>cmg
CMG_DN_OR_LEN:
>7512531
CMG_DN_OR_LEN:
>7512532
CMG_DN_OR_LEN:
>$
COMMAND AS ENTERED:
DEL NOW 97 4 27 AM CMG ( 7512531 ) ( 7512532 )$
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 10 Deleting the CMG option using the DEL command on an IBN line

```
>del
SONUMBER:     NOW  97  4 27 AM
>
GROUPTYPE:
>cmg
CMG_DN_OR_LEN:
>7502511
CMG_DN_OR_LEN:
>7502514
CMG_DN_OR_LEN:
>$
COMMAND AS ENTERED:
DEL NOW 97 4 27 AM CMG ( 7502511 ) ( 7502514 )$
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 11 Deleting the CMG option using the DEO command on a P-Phone

```
>deo
SONUMBER:     NOW  97  4 27 AM
>
DN_OR_LEN:
>7512531
OPTKEY:
>1
OPTION:
>cmg
OPTION:
>$
COMMAND AS ENTERED:
DEO NOW 97 4 27 AM 7512531 ( CMG ) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 12 Deleting the CMG option using the DEO command on an IBN line

```
>deo
SONUMBER:     NOW  97  4 27 AM
>
DN_OR_LEN:
>7502511
OPTION:
>cmg
OPTION:
>$
COMMAND AS ENTERED:
DEO NOW 97 4 27 AM 7502511 ( CMG ) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 13 Example using the CHF command for a P-Phone

```
>chf
SONUMBER:     NOW  97  4 27 AM
>
DN_OR_LEN:
>7512531
OPTKEY:
>1
OPTION:
>cmg
LINK_DN_OR_LEN:
>7512532
OPTKEY:
>$
COMMAND AS ENTERED:
CHF NOW 97 4 27 AM 7512531 ( 1 CMG 7512532) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

Figure 14 Example using the CHF command for an IBN line

```
>chf
SONUMBER:     NOW  97  4 27 AM
>
DN_OR_LEN:
>7502511
OPTION:
>cmg
LINK_DN_OR_LEN:
>7502512
DENY_SDN: Y
>
OPTION:
>$
COMMAND AS ENTERED:
CHF NOW 97 4 27 AM 7502511 ( CMG 7502512 Y) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
```

58.2.1.3 Option prompts

Table 2 System prompts for the CMG option

Prompt	Valid input	Description	Areas affected by prompts
LINK_DN_OR_LEN	Type is DR_LEN_TYPE	Prompt by the ADD command to specify the LEN or DN of an existing member of a CMG group to which a new member will be added. For the ADO and the NEW commands, when DR_LEN_TYPE is set to the DN or LEN of the line being added the CMG option then a new single-member CMG group is created. When DR_LEN_TYPE is set to an existing member of a CMG group, the line is added to that group.	OPTION
CMG_DN_OR_LEN	Type is DR_LEN_TYPE	LEN or DN to be added or deleted from an existing CMG group through the ADD and DEL command. LEN or DN that will form a new CMG group through the EST command.	OPTION
DENY_SDN	Type is {Y|N}	This sub-option specifies whether the simultaneous ringing should be denied on all SDNs associated with the PDN. .	OPTION

58.2.1.4 Line class code compatibility

Table 3 CMG compatibility to LCC

Line class code	Compatible?
1FR	No
1MR	No
RES	Yes

Line class code	Compatible?
RES/1FR	Yes
RES/1MR	Yes
IBN	Yes
Key Set	Yes
ISDN	No

58.2.1.5 Assignability

The following functionalities apply to this option:

- set functionality: no
- subset functionality: no
- DN functionality: yes
- key functionality: no

58.2.1.6 Option prerequisites

None.

58.2.1.7 Notes

None.

58.2.1.8 Feature identification

Functionality: CMGSUB

Feature number: AT.59022058

59: Service orders (SO)

59.1 Summary of Service Order Impact

The NA015 feature A59022651: ‘ServOrd CDN command support for an OPRT intercept’ is intended to improve the flow through the Service Order procedure of CDN. The operation of the CDN command will be impacted, but the command level interface will not change.

The impact to the operation of the command will be as follows:

- The ServOrd CDN command passes successfully, inspite of the new DN being associated with an ANCT or an OPRT type of intercept.

59.2 Service Order change details

IDENTIFY any NEW LCC introduced by this feature: None

IDENTIFY any NEW OPTIONS introduced by this feature: None

LIST options NOT compatible with new options introduced: Not Applicable

FOR EACH OPTION, list other options which must be assigned: N.A.

IDENTIFY new commands: None

59.2.1 Changes in The Existing Message

The following section discusses the change in the ERROR message displayed after code changes are implemented for this feature.

When the new DN entered via the ServOrd CDN command is not associated with either a BLDN, an ANCT or an OPRT type of intercept, the following ERROR message will be issued.

59.2.1.1 New prompts for NON-KSET Line

- No new prompts have been added for the ServOrd CDN command in this feature.

59.2.1.2 New prompts for KSET Line

- No new prompts have been added for the ServOrd CDN command in this feature.

59.3 Examples of Service Orders for:

59.3.1 CDN Command Support for OPRT intercept

The behavior of the ServOrd CDN command will change. This change is with the intent of preventing the command from being rejected, if the new DN entered, using the CDN command, happens to be associated with an ANCT or an OPRT type of intercept. At present, the intercept check allows the command to be accepted only if the new DN entered is a free DN.

This feature will reduce the amount of unnecessary delays to the customers and also eliminate the requirement of manual intervention of the central official personnel when using flow through Service Order procedures.

Following are given some examples of how the ServOrd CDN command works currently and how its behavior will change after code changes in this feature.

59.3.1.1 Example of a Single Party Line (without code changes)

- New DN entered is free

Query the Directory Numbers:

```
>QDN 5500010
------------------------------------------------------------------------------
DN:           5500010
TYPE: UNASSIGNED
------------------------------------------------------------------------------
>QDN  5500011
------------------------------------------------------------------------------
DN:    5500011
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y
```

CDN command Execution:

```
>CDN
SONUMBER:     NOW   0  6 15 AM
>
OLD_DN:
>5500011
NEW_DN:
>5500010
INTERCEPT_NAME:
>BLDN
COMMAND AS ENTERED:
CDN NOW 0 6 15 AM 5500011 5500010 BLDN
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
SHOULD ORDER BE DONE ANYWAY? (Y OR N)
>Y
```

Here, in this example, the new DN is a free DN, so the command has executed successfully. The results are as shown below:

Query the DNs after CDN command

```
>QDN  5500010
------------------------------------------------------------------------------
DN:     5500010
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y

------------------------------------------------------------------------------
>QDN 5500011
------------------------------------------------------------------------------
DN:           5500011
TYPE: UNASSIGNED
```

- New DN entered is not free

Query the Directory Numbers

```
>QDN 5500010
------------------------------------------------------------------------------
DN:     5500010
TYPE: NUMBER ON INTERCEPT OPRT
OPTIONS: NONE
------------------------------------------------------------------------------
>QDN 5500011
------------------------------------------------------------------------------
DN:     5500011
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y
```

CDN command execution:

```
>CDN
SONUMBER:     NOW   0  6 15 PM
>
OLD_DN:
>5500011
NEW_DN:
>5500010
INTERCEPT_NAME:
>BLDN
COMMAND AS ENTERED:
CDN NOW 0 6 15 PM 5500011 5500010 BLDN
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
DN IS ON INTERCEPT.
  DN IS WRONG TYPE -- SHOULD BE ONE OF
  FREE
***  ERROR - INCONSISTENT DATA  ***
COMMAND AS ENTERED:
CDN NOW 0 6 15 PM 5500011 5500010 BLDN
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>N
```

59.3.1.2 Example of a Single Party Line (with code changes)

- New DN entered is on an OPRT intercept

Query the Directory Numbers

```
>QDN  5500010
------------------------------------------------------------------------
DN:    5500010
TYPE: NUMBER ON INTERCEPT OPRT
OPTIONS: NONE
------------------------------------------------------------------------
>QDN  5500011
------------------------------------------------------------------------
DN:    5500011
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y
```

CDN command execution:

```
>CDN
SONUMBER:     NOW   0  6 16 AM
>
OLD_DN:
>5500011
NEW_DN:
>5500010
INTERCEPT_NAME:
>OPRT
COMMAND AS ENTERED:
CDN NOW 0 6 16 AM 5500011 5500010 BLDN
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
SHOULD ORDER BE DONE ANYWAY? (Y OR N)
>Y
```

Here, in this example, the new DN is on an OPRT intercept, yet the command has executed successfully. The results are shown below:

Query the DNs after CDN command

```
>QDN 5500010
------------------------------------------------------------------------------
DN:     5500010
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y

------------------------------------------------------------------------------
>QDN 5500011
------------------------------------------------------------------------------
DN:     5500011
TYPE: NUMBER ON INTERCEPT OPRT
OPTIONS: NONE
```

- New DN entered is on an ANCT intercept

Query the Directory Numbers

```
>QDN 5500011
------------------------------------------------------------------------------
DN:    5500011
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y

------------------------------------------------------------------------------
>QDN 5500001
------------------------------------------------------------------------------
DN:    5500001
TYPE: NUMBER ON INTERCEPT ANCT
OPTIONS: NONE
```

CDN command execution:

```
>CDN
SONUMBER:     NOW   0  6 16 AM
>
OLD_DN:
>5500011
NEW_DN:
>5500001
INTERCEPT_NAME:
>BLDN
COMMAND AS ENTERED:
CDN NOW 0 6 28 AM 5500011 5500001 BLDN
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
SHOULD ORDER BE DONE ANYWAY? (Y OR N)
>Y
```

Here, in this example, the new DN is on an ANCT intercept, yet the command has executed successfully. The results are shown below:

Query the DNs after CDN command

```
>QDN  5500001
------------------------------------------------------------------------------
DN:     5500001
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  03 0 17 07
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    552
OPTIONS:
DGT NAME PUBLIC A1FR1 PIC C521 Y

------------------------------------------------------------------------------
>QDN 5500011
------------------------------------------------------------------------------
DN:           5500011
TYPE: UNASSIGNED
```

- New DN entered is not on on an ANCT/OPRT intercept

Query the Directory Numbers

```
>QDN 5500011
------------------------------------------------------------------------------
DN:     5500011
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: N/A
LINE EQUIPMENT NUMBER:     HOST  01 0 01 02
LINE CLASS CODE:  IBN
IBN TYPE: STATION
CUSTGRP:       NETTRAF     SUBGRP: 0  NCOS: 0
CARDCODE:  6X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    43
PM TERMINAL NUMBER :    35
OPTIONS:
DGT
>QDN 5500001
------------------------------------------------------------------------------
DN:     5500001
TYPE: NUMBER ON INTERCEPT UNDN
OPTIONS: NONE
```

CDN command execution:

```
>CDN
SONUMBER:     NOW   0  6 30 AM
>
OLD_DN:
>5500011
NEW_DN:
>5500001
INTERCEPT_NAME:
>OPRT
COMMAND AS ENTERED:
CDN NOW 0 6 30 AM 5500011 5500001 OPRT
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
DN IS ON INTERCEPT.
  DN IS WRONG TYPE -- SHOULD BE ONE OF
  FREE or OPRT/ANCT INTERCEPT
***  ERROR - INCONSISTENT DATA  ***
COMMAND AS ENTERED:
CDN NOW 0 6 30 AM 5500011 5500001 OPRT
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>N
```

Since the new DN entered here is not free or of intercept type ANCT/OPRT, the command is rejected.

60: Service orders (SO)

60.1 Summary of Service Order impact

The NA015 DTMF Default Capability feature addresses the problem of signalling type in the DMS 100 switches and this is intended to provide the signalling type of the customers' choice.This feature implementation will impact the Servord level interface.

The impact of this feature implementation will be as follows:

- For provision of a non-keyset line, customer will be given a choice to select one of the signalling types either DP or DT.
- If the customers'choice of signalling type is DP signalling type then the line option DP will be set automatically and displayed in the options list as of now DGT is being displayed.

60.2 Service order change details

IDENTIFY any NEW OPTIONS introduced by this feature: DP

ENTIFY any NEW LCC introduced by this feature: None

LIST options NOT compatible with new options introduced: None

FOR EACH OPTION, list other options which must be assigned: None

IDENTIFY new commands: None

60.2.1 Change in the existing behavior

The following discusses the behavior of the signalling type after changes have been implemented.This will occur while provisioning a non-keyset line when default signalling type is set.

- When default signalling type is set to DP and a non-keyset line is provisioned, the default signalling type is Dial Pulse (DP), rather than Digitone (DGT). If DGT is not specified in the service order, the switch will automatically provision the customers' line with signalling type as DP.
- When default signalling type is set to DT and a non-keyset line is provisioned, the default signalling type is Digitione (DT), rather than Dial Pulse (DP). If DP is not specified in the service order, the switch will automatically provision the customers' line with signalling type as DT.
- When DP option is removed from a line with signalling type as DP using servord DEO command, the signalling type of line changes to DT and vice versa.

60.2.2 DP compatible LCCs

The following are the LCCs which are compatible with DP and these are the LCCs affecting with present behavior of the signalling type.

1FR, 2FR, 4FR, 8FR, 10FR, 1MR, RES, IBN, CSD, INW, ETW, EOW, CSP, CFD, CDF, OWT, CCF, ZM, ZMZPA, PBX, TWX.

60.2.3 DP incompatible Options

The following option is the incompatible with DP option.

LDTPSAP.

60.3 Examples of Service Order

The behavior of the Default Signalling Type will change after code changes are implemented.The intent of the changes allow customers to select the signalling type of their choice.

Since not all customers want this feature/behavior, the capability is provided to control this feature using office parameter DEFAULT_SIGNALLING_TYPE.

This feature is implemented only for non-keyset lines.

60.3.1 Examples of Non-keyset lines

The following tables will give clear view of how the NA015 release feature DTMF Default Capability will work. The functionality mentioned is applicable only for non-keyset lines. In the following tables 1FR lines are mentioned as reference and for other LCCs similar behavior exists.

60.3.1.1 List of Commands impacted

The following are the list of commands impacted by this NA015 feature.NEW, ADO, DEO, ADD, EST, EXBADD, EXBADO, EXBDEO, EXBEST. As NEWACD is applicable to only PSET and ISDNKSET_LCCs, this feature will not impact this command.

60.3.1.2 NEW command

60.3.1.2.1 Existing behavior

Provisioning the line without any option
>new $ 5501411 1FR lata1 0 0 HOST 06 1 15 17 $ y y --- COMMAND AS ENTERED: NEW NOW 0 6 14 AM 5501411 1FR LATA1 0 HOST 06 1 15 17 $ MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED *** RETURN TO SERVICE FAILED *** LEN: HOST 06 1 15 17 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number
>qdn 5501411 --- DN: 5501411 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DP LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 06 1 15 17 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 2X17AB GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 52 PM TERMINAL NUMBER : 498 OPTIONS: NONE

Provisioning the line with the DGT option
>new $ 5501411 1FR lata1 0 0 HOST 06 1 15 17 dgt $ y y COMMAND AS ENTERED: NEW NOW 0 6 14 AM 55014111FR LATA1 0 HOST 06 1 15 17 (DGT) $ MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED

Query the Directory Number

```
>qdn 5501411
------------------------------------------------------------------------------
DN:     5501411
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  06 1 15 17
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  2X17AB    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    52
PM TERMINAL NUMBER :    498
OPTIONS:
DGT
```

60.3.1.2.2 Desired behavior

DEFAULT_SIGNALLING_TYPE = DP

Provisioning the line without any option
>NEW $ 5500003 1FR LATA1 0 HOST 00 0 04 01 $ Y Y COMMAND AS ENTERED: NEW NOW 0 6 17 AM 5500012 INW LATA1 0 RCU0 00 0 02 17 $ MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 02 17 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number
>qdn 5500003 --- DN: 5500003 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DP LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 00 0 04 01 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 6X17AA GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 40 PM TERMINAL NUMBER : 130 OPTIONS: DP OFFICE OPTIONS: AIN LNPOFFICE

Provisioning the line with DGT option

```
>new $ 5501411 1FR lata1 0 0 HOST 06 1 15 17 dgt $ y y
COMMAND AS ENTERED:
NEW NOW 0 6 14 AM 55014111FR LATA1 0 HOST 06 1 15 17 (DGT) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 5500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DGT
OFFICE OPTIONS:
AIN LNPOFFICE
```

Provisioning the line with DP option

```
>new $ 5501411 1FR lata1 0 0 HOST 06 1 15 17 dp $ y y
COMMAND AS ENTERED:
NEW NOW 0 6 14 AM 55014111FR LATA1 0 HOST 06 1 15 17 (DP) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 5500003
------------------------------------------------------------------------------
DN:     5500003
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DP    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DP
OFFICE OPTIONS:
AIN LNPOFFICE
```

DEFAULT_SIGNALLING_TYPE = DT

Provisioning the line without any option

```
>NEW $ 5500003 1FR LATA1 0 HOST  00 0 04 01 $ Y Y
COMMAND AS ENTERED:
NEW NOW 0 6 14 AM 5500003 1FR LATA1 0 HOST 00 0 04 01 $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory Number

```
>qdn 5500003
------------------------------------------------------------------------------
DN:     5500003
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DGT
OFFICE OPTIONS:
AIN LNPOFFICE
```

Provisioning the line with DP option

```
>NEW $ 5500003 1FR LATA1 0 HOST  00 0 04 01 dp $ y y
COMMAND AS ENTERED:
NEW NOW 0 6 14 AM 5500003 1FR LATA1 0 HOST  00 0 04 01 (DP) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number
>qdn 5500003 --- DN: 5500003 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DP LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 00 0 04 01 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 6X17AA GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 40 PM TERMINAL NUMBER : 130 OPTIONS: DP OFFICE OPTIONS: AIN LNPOFFICE

Provisioning the line with DGT option
>NEW $ 5500003 1FR LATA1 0 HOST 00 0 04 01 DGT $ y y COMMAND AS ENTERED: NEW NOW 0 6 14 AM 5500003 1FR LATA1 0 HOST 00 0 04 01 (DGT) $ MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED

Query the Directory Number

```
>qdn 5500003
------------------------------------------------------------------------------
DN:     5500003
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DGT
OFFICE OPTIONS:
AIN LNPOFFICE
```

60.3.1.3 ADD command

60.3.1.3.1 Existing behavior

Adding a member without any option

```
>add $ dnh 9509151 5500003 HOST  00 0 04 01 $ $ 5 y y
COMMAND AS ENTERED:
ADD NOW 0 6 19 AM DNH 9509151 ( 5500003 HOST 00 0 04 01 ) $ $ 5
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory Number

```
>qdn 5500003
------------------------------------------------------------------------------
DN:     5500003
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 909   SIG: DP    LNATTIDX: 42
HUNT GROUP:  1001       HUNT MEMBER:  1
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS: NONE
PILOT DN:      9099509151
GROUP OPTIONS:
RCVD
```

Adding a member with DGT option

```
>add $ dnh 9509151 5500003 HOST  00 0 04 01 $ dgt $ 5 y y
COMMAND AS ENTERED:
ADD NOW 0 6 19 AM DNH 9509151 ( 5500003 HOST 00 0 04 01 ) $ ( DGT ) $ 5
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory number

```
>qdn 5500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 909   SIG: DT    LNATTIDX: 42
HUNT GROUP:  1001        HUNT MEMBER:  1
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DGT
OFFICE OPTIONS:
AIN LNPOFFICE
PILOT DN:      9099509151
GROUP OPTIONS:
RCVD

--------------------------------------------------------------------------------
```

60.3.1.3.2 Desired behavior

DEFAULT_SIGNALLING_TYPE = DP

Adding a member without any option

```
>add $ dnh 9509151 5500003 HOST  00 0 04 01 $ $ 5 y y
COMMAND AS ENTERED:
ADD NOW 0 6 19 AM DNH 9509151 ( 5500003 HOST 00 0 04 01 ) $ $ 5
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory Number

```
>qdn 5500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 909   SIG: DP    LNATTIDX: 42
HUNT GROUP:  1001       HUNT MEMBER:  1
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DP
PILOT DN:      9099509151
GROUP OPTIONS:
RCVD
```

Adding a member with DGT option

```
>add $ dnh 9509151 5500003 HOST  00 0 04 01 $ dgt $ 5 y y
COMMAND AS ENTERED:
ADD NOW 0 6 19 AM DNH 9509151 ( 5500003 HOST 00 0 04 01 ) $ ( DGT ) $ 5
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory number

```
>qdn 5500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 909   SIG: DT    LNATTIDX: 42
HUNT GROUP:  1001       HUNT MEMBER:  1
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DGT
OFFICE OPTIONS:
AIN LNPOFFICE
PILOT DN:      9099509151
GROUP OPTIONS:
RCVD

--------------------------------------------------------------------------------
```

DEFAULT_SIGNALLING_TYPE = DT

Adding a member without any option

```
>add $ dnh 9509151 5500003 HOST  00 0 04 01 $ $ 5 y y
COMMAND AS ENTERED:
ADD NOW 0 6 19 AM DNH 9509151 ( 5500003 HOST 00 0 04 01 ) $ $ 5
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory number

```
>qdn 5500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 909   SIG: DT    LNATTIDX: 42
HUNT GROUP:  1001       HUNT MEMBER:  1
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DGT
OFFICE OPTIONS:
AIN LNPOFFICE
PILOT DN:      9099509151
GROUP OPTIONS:
RCVD

--------------------------------------------------------------------------------
```

Adding a member with DP option

```
>add $ dnh 9509151 5500003 HOST  00 0 04 01 $ dp $ 5 y y
COMMAND AS ENTERED:
ADD NOW 0 6 19 AM DNH 9509151 ( 5500003 HOST 00 0 04 01 ) $ ( DP ) $ 5
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  00 0 04 01 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory number

```
>qdn 5500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 909   SIG: DP    LNATTIDX: 42
HUNT GROUP:  1001        HUNT MEMBER:  1
LINE EQUIPMENT NUMBER:     HOST  00 0 04 01
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AA    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    130
OPTIONS:
DP
PILOT DN:      9099509151
GROUP OPTIONS:
RCVD
```

60.3.1.3.3 EST command

60.3.1.3.4 Existing behavior

Establishing the hunt group without any option
>est $ dnh 9095500003 1fr LATA1 0 HOST 03 0 16 21 9095500004 HOST 03 0 18 15 $ $ 6 y y COMMAND AS ENTERED: EST NOW 0 6 16 AM DNH 9095500003 1FR LATA1 0 HOST 03 0 16 21 (9095500004 HOST 03 0 18 15) $ $ 6 MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED *** RETURN TO SERVICE FAILED *** LEN: HOST 03 0 16 21 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN: HOST 03 0 18 15 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number
>qdn 9095500003 --- DN: 5500003 TYPE: PILOT OF DNH HUNT GROUP SNPA: 909 SIG: DP LNATTIDX: 42 HUNT GROUP: 0 HUNT MEMBER: 0 LINE EQUIPMENT NUMBER: HOST 03 0 16 21 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 6X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 40 PM TERMINAL NUMBER : 534 OPTIONS: NONE GROUP OPTIONS: RCVD MEMBER INFO: 1 9095500004

Establishing the hunt group with DGT option

```
>est $ dnh 9095500003 1fr LATA1 0 HOST  03 0 16 21 9095500004 HOST  03 0 18
15 $ dgt $ 6 y y
COMMAND AS ENTERED:
EST NOW 0 6 16 AM DNH 9095500003 1FR LATA1 0 HOST 03 0 16 21 (
9095500004
HOST 03 0 18 15 ) $ ( DGT ) $ 6
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  03 0 16 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  03 0 18 15 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory Number

```
>qdn 9095500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: PILOT OF DNH HUNT GROUP
SNPA: 909   SIG: DT    LNATTIDX: 42
HUNT GROUP:  0       HUNT MEMBER:  0
LINE EQUIPMENT NUMBER:     HOST  03 0 16 21
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    534
OPTIONS:
DGT
GROUP OPTIONS:
RCVD
MEMBER INFO:
  1       9095500004
```

60.3.1.3.5 Desired behavior

DEFAULT_SIGNALLING_TYPE = DP

Establishing the hunt group without any option
>est $ dnh 9095500003 1fr LATA1 0 HOST 03 0 16 21 9095500004 HOST 03 0 18 15 $ $ 6 y y COMMAND AS ENTERED: EST NOW 0 6 16 AM DNH 9095500003 1FR LATA1 0 HOST 03 0 16 21 (9095500004 HOST 03 0 18 15) $ $ 6 MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED *** RETURN TO SERVICE FAILED *** LEN: HOST 03 0 16 21 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN: HOST 03 0 18 15 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number
>qdn 9095500003 -- DN: 5500003 TYPE: PILOT OF DNH HUNT GROUP SNPA: 909 SIG: DP LNATTIDX: 42 HUNT GROUP: 0 HUNT MEMBER: 0 LINE EQUIPMENT NUMBER: HOST 03 0 16 21 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 6X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 40 PM TERMINAL NUMBER : 534 OPTIONS: DP GROUP OPTIONS: RCVD MEMBER INFO: 1 9095500004

Establishing the hunt group with DGT option

```
>est $ dnh 9095500003 1fr LATA1 0 HOST  03 0 16 21 9095500004 HOST  03 0 18
15 $ dgt $ 6 y y
COMMAND AS ENTERED:
EST NOW 0 6 16 AM DNH 9095500003 1FR LATA1 0 HOST 03 0 16 21 (
9095500004
HOST 03 0 18 15 ) $ ( DGT ) $ 6
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  03 0 16 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  03 0 18 15 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory Number

```
>qdn 9095500003
------------------------------------------------------------------------------
DN:     5500003
TYPE: PILOT OF DNH HUNT GROUP
SNPA: 909   SIG: DT    LNATTIDX: 42
HUNT GROUP:  0       HUNT MEMBER:  0
LINE EQUIPMENT NUMBER:     HOST  03 0 16 21
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    534
OPTIONS:
DGT
GROUP OPTIONS:
RCVD
MEMBER INFO:
  1       9095500004
```

DEFAULT_SIGNALLING_TYPE = DT

Establishing the hunt group without any option
>est $ dnh 9095500003 1fr LATA1 0 HOST 03 0 16 21 9095500004 HOST 03 0 18 15 $ $ 6 y y COMMAND AS ENTERED: EST NOW 0 6 16 AM DNH 9095500003 1FR LATA1 0 HOST 03 0 16 21 (9095500004 HOST 03 0 18 15) $ $ 6 MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED *** RETURN TO SERVICE FAILED *** LEN: HOST 03 0 16 21 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN: HOST 03 0 18 15 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number
>qdn 9095500003 --- DN: 5500003 TYPE: PILOT OF DNH HUNT GROUP SNPA: 909 SIG: DT LNATTIDX: 42 HUNT GROUP: 0 HUNT MEMBER: 0 LINE EQUIPMENT NUMBER: HOST 03 0 16 21 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 6X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 40 PM TERMINAL NUMBER : 534 OPTIONS: DGT GROUP OPTIONS: RCVD MEMBER INFO: 1 9095500004

Establishing the hunt group with DP option

```
>est $ dnh 9095500003 1fr LATA1 0 HOST  03 0 16 21 9095500004 HOST  03 0 18
15 $ dp $ 6 y y
COMMAND AS ENTERED:
EST NOW 0 6 16 AM DNH 9095500003 1FR LATA1 0 HOST 03 0 16 21 (
9095500004
HOST 03 0 18 15 ) $ ( DP ) $ 6
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  03 0 16 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
 *** RETURN TO SERVICE FAILED ***
LEN : HOST  03 0 18 15 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Directory Number

```
>qdn 9095500003
--------------------------------------------------------------------------------
DN:     5500003
TYPE: PILOT OF DNH HUNT GROUP
SNPA: 909   SIG: DP    LNATTIDX: 42
HUNT GROUP:  0       HUNT MEMBER:  0
LINE EQUIPMENT NUMBER:     HOST  03 0 16 21
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  6X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    40
PM TERMINAL NUMBER :    534
OPTIONS:
DP
GROUP OPTIONS:
RCVD
MEMBER INFO:
  1      9095500004
```

60.3.1.4 EXBADD command

60.3.1.4.1 Existing behavior

Query the Directory Number

```
>qdn 6136210018
--------------------------------------------------------------------------------
DN:     6210018     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 18
PRIMARY LEN:  RCU0  00 0 00 18
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    19
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 18           EXB   PRIMARY: Y   RING: ALWAYS
```

Adding the secondary len

```
>exbadd $ 6210018 RCU0  00 0 00 21 n $ n y y

GROUP MEMBER LIST:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:


COMMAND AS ENTERED:
EXBADD NOW 0 6 18 AM 6210018 (RCU0 00 0 00 21 N) $ N
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN: RCU0  00 0 00 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Line Equipment Number

```
>qlen RCU0  00 0 00 21
-------------------------------------------------------------------------------
LEN:    RCU0  00 0 00 21
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613
DIRECTORY NUMBER:    6210018            (NON-UNIQUE)
LINE CLASS CODE:     1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:N  RING:NEVER
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
SIGNALLING TYPE:  DIAL PULSE
LINE TREATMENT GROUP:    0
LINE ATTRIBUTE INDEX:    0
CARDCODE:  3A06BD   GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER    :   56
PM TERMINAL NUMBER :   22
OPTIONS: NONE
RES OPTIONS: NONE
```

Adding the DGT option to the secondary len

```
>exbadd $ 6210018 RCU0  00 0 00 21 n dgt $ n y y

GROUP MEMBER LIST:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:


COMMAND AS ENTERED:
EXBADD NOW 0 6 18 AM 6210018 (RCU0 00 0 00 21 N) $ N
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN: RCU0  00 0 00 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Line Equipment Number

```
>qlen RCU0  00 0 00 21
----------------------------------------------------------------------------
LEN:     RCU0  00 0 00 21
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613
DIRECTORY NUMBER:     6210018              (NON-UNIQUE)
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:N  RING:NEVER
CUSTGRP:         RESGRP  SUBGRP:0  NCOS: 2
SIGNALLING TYPE: DIGITONE
LINE TREATMENT GROUP:     0
LINE ATTRIBUTE INDEX:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    22
OPTIONS:
DGT
RES OPTIONS: NONE
```

60.3.1.4.2 Desired behavior

DEFAULT_SIGNALLING_TYPE = DP

Adding the secondary len without any option

>exbadd $ 6210018 RCU0 00 0 00 21 n $ n y y
 	
GROUP MEMBER LIST:
  PRIMARY LEN - RCU0 00 0 00 18
  SECONDARY LENS:
 	
COMMAND AS ENTERED:
EXBADD NOW 0 6 18 AM 6210018 (RCU0 00 0 00 21 N) $ N
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
  *** RETURN TO SERVICE FAILED ***
LEN: RCU0 00 0 00 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE

Query the Line Equipment Number

```
>qlen RCU0  00 0 00 21
-------------------------------------------------------------------------------
LEN:     RCU0  00 0 00 21
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613
DIRECTORY NUMBER:     6210018              (NON-UNIQUE)
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:N  RING:NEVER
CUSTGRP:         RESGRP  SUBGRP:0  NCOS: 2
SIGNALLING TYPE:  DIAL PULSE
LINE TREATMENT GROUP:     0
LINE ATTRIBUTE INDEX:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    22
OPTIONS:
DP
RES OPTIONS: NONE
```

Adding the DGT option to the secondary len

```
>exbadd $ 6210018 RCU0  00 0 00 21 n dgt $ n y y

GROUP MEMBER LIST:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:


COMMAND AS ENTERED:
EXBADD NOW 0 6 18 AM 6210018 (RCU0 00 0 00 21 N) $ N
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN: RCU0  00 0 00 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Line Equipment Number

```
>qlen RCU0  00 0 00 21
------------------------------------------------------------------------------
LEN:     RCU0  00 0 00 21
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613
DIRECTORY NUMBER:     6210018              (NON-UNIQUE)
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:N  RING:NEVER
CUSTGRP:         RESGRP  SUBGRP:0  NCOS: 2
SIGNALLING TYPE: DIGITONE
LINE TREATMENT GROUP:     0
LINE ATTRIBUTE INDEX:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    22
OPTIONS:
DGT
RES OPTIONS: NONE
```

DEFAULT_SIGNALLING_TYPE = DT

Adding the secondary len without any option

```
>exbadd $ 6210018 RCU0  00 0 00 21 n $ n y y

GROUP MEMBER LIST:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:


COMMAND AS ENTERED:
EXBADD NOW 0 6 18 AM 6210018 (RCU0 00 0 00 21 N) $ N
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN: RCU0  00 0 00 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Line Equipment Number

```
>qlen RCU0  00 0 00 21
----------------------------------------------------------------------------
LEN:     RCU0  00 0 00 21
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613
DIRECTORY NUMBER:     6210018              (NON-UNIQUE)
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:N  RING:NEVER
CUSTGRP:         RESGRP  SUBGRP:0  NCOS: 2
SIGNALLING TYPE: DIGITONE
LINE TREATMENT GROUP:     0
LINE ATTRIBUTE INDEX:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    22
OPTIONS:
DGT
RES OPTIONS: NONE
```

Adding the DP option to the secondary len

```
>exbadd $ 6210018 RCU0  00 0 00 21 n dp $ n y y

GROUP MEMBER LIST:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:


COMMAND AS ENTERED:
EXBADD NOW 0 6 18 AM 6210018 (RCU0 00 0 00 21 N) $ N
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
 *** RETURN TO SERVICE FAILED ***
LEN: RCU0  00 0 00 21 *** CHECK LINE STATUS ***
FAILED TO RETURN LINE TO SERVICE
```

Query the Line Equipment Number

```
>qlen RCU0  00 0 00 21
------------------------------------------------------------------------------
LEN:     RCU0  00 0 00 21
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613
DIRECTORY NUMBER:     6210018             (NON-UNIQUE)
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:N  RING:NEVER
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
SIGNALLING TYPE:  DIAL PULSE
LINE TREATMENT GROUP:     0
LINE ATTRIBUTE INDEX:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    22
OPTIONS:
DP
RES OPTIONS: NONE
```

60.3.1.5 EXBEST Command

60.3.1.5.1 Existing behavior

Creating an exb group without any option
>exbest $ 6210017 RCU0 00 0 00 18 y RCU0 00 0 00 21 y $ y y y Primary LEN is RCU0 00 0 00 17 COMMAND AS ENTERED: EXBEST NOW 0 6 19 AM 6210017 (RCU0 00 0 00 18 Y) (RCU0 00 0 00 21 Y) $ Y There is a RES specific option in the option set. Line will become a RES line. MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED ATTEMPT TO SEIZE THE LINE FAILED LEN : RCU0 00 0 00 17 *** CHECK LINE STATUS *** *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 17 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 18 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 21 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DP    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS: NONE
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

60.3.1.5.2 Desired behavior

DEFAULT_SIGNALLING_TYPE = DP

Creating an exb group without any option
>exbest $ 6210017 RCU0 00 0 00 18 y RCU0 00 0 00 21 y $ y y y Primary LEN is RCU0 00 0 00 17 COMMAND AS ENTERED: EXBEST NOW 0 6 19 AM 6210017 (RCU0 00 0 00 18 Y) (RCU0 00 0 00 21 Y) $ Y There is a RES specific option in the option set. Line will become a RES line. MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED ATTEMPT TO SEIZE THE LINE FAILED LEN : RCU0 00 0 00 17 *** CHECK LINE STATUS *** *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 17 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 18 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 21 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number

```
>qdn 6210017
------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DP    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DP
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

DEFAULT_SIGNALLING_TYPE = DT

Creating an exb group without any option
>exbest $ 6210017 RCU0 00 0 00 18 y RCU0 00 0 00 21 y $ y y y Primary LEN is RCU0 00 0 00 17 COMMAND AS ENTERED: EXBEST NOW 0 6 19 AM 6210017 (RCU0 00 0 00 18 Y) (RCU0 00 0 00 21 Y) $ Y There is a RES specific option in the option set. Line will become a RES line. MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED ATTEMPT TO SEIZE THE LINE FAILED LEN : RCU0 00 0 00 17 *** CHECK LINE STATUS *** *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 17 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 18 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE *** RETURN TO SERVICE FAILED *** LEN : RCU0 00 0 00 21 *** CHECK LINE STATUS *** FAILED TO RETURN LINE TO SERVICE

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

60.3.1.6 ADO Command

60.3.1.6.1 Existing behavior

Presently, when DGT option is added to a line with DP signalling type, the signalling type changes to DT. To change the signalling type from DT to DP, DGT option has to be removed from the line.

Query the Directory Number
>qdn 5500004 --- DN: 5500004 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DP LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 06 0 04 00 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 2X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 51 PM TERMINAL NUMBER : 129 OPTIONS: NONE

Adding the DGT option using ADO command
>ado $ 5500004 dgt $ y y COMMAND AS ENTERED: ADO NOW 0 6 19 PM 5500004 (DGT) $ MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED

Query the Directory Number

```
>qdn 5500004
------------------------------------------------------------------------------
DN:     5500004
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  06 0 04 00
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  2X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    51
PM TERMINAL NUMBER :    129
OPTIONS:
DGT
```

60.3.1.6.2 Desired behavior

When DGT option is added to a line with DP signalling type, the signalling type changes to DT. To change the signalling type from DT to DP, add DP option to the line and vice versa. Option DP is also displayed in the options list in query commands just like DGT option.

Query the Directory Number

```
>qdn 5500004
------------------------------------------------------------------------------
DN:     5500004
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DP    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  06 0 04 00
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  2X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    51
PM TERMINAL NUMBER :    129
OPTIONS:
DP
```

Adding the DGT option using ADO command

```
>ado $ 5500004 dgt $ y y
COMMAND AS ENTERED:
ADO NOW 0 6 19 PM 5500004 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 5500004
--------------------------------------------------------------------------------
DN:     5500004
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  06 0 04 00
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  2X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    51
PM TERMINAL NUMBER :    129
OPTIONS:
DGT
```

Adding the DP option using ADO command

```
>ado $ 5500004 dp $ y y
COMMAND AS ENTERED:
ADO NOW 0 6 19 PM 5500004 ( DP ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number
>qdn 5500004 --- DN: 5500004 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DP LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 06 0 04 00 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 2X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 51 PM TERMINAL NUMBER : 129 OPTIONS: DP

60.3.1.7 DEO Command

60.3.1.7.1 Existing behavior

Presently to change the signalling type of a line from DT to DP, DGT option is deleted from the line using DEO command. To convert the signalling type of line from DP to DT, DGT option should be added to the line using ADO command.

Query the Directory Number

```
>qdn 5500004
------------------------------------------------------------------------------
DN:     5500004
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DT    LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  06 0 04 00
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  2X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    51
PM TERMINAL NUMBER :    129
OPTIONS:
DGT
```

Deleting DGT option using DEO command

```
>deo $ 5500004 dgt $ y y
COMMAND AS ENTERED:
DEO NOW 0 6 19 PM 5500004 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number
>qdn 5500004 ---------- DN: 5500004 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DP LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 06 0 04 00 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 2X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 51 PM TERMINAL NUMBER : 129 OPTIONS: NONE

60.3.1.7.2 Desired behavior

To change the signalling type from DT to DP, DGT option is deleted from the line using DEO command. The signalling type of the line can also be converted from DP to DT by deleting the DP option from the line.

Query the Directory Number
>qdn 5500004 ---------- DN: 5500004 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DT LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 06 0 04 00 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 2X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 51 PM TERMINAL NUMBER : 129 OPTIONS: DGT

Deleting the DGT option using DEO command

```
>deo $ 5500004 dgt $ y y
COMMAND AS ENTERED:
DEO NOW 0 6 19 PM 5500004 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 5500004
------------------------------------------------------------------------------
DN:     5500004
TYPE: SINGLE PARTY LINE
SNPA: 909   SIG: DP LNATTIDX: 42
LINE EQUIPMENT NUMBER:     HOST  06 0 04 00
LINE CLASS CODE:      1FR
LINE TREATMENT GROUP:     0
CARDCODE:  2X17AC    GND: N  PADGRP: STDLN  BNV: NL MNO: N
PM NODE NUMBER     :    51
PM TERMINAL NUMBER :    129
OPTIONS:
DP
```

Deleting the DP option using DEO command

```
>deo $ 5500004 dp $ y y
COMMAND AS ENTERED:
DEO NOW 0 6 19 PM 5500004 ( DP ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number
>qdn 5500004 --- DN: 5500004 TYPE: SINGLE PARTY LINE SNPA: 909 SIG: DT LNATTIDX: 42 LINE EQUIPMENT NUMBER: HOST 06 0 04 00 LINE CLASS CODE: 1FR LINE TREATMENT GROUP: 0 CARDCODE: 2X17AC GND: N PADGRP: STDLN BNV: NL MNO: N PM NODE NUMBER : 51 PM TERMINAL NUMBER : 129 OPTIONS: DGT

60.3.1.8 EXBADO Command

60.3.1.8.1 Existing behavior

To change the signalling type of EXB group from DP to DT, DGT option is to be added. To change the signalling type from DT to DP,DGT option should be removed.

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DP    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS: NONE
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Adding the DGT option using EXBADO command

```
>exbado $ 6210017 dgt $ y y

ADD OPTIONS TO:
  PRIMARY LEN - RCU0  00 0 00 17
  SECONDARY LENS:
    RCU0  00 0 00 21, RCU0  00 0 00 18,

COMMAND AS ENTERED:
EXBADO NOW 0 6 19 AM 6210017 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 6210017
------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

60.3.1.8.2 Desired behavior

To change the signalling type from DT to DP, DP option is to be added and DP option also displayed under options list in query commands. If DGT option is added to the line with signalling type as DP, then signalling type will change to DT.

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:    6210017    (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :   56
PM TERMINAL NUMBER :    18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Adding the DP option using EXBADO command

```
>exbado $ 6210017 dp $ y y

ADD OPTIONS TO:
  PRIMARY LEN - RCU0  00 0 00 17
  SECONDARY LENS:
    RCU0  00 0 00 21, RCU0  00 0 00 18,

COMMAND AS ENTERED:
EXBADO NOW 0 6 19 AM 6210017 ( DP ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DP    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DP
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Adding the DGT option using EXBADO command

```
>exbado $ 6210017 dgt $ y y

ADD OPTIONS TO:
  PRIMARY LEN - RCU0  00 0 00 17
  SECONDARY LENS:
    RCU0  00 0 00 21, RCU0  00 0 00 18,

COMMAND AS ENTERED:
EXBADO NOW 0 6 19 AM 6210017 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

60.3.1.9 EXBDEO Command

60.3.1.9.1 Existing behavior

To change the signalling type from DT to DP, DGT option is to be removed.

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:    6210017    (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT LNATTIDX: 0
LINE EQUIPMENT NUMBER:    RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:     1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:       RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:    0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER    :   56
PM TERMINAL NUMBER :   18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Deleting the DGT option using EXBDEO command

```
>exbdeo $ 6210018 dgt $ y y

DELETE OPTIONS FROM:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:
    RCU0  00 0 00 21,

COMMAND AS ENTERED:
EXBDEO NOW 0 6 19 AM 6210018 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DP    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS: NONE
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

60.3.1.9.2 Desired behavior

To change the signalling type from DT to DP, DGT option is to be removed and DP option will be displayed under the options list in the query commands. The signalling type can be changed from DP to DT by deleting DP option.

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Deleting the DGT option using EXBDEO command

```
>exbdeo $ 6210018 dgt $ y y

DELETE OPTIONS FROM:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:
    RCU0  00 0 00 21,

COMMAND AS ENTERED:
EXBDEO NOW 0 6 19 AM 6210018 ( DGT ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 6210017
--------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DP    LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DP
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Deleting the DP option using EXBDEO command

```
>exbdeo $ 6210018 dp $ y y

DELETE OPTIONS FROM:
  PRIMARY LEN - RCU0  00 0 00 18
  SECONDARY LENS:
    RCU0  00 0 00 21,

COMMAND AS ENTERED:
EXBDEO NOW 0 6 19 AM 6210018 ( DP ) $
MACHINES ARE OUT OF SYNC, SERVICE ORDERS NOT ALLOWED
JOURNAL FILE IS INACTIVE, SERVICE ORDERS NOT ALLOWED
```

Query the Directory Number

```
>qdn 6210017
------------------------------------------------------------------------------
DN:     6210017     (NON-UNIQUE)
TYPE: MULTIPLE APPEARANCE DIRECTORY NUMBER
SNPA: 613   SIG: DT LNATTIDX: 0
LINE EQUIPMENT NUMBER:     RCU0  00 0 00 17
PRIMARY LEN:  RCU0  00 0 00 17
LINE CLASS CODE:      1FR
IBN TYPE:  MADN
MADN INFO - TYPE:EXB  PRIMARY:Y  RING:ALWAYS
CUSTGRP:        RESGRP  SUBGRP:0  NCOS: 2
LINE TREATMENT GROUP:     0
CARDCODE:  3A06BD    GND: N  PADGRP: STDLN  BNV: NL MNO: N
CARDTYPE:  RCUEPOTS
PM NODE NUMBER     :    56
PM TERMINAL NUMBER :    18
OPTIONS:
DGT
RES OPTIONS: NONE
MADN MEMBER LENS INFO:
  RCU0  00 0 00 17          EXB   PRIMARY: Y   RING: ALWAYS
  RCU0  00 0 00 21          EXB   PRIMARY: N   RING: ALWAYS
  RCU0  00 0 00 18          EXB   PRIMARY: N   RING: ALWAYS
```

Note : The desired behavior of ADO, DEO, EXBADO and EXBDEO commands are same as described above irrespective of value of the office parameter DEFAULT_SIGNALLING_TYPE.

Office Parameters Highlights

PARM Table	PARM Name	Comments	Featid
OFCENG	IPGW_PCM_SELECTION	New	a59020499
OFCVAR	HPC_CALL_QUEUING	New	a59021972
OFCVAR	DDN_INTERNATIONAL	New	a59022041
OFCVAR	DEFAULT_SIGNALLING_TYPE	New	a59022657
OFCENG	RATED_POWER	Changed	a59024411
OFCOPT	SPM_MAX_MSGTRK_CARRIER, SPM_MAX_PRITRK_CARRIER	Deleted	a59027128
OFCENG	NUMBER_OF_EBOF_MEDIUM_AUX_BLOCKS	Deleted	s10380206
OFCAUT	NUMBER_OF_EBOF_MEDIUM_AUX_BLOCKS	Deleted	"

DMS-100 Family

North American DMS-100

Release Document Volume 2 of 2

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Publication number: PLN-8021-004
Product release: LET0015
Document issue: 13.02
Date: May 2001
Printed in the United States of America

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