Critical Release Notice

Publication number: 297-8021-351
Publication release: Standard 12.02

Attention!

****

The North America DMS-100 Data Schema Reference Manual, 297-8021-351, will continue to be updated and provided in the North America - DMS NTP collection.

****

The content of this customer NTP supports the SN09 (DMS) software release.

Bookmarks used in this NTP highlight the changes between the NA015 baseline and the SN08 (DMS) release. The bookmarks provided are color-coded to identify release-specific content changes. NTP volumes that do not contain bookmarks indicate that the NA015 baseline remains unchanged and is valid through the SN08 (DMS) release.

Bookmark Color Legend

Black: Applies to content for the NA015 baseline that is valid through the current release.

Red: Applies to new or modified content for NA017 that is valid through the current release.

Blue: Applies to new or modified content for NA018 (SN05 DMS) that is valid through the current release.

Green: Applies to new or modified content for SN06 (DMS) that is valid through the current release.

Purple : Applies to new or modified content for SN07 (DMS) that is valid through the current release.

Pink: Applies to new or modified content for the SN08 (DMS) that is valid through the current release.

Orange: Applies to new or modified content for SN09 (DMS) that is valid through the current release.

Attention!

Adobe ® Acrobat ® Reader ™ 5.0 or higher is required to view bookmarks in color.

Publication History

***Note**: Refer to the NA015 baseline document for Publication History prior to the NA017 software release.*

January 2006

Standard NTP release 12.02 for the SN09 (DMS) software release.

Volume 1

Modified data schema – AMAOPTS (A00009252)

Volume 4

Modified data schema – ESAPXLA (Q01228425-01)

Volume 6

Modified data schema – IPNETWRK (Q01215905 and Q01227402)

Volume 7

Modified data schema – LNSMTCE (Q00959081)

Volume 9

New data schema – PATHSET (modified by Q01077097)

New data schema – SBSRMINV (Q01063949)

Volume10

New data schema – SERVRINV (Q01063949)

Volume12

Deleted the term TBD, which occurred in two places in this volume.

September 2005

Preliminary NTP release 12.01 for the SN09 (DMS) software release.

Volume 1

Modified data schema – AMAOPTS (A00009252, A00009508); ANNMEMS, ANNPHLST (A00009013)

Volume 8

Modified data schema – OAFUNDEF (A00009012)

Volume 9

Modified data schema – SCAICOMS (A00009078)

Volume 11

Modified data schema – TOPSFTR (A00009012)

Volume 12

Modified data schema – TRKSGRP type ISDN (Q01112597)
Modified data schema – XPMIPMAP (A00009011)

August 2005

Standard NTP release 11.03 for the SN08 (DMS) software release.

Volume 5

Modified data schema – IBNFEAT feature SimRing

Volume 6

Modified data schema – KSETFEAT feature SimRing

Volume 7

Modified data schema – LTCINV

Volume 11

New data schema – TOPSMCDB
Modified data schema – TOPSTOPT

June 2005

Standard NTP release 11.02 for the SN08 (DMS) software release.

The following Data Schema content is updated for the SN08 (DMS) release. Content provided in this NTP is not superceded by content provided in the replacement NTP as indicated for the Preliminary release.

Volume 3

New data schema – CUSTSTN option CNDBO

Volume 4

Modified data schema – EADAS

Volume 6

New data schema – KSETINV
New data schema – LCMINV

Volume 8

New data schema – NSCDEFS
New data schema – NSCPMAP

March 2005

Preliminary NTP release 11.01 for the SN08 (DMS) software release.

The following updated Data Schema content is provided in the Carrier VoIP Operational Configuration: Data Schema Reference NTP, NN10324-509. The content provided in NTP 297-8021-351 is superseded by the content provided in NTP NN10324-509.

ACDMISPL
CGBLDADD
CGBLDDGL
CGBLDDIG
CGBLDNI
CGBLDPI
CGPNBLDR
CUSTSTN_OPTION_DBO
EDAS
IBNLINES
ISERVOPT
KSETINV
TLDSIAMAOPTS
TRKSGRP_TYPE_C7UP

The following new Data Schema content is provided in the Carrier VoIP Operational Configuration: Data Schema Reference NTP, NN10324-509. This content will not be provided in NTP 297-8021-351.

CGBLDSIN
LOGTHROT
NTPOLL

October 2005

Standard release 10.04 for software release SN07 (DMS). Updates made in the North American Data Schema Reference Manual are shown below

Volume 2

Table BEARNETS description added for CR Q01083765.

Volume 3

Table DESDATA description added for CR Q01083765.

Volume 4

Table DPTRKMEM was created as part of activity A59015739 in an earlier release. Documentation updated for CR Q01083781.

Volume 5

Table IHEADRR description added for CR Q01083765.

Volume 8

Table NET2NET description added for CR Q01083765
Table NETBRDGE description added for CR Q01083765
Table NETPATH description added for CR Q01083765

Volume 9

Table PCEMENTT was created as part of activity A00007196 in an earlier release. Documentation updated for CR Q01077110.

Table PCEMFEID was created as part of activity A00007196 in an earlier release. Documentation updated for CR Q01077137.

Table PRSUDATA description added for CR Q01083765.

Table PVDNCHAN description modified for CR Q00806759/Q01207784

Volume 10

Table SELDEFS and table SETDEFS descriptions added for CR Q01083765.

December 2004

Standard release 10.03 for software release SN07 (DMS). Updates made in the North America Data Schema Reference Manual are shown below

Volume 9

Table PECINV amended for CR Q00900178

Standard release 10.02 for software release SN07 (DMS). Updates made in the North America Data Schema Reference Manual are shown below

Volume 1

AINPRESC (new), ACDENLOG, ACDGRP, ACDLOGIN, ANNS

Volume 2

No changes

Volume 3

CMIPADDR, CUSTSTN option AINDENY

Volume 4

No changes

Volume 5

IBNFEAT feature ACD, IBNFEAT feature SUPR

Volume 6
IPAPPL (new), KSETFEAT feature SUPR, KSETFEAT feature IPCLIENT, KSETLINE feature ACD

Volume 7
No changes

Volume 8
MULTITM (new), OAFUNDEF, OANODINV

Volume 9
PADDATA, QMSMIS

Volume 10
No changes

Volume 11
TOPSFTR, TOPTDROP, TRIGINFO, TRIGITM, TRKAIN

Volume 12
No changes

September 2004

Preliminary release 10.01 for software release SN07 (DMS). Updates made in the North America Data Schema Reference Manual are shown below

Volume 1
ACDENLOG, ACDGRP, ACDLOGIN

Volume 2
AUTHCDE

Volume 3
CUSTN, CUSTN option VOWDN (new)

Volume 4
DIRPOOL2 (new), DIRPPOOL, DNROUTE, DNROUTE feature VOWDN (new)

Volume 5
IBNFEAT feature ECM, IBNXLA

Volume 6
ISUPTRK, KSETFEAT feature ECM

Volume 7
LIUINV, LTCINV, MNHSCARR, MSCIDMAP (new), MSCINMAP (new)

Volume 8
MUMRTAB

Volume 9
RESFEAT

Volume 10
TDBDAOPT, TMTMAP

Volume 11
TOLLTRKS, TOPSFTR, TOPSPARM, TOPSTLDN

Volume 12
TRKOPTS, VOWINV (new), XLABILL (new), XLACLASS (new)

March 2004

Standard release 09.03 for software release SN06 (DMS). Updates made in the North America Data Schema Reference Manual are shown below.

Volume 1
DCA references changed / made obsolete

Volume 2
CARRMTC, C7UPTMR

Volume 3
DCA references changed / made obsolete

Volume 4
DNROUTE, DNROUTE feature DISA

Volume 5-6
No changes

Volume 7
LNPOPTS, LTDATA

Volume 8
OPTOPT

Volume 9
PADDATA, RDTINV

Volume 10
SUSHELF, SYNCLK, DCA references changed / made obsolete

Volume 11-12
No changes

September 2003

Standard release 09.02 for software release SN06 (DMS). Updates made in the North America Data Schema Reference Manual are shown below.

Volume 1
No changes

Volume 2
BCCODES

Volume 3
CSEDPMAP

Volume 4
DSLIMIT, FNPACONT.RTEREF

Volume 5

HNPACONT.RTEREF, IBNFEAT feature MWT, IBNLINES option MDN, IBNLINES option STN, IBNRTE selector CND, IBNRTE selector NOT, IBNXLA, IBNXLA selector FTR type LSPKP

Volume 6
ISDNPARM, ISERVOPT, KSETLINE

Volume 7
LENLINES, LTCINV, MNMGPIP

Volume 8
OFRT selector CND, OFRT selector NOT

Volume 9
No changes

Volume 10
STDPRTCT.STDPRT selector E911

Volume 11
TODHEAD, TONES, TRKGRP E911, TRKGRP type IT

Volume 12
TRKOPTS, VFGDATA, VIRGRPS

June 2003

Preliminary release 09.01 for software release SN06 (DMS). Updates made in the North America Data Schema Reference Manual are shown below.

Volume 1
ACRTE, ALMSC, ALMSCGRP, ALMSD, ALDSDGRP, ANNAUDID (new), ANNMEMS, ANNPHLST (new)

Volume 2
No changes

Volume 3
CSEDPMAP (new), CUSTN option CFIND, DEFDATA

Volume 4
FNPACONT

Volume 5
HNPACONT, IBNFEAT feature CFIND, IBNLINES, IBNRTE selector CND, IBNRTE selector NOT

Volume 6
ISERVOPT, KSETLINE

Volume 7
LRGPINV (new), LTDATA, MNCKTPAK, MNIPPARM (new), MNNODE

Volume 8
OFRT selector CND, OFRT selector NOT

Volume 9
PADDATA, REXSCHED

Volume 10
SERVSINV, SPMECAN, SPMLDVAL (new), STDPRTCT.STDPRT selector E911

Volume 11
TODHEAD, TONES, TRKGRP E911, TRKGRP type IT

Volume 12
TRKMEM, TRKOPTS, TRKSGRP, VFGDATA, VIRTGRPS

This page is intentionally blank.

297-8021-351

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual Volume 4 of 12

Data Schema DGCODE-FTRGMEMS

LET0015 and up Standard 05.02 May 2001

NORTEL NETWORKS™

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual Volume 4 of 12

Data Schema DGCODE-FTRGMEMS

Publication number: 297-8021-351
Product release: LET0015 and up
Document release: Standard 05.02
Date: May 2001

Contents

Customer Data Schema Reference Manual Volume 4 of 12
Data Schema DGCODE-FTRGMEMS

NTP Summary Contents ix

1 Data schema tables 1-1

DGCODE 1-2
DGHEAD 1-11
DIALBACK 1-15
DIALPLAN 1-22
DIGCOL 1-39
DIGCOL type COL 1-43
DIGCOL type POTS 1-49
DIGCOL type RES 1-51
DIGCOL type RPT 1-53
DIGMAN 1-55
DIRPHOLD 1-75
DIRPPOOL 1-77
DIRPSSYS 1-88
DISTANCE 1-108
DIUAM 1-111
DIUCONN 1-114
DLCDEV 1-116
DMCTLIST 1-118
DMODEM 1-122
DNATTRS 1-125
DNBKSUR 1-136
DNBKSURI 1-139
DNCHNL 1-140
DNCODE 1-155
DNCTINFO 1-165
DNDMSB 1-169
DNDSCHED 1-172
DNFEAT 1-178
DNGRPS 1-186
DNHEAD 1-195
DNIBERT 1-203
DNINV 1-206

DNLPIC 1-212
DNOWN 1-215
DNPIC 1-217
DNREGION 1-221
DNREVXLA 1-241
DNROUTE 1-245
DNROUTE feature ACD 1-253
DNROUTE feature AIN 1-257
DNROUTE feature ASR 1-260
DNROUTE feature CFIB 1-261
DNROUTE feature D 1-264
DNROUTE feature DISA 1-265
DNROUTE feature DNTRIG 1-275
DNROUTE feature DSVC 1-277
DNROUTE feature M 1-279
DNROUTE feature MCDN 1-281
DNROUTE feature MM 1-284
DNROUTE feature MONA 1-286
DNROUTE feature RSDT 1-289
DNROUTE feature SPRING 1-293
DNROUTE feature SRA 1-294
DNROUTE feature SYN 1-300
DNROUTE feature T 1-302
DNROUTE feature UCD 1-304
DNRTE 1-307
DNRTEID 1-321
DNSCRN 1-324
DOMBILL 1-339
DPACDEV-Canada only 1-344
DPCTSCRN 1-347
DPNSSLK 1-350
DPP 1-353
DPROFILE 1-360
DPROFILE data unit type AILC 1-365
DPROFILE data unit type CCU 1-369
DPROFILE data unit type CMADO 1-371
DPROFILE data unit type DAVLC 1-373
DPROFILE data unit type HS 1-377
DPROFILE data unit type HSEXT or LSEXT 1-381
DPROFILE data unit type LS 1-385
DPROFILE data unit type MADO 1-393
DPROFILE data unit type MP 1-397
DPROFILE data unit type MPDA 1-402
DPROFILE data unit type TCU 1-406
DQMODEM 1-409
DRAMPHRS 1-412
DRAMS 1-415
DRAMTRK 1-431
DRMAPPL 1-443
DRMPOOL 1-448
DRMTRANS 1-450

DRMUSERS 1-453
DS 1-508
DSCWDTYP 1-512
DSLIMIT 1-516
DSTTABLE 1-519
DTUPRO 1-521
DUAQOPT 1-523
E911ALI 1-527
E911ESN 1-530
E911NPD 1-538
E911OFC 1-543
E911PSAP 1-549
E911RCER 1-553
E911SRDB 1-555
E911TDRT 1-558
EAACTSAN 1-560
EAANIID 1-563
EADAS 1-566
EADNMPK 1-569
EADNMTG 1-573
EADNMTGP 1-576
EAMCCSAN 1-578
EAREGN 1-580
EASAC 1-583
EASCRN 1-585
ECHCONF 1-588
ECHINV 1-592
ECHOSUP 1-596
EDRAMINV 1-599
ENCDINV 1-605
ENIMLAST 1-611
ENINV 1-614
ENSITES 1-620
ENTYPES 1-622
EOCDB 1-624
ESA 1-627
ESAHNPA 1-631
ESAPXLA 1-635
ESARTE 1-648
ESRVATTR 1-652
ESRVCAP 1-655
ETSIFEAT 1-657
EXNDAPPL 1-659
EXNDINV 1-662
FACODE 1-670
FAHEAD 1-671
FAILMSG 1-673
FARTE 1-710
FEATCNTL 1-711
FEATDESC 1-720
FGBCIC 1-724

FLEXAMA 1-726
FLEXRES 1-738
FLXCMAP 1-740
FMRESINV 1-742
FMRESUSE 1-749
FMTINV 1-752
FMTMAP 1-757
FMTSC 1-761
FNMAP 1-764
FNMAP selector ICICODE 1-771
FNMAP selector SPECL ACC 1-774
FNMAP selector SPECL ACEES 1-776
FNMAP selector SPECL AUTH 1-778
FNMAP selector SPECL AUTOD 1-780
FNMAP selector SPECL AUVAL 1-782
FNMAP selector SPECL BUZZ 1-784
FNMAP selector SPECL BVL 1-786
FNMAP selector SPECL BVT 1-788
FNMAP selector SPECL CFS 1-790
FNMAP selector SPECL CONF 1-792
FNMAP selector SPECL DND 1-794
FNMAP selector SPECL DQC 1-796
FNMAP selector SPECL DSPC 1-798
FNMAP selector SPECL GTAC 1-800
FNMAP selector SPECL GTGB 1-802
FNMAP selector SPECL GVAC 1-804
FNMAP selector SPECL GVGB 1-806
FNMAP selector SPECL LANG 1-808
FNMAP selector SPECL LOGIN 1-810
FNMAP selector SPECL MSGIND 1-812
FNMAP selector SPECL NAME 1-814
FNMAP selector SPECL NSPRG 1-816
FNMAP selector SPECL PARK 1-818
FNMAP selector SPECL POS 1-820
FNMAP selector SPECL PVNAUTH 1-822
FNMAP selector SPECL PVNRMAC 1-824
FNMAP selector SPECL PVNSRCDN 1-826
FNMAP selector SPECL SC10, SC30, SC50, SC70 or SCU 1-828
FNMAP selector SPECL SERIAL 1-830
FNMAP selector SPECL SORC 1-832
FNMAP selector SPECL TIME 1-834
FNMAP selector SPECL TRBL 1-836
FNMAP selector SPECL UNPK 1-838
FNMAP selector SPECL WC 1-840
FNMAP selector TAC 1-842
FNMAP selector TGB 1-844
FNMAP selector VAC 1-846
FNMAP selector VGB 1-848
FNPA7DIG 1-850
FNPACONT 1-852
FNPACONT.FNPACODE 1-873

FNPACONT.FNPASTS 1-877
FNPACONT.FNPASTS.RTEREF 1-887
FNPACONT.FNPASTS.STSCODE 1-888
FNPACONT.RTEREF 1-894
FPDEVINV 1-896
FPDIPINV 1-900
FRSACCCN 1-905
FRSCCTRL 1-908
FRSCIR 1-912
FRSCNEND 1-916
FRSTRKCN 1-921
FRSTRKGP 1-927
FRSTRKS 1-929
FTCODE 1-931
FTHEAD 1-932
FTRANDEV 1-933
FTRGDEFS 1-935
FTRGMEMS 1-941

NTP Summary Contents

Customer Data Schema Reference Manual Volume 1 of 12
Data Schema AABSFILT-ATTSCHED

Customer Data Schema Reference Manual Volume 2 of 12
Data Schema AUDALARM-CCVPARMS

Customer Data Schema Reference Manual Volume 3 of 12
Data Schema CDACCESS-DFINV

Customer Data Schema Reference Manual Volume 4 of 12
Data Schema DGCODE-FTRGMEMS

Customer Data Schema Reference Manual Volume 5 of 12
Data Schema FTRGOPTS-INWTMAP

Customer Data Schema Reference Manual Volume 6 of 12
Data Schema IOC-LENFEAT feature WML

Customer Data Schema Reference Manual Volume 7 of 12
Data Schema LENLINES-MSRTAB

Customer Data Schema Reference Manual Volume 8 of 12
Data Schema MTAHORIZ-OPTOPT

Customer Data Schema Reference Manual Volume 9 of 12
Data Schema OQCQPROF-SCALLTAB

Customer Data Schema Reference Manual Volume 10 of 12
Data Schema SCCPTMR-TMZONE

Customer Data Schema Reference Manual Volume 11 of 11

Data Schema TODHEAD-TRKGRP type NU

Customer Data Schema Reference Manual Volume 12 of 12

Data Schema TRKGRP type OC-ZONEORDR

1 Data schema tables

The following pages contain the data schema tables.

DGCODE

Table name

Digit Analysis Code Table

Functional description of table DGCODE

Table DGCODE contains the digit analysis data that applies to speci ed types of calls. The following determines the type of digit analysis that the system performs:

- digit analysis index name (DGNAME) for the originating line or trunk
- rst one or tw o digits dialed

If table DGCODE does not contain digit analysis data for the call, the default values speci ed in table DGHEAD apply . When this condition occurs, the DGNAME and rst one or tw o digits dialed do not index a tuple. The DGNAME and rst one or tw o digits dialed do not index a tuple that corresponds in table DGCODE. In all other conditions, table DGCODE speci es one of the types of digit analysis described belo w.

Collect a xed number of digits Digit analysis collects a speci ed number of digits and the digits that index this table. Digit collection stops if the system dials a speci ed stop digit.

Collect in two step Digit analysis collects a speci ed number of digits and the digits that index this table. The system enables overlap signaling.

Continues Digit analysis continues with another DGNAME that this table speci es.

Collect a range of digits Digit analysis collects a speci ed minimum number of digits. Collection stops when one of the following conditions occur:

- the digit analysis collects the speci ed maximum number of digits
- the time-out exceeds the speci ed time-out
- the system dials a speci ed stop digit

Report Digit analysis reports on the digits collected at this time.

Refer to table DGHEAD for related information.

Data ll sequence

Enter data into table DGHEAD before you enter data into table DGCODE.

Table size

0 to 600 tuples

The number of tuples with a minimum of two digits in elds FR OMD and TOD determines the maximum number of tuple. The storage available for this table also determines the number of tuples. The storage available for this table is in the extended multiprocessor system (XMS)-based peripheral module (XPM).

CAUTION

Possibility of dropped calls

When the system deletes a tuple from table DGCODE, the status of the PCM30 line group controllers (PLGC) changes. The status of the PLGC changes from in-service (.) to in-service trouble (ISTb). The system can drop calls.

The addition or deletion of tuples in table DGCODE affects the static data in PLGC peripheral modules (PM). When the system deletes a tuple from table DGCODE, the status of the PLGC goes to in-service-trouble. The fault description is static data.

To add or delete tuples in table DGCODE with minimum impact to call processing on the DMS switch, perform the following steps:

1. Select a low-traf c time period to perform data changes.
2. Add or delete the required tuples for table DGCODE.
3. Perform two warm restart switch of activity (WARMSWACT) operations on all PLGCs in the central of ce.

The WARMSWACT action reloads the static data in the PLGC to clear the ISTb condition. This action occurs twice to allow the static data in plane 0 and plane 1 of each PLGC to load.

If you do not use caution, the PLGCs can drop calls.

Field descriptions

Field names, sub eld names, and correct data ranges for table DGCODE appear in the following table.

DGCODE (continued)

Field descriptions for table DGCODE (Sheet 1 of 2)

Field or subfield	Entry	Description
DGCLKEY	see subfields	*Digit analysis key*. This field contains subfields DGNAME, FROMD, and TOD.
DGNAME	alphanumeric (a maximum of eight characters) or NIL	*Digit analysis index name*. Enter the digit analysis index name. This index name must also appear in field DGNAME of table DGHEAD. Field DGCLNAME in table LINEATTR refers to the DGNAME entered here. Fields DGCLSEL(CONT).DGNAME and DGCLSEL(COL2STEP).DGNAME in table DGCODE refer to the DGNAME entered here. For non-international offices, enter NIL.
FROMD	oneortwodigits (0 to 9, B, or C)	*From digits*. Fields FROMD and TOD specify the range of digits that require a specified type of analysis. Enter the first one or the first two digits of the range.
TOD	oneortwodigits (0 to 9, B, or C)	*To digits* Enter the last one or the last two digits of the range. Fields FROMD and TOD must have the same number of digits.

DGCODE (continued)

Field descriptions for table DGCODE (Sheet 2 of 2)

Field or subfield	Entry	Description
DATA	see subfield	*Digit analysis data*. This field contains subfield DGCLSEL.
DGCLSEL	COLL COL2STEP CONT RAN or REP	*Digit analysis selector* Select the type of digit analysis required for the specified range of digits. Enter COLL to collect a fixed number of dialed digits. Enter refinements NUMDGTS and STOPDGT as described on page 5. If the tuple specifies stop digits, digit collection stops when the system dials a stop digit. Enter COL2STEP to enable overlap signaling for the specified range of digits. Enter refinements COLNREP and DGNAME as described on page 5Section , "DGCLSEL = COLL" on page -6. Enter CONT to continue digit analysis that another tuple in this table specifies. Enter refinements DGNAME, REPORT, and DIALTONE as described on page 5Section , "DGCLSEL = COLL" on page -6. Enter RAN to collect a specified minimum and a specified maximum number of digits. Enter refinements MINDGTS, MAXDGTS, IDGTTMO, and STOPDGT as described on page 7Section , "DGCLSEL = RAN" on page -8. If the tuple specifies stop digits, digit collection stops when the system dials a stop digit. Enter REP to report the digits collected thus far and no others. This forces the digits collected to be complete. This table does not require additional datafill.

DGCODE (continued)

DGCLSEL = COLL

If the entry in sub eld DGCLSEL is COLL, enter re nements NUMDGTS, and STOPDGT. These re nements appear in the follo wing table.

Conditional data ll f or table DGCODE

Field or subfield	Entry	Description
NUMDGTS	1 to 24	*Number of digits to collect*. Enter the number of digits to collect and the number collected at this time.
STOPDGT	vector of a maximum of 12 digits (0 to 9, B, C) or N	*Stop digit* Enter the stop digit or digits. Each stop digit (0 to 9, B, C) specified here stops digit collection when dialed. Enter N if a stop digit is not necessary.

DGCLSEL = COL2STEP

If the entry in sub eld DGCLSEL is COL2STEP , enter re nements COLNREP and DGNAME. These re nements appear in the follo wing table.

Conditional data ll f or table DGCODE

Field or subfield	Entry	Description
COLNREP	1 to 24	*Collect and report*. Enter the number of digits to collect and the number collected at this time before the analysis reports the digits.
DGNAME	alphanumeric (a maximum of eight characters)	*Digit analysis index name* Enter the digit analysis index name. The digit analysis continues with this index name.

DGCLSEL = CONT

If the entry in sub eld DGCLSEL is CONT , enter re nements DGN AME, REPORT, and DIALTONE. These re nements appear in the following table.

Conditional data ll f or table DGCODE

Field or subfield	Entry	Description
DGNAME	alphanumeric (a maximum of 8 characters)	*Digit analysis index name*. Enter the digit analysis index name. The digit analysis continues with this index name.
REPORT	Y or N	*Report collected digits* Enter Y (yes) to report the digits collected at this time before the digit analysis continues. Enter N (no) for all other conditions.
DIALTONE	NORM SPEC NONE or SPEC2	*Dial tone* Specify the type of dial tone to connect to the originating line before the analysis continues. Enter NORM for normal dial tone, SPEC for a special dial tone, or NONE if dial tone is not necessary. Enter SPEC2 to return the international second dial tone in offices with feature AE0448 (Moroccan Tones). The international second dial tone is a complex periodic tone that contains four tones repeated each 500 ms, as follows: • 440-Hz tone for 500 ms • 590-Hz tone for 300 ms • 740-Hz tone for 200 ms • 660-Hz tone for 500 ms • idle tone for 500 ms ***Note:*** The DIALTONE option is for dial pulse (DP) trunks only.

DGCODE (continued)

DGCLSEL = RAN

If then entry in sub eld is RAN, enter re nements MINDGTS, MAXDGTS, IDGTTMO, and STOPDGT. These re nements appear in the following table.

Conditional data ll f or table DGCODE

Field or subfield	Entry	Description
MINDGTS	1 to 24	*Minimum number of digits to collect*. Enter the minimum number of digits to collect. Enter the number of digits collected at this time.
MAXDGTS	1 to 24	*Maximum number of digits to collect*. Enter the maximum number of digits to collect. Enter the number of digits collected at this time.
IDGTTMO	1 to 30	*Interdigit time-out*. Enter the maximum time to wait between digits after the analysis collects the minimum number of digits. Enter the time in seconds.
STOPDGT	vector of a maximum of 12 digits (0 to 9, B, C) or N	*Stop digit*. Enter the stop digit or digits. Each stop digit (0 to 9, B, C) specified here stops the digit collection when dialed. Enter N if a stop digit is not necessary.

Data ll e xample

This section describes two examples of data ll for the digit analysis tables DGHEAD and DGCODE.

Example 1

To provide background information for example 1, the dial plan for Anguilla appears in the following table.

(Sheet 1 of 2)

Type of call	Number of digits
Local calls	Four digits
Calls in Caribbean area (numbering plan area [NPA] 809)	0 + 1 + seven digits
Calls outside NPA 809, but in world numbering zone 1	0 + 1 + ten digits

(Sheet 2 of 2)

Type of call	Number of digits
International calls outside zone 1	0 + country code + national significant number
Special codes	999 emergency 1XX (for example, 100 is the operator)

In the following example, table DGHEAD speci es 15 s as the maximum time to wait for the rst dialed digit. If table DGCODE does not contain the rst digits dialed, the digit analysis collects four digits by default. Table DGHEAD speci es that the maximum w ait time between digits is 10 s.

The rst digits dialed can be 0 followed by 1. If the system dials these digits, the digit analysis collects a minimum of seven digits and a maximum of ten digits. Table DGCODE speci es the collection of these digits. After the analysis collects seven digits, the maximum time to wait between digits changes from 10 s to 5 s.

If the rst digit that the system dials is a 1, the digit is one of the service codes. A service code can be 100 for the operator. The analysis collects two additional digits.

MAP example for table DGHEAD

```
   DGNAME  INITTMO  IDGTTMO  NUMDGTS      STOPDGT  DTONE  DGTYPE
_____________________________________________________________________
  NTRS02       20       10        7            C  NORM   LINE

  NATIONAL     10        5        8            C  NORM   LINE
```

Example 2

To provide background information for example 2, the dial plan for Turkey appears in the following table.

(Sheet 1 of 2)

Type of call	Number of digits
local calls	four to seven digits (according to the office)
national calls	9 + dial tone + eight digits

DGCODE (end)

(Sheet 2 of 2)

Type of call	Number of digits
international calls	9 + dial tone + 9 + 4 to 13 digits
special codes	0 + one digit 77 (for hospital - Istanbul only)

In the following example, if table LINEATTR speci es NTRS02 as the index to the digit analysis tables, table DGHEAD speci es 20s. T able DGHEAD speci es 20 s as the maximum time to w ait for the rst digit dialed.

If table DGCODE does not contain the rst digits dialed for eld DGNAME = NTRS02, the digit analysis collects seven digits. Table DGHEAD speci es that the maximum wait time between digits is 10 s.

If 0 is the rst digit dialed, the digit analysis collects only one additional digit. Table DGCODE speci es the additional digit.

If the rst tw o digits dialed are 77, this is a call to the hospital. The digit analysis reports the call immediately. Each area has a code for the hospital. The code for Istanbul is 77.

If 9 is the rst digit dialed, the system connects the special dial tone. The tuple with eld DGNAME set to NATIONAL speci es the next action. If another 9 is the next digit dialed, the digit analysis collects between 4 to 13 additional digits. If 9 is not the next digit dialed, the digit analysis collects a total of eight additional digits. The tuple with eld DGN AME set to NATIONAL in table DGHEAD speci es this action.

MAP example for table DGCODE

```
        DGCLKEY                                  DATA
_____________________________________________________

NTRS02     0  0                          COLL 1 C

NTRS02    77 77                               REP

NTRS02     9  9                CONT NATIONAL N SPEC

NATIONAL   9  9                         RAN 4 13 5 C
```

DGHEAD

Table name

Digit Analysis Head Table

Overview

Tables DGHEAD and DGCODE provide the universal digit analysis system in DMS international.

The following can use the universal digit analysis tables:

- a line
- a trunk of a trunk group type OPR (international with operator)
- a trunk of a trunk group type MTR (international with metering)

The line attribute index can associate a line originates a call with a speci ed type of digit analysis.

To associate a line, the line attribute index selects the tuple. The line attrubute index selects the tuple that applies to the line in table LINEATTR. The entry in eld DGCLNAME of table LINEATTR indicates entries that match in eld DGNAME of tables DGHEAD and DGCODE. These entries indicate the digit analysis data that applies to the originating line.

The common language location identi er (CCLI) of the trunk group can associate a trunk that originates a call with a speci ed type of digit analysis. The CLLI associates a trunk of trunk group OPR or MTR that originates a call with a speci ed type of digit analysis. The CLLI selects the tuple that applies to the trunk in table TRKGRP. The entry in eld GRPTYP(MTR|OPR).DIRSEL.DIR(IC).DGNAME of table TRKGRP indicates entries that match in eld DGN AME of tables DGHEAD and DGCODE. This procedure selects the digit analysis data that applies to the originating trunk.

Table DGCODE speci es the type of digit analysis to perform for each originating line or trunk. The type of digit analysis depends on the actual digits dialed. The rst one or two digits dialed on the line or trunk indexes the tuple in table DGCODE. This tuple contains the digit analysis. If a tuple in table DGCODE does not correspond to the rst one or two digits dialed, the defaults speci ed in table DGHEAD apply. Table DGCODE contains only digits that require a special type of analysis.

DGHEAD (continued)

Functional description of table DGHEAD

Table DGHEAD speci es the following default values for the originating line or trunk associated with each digit analysis index name (DGNAME):

- the maximum time in seconds to wait for the rst dialed digit
- the maximum time in seconds to wait between digits
- the number of digits to collect
- the stop digit or digits (to stop digit collection)
- the type of dial tone to return when the system seizes a trunk
- the type of originator in tables DGHEAD and DGCODE that can use this digit analysis tuple. The originator can include the following:
  - — a line
  - — a trunk of a trunk group type MTR
  - — a trunk of a trunk group type OPR
  - — or a trunk of trunk group types MTR and OPR

Data ll sequence

You do not need to enter data in other tables before you enter data in table DGHEAD.

Table size

1 to 127 tuples

CAUTION
Possibility of dropped calls
When the system deletes a tuple from table DGCODE, the status of the PCM30 line group controllers (PLGC) changes from in-service (.). The PLGC becomes in-service trouble (ISTb). The system can drop calls.

The addition or deletion of tuples in table DGCODE affects the static data in PLGC peripheral modules (PM). When the deletion of a tuple from table DGCODE occurs, the status of the PLGC becomes in-service-trouble (ISTb) with the fault description static data.

To add or delete tuples in table DGHEAD with minimum impact on call processing on the DMS switch, perform the following steps:

1. Select a low-traf c time period to perform data changes.
2. Add or delete the required tuples for table DGHEAD.
3. Perform two warm restart switch of activity (WARMSWACT) operations on all PLGCs in the central of ce.

The WARMSWACT action loads the static data in the PLGC again to clear the ISTb condition. This procedure occurs twice to allow the static data in plane 0 and plane 1 of each PLGC to load.

If you do not perform these precautions, the PLGCs can drop calls.

Field descriptions

Field names, sub eld names, and correct data ranges for table DGHEAD appear in the following table.

Field descriptions for table DGHEAD (Sheet 1 of 2)

Field or subfield	Entry	Description and action
DGNAME	alphanumeric (a maximum of 8 characters) or NIL	*Digit analysis index name*. Enter the digit analysis index name. The digit analysis index name is the key to this table. Table LINEATTR field DGCLNAME and table DGCODE fields DGNAME, DGCLSEL(CONT).DGNAME, and DGCLSEL(COL2STEP).DGNAME refer to this key. For noninternational offices, enter NIL.
INITTMO	1 to 40	*Initial time-out*. Enter the maximum time, in seconds, to wait for the first dialed digit.
IDGTTMO	1 to 30	*Interdigit time-out*. Enter the default maximum time to wait between digits. Enter the time in seconds.
NUMDGTS	1 to 24	*Number of digits to collect*. Enter the default number of digits to collect.
STOPDGT	vector of a maximum of 12 digits (0 to 9, B, or C) or N	*Stop digit*. Enter the default stop digit or digits. Each stop digit (0 to 9, B, C) specified here stops digit collection when dialed. Enter N if you do not require a default stop digit.

DGHEAD (end)

Field descriptions for table DGHEAD (Sheet 2 of 2)

Field or subfield	Entry	Description and action
DTONE	NONE NORM SPEC or SPEC2	*Dial tone*. Enter the type of dial tone to return to an originating party after the originating party seized a trunk. The entry NONE indicates a dial tone does not apply. The entry NORM is for standard dial tone. The entries SPEC and SPEC2 are for special dial tones. In the CIS register signaling systems, to send the 425 kHz dial tone requires this field as SPEC.
DGTYPE	LINE, TRK, or BOTH	*Digit analysis originator type*. Enter LINE if an originating line can use the DGNAME in tables DGHEAD and DGCODE. Enter TRK if an originating trunk of trunk group type MTR or OPR can use the DGNAME in tables DGHEAD and DGCODE. Enter BOTH if an originating line and a trunk of trunk group type MTR or OPR can use the DGNAME in tables.

Data ll e xample

See table DGCODE for examples of data ll for the uni versal digit analysis tables DGHEAD and DGCODE.

Table history

BCS38

The following changes were introduced to table DGHEAD in BCS38:

- values RCC and RCC2 from eld XPMTYPE were deleted. The v alues were moved to table RCCPSINV.
- entry M200 from eld TRMTYPE w as deleted for BCS35 and later versions
- the entry in eld T ONESET was corrected (changed NZLG to NZLC)

DIALBACK

Table name

Automatic Dial Back Table

Functional description

Table DIALBACK improves the security of dial-up ports.

The current method to dial to a DMS from a remote site contains the following steps:

1. Place the call.
2. Receive an answer tone.
3. Send an originate tone (press data button).
4. Enter <break> login to start login.
5. Supply the required user identi cation (userID) and passw ord.

After the system veri es the user identi er (ID) and password, the remote user can access the system. If the userID or password are not correct, the system does not allow access. The correct userID and password allows any person to access a DMS switch. Feature BC1043 (Automatic Dial Back) provides a second level of security to eliminate this access.

After a remote user logs in, the system disconnects the modem. The system calls the user and the remote user must login again. The user can access the DMS only after this second login. A remote user with the correct dial-back ID and password cannot access the system. This user can only access the system if the call originates from the correct remote site.

Dial back requires feature package NTX293AA (Enhanced Security Package II) to function correctly.

Data II sequence and meaning

You do not need to enter data in other tables before you enter data in table DIALBACK.

Table size

The system allocates memory dynamically to a maximum of 256 tuples.

DIALBACK (continued)

Data ll

Data ll for table DIALB ACK appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description and action
ID		alphanumeric (a maximum of 16 characters)	*Dial-back identifier*. Enter a dial-back identifier that is the key to the table. This dial-back identifier identifies the directory number (DN) used in the dial back.
DIRNUM		alphanumeric (a maximum of 30 characters without embedded blanks)	*Directory number*. Enter a dial-back DN. The normal digits in a telephone number and the following special characters control the dialing of the number.
		0 to 9	a digit
		A	ignored on Rixon modem. Abort call if a dial tone is not on CTS (clear to send) 212AH modem
		D	
		N	ignored on Rixon modem. Automatic dial the rest of the number on the CTS212AH modem
		P	
		S	#, correct only if selected dial type is tone
		T	pulse dial the rest of the number
		W	*, correct only if selected dial type is tone
			tone dial the rest of the number
			wait a few seconds, 4 s for modem dependent Rixon
			ignored, for accuracy only

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Description and action
DIRNUM (continued)		_	In some conditions, the command interpreter (CI) does not allow specified groups of characters and digits in field DIRNUM. For example, the DN 9A5551212 specifies that the call aborts if a dial tone is not heard after the user dials 9. The CI can not interpret the DN 9A5551212 correctly because the DN appears to be a correct hexadecimal address. To solve this problem, add an underscore (_) that precedes the number. For example, _9A5551212.
MISCINFO	alphanumeric (a maximum of 36 characters without imbedded blanks)		*Miscellaneous information*. Enter any information that the operating company requires to associate with the tuple. For example, the location of the DN or address. Field MISCINFO cannot contain embedded blanks because the blank functions as a terminator in the table editor. Underscores (_) can replace blank spaces.

Data ll e xample

Sample data ll for table DIALB ACK appears in the following example.

The example contains a remote user with an ID of JOHNSMITH with a DN of 234-5678. The remote user can be tone dialed. The remote user must access a dial pulse tie line rst. The access number for the tie line is 88. After the tie line connects, the system must receive the dial tone before the remote user can complete dialing. The address of the DN is 1111 Happy Road, ANYTOWN.

MAP example for table DIALBACK

```
              ID              DIRNUM                  MISCINFO
  ______________________________________________________________
  JOHNSMITH        88AT234_5678   1111_HAPPY_ROAD_ANYTOWN
```

DIALBACK (continued)

Table history

BCS36

A note that requires the use of cable CAOX15 was added in BCS36.

Additional information

This section provides product information that relates to table DIALBACK.

Dial back

The special dial-back login sequence occurs only if the following two conditions are present:

- the correct hardware and rmw are are available
- the dial-back ag associated with the modem is set

The rst login is a special dial-back login that requires a dial-back ID and password. The second login is the current normal login to access the system. The operating company assigns and maintains the passwords associated with the dial-back IDs. Passwords must have a minimum length.

After the system receives the dial-back ID and password, the system disconnects the modem. The system expects the remote user to go off-hook. A message appears before the disconnect. A random number of garbage characters can appear on the terminal of the user because the disconnect occurred. This action does not cause an alarm. The system does not attempt to inform the user if the entered ID and password are correct. A person that attempts to break in to the system cannot immediately know if the attempt completed. If the attempt does complete a dial back occurs. An attempt completes when correct ID and password pair are entries occur.

A delay allows the originator to off-hook the line and set up the modem. The system dials out on a second modem with the DN associated with the dial-back ID that the user entered. One-to-one mapping occurs between dial-back IDs and DNs. The DN is a function of the dial-back ID. The method to determine this number provides a level of security. This condition occurs because the called number that the system calls is not the calling number of the remote site. These numbers are the same if the user enters the correct dial-back ID. The amount of time elapsed between the modem disconnect and the completion of the return call can be different. For the Rixon modem, the time required is between 80 s and 240 s. The CTS212AH modem requires less than between 80 s and 240 s. The time depends on the following conditions:

- the baud rate of the port
- the load on the switch
- the length of the DN dialed

- the number of dial backs attempted
- the type of modem used for the dial back

The operating company must assign and maintain the DNs associated with the dial-back IDs.

When the system connects the call, the following message appears. The system prompts the user to login:

```
DIALBACK COMPLETE
```

The user must not press the break key to obtain the login prompt. This action starts the dial-back sequence again. The system aborts automatic login.

Commands

If feature package NTX293AA (Enhanced Security Package II) is in the switch, the following command interpreter (CI) commands are available:

- LOGINCONTROL
- DIALBACKPW
- SHOWDBPW
- of ce parameter DIALB ACKPW_ENCRYPTED in table OFCOPT

The CI command LOGINCONTROL allows the operating company to turn dial back on or off for a speci ed port. The command allo ws the operating company to change three dial-out-related values. These values include the number of rings for each dial-back attempt and dial-back attempts. These values include the type of dial line.

The CI command DIALBACKPW allows the operating company to change dial-back passwords. This command is a privileged command because the command prevents security problems. The security of this feature depends on the following action. The operating company must assign appropriate command classes for this command.

The CI command SHOWDBPW can display dial-back passwords. The command is available if the of ce parameter DIALBACKPW_ENCRYPTED is not set.

The system dial-back occurs on a line different from the line used for the incoming call. A minimum of two modems must connect to the switch. The CI command LOGINCONTROL speci es if a modem is in use as an answer modem or dial-out modem. This use occurs when the dial-back function is active.

DIALBACK (continued)

Tables

Field MODEM speci es the type of modem connected to the port. Use table editor to change this eld to an y permitted value.

Table DIALBACK stores data related to dial-back. The table contains elds for the dial-back ID and the DN. The table contains elds for data that the operating company requires associated with a speci ed DN or dial-back ID.

Modems

The Companion CTS212AH smart modem and the Rixon R212A intelligent modem can function with feature BC1043 (Automatic Dial Back). These two modems satisfy the following requirements:

Disconnect

Toggle the data terminal ready (DTR) line of the RS232C interface must disconnect the modem. Do not use a control character sequence to disconnect the modem.

Autodial

The modem must be able to autodial any number without manual support.

Autoanswer

The modem must be able to answer incoming calls. The use of control characters must allow the operating company to toggle the modem in and out of autoanswer mode.

Modem ready

The operating company must be able to force the data set ready (DSR) line of the RS232C interface of the modem on.

Note 1: The operation of the Rixon depends on cable length. If the cable is long, the system can generate MODEM UNSTABLE log report often.

Note 2: Outgoing dial-back modems set with the CI command LOGINCONTROL with device DIALBACK DIAL have the following requirement. A step must tie the digital coupling device (DCD) and call-through simulator (CTS) leads high in the IOC connector. The DCD is the input/output controller (IOC) connector pin 31. The CTS is pin 34. In all other conditions, the DMS cannot send the modem initialization string. The system generates the SECU122 log reports, DIALBACK FAILED. NO MODEM AVAILABLE.

Dial-back modems require cable CAOX15. This cable has pin 31 and pin 37 strapped at the IOC end. This condition allows the DMS to send initialization strings to the modem.

Disconnect

The disconnect requires that the system drop the call. If the system modem disconnects, check that the system dropped the call. To perform this check, the system places the outgoing dial-back call on a line that did not receive the original call. This method requires a minimum of two modems on the system.

The system places outgoing calls on another modem. The system does not have to drop the line connected to the rst modem. In most conditions, the system drops the line when the system disconnects the modem. When this condition does not occur, the system places the original call through a cross-bar or step-by-step switch. In these two conditions, only the originator can drop the call.

A modem disconnect that is not normal can occur if the modem detects noise on the line. A modem disconnect can occur if the connection between the modem of the user and the DMS fails. Telephone lines that connect to modems normally do not have the Call Waiting feature. This feature causes an audible tone. The modem handles this tone as noise. The system can place modems that are not connected in this method off-hook. The system requires the user to force busy (BSY) and return the port to service (RTS) twice before the modem is available. The system can require the operating company to enable the dial-in and dial-out modems again with the command LOGINCONTROL.

Disconnections that occur during login prompts for dial-back password or CI password can cause the login process to hang the port. All dial-back ports must have a login time-out and an idle time-out set with the command LOGINCONTROL.

Note: The operating company must limit the read and write access to this table. Enter data in table CUSTPROT for dial-back IDs and DNs of the modems that have feature Automatic Dial Back enabled.

DIALPLAN

Table name

Dialing Plan Table

Functional description

Table DIALPLAN de nes the various dialing plan characteristics that are used to drive the various dialing sequences for network services software (NSS).

Note: The following codes are used to describe the dialing sequences:

X (any digit from 0 to 9)

N (any digit from 2 to 9)

W (the digit 0 or 1)

NPA (numbering plan area)

CC (country code)

NSC (network speed call access code)

Hotline dialing

Hotline dialing enables a subscriber, after gaining access to the switch, to route directly to a prede ned destination. The follo wing dialing formats are available; the user can also be prompted for an account code.

- local: NXX-XXXX
- direct distance dialing: (DDD) (1) (NPA) NXX-XXXX
- international: DDD (IDDD) 011 CC NN
- network speed call: (SC) NSC XXX
- local phone extension number: (EXTN) 1 to 7 digits
- feature access code: (FAC) 1 to 7 digits

The number used for billing purposes in this dialing plan is found in eld BILLDN in table TRKGRP.

Senderized dialing

With senderized dialing, the destination digits are collected by the originating private branch exchange (PBX) and sent to the NSS. The following dialing formats are available; the user can also be prompted for an account code.

- local: NXX-XXXX
- DDD: (1) (NPA) NXX-XXXX
- IDDD: 011 CC NN
- private SC: 1NN
- network SC: NSC XXX
- EXTN: 1 to 7 digits
- FAC: 1 to 7 digits

The number used for billing purposes in this dialing plan is found in eld BILLDN in table TRKGRP.

Cut-through dialing

Cut-through dialing has four subtypes: destination-only, authorization code-only, travel card number-only, and authorization code-or-travel card. These subtypes are described below.

With destination-only cut-through dialing, only the destination digits are expected. The following dialing formats are available; the user can also be prompted for an account code.

local: NXX-XXXX

DDD: (1) + (NPA) NXX-XXXX

IDDD: 011 + CC + NN

network SC: NSC + XXX

EXTN: 1 to 7 digits

FAC: 1 to 7 digits

The number used for billing purposes in this dialing plan is found in eld BILLDN in table TRKGRP.

DIALPLAN (continued)

If billing override for destination-only cut-through dialing is enabled, the subscriber can override the billing number and enter either an authorization code and account code or a travel card number (TCN) and account code.

The number used for billing purposes in this dialing plan is found in table TRKGRP eld BILLDN if the billing override option is not used, or from the dialed authorization code or TCN if the billing override option is used.

With authorization code-only cut-through dialing, an authorization code and destination digits are expected. The following dialing formats are available; the user can also be prompted for an account code.

local: NXX-XXXX

DDD: (1) + (NPA) NXX-XXXX

IDDD: 011 + CC + NN

private SC: 1NN

network SC: NSC + XXX

EXTN: 1 to 7 digits

FAC: 1 to 7 digits

The number used for billing purposes is the authorization code dialed by the user.

With travel card number-only cut-through dialing, a travel card number and the destination digits are expected The following dialing formats are available; the user can also be prompted for an account code.

local: NXX-XXXX

DDD: (1) + (NPA) NXX-XXXX

IDDD: 011 + CC + NN

network SC: NSC + XXX

EXTN: 1 to 7 digits

FAC: 1 to 7 digits

The number used for billing purposes is the travel card number dialed.

With authorization code-or-travel card number cut-through dialing, an authorization code or a travel card number dialing plan can be used. The following dialing formats are available; the user can also be prompted for an account code.

local: NXX-XXXX

DDD: (1) + (NPA) NXX-XXXX

IDDD: 011 + CC + NN

private SC: 1NN (authorization only)

network SC: NSC + XXX

EXTN: 1 to 7 digits

FAC: 1 to 7 digits

The number used for billing purposes is the travel card number or the authorization code, whichever is appropriate.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DIALPLAN.

Table size

0 to 256 tuples

DIALPLAN (continued)

Data ll

The following table lists data ll for table DIALPLAN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DIALPLAN		alphanumeric (1 to 16 characters)	*Dial plan name* Enter the dial plan name
PLANTYPE		CUTTHRU HOTLINE NONEor SENDERZ	*Plan type* Specify the dialing plan type. Enter CUTTHRU for a cut-through dialing plan and datafill refinement CUTHRUTY on the following pages. Enter HOTLINE for a hotline type dialing plan and datafill refinement DESTDIGS on the following pages. Enter NONE if no dialing plan is required An entry of NONE is only valid with feature group D (FGD) network services software (NSS) access type Go to field OPTIONS on the following pages. Enter SENDERZ for a senderized type dialing plan and datafill refinements ACCT and OPTCCN on the following pages.

PLANTYPE = CUTTHRU

If the entry in eld PLANTYPE is CUTTHR U, data ll re nements CUTHRUTY and ANIVALID as explained below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	CUTHRUTY	AUTHONLY AUTHORTC DESTONLYor TCNONLY	*Cut-through dialing type* Specify the cut-through dialing type. Enter AUTHONLY for authorization-only dialing type and datafill refinements ORDER, AUTHPRMT, DESTPRMT, and ACCTPRMT onthe following pages. Enter AUTHORTC for authorization code-or-travel card number dialing type and datafill refinements INITPRMT, AUTHNAME, and TCNNAME onthe following pages. Enter DESTONLY for destination-only dialing type and datafill refinements INITPRMT, ACCT, ACCTPRMT, OPTAUTH, and OPTTCN on the following pages. Enter TCNONLY for travel card number-only dialing type and datafill refinements DESTPRMT, TCNPRMT, ACCTPRMT, and VALIDATE on the following pages.
	ANIVALID	INSWITCH, REMOTE, or BOTH	*Specify the ANI validation plan.* Enter INSWITCH for local ANI validation when not using the DBCP application. Enter REMOTE when remotely using the DBCP application. Enter BOTH when first trying locally, then remotely.

DIALPLAN (continued)

CUTHRUTY = AUTHONLY

If the entry in re nement CUTHR UTY is AUTHONLY, data ll re nements ORDER, AUTHPRMT, DESTPRMT, and ACCTPRMT as explained below.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ORDER	FIRSTorLAST	*Order* Enter the type of authorization code required. Enter FIRST to specify that the destination digits are collected after the authorization code. Enter LAST to specify that the destination digits are collected before the authorization code.
Note: If the entry in refinement ORDER is FIRST, datafill refinements AUTHPRMT, DESTPRMT, and ACCTPRMT in that order. If the entry in refinement ORDER is LAST, datafill refinements DESTPRMT, AUTHPRMT, and ACCTPRMT in that order.			
	AUTHPRMT	CDT, DT, N, NSSCDT, or SDT	*Authorization code prompt* Enter CDT if carrier dial tone is given when the user is prompted for the account code. Enter DT if dial tone is given when the user is prompted for the account code. Enter N if no dial tone is given. Enter NSSCDT if network service software (NSS) carrier dial tone is given NSSCDT is a valid entry only if refinement ORDER is datafilled with FIRST. Enter SDT if special dial tone is given.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DESTPRMT	DT, N, NSSCDT, SDT, or N	*Destination prompt* Enter DT if dial tone is given when the user is prompted to enter destination digits. Enter N if no dial tone is given. Enter NSSCDT if NSS carrier dial tone is given. NSSCDT is a valid entry only if refinement ORDER is datafilled with LAST. Enter SDT if special dial tone is given.
	ACCTPRMT	DT, SDT, or N	*Account code prompt* Enter DT if dial tone is given when the user is prompted to enter an account code. Enter SDT if special dial tone is given. Enter N if no dial tone is given. Any entry outside the range indicated for this field is invalid. Go to field OPTIONS on the following pages.

DIALPLAN (continued)

CUTHRUTY = AUTHORTC

If the entry in re nement CUTHR UTY is AUTHORTC, data ll re nements INITPRMT, AUTHNAME, and TCNNAME as explained below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	INITPRMT	DT, NSSCDT, or SDT	*Initial prompt* Enter DT if dial tone is the initial prompt given to subscribers. Enter NSSCDT if NSS carrier dial tone is given. Enter SDT if special dial tone is given. For travel card number (TCN) dialing plan, this is the prompt for the 0+ destination digits. For authorization dialing plan, this is the prompt for the authorization code. Any entry outside the range indicated for this field is invalid.
	AUTHNAME	alphanumeric (1 to 16 characters)	*Authorization dialing plan name* Enter the authorization dialing plan name.
	TCNNAME	alphanumeric (1 to 16 characters)	*Travel card number name* Enter the TCN dialing plan name. Go to field OPTIONS on the following pages.

CUTHRUTY = DESTONLY

If the entry in re nement CUTHR UTY is DESTONLY, data ll re nements INITPRMT, ACCT, ACCTPRMT, OPTAUTH, and OPTTCN as explained below.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	INITPRMT	DT, NSSCDT, or SDT	*Initial prompt* Enter DT if dial tone is the initial prompt heard by subscribers for all destination-only calls, even if billing override is not used. Enter NSSCDT if network services software (NSS) carrier dial tone is the initial prompt Enter SDT if special dial tone is the initial prompt. Any entry outside the range indicated for this field is invalid.
	ACCT	Y or N	*Account code required* Enter Y (yes) if an account code is required. Otherwise, enter N (no).
	ACCTPRMT	DT, N, or SDT	*Account code prompt* Enter DT if dial tone is given when the user is prompted for the account code. Enter N if no dial tone is given. Enter SDT if special dial tone is given Any entry outside the range indicated for this field is invalid.
	OPTAUTH	Y or N	*Optional authorization* If the subscriber can override the destination-only dialing plan by dialing an octothorpe (#), enter Y and datafill refinement AUTHNAME as explained below. Otherwise, enter N and go to refinement OPTTCN.

DIALPLAN (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	AUTHNAME	alphanumeric (1 to 16 characters)	*Authorization dialing plan name* If the entry in refinement OPTAUTH is Y, datafill this refinement. Enter the authorization dialing plan name.
	OPTTCN	Y or N	*Optional travel card number* If the subscriber can override the destination-only dialing plan by dialing 0 (zero) followed by the destination digits, enter Y and datafill refinement TCNNAME as explained below. Otherwise, enter N and go to field OPTIONS on the following pages.
	TCNNAME	alphanumeric (1 to 16 characters)	*Travel card number name* If the entry in refinement OPTTCN is Y, datafill this refinement. Enter the travel card number (TCN) dialing plan name. The dialing plan name must be of type CUTTHRU-TCNONLY. Go to field OPTIONS on the following pages.

CUTHRUTY = TCNONLY

If the entry in re nement CUTHR UTY is TCNONLY, data ll re nements DESTPRMT, TCNPRMT, ACCTPRMT, and VALIDATE as explained below.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DESTPRMT	DT, NSSCDT, or SDT	*Destination prompt* Enter DT if dial tone is given when the user is prompted to enter destination digits. Enter NSSCDT if network services sortware (NSS) carrier dial tone is given. Enter SDT if special dial tone is given. Any entry outside the range indicated for this field is invalid.
	TCNPRMT	DT or SDT	*Travel card number prompt* Enter DT if dial tone is given when the user is prompted to enter a travel card number (TCN). Enter SDT if special dial tone is given. Any entry outside the range indicated for this field is invalid.
	ACCTPRMT	DT, N, or SDT	*Account code prompt* Enter DT if dial tone is given when the user is prompted to enter an account code. Enter N if no dial tone is give. N is not a valid entry if refinement VALIDATE is set to REMOTE or BOTH. Enter SDT if special dial tone is given. Any entry outside the range indicated for this field is invalid.

DIALPLAN (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	VALIDATE	BOTH INSWITCHor REMOTE	*Validate* Enter BOTH if the TCN is first validated in-switch, and if unsuccessful, then validated using NSS DBCP. Datafill refinements CLG_ADDR, CLD_ADDR, and PROTOCOL. Enter INSWITCH if the TCN is validated in-switch using table TCNDATA. Enter REMOTE if the TCN is validated using network services software (NSS) database control point (DBCP). Datafill refinements CLG_ADDR, CLD_ADDR, and PROTOCOL. ***Note:*** If either entry REMOTE or BOTH is selected, refinement ACCTPRMT above cannot be datafilled as N.
	CLG_ADDR	up to 11 digits (0 to 9)	*Calling address* Enter the calling address. This identifies the node that requires the TCN validation.
	CLD_ADDR	up to 11 digits (0 to 9)	*Called address* Enter the called address. This identifies the node that processes the TCN queries.
	PROTOCOL	VERSION1	*Protocol* Enter the protocol version used. VERSION1 is the only valid entry. Go to field OPTIONS.

ANIVALID = REMOTE or BOTH

If the entry in re nement CUTHR UTY is ANIVALID, data ll re nements CLD_ADDR, and CLG_ADDR as explained below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	CLD_ADDR	Vector 0 to 9 of digit	*Called address* Enter the expected 10 digit value that identifies the node requesting the remote DBCP ANI.
	CLG_ADDR	Vector 0 to 9 of digit	*Calling address* Enter the expected 10 digit value that identifies the node processing the remote validation request.

PLANTYPE = HOTLINE

If the entry in eld PLANTYPE is HOTLINE, data ll re nement DESTDIGS as explained below

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	DESTDIGS	numeric (up to 18 digits)	*Destination digits* Enter the destination digits. All calls are routed to the destination digits. Go to field OPTIONS on the following pages.

DIALPLAN (continued)

PLANTYPE = SENDERZ

If the entry in eld PLANTYPE is SENDERZ, data ll re nements ACCT and OPTTCN as explained below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	ACCT	Y or N	*Account code required* Enter Y (yes) if an account code is required. Otherwise, enter N (no).
	OPTTCN	Y or N	*Option for travel card name* If the dial plan allows for travel card number validation on senderized trunks, enter Y and datafill refinement TCNNAME as explained below. Otherwise, enter N and go to field OPTIONS onthe following pages.
	TCNNAME	alphanumeric (1 to 16 characters)	*Travel card name* If the entry in refinement OPTTCN is Y, datafill this refinement. Enter the travel card dial plan name. Go to field OPTIONS onthe following pages.

PLANTYPE = all entries

For all entries in eld PLANTYPE, data ll eld OPTIONS and its re nements as explained below

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS		see subfield	*Options* This field consists of up to two multiples of subfield OPTIONS and its refinements. If less than two options are required, end the list with a $ (dollar sign).
	OPTIONS	CONDHLorTIMEOUT	*Options* Enter CONDHL to select the conditional hotline option and datafill refinement DIGITS. Enter TIMEOUT to select the time-out option and datafill refinement TIMEOUT.
	DIGITS	numeric(up to 18 digits)	*Digits* If the entry in field OPTIONS is CONDHL, datafill this refinement. Enter a conditional hotline number.
	TIMEOUT	4 to 30	*Time-out timer* If the entry in field OPTIONS is TIMEOUT, datafill this refinement. Enter the length of time (in seconds) that the tone is applied before the caller is routed to an attendant if no digits are dialed.

Data ll e xample

The following example shows sample data ll for table DIALPLAN.

In the example, the dial plan SEND1 uses senderized dialing. An account code is required, and travel card validation is enabled using the travel card dial plan TCN1. The time-out is set at 10 s.

DIALPLAN (end)

MAP display example for table DIALPLAN

```
          DIALPLAN
                                                    PLANTYPE
                                                     OPTIONS
    ____________________________________________________________

            SEND1
                                          SENDERZ Y Y TCN1
                              (TIMEOUT 10)$
```

Table history

UK002

CDT was added as an entry for re nement A UTHPRMT for CUTHRUTY = AUTHONLY.

DIGCOL

Table name

IBN Digit Collection Table

Functional description

This table is required for the Integrated Business Network (IBN) and Residential Enhanced Services (RES) table-driven digit collection system.

Data speci ed in table DIGCOL indicates the action that the line module must take in accordance with the rst digit dialed. If data is not provided for a digit, it automatically defaults to the format with selector RPT.

This table has a two part key. The rst part of the k ey is a one- to eight-character name. The second part of the key is an octothorpe (OCT), a star (STAR), or a digit within the range of 0 (zero) to 9.

The name assigned to the customer group digit collection table is entered in eld DGCOLNM of table CUSTHEAD. If one or more stations require a different digit collection table than the one speci ed in table CUSTHEAD, the name of the digit collection table is speci ed as an option of the network class of service (NCOS) number assigned to the stations in table NCOS.

Digit collection table names are assigned to the access codes for direct outward dial calls, electronic switching network calls, outward wide area telephone service (OUTWATS) calls, private networks calls, and route and tandem tie trunk route calls. These table names are assigned in table IBNXLA.

There are three digit collection selectors provided in the IBN table driven collection system for which no input is require. These are described below:

- NDGT (digit collection selector) can be speci ed in tables CUSTHEAD and IBNXLA if no digit collection data is provided. If table NDGT is speci ed, the IBN digit collection system reports to the central control (CC) after the receipt of each digit.
- If an NCOS number in table NCOS is assigned the digit collection name NDGT with option XLAS, or if by default option XLAS is not assigned, digit collection automatically routes to the digit collection table speci ed in table CUSTHEAD.
- POTS (regular digit collection selector) can be speci ed if digit collection is required to transfer from the IBN digit collection system to the regular digit collection system.

If business sets with a group intercom (GIC) key are assigned a plain ordinary telephone service (POTS) digit collection selector, a 10 s time-out occurs after

DIGCOL (continued)

the dialing of the GIC member number. To receive an instant time-out after the GIC member number has been dialed, the octothorpe (#) key must be pressed.

If it is not desirable to use the octothorpe (#) key for instant time-out after the dialing of GIC member numbers, and if the digit collection table is speci ed in table CUSTHEAD, the recommended approach is to use digit collection selector NDGT instead of POTS.

If the digit collection selector is speci ed in a table other than CUSTHEAD, a customer-de ned digit collection selector must be created. All digits that are the leading digit of a GIC member number must be assigned with the selector RPT.

Ambiguous Speed Calling

The optional Ambiguous Speed Calling (AMBISC) feature is assigned to a customer group if an ambiguity exists between IBN Speed Call access and abbreviation codes that have leading digits 2 to 7, and extensions, other codes, or numbers with the same leading digit.

The assignment of option AMBISC in table CUSTSTN includes a sub eld OVERRIDE. The OVERRIDE sub eld is set to true to o verride a feature translator and replace selector in table IBNXLA for access codes in the ambiguous speed call range. The business set subscriber presses the speed call key before dialing the speed call digits with the AMBISC override functionality.

For the AMBISC feature to work correctly, IBN Speed Call access and abbreviation codes must be followed by an end-of-dialing indicator. This end-of-dialing indicator must be an octothorpe digit (#) for Digitone lines, or an interdigit time-out for Digitone or dial pulse lines. See the examples for the correct data ll to ensure that a short interdigit time-out exists after IBN Speed Call speed call access and abbreviation codes have been dialed.

Note: For more information on IBN Speed Call, refer to BR0739 (Variable Speed Calling).

Digit collection

RES (residential digit collection selector) allows IBN and RES digit collection to follow the POTS digit collection algorithm. RES is only used if the dial plan does not require an access code to precede a table IBNXLA NET destination.

If the POTS digit collection algorithm is followed in this manner, short interdigit timing is performed between the rst and second digits dialed and

between the second and third digits dialed. This short interdigit dialing minimizes post-dial delay if one-digit speed calling abbreviations, two-digit speed calling abbreviations, or feature access codes are dialed.

RES does not specify data for an octothorpe. It is not used if one or more dialed codes require a preceding octothorpe (#). See the “Digit collection selector (selector: RES)" section for the data ll required if one or more codes require a preceding octothorpe (#).

RES and POTS digit collection

RES digit collection is designed to have an interdigit timing value of 4 s due to access code dialing. With the RES digit collection method, dialing an access code is evaluated after 4s. However, with POTS digit collection, 10 s pass before the access code is evaluated. This difference between POTS and RES is necessary since RES access codes can be changed through table IBNXLA. POTS access codes are hard-coded and cannot be changed.

Tuple ownership

If feature BC1459 (Partitioned Table Editor) has been purchased, the ownership of each tuple in this table is de ned in table O WNTAB.

The entry in table OWNTAB that is applicable to this table is the one that has the entry in eld T ABNAME equal to DIGCOL.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DIGCOL.

Table size

0 to 3072 tuples

The maximum number of digit collection names that can be data lled in table DIGCOL is 256. Four of these names are reserved for system use, leaving 252 available for use by the operating company. Prior to BCS34, the limit was 128.

DIGCOL (end)

Data II

There are four variations of data provided for this table. These data variations correspond to the four digit collection selector values supported by table DIGCOL.

Digit collection selector values

Digit collection selector	Digit collection scheme
COL	Collect more digits
POTS	Regular digit collection
RES	Residential digit collection
RPT	Report

Table history

NA008

Added OVERRIDE functionality to Ambiguous Speed Calling section.

CSP02

Added note explaining the difference between POTS and RES digit collection.

Collect more digits (selector: COL)

This format is required for each digit, star (*), and octothorpe (#) in table DIGCOL that requires the collection of two or more digits before reporting to the central control (CC). Short or long timing can be applied between the collection of each digit.

The maximum number of digits to which short timing can be applied is three. The number of digits speci ed does not include the digit or digits that are used to index into table DIGCOL. After digits other than those speci ed in the number of digits are received, the timing reverts to long timing.

If cut-through dialing is not applicable, short timing is recommended for two-, three- and four-digit access codes. The number of digits speci ed does not include the digit used to index into table DIGCOL.

If cut-through dialing is applicable, the report format (RPT) is recommended for use with two-, three-, and four-digit access codes. The number of digits speci ed is tw o less than the total number of digits prior to short digit timing being in effect. After receipt of the speci ed number of digits, short digit timing is in effect until the next digit is received. For all subsequent digits, long timing is in effect. The maximum number of digits for which long timing can be applied is seven.

The time intervals that are used for short and long timing are de ned in of ce parameters LN_SHORT_PARTIAL_DIAL_TIME and LN_LONG_PARTIAL_DIAL_TIME respectively. These parameters are de ned in table OFCENG.

This format is also used for one or more ambiguous digits. Digit 0 is ambiguous if it can be used for attendant access on its own and can be used as the rst digit in a ve digit extension number. In such a case, the selector COL can be used with long timing mode to collect more digits (for example, BNR1 0 COL L 4). The option AMBZERO must be assigned in table CUSTSTN for short timing to take place after the digit 0 has been collected. If a digit is collected within the short timing limit, the timing reverts back to long timing for additional digits.

Digits other than 0 can be used for attendant access and ambiguous codes. For example, consider the case where the digits 34 represent both the attendant access code and also the rst two digits in a ve-digit extension number. Since the digit collection algorithm only checks for digit 0 to determine whether or not to short time, short timing must be speci ed (for example, BNR1 3 COL S 1). If there is a third digit after digits 34, the remaining digits are collected in long timing mode.

DIGCOL type COL (continued)

Data ll

The following table lists the data ll for table DIGCOL type COL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DGKEY		see subfields	*Digit collection key* This field consists of subfields DATNAME and DIGIT.
	DATNAME	alphanumeric (1 to 8 characters)	*Name of digit collection table* Enter the character name assigned to the block of data in table DIGCOL.
	DIGIT	0 to 9, STAR, or OCT	*Digit* Enter a numeric value from 0 to 9, STAR (star), or OCT (octothorpe) to specify the digit that is applicable to the record.
DGDATA		see subfields	*Digit collection data* This field consists of subfields DGCOLSEL and COLDATA.
	DGCOLSEL	COL	*Digit collection selector* Enter COL for the collect more digits option.
	COLDATA	see subfields	*Collect data* This subfield consists of subfields TMODE and NUMDIGS.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TMODE	S or L	*Timing mode* Enter S for short timing mode or L for long timing mode.
	NUMDIGS	numeric (1 to 7)	*Number of digits* If TMODE is S, specify the number of digits for which short timing is required after the receipt of each digit. The number of digits specified, which does not include the initial digit, must be no greater than three for short timing. If TMODE is L, specify the number of digits for which long timing is required after the receipt of each digit. The number of digits specified, which does not include the initial digit, must be no greater than seven for long timing.

Data ll e xample

The following example shows sample data ll for table DIGCOL type COL.

This example is for a switching unit without option AMBISC. Digit collection for the switching unit in this example is as follows:

- Digit 0 is required for ambiguous dialing. This digit is used for attendant access (0) and extension number dialing (0XXXX) with long timing applied. Short timing is applied automatically after digit 0. If a second digit is detected, long timing goes into effect for the receipt of subsequent digits.
- Digit 1 is required for a three-digit (1xx) access code with short timing.
- Digit 3 is required for dial pulse tone star-equivalent input. The * access codes from a dial pulse phone are 3xx.
- Digit 4 is required for four-digit extension numbers with long timing.
- Digit 5 is required for ambiguous dialing. The digits 57 are required for both attendant access and extension number dialing (57XXX). Short timing applies for the digit 7 collected after the digit 5. When the third digit is collected, long timing is applied while the remainder of the digits are collected.
- Star (*) is required for feature access codes (*xx) from a Digitone phone.

DIGCOL type COL (continued)

MAP display example for table DIGCOL type COL

```
DGKEY    DGDATA
________________________________________________________________
BNR1     0   COL L 4
BNR1     1   COL S 2
BNR1     3   COL S 2
BNR1     4   COL L 3
BNR1     5   COL S 1
BNR1  STAR   COL S 2
```

With option AMBISC

The rst example is for a customer group with a four-digit extension plan. For this dial plan it is necessary to impose short interdigit timing for each of the last three digits in the four-digit extensions listed. Despite this imposition there is no real-time impact on calls to these extensions since extensions dialed in the range 2 to 7 are reported to the CC in a single digits message. IBN Speed Call access and abbreviation codes must be followed by an end-of-dialing indication.

The data ll for digits 0, 1, 8, 9, OCT, and STAR is customer group dependent. For more information concerning customer group dependent data ll, refer to table CUSTHEAD.

The data ll for this table DIGCOL e xample is shown below.

MAP display example for table DIGCOL type COL

```
DGKEY    DGDATA
________________________________________________________________
AMSCD    2   COL S 3
AMSCD    3   COL S 3
AMSCD    4   COL S 3
AMSCD    5   COL S 3
AMSCD    6   COL S 3
AMSCD    7   COL S 3
```

With four-digit extension plan

The second example is for a customer group with a four-digit extension plan.

In this example, even though there are no extensions in the range 2000 to 3999, data must exist for entries 2 and 3. COL S 2 is used for the digits 2 and 3 since a maximum of two digits are collected (SCL abbreviation codes 20 to 39). These digits must be followed by an end-of-dialing indicator (short interdigit time-out on dial pulse lines).

The data ll for digits 0, 1, 8, 9, OCT , and STAR are customer group dependent. For more information concerning customer group dependent data ll, refer to table CUSTHEAD.

The data ll for this table DIGCOL e xample is shown below.

MAP display example for table DIGCOL type COL

```
 DGKEY    DGDATA
________________________________________
AMSCD     2   COL S 2
AMSCD     3   COL S 2
AMSCD     4   COL S 3
AMSCD     5   COL S 3
AMSCD     6   COL S 3
AMSCD     7   COL S 3
```

With ve-digit e xtension plan

The third example is for a customer group with a ve-digit extension plan.

For this dial plan it is necessary to impose short interdigit timing for each of the last four digits in the ve-digit extensions listed. This imposes a 9% real-time impact on line originated calls to these extensions, since extensions dialed in the range 2 to 7 are reported to the CC in two digits messages.

When ve-digit extensions are dialed, the rst digits message reports the rst four digits in the extension and the second digits message reports the last digit in the extension. The three digit maximum (not including the rst digit) for short interdigit timing results in a real-time impact that is currently unavoidable.

IBN Speed Call access and abbreviation codes must be followed by an end-of-dialing indication.

DIGCOL type COL (end)

The data ll for digits 0, 1, 8, 9, OCT , and STAR are customer group dependent. For more information concerning customer group dependent data ll, refer to table CUSTHEAD.

The data ll for this table DIGCOL e xample is provided below.

MAP display example for table DIGCOL type COL

```
  DGKEY   DGDATA
________________________________________________________
 AMSCD     2  COL S 3
 AMSCD     3  COL S 3
 AMSCD     4  COL S 3
 AMSCD     5  COL S 3
 AMSCD     6  COL S 3
 AMSCD     7  COL S 3
```

DIGCOL type POTS

Regular digit collection (selector: POTS)

This format is required for each digit in table DIGCOL for which a transfer from IBN digit collection to regular (POTS) digit translation is required after the digit has been received.

Data ll

The following table lists the data ll for table DIGCOL type PO TS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DGKEY		see subfields	*Digit collection key* This field consists of subfields DATNAME and DIGIT.
	DATNAME	alphanumeric (1 to 8 characters)	*Name of digit collection table* Enter the name assigned to the block of data in table DIGCOL.
	DIGIT	0 to 9, STAR, or OCT	*Digit* Enter a numeric value from 0 to 9, STAR (star), or OCT (octothorpe) to specify the digit that is applicable to the record.
DGDATA		see subfields	*Digit collection data* This field consists of subfields DGCOLSEL and DTONE.
	DGCOLSEL	POTS	*Digit collection selector* Enter POTS for regular digit translation.
	DTONE	Y or N	*Dial tone* Enter Y (yes), if dial tone is required after the receipt of the first digit. Otherwise, enter N (no) to indicate that dial tone is not required.

Data ll e xample

The following example shows sample data ll for table DIGCOL type PO TS.

This example is for a block of data in table DIGCOL that is assigned the name BNR1 and is required to support a direct outward dial (9+) access code and

DIGCOL type POTS (end)

access code 8 for a private network. The direct outward dial access code requires second dial tone and the private network dial code does not.

Digit collection is required to transfer to regular (POTS) digit collection after the receipt of the access digit.

The following example shows sample data ll for table DIGCOL type PO TS.

MAP display example for table DIGCOL type POTS

```
          DGKEY    DGDATA
_____________________________________________________________

    BNR1     8    POTS N
    BNR1     9    POTS Y
```

DIGCOL type RES

Residential (selector: RES)

This format is used if IBN or RES digit collection is required to follow a POTS digit collection algorithm and if an octothorpe (#) precedes one or more of the codes dialed.

ATTENTION

Possible digit loss exists for 800 numbers dialed on ground-start lines in a private branch exchange (PBX). This loss results from the use of POTS or RES digit collection in table DIGCOL for these types of lines. Use COL L 5 in table DIGCOL to solve this digit loss problem.

Data ll

The following table lists the data ll for table DIGCOL type RES.

1Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DGKEY		see subfields	*Digit collection key* This field consists of subfields DATNAME and DIGIT.
	DATNAME	alphanumeric (1 to 8 characters)	*Name of digit collection table* Enter the name assigned to the block of data in table DIGCOL.
	DIGIT	0 to 9 or STAR	*Digit* Enter a numeric value from 0 to 9 or STAR (star) to specify the digit that is applicable to the record.
DGDATA		see subfield	*Digit collection data* This field consists of subfield DGCOLSEL.
	DGCOLSEL	RES	*Digit collection selector* Enter RES for residential digit selection.

Data ll e xample

The following example shows sample data ll for table DIGCOL type RES.

DIGCOL type RES (end)

This example is for a block of data in table DIGCOL that is assigned the name RESDC. This data is required if IBN or RES digit collection follows the POTS digit collection algorithm, and if an octothorpe (#) precedes one or more of the codes dialed. See selector COL for the data ll for the octothorpe (#). The data ll for this table DIGCOL e xample follows.

MAP display example for table DIGCOL type RES

```
      DGKEY    DGDATA
_____________________________________________________________

   RESDC     0      RES
   RESDC     1      RES
   RESDC     2      RES
   RESDC     3      RES
   RESDC     4      RES
   RESDC     5      RES
   RESDC     6      RES
   RESDC     7      RES
   RESDC     8      RES
   RESDC     9      RES
   RESDC  STAR      RES
   RESDC   OCT   COL L 2
```

DIGCOL type RPT

Report (selector: RPT)

This format is used if IBN digit collection is required to report to the CC after the receipt of each digit.

This is the recommended format if the total number of digits to be received is one (for example, attendant access code 0). RPT is also the recommended format for two-, three-, or four-digit access codes if cut-through dialing is applicable.

Data ll

The following table lists the data ll for table DIGCOL type RPT .

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DGKEY		see subfields	*Digit collection key* This field consists of subfields DATNAME and DIGIT.
	DATNAME	alphanumeric (1 to 8 characters)	*Name of digit collection table* Enter the name assigned to the block of data in table DIGCOL.
	DIGIT	0 to 9, STAR, or OCT	*Digit* Enter a numeric value from 0 to 9, STAR (star), or OCT (octothorpe) to specify the digit that is applicable to the record.
DGDATA		see subfield	*Digit collection data* This field consists of subfield DGCOLSEL.
	DGCOLSEL	RPT	*Digit collection selector* Enter RPT for report digit collection.

Data ll e xample

The following example shows sample data ll for table DIGCOL type RPT .

This example is for a block of data in table DIGCOL that is assigned the name BNR1. It shows the input requirements for the attendant access code (0-). Since no more digits are received after the access digit, the IBN digit collection system reports to the CC.

DIGCOL type RPT (end)

The data ll for this table DIGCOL e xample is shown below.

MAP display example for table DIGCOL type RPT

```
          DGKEY    DGDATA
_____________________________________________________________

                        BNR1     0      RPT
```

DIGMAN

Table name

Digit Manipulation Table

Functional description

Simpli ed dialing with table DIGMAN allo ws a subscriber to adopt a destination code-based dialing plan for the private network. The switching unit is a part of this private network. This procedure allows users that the switch serves to dial a x ed number of digits to reach a called party. The number of digits in the connection does not affect this action. The dialing plan is the same as the direct distance dialing (DDD) network when a user dials NPA-Nxx-xxxx.

The destination code contains an access code to identify access to the private network of the subscriber. The destination code also contains a location code that identi es the end pri vate branch exchange (PBX). Integrated Business Network (IBN) translation supports this type of dialing plan.

At the end of dialing, the DMS switch transforms the x ed-length number dialed by the user. The DMS switch transforms this number to a sequence of access codes and the extension number of the called party.

CAUTION
Use of table DIGMAN in DMS Packet call translation does not allow packet calls to complete.
The DMS Packet Handler for ISDN Basic Rate Interface call translation does not support table DIGMAN.

Tandem tie trunk network

A DMS switching unit can outpulse digits to a tandem tie trunk network (TTTN) with senderized operation.

See the example of a subscriber with a complete TTTN. A user dials the directory number (DN) of another user located three tandem points away. The switch must outpulse the appropriate digits and insert pauses or detect dial tones between the access codes. The switch seizes a trunk, and performs the following actions:

1. pauses for a determined time or detects dial tone
2. outpulses 144
3. pauses for a determined time or detects dial tone

DIGMAN (continued)

4. outpulses 85
5. pauses for a determined time or detects dial tone
6. outpulses the extension number dialed by the user

Note: The subscriber enters the pauses or dial tone detections at each end point. The subscriber enters the pauses or tone detections occurs when the system requires a pause or tone detection.

The far end returns dial tone between access codes to indicate that the far end can receive digits. The far end returns reorder tone to indicate an all-trunks-busy condition. An error condition can cause silent tone, reorder tone, or attendant intercept.

When outpulsing ends, the switching unit establishes a network connection between the user and the outgoing trunk. When the network connection occurs, the user receives a signal that indicates the state of the connection:

- ringing indicates the complete termination of the call with the called line idle
- busy tone indicates the complete termination of the call with the called line busy. Refer to note.
- reorder tone indicates that the call encounters an all-trunks-busy condition at some point in the connection. The location does not appear to the location.
- silent tone indicates an error condition at some location. The cause of the error and the location do not appear to the user.

Note: Some PBXs return a busy tone and not a reorder tone when an idle trunk is not available.

Listed directory number

The DMS switching units can perform listed directory number (LDN) replacement.

The user can dial a location code and an extension number. The user can program the switch with an alternate route to DDD. When these actions occur, the system can require LDN replacement. A LDN replacement must occur if the end PBX does not support direct inward dialing (DID) for all lines.

For example, the user dialed 8-236-7855 and all tie trunks are busy. The system selects an alternate route that uses a dial-9 trunk. The number 7855 is not a DID number. Data ll must specify this condition. The digits this example outpulses appear in the following example:

(1)(NPA) - Nxx - xxxx

where

(1)
is optional and depends on the central of ce (CO) requirement

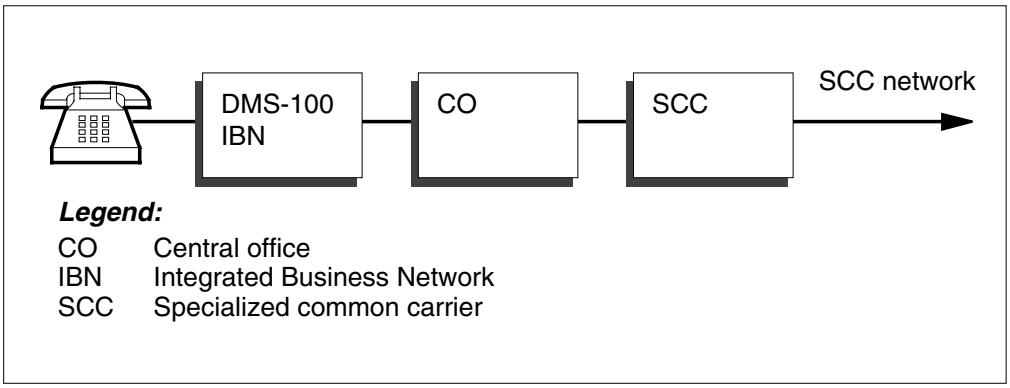
(NPA)
is optional and depends on the destination

Nxx-xxxx
is the substituted LDN of the far end PBX

Specialized common carrier

A DMS switch can access a specialized common carrier (SCC) through a CO as described in the following gure. The user dials a DN for access through the SCC. The DMS switch seizes a trunk to the local CO and outpulses the SCC DN. A pause follows the outpulse to allow the SCC to answer. The DMS switch outpulses an authorization code. Another pause follows to allow the SCC to process the authorization code. The DMS switch outpulses the destination DN.

SCC access



If the user dials a destination only, a direct access line (DAL) from the SCC can serve the switch. The switch can select a route through the DAL for the destination. For the DAL, the SCC uses an authorization code associated with the subscriber. In this condition, the DMS switch outpulses an authorization code. A pause follows and the switch outpulses the DN in the correct format. Normally, the correct format is DDD.

Note: The authorization code is a string of digits stored for outpulsing only. Only the SCC checks these digits. All outpulses for this application are dual-tone multifrequency (DTMF).

DIGMAN (continued)

End of dial signal on outgoing trunks

For DTMF outpulsing, signify the end of dialing to the far end. The system adds an octothorpe (#) at the end of the dialing sequence and outpulsed to the far end. The far end must be able to receive the octothorpe. An example of this procedure follows:

- CL END (move cursor to end of string of digits)
- INC C (C in hex is the equivalent of # on the dial pad)

Post-dial considerations

A standard dial plan for the network of the subscriber creates a network like the public network dial plan. Signaling continues to use dial pulse and Digitone. Senderization can cause post-dial delay. Digit timeouts cause the post-dial delay. This action occurs when the system outpulses different lengths of digit strings preceded by the same access code.

For example, for a call from node A to node C, node A can outpulse 8-232-0 for the attendant. Node A can outpulse 8-232-Mxxx for users. The digit M is the digit assigned for extensions. If the extension starts with the digit 3, the system expects a three-digit extension. If the extension starts with the digit 4, the system expects a two-digit extension. If the extension starts with the digit 2, 5, 6, or 7, the system expects a four-digit extension.

If the digit 8 inpulses at node A, translation expects ve to eight digits. The system limits the digit timeout to 4 s on digit strings under the minimum 5 digits. The system adds an additional 4 s adds to the dialing time of the user.

To solve this problem, use a standard length of digits. For example, the subscriber of the network assigns 0000 as the attendant DN on other switches. The subscriber of the network can also assign 1212 as the attendant DN on other switches. Two-digit and three-digit extensions have dummy digits to appear as four-digit extensions. To call node B, a user on node A dials:

8-231-444x

where

8
is the private network selector

231
is the location code for B

44
are dummy digits

4x
is the extension.

The system only outpulses 4x.

Access table DIGMAN from table IBNRTE for digit manipulation. This condition occurs for inward wide area telephone service (INWATS) and outward wide area telephone service (OUTWATS) calls.

In of ces with feature BC1459 (Partitioned Table Editor), tables DATAOWNR and OWNTAB de ne o wnership of each tuple in table DIGMAN.

The entries in table DATAOWNR that apply to table DIGMAN have eld TABNAME equal to DIGMAN. The entries in eld DMIKEY of table DATAOWNR also match the value of eld DMIKEY in table DIGMAN.

The entry in table OWNTAB that applies to table DIGMAN has the eld TABNAME equal to DIGMAN.

Limits

Trunks that require digit manipulation must be IBN trunks speci ed in table IBNRTE. Plain ordinary telephone service (POTS) trunks speci ed in table IBNRTE cannot transmit complex outpulsing sequences.

Data ll sequence and meaning

Enter data in the following tables before you enter data in table DIGMAN:

- COSMAP
- IBNATD
- LCASCRCN

Enter data in the following tables after you enter data in table DIGMAN:

- DATAOWNR
- IBNRTE
- IBNRT2
- IBNRT3
- INBRT4
- OFRT
- OFR2

DIGMAN (continued)

- OFR3
- OFR4

Table size

0 to 32 766 tuples

The system allocates memory dynamically for table DIGMAN.

Data ll

Data ll for table DIGMAN appears in the follo wing table.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
DMIKEY		1 to 32 766	*Digit manipulation key* Enter the digit manipulation key if this record is the first for the DMIKEY. The digit manipulation key is the key to this table. Leave this field blank if this record is not the first for the DMIKEY. An entry of 0 indicates to the switch that the switch must not use the data after this key (NIL KEY).
DMIDATA		see subfield	*Digit manipulation data* This field contains subfield DIGCOM and the refinements.
	DIGCOM	ANS, ARDENY, ATD, CALL, CB, CF, CL, CLI, COM, FAIL, FLD, IFCC, INC, IPD, NEX, PAU, REM, SDN, SETCDN, or SIG	*Digit command* Enter one digit command for each line for the function required. Each DMIKEY can have a maximum of six lines. Refer to the following pages for a complete description of each digit command.

DIGCOM = ANS

Enter ANS to allow the NT5X29AC to detect an answer on terminating trunks from the far end switching unit for answer supervision generation. The NT5X29AC card is the audio, answer, detect Digitone multifrequency circuit card. Enter re nement ANSTYPE.

Field descriptions

Field	Subfield or refinement	Entry	description and action
ANSTYPE		VOX, ELEC, or ALL	*Answer type* Enter VOX if dial tone or voice is needed to answer the call. Enter VOX if the answer updates Station Message Detail Recording (SMDR) and continues the call to the talk state. Enter ELEC if the system returns an electrical answer from the trunk. This procedure updates the SMDR and allows the system to outpulse more digits. Enter ALL if the system can return the dial tone (or voice) or an electrical answer. The first returned updates the SMDR and allows the call to continue.

DIGCOM = ARDENY

Enter ARDENY to allow an alternate route denial for a call. Re nements do not require data ll.

Enter this command before you enter an ATD or ANS command. If the system detects a failure, the system routes the caller to treatment. Failures that the system can detect include reorder, busy, or timeout. The system does not allow alternate routing.

This command performs the following functions:

- does not allow alternate routing to a speci ed destination if the system shares tie trunks are shared
- does not allow alternate routing if the subscriber does not want users to wait a long time for the call to fail or complete

DIGMAN (continued)

DIGCOM = ATD

Enter ATD to allow the NT5X29AC to detect tones returned from the trunk. The NT5X29AC card is the audio, answer, detect Digitone multifrequency circuit card. Enter re nement A TDTONE.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
ATDTONE		AR, DT, or GLARE	*Audio tone detection tone* Enter AR to detect ringing from far end. Enter DT to detect dial tone from intermediate links in a tandem tie trunk network. Enter GLARE to detect dial tone to resolve glare on the trunk when the system seizes the trunk.

DIGCOM = CALL

Enter CALL to transfer to another DMIKEY and return. Enter re nement DMI. When you complete the commands for the new DMIKEY, translation starts again. Translation starts again at the original DMIKEY at the command that immediately follows the CALL command.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
DMI		1 to 32 766	*Digit manipulation index* Enter the DMIKEY that the translation must transfer.

DIGCOM = CB

Enter CB (cursor back) to move the cursor backwards a speci ed number of digits. Enter re nement CBCOUNT .

Field descriptions

Field	Subfield or refinement	Entry	Description and action
CBCOUNT		0 to 15	*Cursor back count* Enter the number of digits in the digit string to move the cursor backward. The cursor only counts digits. The cursor does not detect pauses.

DIGCOM = CF

Enter CF (cursor forward) to move the cursor forward a speci ed number of digits. Enter re nement CFCOUNT .

Field descriptions

Field	Subfield or refinement	Entry	Description and action
CFCOUNT		0 to 15	*Cursor forward count* Enter the number of digits in the digit string to move the cursor forward. The cursor only counts digits. The cursor does not detect pauses.

DIGCOM = CL

Enter CL (cursor locate) to place the cursor at the start or the end of the digit string. Enter re nement POSITION.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
POSITION		BEG or END	*Position* Enter BEG to set the cursor at the start of the digit string. Enter END to set the cursor at the end of the digit string. The cursor only counts digits. The cursor does not detect pauses.

DIGMAN (continued)

DIGCOM = CLI

Enter CLI (calling line identi er) to insert the calling number to the outpulse string, with dual-tone multifrequency (DTMF) signaling. Re nements do not require data ll.

The CLI command does not require any data ll parameters. The CLI command obtains the calling number from the call processing information. If the calling number is not in the call processing control information, the CLI command does not change the outpulse string.

DIGCOM = COM

Enter COM (compare) to perform additional digit manipulation on the dialed digits if the dialed digits are in a speci ed range of values. Enter re nements MINEXT, MAXEXT, and DMI.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
MINEXT		numeric (one to seven digits)	*Minimum extension* Enter the extension number with the lowest numeric value in the range of values that the system compares dialed digits.
MAXEXT		numeric (one to seven digits)	*Maximum extension* Enter the extension number that has the highest numeric value in the range of values that system compares dialed digits.
DMI		1 to 32 766	*Digit manipulation index* Enter the DMIKEY to indicate where the call proceeds for additional digit manipulation. Perform this procedure if the number is in the range of values specified.

DIGCOM = DTO

Enter DTO (digits to outpulse) to select the number of digits the switch is to outpulse.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
DTOCOUNT		numeric (1 to 15)	*Digits to outpulse* Enter a value from 1 to 15 to represent the number of digits that the switch is to outpulse.

DIGCOM = FAIL

Enter FAIL to reject the current route list if the element does not apply to the current call. Re nements do not require data ll. If the system encounters a FAIL command, translation continues with the next route list element. This action occurs when all trunks in the current route list element are busy.

DIGCOM = FLD

Enter data ll for re nement FIELD appears in the follo wing table.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
FIELD		COS, DDD, IBNATD, or PVNTCM	*Field* Enter the field name. Enter the correct subfields to perform the required action.

FIELD = IBNATD

Enter IBNATD to use audio tone detector parameters entered in table IBNATD. Enter sub eld INDEX.

Enter command FLD IBNATD before the ATD or ANS commands to which the audio tone detector parameters apply. If speci ed, the ne w audio tone detector parameters in table IBNATD function for all ATD or ANS commands

DIGMAN (continued)

used after this call. If not speci ed, the system uses default values for the audio tone detector.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
INDEX		0 to 127	*Index* Enter the index to the entry in table IBNATD that applies to this command.

FIELD = DDD

Enter DDD to convert numbers dialed in ten-digit electronic switching network (ESN) off-net format to equivalent DDD numbers. This conversion is for ESN automatic route selection. Enter sub elds LCA, STS, and SMDR.

Translation uses the local calling area screening. Translation determines if the system requires the numbering plan area (NPA) and a pre x 1 for outpulsing. The NPA can be the home or adjacent NPA.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description and action
LCA		alpha-numeri c (one to eight characters)	*Local calling area screening table name* Enter the name of the local calling area screening table two which the system routes the translation.
STS		numeric (three digits)	*Serving translation system* Enter the number of the serving translation system for local calling area screening.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Description and action
SMDR		Y or N	*Station message detail recording* Enter Y (yes) if all calls that use this command require SMDR records. In all other conditions, enter N (no).
VCDR		Y or N	*Variable call detail record* Enter Y if you require variable call detail record (VCDR) billing. In all other conditions, enter N.

FIELD = COS

Enter COS (class of service) to insert digits in the outpulsed digit string that indicates the COS associated with the call. Enter sub elds DIGS, and MAP .

Field descriptions

Field	Subfield or refinement	Entry	Description and action
DIGS		0 to 15	*Number of digits* Enter the number of digits to outpulse for the COS field.
MAP		alpha-numeric (1 to 16 characters)	*MAP* Enter the name of the class of service from table COSMAP that contains the value of the COS to outpulse.

FIELD = PVNTCM

Enter PVNTCM for private virtual network (PVN) calls on switching units with PVN capability. Enter PVNTCM to add an outgoing travelling class mark (TCM) to the outpulsed number on a speci ed trunk group. Re nements do not require data ll.

Enter command FLD PVNTCM after command CL. Command FLD PVNTCM locates the af xing position in the outpulse digit string at the start or at the end. The start of the outpulse digit string uses ESN TCM signaling. The end of the outpulse digit string uses electronic tandem network (ETN) TCM signaling. For ESN TCM signaling, command INC can separate

DIGMAN (continued)

commands CL and FLD PVNTCM. The INC command inserts a call code before the TCM.

For example, the DMS switch functions as a service switching point (SSP). The switch receives instructions from the service control point (SCP) about the facility to which the system routes the call. The SSP contains associated data ll in table IBNR TE that speci es a DMIKEY in table DIGMAN. The DIGMAN tuple causes the SSP to add a TCM that the SCP supplies for that call.

DIGCOM = IFCC

Enter IFCC to perform additional digit manipulation on the dialed digits. These dialed digits depend on the value of a speci ed call characteristic from table CALLCHR. Enter re nements CALLCHAR, V ALUE, and DMI.

Set eld DIGCOM equal to IFCC to test a call characteristic in table CALLCHR. If that characteristic contains the tested value, an NEX operation to a speci ed DMIKEY occurs.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
CALLCHAR		DIGDATA or SAT	*Call characteristic* Enter the call characteristic from table CALLCHR to which the system routes the translation.
VALUE		Y or N	*Value* Enter the value, Y or N, to test for the specified call characteristic.
DMI		1 to 32 766	*Digit manipulation index* Enter the DMIKEY to which the call proceeds if the specified call characteristic contains the specified value.

DIGCOM = INC

Enter INC (included digits) to add additional digits to the digit string. Enter re nement INCDIGS.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
INCDIGS		numeric (1 to 15 digits)	*Included digits* Enter the digits to include in the digit string. The system places the digits in the digit string before the cursor.

DIGCOM = IPD

Enter IPD (insert pre x digits) to allo w the system to recover digits pre x ed by the standard pretranslator table (STDPRTCT) for outpulsing. Re nements do not require data ll.

The command inserts all digits between the Integrated Business Network (IBN) access code in the digit string before the cursor. Table IBNXLA sets the IBN access code. The command inserts the pre x limit in the digit string before the cursor. Table STDPRTCT sets the pre x limit. This procedure is like the operation of the Include (INC) command. The IPD can function with an equal access primary interLATA carrier (PIC) call. In this event, the system inserts the 10xxx digits of the PIC in the digit string. The system inserts the digits even if the digits are not dialed.

DIGCOM = NEX

Enter NEX (next) to proceed to a new DMIKEY if the number of digit commands for a DMIKEY is more than six. Enter re nement DMI.

DIGMAN (continued)

Use the NEX command for long sets of commands. Each DMIKEY can accept six digit commands. If you require more than six digit commands, use NEX to move to a new DMIKEY.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
DMI		1 to 32 766	*Digit manipulation index* Enter the DMIKEY to which the call proceeds if the number of digit commands for a specified DMIKEY is more than six. The digit commands that remain are in the specified DMIKEY.

DIGCOM = PAU

Enter PAU (pause) to insert a pause in the digit string. Enter re nement PAUSETIM.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
PAUSETIM		0 to 99	*Pause time* Enter the length of the pause to insert in the digit string, in units of 100 ms. For example, an entry of 50 is 5 s. The insertion of pauses does not affect the cursor position.

DIGCOM = REM

Enter REM (remove digits) to remove digits from the digit string. Enter re nement REMCOUNT .

Field descriptions

Field	Subfield or refinement	Entry	Description and action
REMCOUNT		0 to 15	*Remove digits count* Enter the number of digits to remove from the digit string. The system starts to remove digits from the digit string at the cursor position.

DIGCOM = SDN

Enter SDN (substitute DN) to replace a directory number (DN) for the dialed number. The dialed number must be in a speci ed range of v alues for this condition to function. Enter re nements MINEXT, MAXEXT, and SUBEXT.

Field descriptions

Field	Subfield or refinement	Entry	Description and action
MINEXT		numeric (one to seven digits)	*Minimun extension* Enter the extension number with the lowest numeric value in the range of values in which the system compares dialed digits.
MAXEXT		numeric (one to seven digits)	*Maximum extension* Enter the extension number with the highest numeric value in the range of values in which the system compares dialed digits.
SUBEXT		numeric (one to seven digits)	*Substitute directory number*Enter the DN to replace for the dialed digits when the dialed digits are in the range defined by MINEXT and MAXEXT. The number to replace must contain the same number of digits in the digit manipulation string.

DIGMAN (continued)

DIGCOM = SETCDN

Enter SETCDN to use the speci ed CDNN AME when CDNRTE is next encountered. This command also determines the required characteristics to use in the outgoing message, provided that the outgoing protocol is supported. Enter re nement CDNN AME.

Called number name

Field	Subfield or refinement	Entry	Description and action
CDNNAME		Aapha-numeric (1 to 8 characters)	*Called number name* Enter a value to set the required characteristics to use in the outgoing message. CDNNAME is also used when CDNRTE is next encountered.

DIGCOM = SIG

The default values for the interdigital timing for the SIG command appear in table 20. The default values appear in ms.

Interdigital timing default values

Pulse type	Interdigital timing
Dial pulse	700
Digitone	50
Multifrequency	70

Enter SIG to change the signaling type during outpulsing. Enter re nements PULSTYPE, and IDGTIME.

A call can route out on a dial pulse (DP) trunk. A call can terminate on a direct inward system access (DISA) or specialized common carrier DN. When this condition occurs, wait for an answer. Outpulse the authorization code and

dialed number in DTMF format. Enter command ANS followed by command SIG. Enter the digits for the authorization code and DN.

Field description

Field	Subfield or refinement	Entry	Description and action
PULSTYPE		C6, DP, DPNSS, DT, ISDN, MF, MFC, N5MF, N6, NP, RP, or SS7	*Pulse type* Enter one of the following pulse types: • C6 (C6 signaling) • DP (dial pulse) • DPNSS (digital private network signaling) • DT (Digitone) • ISDN (integrated services digital network) • MF (multifrequency) • MFC (multifrequency compelled) • N5MF (CCITT #5) • N6 (reserved) • NP (no pulse) • RP (revertive) • SS7 (CCITT #7)
IDGTIME		0 to 100	*Interdigital timing* Enter the interdigital timing in units of 10 ms. For example, an entry of 25 is 250 ms. Enter 0 to use the default value for the specified signaling type.

Data ll e xample

Sample data ll for table DIGMAN appears in the follo wing example.

DIGMAN (end)

MAP example for table DIGMAN

```
 DMIKEY DMIDATA
_____________________________________________________________________________

1       (REM 3) (PAU 20) (INC 144) (PAU 30) (INC 85) (NEX 2)  $
```

Table history

EUR010

Added option SETCDN for activity AJ5346.

NA011

Added digit command DTO and its sub eld DT OCOUNT to specify the number of digits the switch is to outpulse for uniform outpulsing.

NA010

Modi ed DMID ATA eld with a DIGCOM of FLD and a eld of DDD to show the LCA sub eld requires an LCAN AME of 1 to 8 characters.

TL08

References to VCDR were removed in TL08.

DIRPHOLD

Table name

Device Independent Recording Package Hold Table

Functional description

Table DIRPHOLD is a directory for all closed les that require transmission. This table functions only with data transfer or the semiautomatic disk-to-tape copy utility DIRPAUTO. If you require the le for manual retransmission, enter data in this table. The Device Independent Recording Package (DIRP) automatically completes table DIRPHOLD with closed les.

You can add or delete tuples, but you cannot change tuples.

Refer to table DIRPPOOL for related information.

Data ll sequence and meanings

You do not need to enter data in other tables before you enter table DIRPHOLD.

Table size

0 to 100 tuples

Data ll

Data ll for table DIRPHOLD appears in the follo wing table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description and action
HOLDNO		0 to 99	*DIRPHOLD index number*. This field is the index to table DIRPHOLD. The system completes table DIRPHOLD down from 99. The user can completes table DIRPHOLD manually up from 0 or any available slot.
SSYSNAME		alphanumeric (one to four characters)	*Subsystem name*. Enter a correct subsystem name to identify the originating subsystem or journal file (JF). An operational measurement is an example of an originating subsystem. Normally, the system does not transmit JF.
FILENAME		alphanumeric (1 to 17 characters)	*File name*. Enter a correct file name to identify the file that requires manual transmission.

DIRPHOLD (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Description and action
VOLSER		alphanumeric (one to eight characters)	*Volume serial number*. Enter a correct volume serial number to indicate the volume identification. For example, enter T2 or a volume serial number for tape or D000AMA0 for disk volume number. For tape, the file names can be the same for each tape.
COUNT		numeric (0 to 1073741823)	*Count*. This field is a double-precision integer field that contains numeric digits. The field tracks the number of records or calls in a file. Downstream systems use the entry in field COUNT to determine if the system received all data. If the counts do not match, manual follow-up determines if data is missing or not correct. Enter the number of logical records in the file.
Note: Manual file additions make a file available for transmission to a downstream data center with manual transmission protocol. This condition does not apply with the DIRPAUTO utility.			

Data ll e xample

Sample data ll for table DIRPHOLD appears in the follo wing example.

In the example, le OM1 is a closed le that requires manual retransmission.

MAP example for table DIRPHOLD

```
HOLDNO   SSYSNAME     FILENAME     VOLSER       COUNT
_____________________________________________________
   0         OM        OM1         123456       3490
```

DIRPOOL2

Table name

Device Independent Recording Pool Table 2

Functional description

Feature Bridge SBB28 introduced table DIRPOOL2 in SNNCSH04. Table DIRPOOL2 links three DIRP pools in table DIRPPOOL for a subsystem listed in table DIRPSSYS. The three pools provide 72 volumes of storage capacity per subsystem.

Table DIRPOOL2 provides information needed to consolidate linked pools when moving to a load that now has 72 volumes per pool in table DIRPPOOL. The table is created at IPL. Its data is transferred during DART (if applicable). The table data is used during POSTSWACT to consolidate volumes in DIRPPOOL. At the end of POSTSWACT, table DIRPOOL2 is rendered inert in the switch.

Datafill sequence and meaning

You must enter data in tables in the following sequence:

- DIRPPOOL
- DIRPSSYS
- DIRPOOL2

Table size

Minimum 0 to maximum 24 tuples. Memory is allocated only during ONP and is freed afterwards.

Datafill

Datafill for table DIRPPOOL2 appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ssysname		ssnamesr	DIRP subsystem name
poolnam1		poolnamesr	DIRP pool name
poolnam2		poolnamesr	DIRP pool name
poolnam3		poolnamesr	DIRP pool name

DIRPOOL2 (end)

Datafill example

Sample datafill for table DIRPOOL2 appears in the following example.

The entry of data in this example shows sample datafill that was transferred from feature bridge SBB28 data in SNNCSH04.

MAP example for table DIRPOOL2

```
TABLE: DIRPOOL2

SSYSNAME POOLNAM1 POOLNAM2 POOLNAM3

_____________________________________________________________________

      AMA  AMAPOOL AMAPOOL2 AMAPOOL3
BOTTOM
```

Table history

SN07 (DMS)

Table DIRPOOL2 was introduced by feature A00003905 solely for consolidating pool volumes linked via feature bridge SBB28. SBB28 introduced table DIRPOOL2 to link up to three DIRP pools to one DIRP subsystem allowing for a maximum of 72 recording volumes. Table DIRPOOL2 is used during ONP to consolidate the linked pool volumes under the main pool that is datafilled against the subsystem in table DIRPSSYS. Post-ONP, table DIRPOOL2 is rendered inert in the system, and SOC for feature A00003905 is used to provision more than 24 and up to 72 volumes per pool in table DIRPPOOL.

DIRPPOOL

Table name

Device Independent Recording Package Pool Table

Functional description

The Device Independent Recording Package (DIRP) control tables contain tables DIRPHOLD, DIRPPOOL, and DIRPSSYS. The tables make sure of the correct management of data and recording resources.

Table DIRPPOOL lists the collection, or pool, of recording devices allocated to each contributing subsystem. Table DIRPPOOL can contain a maximum of 32 pools. Each pool can contain a maximum 72 recording volumes. Each entry in table DIRPSSYS points to a pool in table DIRPPOOL. Only one contributing subsystem can reference each pool in table DIRPPOOL.

Recommended datafill for table DIRPPOOL

As of BCS32, default datafill for table DIRPPOOL at the time of loadbuild is not present. The following is a list of recommended datafill for table DIRPPOOL:

- Pool 0 is for use by the automatic message accounting (AMA) subsystem. Pool 0 contains two DISK-type recording volumes.
- Pool 1 is for use by the operational measurements (OM) subsystem. Pool 1 contains one TAPE-type recording volume.
- Pool 2 is for use by the journal file (JF) subsystem. Pool 2 contains one TAPEX-type recording volume.
- Pool 7 is for use when the international centralized AMA (ICAMA) subsystem is present in the switch. Pool 7 provides billing information for subtending class 5 switching units connected through automatic number identification (ANI) trunks.
- Pool 30 is for use for parallel recording of the AMA subsystem. See table DIRPSSYS, section “Recommended datafill for table DIRPSSYS".
- Pool 31 is for use for parallel recording of the ICAMA subsystem. See table DIRPSSYS, section “Recommended datafill for table DIRPSSYS".

DIRPPOOL (continued)

The recommended datafill for table DIRPPOOL appears in the following table:.

Table DIRPPOOL recommended datafill

Field name	Recommended datafill					
POOLNO	0	1	2	7	30	31
POOLNAME	AMADISK	OMPOOL	JFPOOL	ICMAPOOL	AMAPARL	ICMAPARL
POOLTYPE	REGULAR	REGULAR	REGULAR	REGULAR	PARALLEL	PARALLEL
DEVTYPE	DISK	TAPE	TAPEX	DISK	DISK	DISK
VOL00X02						
volume 00	$	Tnn	Tnn	$	Dnnncccc	Dnnncccc
volume 01	$	$	$	$	$	Dnnncccc
volume 02	$	$	$	$	Dnnncccc	$
VOL03X05						
volume 03	$	$	$	$	Dnnncccc	$
volume 04	$	$	$	$	Dnnncccc	$
volume 05	$	$	$	$	$	$
VOL06X08						
volume 06	$	$	$	$	$	$
volume 07	$	$	$	$	$	$
volume 08	$	$	$	$	$	$
VOL09X11						
volume 09	$	$	$	$	$	$
volume 10	$	$	$	$	$	$
volume 11	$	$	$	$	$	$
VOL12X14						
volume 12	$	$	$	$	$	$
volume 13	$	$	$	$	$	$
volume 14	$	$	$	$	$	$
VOL15X17						

Note: The Tnn represents the number of the magnetic tape drive used. The Dnnncccc represents the name of the disk volume used. The *$* indicates that a volume is not assigned in that position.

Table DIRPPOOL recommended datafill

Field name	Recommended datafill					
volume 15	$	$	$	$	$	$
volume 16	$	$	$	$	$	$
volume 17	$	$	$	$	$	$
VOL18X20						
volume 18	$	$	$	$	$	$
volume 19	$	$	$	$	$	$
volume 20	$	$	$	$	$	$
VOL21X23						
volume 21	$	$	$	$	$	$
volume 22	Dnnncccc	$	$	$	$	$
volume 23	Dnnncccc	$	$	$	$	$
VOL24X26						
volume 24	$	$	$	$	$	$
volume 25	$	$	$	$	$	$
volume 26	$	$	$	$	$	$
VOL27X29						
volume 27	$	$	$	$	$	$
volume 28	$	$	$	$	$	$
volume 29	$	$	$	$	$	$
VOL30X32						
volume 30	$	$	$	$	$	$
volume 31	$	$	$	$	$	$
volume 32	$	$	$	$	$	$
VOL33X35						
volume 33	$	$	$	$	$	$
volume 34	$	$	$	$	$	$
volume 35	$	$	$	$	$	$
VOL36X38						

Note: The Tnn represents the number of the magnetic tape drive used. The Dnnncccc represents the name of the disk volume used. The *$* indicates that a volume is not assigned in that position.

DIRPPOOL (continued)

Table DIRPPOOL recommended datafill

Field name	Recommended datafill					
volume 36	$	$	$	$	$	$
volume 37	$	$	$	$	$	$
volume 38	$	$	$	$	$	$
VOL39X41						
volume 39	$	$	$	$	$	$
volume 40	$	$	$	$	$	$
volume 41	$	$	$	$	$	$
VOL42X44						
volume 42	$	$	$	$	$	$
volume 43	$	$	$	$	$	$
volume 44	$	$	$	$	$	$
VOL45X47						
volume 45	$	$	$	$	$	$
volume 46	$	$	$	$	$	$
volume 47	$	$	$	$	$	$
VOL48X50						
volume 48	$	$	$	$	$	$
volume 49	$	$	$	$	$	$
volume 50	$	$	$	$	$	$
VOL51X53						
volume 51	$	$	$	$	$	$
volume 52	$	$	$	$	$	$
volume 53	$	$	$	$	$	$
VOL54X56						
volume 54	$	$	$	$	$	$
volume 55	$	$	$	$	$	$
volume 56	$	$	$	$	$	$
VOL57X59						

Note: The Tnn represents the number of the magnetic tape drive used. The Dnnncccc represents the name of the disk volume used. The *$* indicates that a volume is not assigned in that position.

Table DIRPPOOL recommended datafill

Field name	Recommended datafill					
volume 57	$	$	$	$	$	$
volume 58	$	$	$	$	$	$
volume 59	$	$	$	$	$	$
VOL60X62						
volume 60	$	$	$	$	$	$
volume 61	$	$	$	$	$	$
volume 62	$	$	$	$	$	$
VOL63X65						
volume 63	$	$	$	$	$	$
volume 64	$	$	$	$	$	$
volume 65	$	$	$	$	$	$
VOL66X68						
volume 66	$	$	$	$	$	$
volume 67	$	$	$	$	$	$
volume 68	$	$	$	$	$	$
VOL69X71						
volume 69	$	$	$	$	$	$
volume 70	Dnnncccc	$	$	$	$	$
volume 71	Dnnncccc	$	$	$	$	$

Note: The Tnn represents the number of the magnetic tape drive used. The Dnnncccc represents the name of the disk volume used. The *$* indicates that a volume is not assigned in that position.

Log retrieval facility for emergency (E1 & E2) incidents (DLOG)

This subsystem allows operating companies to capture all logs on permanent store. These logs include logs that the system can hold in threshold or suppress in the log utility (LOGUTIL) of a MAP (maintenance and administrative position) terminal. The use of the LOGUTIL can be for a debugging tool for field support or Northern Telecom personnel. The personnel can turn the LOGUTIL on or off. The DLOG subsystem is superior to running logs to disk using LOGUTIL. The DLOG subsystem is superior because the DLOG subsystem uses DIRP to record unformatted logs on permanent store. Unformatted logs are compact logs and are not user-readable. The DLOG subsystem is faster, more compact, and has less chance of losing logs during peak activity.

DIRPPOOL (continued)

You can use the command interpreter (CI) command LOGFORMAT to format the logs later. You can use the command SCANLOG to scan the logs for analysis. You can use the interface in the form of a Command Interpreter (CI) level called DLOG to format the logs. This interface gives the user the flexibility to selectively set up formatting parameters through the use of DLOG subcommands. Refer to *Recovery Procedures* for additional information on the DLOG Command Level.

Recommendations for DLOG

The system must store the DLOG subsystem on two volumes on two different disk drive units (DDU). These DDUs must each be on different input/output controllers (IOC). This setup is like AMA and JF allocation. You can use the disk allocation (DSKALLOC) facility to allocate volumes. Refer to the *Disk Maintenance Subsystem Reference Manual*, 297-1001-526 for additional information on DSKALLOC.

The disk storage space required to use this option varies. Office type and size, and the number of subscribers and trunks determines the disk storage space. The office must store the logs for as long as possible. For offices that do not generate many logs, 32 Mbyte for each DLOG volume is normally large enough. The recommended allocation for offices that generate many logs is 64 Mbyte for each DLOG volume.

If the allocation of 32 Mbyte for each DLOG volume occurs, monitor the length of time required to fill up this volume. If to fill up this volume takes less than 14 d, increase the allocation to 64 Mbyte for each DLOG volume. The maximum size of a volume is 64 Mbyte.

The tuples that require addition to table DIRPPOOL if the DLOG subsystem is present in the switch appear in the following table.

Tuple to add if the DLOG subsystem is present

Field name	Entry value for DLOG
POOLNO	*
POOLNAME	LOGSPOOL
POOLTYPE	REGULAR
DEVTYPE	DISK
VOL00X02 volume 00 volume 01 volume 02	 $ $ $

DIRPPOOL (continued)

Tuple to add if the DLOG subsystem is present

Field name	Entry value for DLOG
VOL03X05	
volume 03	$
volume 04	$
volume 05	$
VOL06X08	
volume 06	$
volume 07	$
volume 08	$
VOL09X11	
volume 09	$
volume 10	$
volume 11	$
VOL12X14	
volume 12	$
volume 13	$
volume 14	$
VOL15X17	
volume 15	$
volume 16	$
volume 17	$
VOL18X20	
volume 18	$
volume 19	$
volume 20	$
VOL21X23	
volume 21	$
volume 22	$
volume 23	$
VOL24X26	
volume 24	$
volume 25	$
volume 26	$
VOL27X29	
volume 27	$
volume 28	$
volume 29	$

DIRPPOOL (continued)

Tuple to add if the DLOG subsystem is present

Field name	Entry value for DLOG
VOL30X32	
volume 30	$
volume 31	$
volume 32	$
VOL33X35	
volume 33	$
volume 34	$
volume 35	$
VOL36X38	
volume 36	$
volume 37	$
volume 38	$
VOL39X41	
volume 39	$
volume 40	$
volume 41	$
VOL42X44	
volume 42	$
volume 43	$
volume 44	$
VOL45X47	
volume 45	$
volume 46	$
volume 47	$
VOL48X50	
volume 48	$
volume 49	$
volume 50	$
VOL51X53	
volume 51	$
volume 52	$
volume 53	$
VOL54X56	
volume 54	$
volume 55	$
volume 56	$

DIRPPOOL (continued)

Tuple to add if the DLOG subsystem is present

Field name	Entry value for DLOG
VOL57X59	
volume 57	$
volume 58	$
volume 59	$
VOL60X62	
volume 60	$
volume 61	$
volume 62	$
VOL63X65	
volume 63	$
volume 64	$
volume 65	$
VOL66X68	
volume 66	$
volume 67	$
volume 68	$
VOL69X71	
volume 69	$
volume 70	<volume2 name>
volume 71	<volume1 name>

Note: * is the next available pool number

<volume 1name> is the volume name of the first volume allocated for the DLOG subsystem. The DIRP volume names contain eight alphanumeric characters using the convention D0n0aaaa. In this convention, n is the DDU number as referenced in table DDU and aaa is logs, for example, D000LOGS.

<volume2name> is the volume name of the second volume allocated for the DLOG subsystem, using the same conventions as for <volume1 name>.

When the addition of a volume to the tuple in the above table occurs, the allocation of the volume to DIRP occurs. This action indicates that when the addition of a volume occurs, DIRP automatically allocates and mounts the volume. Mounting and demounting volumes from the DIRP level at a MAP terminal alters this tuple.

DIRPPOOL (continued)

Datafill sequence and meaning

You must enter data in the following tables before you enter data in table DIRPPOOL:

- MTD
- DDU
- DPP
- SLM

Table size

0 to 64 tuples

Tuples 0 through 62 are for customer use. Pool 63 is reserved for internal use only.

Increasing the number of volumes per pool to 72 from 24 increases the memory requirements of table DIRPPOOL. Essentially, volume related store now requires 3x as much memory (72/24=3). Modules DIRPGI and DIRPDSON carry the bulk of the increase in storage.

Datafill

Datafill for table DIRPPOOL appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
POOLNO		numeric 0 to 63	*Pool number*. Enter a value to represent the index number for the recording pool. Select field POOLNO when creating each pool. Pools 0 to 62 are available for operating company use. Pool 63 is for internal use.
POOLNAME		alphanumeric a maximum of eight characters	*Pool name*. Enter a character string to define the name of the pool. An example of a character string is AMAPOOL, AMADISK, JFPOOL, or AMATAPE. This name is the name by which table DIRPSSYS indexes to table DIRPPOOL.

DIRPPOOL (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
POOLTYPE		PARALLEL or REGULAR	*Pool type* Enter REGULAR to specify that the pool stores regular recording volumes. Volumes in a REGULAR pool contain DIRP_FILESEGs (file segments) that the device independent recording package (DIRP) uses for regular recording of the data of a subsystem. Enter PARALLEL to specify that the pool stores parallel volumes. Before the system can mount the volumes in a PARALLEL pool, volumes require formatting for parallel recording. You can use the command interpreter (CI) command DIRPPFMT to perform this procedure. The system can mount volumes to parallel pools by changing nil ($) volume names to correct ones.

DIRPPOOL (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DEVTYPE		DISK DPP TAPE or TAPEX	*Device type*. Enter the device type for the pool. Distributed processing peripheral (DPP) volumes are recoverable on reload, switch of activity, and new BCS insertion. The DPP volumes are also recoverable after the magnetic tape drive (MTD) returns to service from a busy state. Recovery only applies to regular DPP volumes. The use of the DPP cannot occur for parallel recording. A device type of DPP and a pool type of PARALLEL are mutually excluded in any pool of table DIRPPOOL. The entry of billing media converters (BMC) must occur as DPP. The NIL is not a correct entry value for this field.
VOL00X02 to VOL69X71		eight_char_vector	*Volume 00 through volume 71*. Fields VOL00X02 to VOL69X71 each comprise three volumes giving a total of 72 volumes. For example, field VOL00X02 has volumes 00 to 02 and field VOL69X71 has volumes 69 to 71. Each field is provisioned with 3 eight_char_vector covering three volumes. In each field, enter a volume name to specify the volume assigned in the pools. The default is $ $ $. Do not mix device types TAPE and DISK or TAPEX and DISK in one pool. For example, T0 or T1 for tape, and D000VOL1 or D000AMA1 for disk are acceptable volume names. The system can mount a volume in a parallel pool before or after the assignment of volume to a subsystem.

Note the following to enter data for DIRPPOOL.

Note 1: All volumes assigned in a specified pool must be of the same device type.

Note 2: When you change a tuple, volumes must change from a volume name to nil ($) or from nil ($) to a volume name. To change from one volume name to another, first change the original to nil ($). When an appropriate DIRP101 log report confirms this action, change the nil ($) entry to the new volume name.

Note 3: When a request occurs to change a volume to nil ($), DIRP closes as many files as possible on that volume. The request remains pending until this process is complete. The system only changes the volume to nil ($) when open DIRP files do not remain on the volume.

Note 4: The device type can change if volumes are not in the pool.

Note 5: The deletion of a tuple in this table can occur. Deletion occurs if the assignment of all volumes is nil ($) and a subsystem does not reference this pool from table DIRPSSYS.

Note 6: When the addition or changing of a tuple occurs, DIRP confirms that the volumes assigned are correct and available.

Note 7: The assignment of a specified volume can occur one time in all pools.

Note 8: The assignment of a volume assigned to a pool cannot occur in another place as a parallel volume. See table DIRPSSYS. The assignment of a volume assigned as a parallel volume cannot occur in another place to a pool.

Note 9: The assignment of more than one volume to a specified subsystem can occur. When this assignment occurs, arrange the volumes in the table in a pattern of alternating IOC control.

Note 10: The deletion of a volume from a pool while the remote data polling system transmits files on the pool cannot occur.

Note 11: The deletion of a volume from a pool can occur. This condition causes the deletion of all entries for files on the volume from table DIRPHOLD. Operating company personnel are responsible for transferring and processing these files.

Note 12: You can change the pool name at any time.

Note 13: The system can mount one or more parallel volumes in a parallel pool assigned to a subsystem. When this event occurs, those volumes are available for recording subsystem data. When a volume is full, an automatic

DIRPPOOL (continued)

rotation to the next READY volume occurs. If the entry of data for only one volume occurs, the system rewinds and uses the volume again.

Note 14: Volumes can be provisioned via table control or through the use of the MNT and DMNT commands at the MAPCI DIRP level. Table control provisioning of volumes cannot be done with a one line CHA command. Volumes must be entered after the CHA command is issued.

A subsystem that does not contain volumes in a READY state can reference a parallel pool. When this event occurs, the system immediately uses any volume mounted in that pool for recording. Subsequent parallel rotations can occur for volumes immediately following this one in the pool lineup. This action occurs if other volumes are mounted or become ready before the rotation occurs.

The allocation of multiple parallel volumes can occur and the user can attempt to deallocate the current recording parallel volume. When these events occur, a rotation to the next READY volume in the pool occurs.

Demounting the only READY parallel volume in a pool can cause parallel recording for a subsystem to halt. If files are not available for REGULAR recording of the subsystem data, the parallel volume is marked TO BE DELETED. The parallel volume is not demounted from DIRP until another REGULAR or PARALLEL file becomes available for recording. This event is not a requirement if field MINFILES in table DIRPSSYS has a value of 0 for the subsystem.

Datafill example

Sample datafill for table DIRPPOOL appears in the following example.

The entry of data in this example occurs according to the following AMA subsystem requirements:

- The assignment of a subsystem to device pool 0 occurs. The pool type is REGULAR. The system records information for the subsystem on a DISK-type recording device. The allocation of two volumes, volume 22 and volume 23, occurs.
- The assignment of a subsystem to device pool 30 occurs. The pool type is PARALLEL. The system records information on DISK. The allocation of four volumes occurs.

MAP example for table DIRPPOOL

```
POOLNO POOLNAME POOLTYPE DEVTYPE VOL00X02 VOL03X05 VOL06X08
VOL09X11 VOL15X17 VOL18X20 VOL21X23 VOL24X26 VOL27X29 VOL30X32
VOL33X35 VOL36X38 VOL39X41 VOL42X44 VOL45X47 VOL48X50 VOL51X53
VOL54X56 VOL57X59 VOL60X62 VOL63X65 VOL66X68 VOL69X71
_____________________________________________________________________

14 MEGAPOOL REGULAR DISK D000CDR D000CDR1 D000AMA D000OCC1 $ $ $ $ $ $ $ $

$ $ $ $ $ $ $ $ $ F17LAMA F02LAMA $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $
$ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $
```

Table history

SN07 (DMS)

Feature A00003905 impacts table control for table DIRPPOOL. A change in how table DIRPPOOL is manually provisioned is necessitated by expanding the number of volumes per pool. Volumes are no longer provisioned as individual fields but are provisioned in groups of three. Feature A00003905 increases the number of DIRP volumes in table DIRPPOOL from 24 to 72.

DIRPSSYS

Table name

Device Independent Recording Package Subsystem Table

Functional description

Table DIRPSSYS de nes the operating parameters of each contrib uting subsystem. Table DIRPSSYS can contain a maximum of 24 subsystems. These subsystems include the following:

- automatic message accounting (AMA)
- operational measurement (OM)
- journal le (JF) subsystems by def ault
- a maximum of 21 other contributing recording streams. The DMS feature con guration determines the inclusion of these streams.

  The addition of a new tuple to table DIRPSSYS can require a system warm restart. This requirement depends on the addition of the contributing subsystem.

  Note: If the NORESTARTSWACT utility is available on your switch, you can activate data changes without an interruption in service. Refer to the *NORESTARTSWACT User Guide*, 297-1001-546.

Refer to table DIRPPOOL for additional information.

Recommended data ll f or table DIRPSSYS

In BCS32, default data ll for table DIRPSSYS is not present at the time of loadbuild. Enter data in the table to provide the following characteristics for each recording subsystem:

- AMA: The Device Independent Recording Package (DIRP) attempts to maintain two TAPE-type les open for recording AMA. If a ST ANDBY le is not present, you cannot close the ACTIVE le manually. If les are not present, the system raises a critical alarm (CR). If only one le is present for AMA, the system raises a major alarm (MJ). The AMA les have a 30-day expiration period. A scheduled rotation of recording duty does not occur. File names default to a date, time, and subsystem indicator.
- OM: The DIRP attempts to maintain one TAPE-type le open for recording. If a le is not present, the system raises a minor alarm (MN). The OM les have a 30-day expiration period. File names default to a date, time, and subsystem indicator.
- JF: The DIRP attempts to maintain one TAPEX-type le open for recording. If a le is not present, the system does not raise an alarm (NA).

DIRPSSYS (continued)

The JF les have a 499-day expiration period. File names default to a date, time, and subsystem indicator.

The recommended data ll for table DIRPSSYS appears in the following table .

Recommended data ll f or table DIRPSSYS (Sheet 1 of 2)

Field name	Recommended datafill		
SSYSNAME	AMA	OM	JF
READRITE	Y	Y	Y
NUMFILES	2	1	1
MINFILES	1	0	0
POOLNAME	AMADISK	OMPOOL	FPOOL
FILENAME	$	$	$
ALARM0	CR	MN	NA
ALARM1	MJ	NA	NA
ALARM2	NA	NA	NA
ALARM3	NA	NA	NA
RETPD	30	30	499
CRETPD	30	30	499
PARLPOOL	the AMAPARL	$	$
PARCONC	N	N	N
MANDPALM	NA	NA	NA
FILEDATE	OPENED	OPENED	OPENED
SHEDDAYS	NNNNNNN	NNNNNNN	NNNNNNN
SHEDBASE	0	0	0
SHEDINCR	NOROTATE	NOROTATE	NOROTATE
ROTACLOS	NONE	NONE	NONE
AUTOXFER	NONE	NONE	NONE

DIRPSSYS (continued)

Recommended data ll f or table DIRPSSYS (Sheet 2 of 2)

Field name	Recommended datafill		
SPACROTE	N	N	N
the MAXDFSIZ	64	64	64
the PRIORTIO	Y	Y	Y

Data ll sequence and meaning

You must data in enter table DIRPPOOL before you enter data in table DIRPSSYS.

Table size

0 to 64 tuples

The number of subsystems entered determines the size of table DIRPSSYS.

Data ll

Data ll for table DIRPSSYS appears in the follo wing table.

Field descriptions (Sheet 1 of 11)

Field	Subfield or refinement	Entry	Explanation and action
SSYSNAME		alphanumeric (one to four characters)	*Subsystem name*. Enter the subsystem name that serves as the index to table DIRPSSYS. An example is automatic message accounting (AMA).
READRITE		Y or N	*Read after write*. Enter Y (yes) to activate the read/write check. This check is for data the system writes to device types TAPE or DISK (not TAPEX). The system reads written data. The system proceeds to the next input/output operation. The process makes sure the device receives the information correctly. Enter N (no) if you do not require the read/write check. If the entry in field SSYSNAME is DLOG, the entry in this field must be N. This field must be N because logs do not require read/write checking.

DIRPSSYS (continued)

Field descriptions (Sheet 2 of 11)

Field	Subfield or refinement	Entry	Explanation and action
NUMFILES		numeric (1 to 4)	*Number of files*. If recording to tape, enter the number of subsystem files that can be open at a time. If recording to disk, make sure that a maximum of two files are open at one time. In this event, enter 1 or 2. If the value is greater than 1, one of the files serves as the active file. The other files serve as standby files. In an emergency condition, the active file can fail. If this event occurs, the standby files activate a switch of recording duty to a stanby device. To make sure alternate input/output controller (IOC) distribution occurs, do not enter the value 3. You can enter the value 3 if the office has three IOCs and each IOC has one recording device.
MINFILES		numeric (0 to 3)	*Minimum number of files*. Specify the minimum number of files that must be open at all times. The number you enter must equal a minimum of one less than the entry for field NUMFILES. The user cannot close the files of contributing subsystem. If the number of files available to record data at a minimum equals the value you enter, the user can close these files.
POOLNAME		alphanumeric (a maximum of 8 characters) or $	*Pool name*. Specify a correct name for the collection, or pool, of volumes available to a contributing subsystem. Make the entry value the same as the equal entry in table DIRPPOOL. This is necessary this field is the index to DIRPPOOL. Subsystems cannot share pools. Only one subsystem can use a pool name.

DIRPSSYS (continued)

Field descriptions (Sheet 3 of 11)

Field	Subfield or refinement	Entry	Explanation and action
tFILENAME		alphanumeric (a maximum of 17 characters) or $	*File name*. Enter a file name or enter $ (nil) to have the system generate a file name. File names can include the characters A to Z and 0 to 9. If you use special characters, enclose the complete character string in single quotes. An example of a special character is a period. If you enter a correct character string, the system adds a file name to device type TAPE or TAPEX. If you enter $, the system generates the file name. System file names contain a letter identifier that indicates the following: • file status • a time stamp • a file sequence • a contributing subsystem name When the Device Independent Recording Package (DIRP) finishes with files, the system file names manages the files. Disk drive units (DDU) ignore the file names in this field. The DDU always generates a system file name. ***Note:*** Enter $ for the JF subsystem. Use this entry because the $ provides sequential order information to reconstruct a load from multiple journal file (JF) files.

Field descriptions (Sheet 4 of 11)

Field	Subfield or refinement	Entry	Explanation and action
ALARM0 to ALARM3		CR, MJ, MN, or NA	*File ALARM0 to file ALARM3* The system groups fields ALARM0 to ALARM3 together. When the number of files associated with each field are not present or open to record, the system generates an alarm. When this event occurs, the fields control these alarm levels. These fields perform the following functions: • ALARM0 sets the alarm level if files are not open. • ALARM1 sets the alarm level if one file is open. • ALARM2 sets the alarm level if two files are open. • ALARM3 sets the alarm level if three files are open. In each alarm field, enter the following: • CR for a critical alarm • MJ for a major alarm • MN for a minor alarm • NA when an alarm is not present See note 21 for additional information.
RETPD		numeric (0 to 499)	*Retention period in days*. Enter a value to specify the retention period in days. This field controls tape file security. If an attempt occurs to erase a tape file before the expiration date the system prompts the user. This warning prevents the accidental damage of data. When the expiration date passes, the system allows the erasure of the file without special security prompts. The system only erases a file on disk if the file name begins with P. In this occurrence, the system erases the oldest file on the volume first. Entry values greater than 499 are not correct.

DIRPSSYS (continued)

Field descriptions (Sheet 5 of 11)

Field	Subfield or refinement	Entry	Explanation and action
CRETPD		numeric (0 to 499)	*Retention period (in days) for copied-to files*. Enter a value to specify the retention period in days for copied-to files. The default value is the value that you enter in field RETPD. Entry values greater than 499 are not correct.
PARLPOOL		the AMAPARL DLOGPARL JFPARL OMPARL or $	*Parallel pool*. Enter a correct parallel pool name. If the system requires parallel recording, create a parallel pool in table DIRPPOOL. Enter the pool name in field PARLPOOL. Do not use the pool name of a normal pool in this field. Enter the following: • AMAPARL for the AMA parallel pool • DLOGPARL for the DLOG parallel pool • JFPARL for the JF parallel pool • OMPARL for the operational measurement (OM) parallel pool • $ (nil) for no parallel pool Parallel recording starts immediately for a subsystem if the pool that field PARLPOOL designates contains preformatted READY volumes. If volumes do not reside in the pool at first, parallel recording does not begin until volumes are mounted. The default value of field PARLPOOL is $ (nil). The subsystem can record to a file on a parallel volume in the pool. When this process occurs, changes to field PARLPOOL cannot occur. All volumes must be demounted before you can change field PARLPOOL to $ or another parallel pool name. Problems must be present on all volumes before you can change field PARLPOOL to $ or another parallel pool name.

DIRPSSYS (continued)

Field descriptions (Sheet 6 of 11)

Field	Subfield or refinement	Entry	Explanation and action
PARCONC		Y or N	*Parallel and normal recording occur concurrently*. The system performs an optional parallel recording a backup afer the system performs a physical recording. If one recording slows down, this causes the other recording to slow down. This occurs under high traffic conditions. If the two recordings occur together and not serially, throughput improves significantly. For concurrent recording, enter Y. Perform recording at the same time for normal operation. For serial recording, enter N.
MANDPALM		NA, MN, MJ, or CR	*Mandatory parallel alarm* This field supports contributing subsystems with an option to raise an audible alarm. This an option applies if the parallel file is not in the AVAIL state. Enter one of the following values: • NA (an alarm is present) • MN (minor alarm) • MJ (major alarm) • CR (critical alarm) When field MANDPALM is set to a particular alarm level, you cannot change the field to an alarm level of less severity. This action requires technical support from Northern Telecom.

DIRPSSYS (continued)

Field descriptions (Sheet 7 of 11)

Field	Subfield or refinement	Entry	Explanation and action
FILEDATE		CLOSED FIRSTACT LASTACT or OPENED	*File date*This field controls how the system automatically redates the file. This facility applies only to disk, because tape names cannot be named safely again. Enter one of the following values: • The CLOSED value updates the file name if the file is finally closed. • The FIRSTACT value places the date and time stamp on the file the first time the file becomes active. • The LASTACT value updates the file name each time the file becomes active. • The OPENED value places the file name date and time stamp on the file when the file is first opened.
SHEDDAYS		Y or N (character string with seven boolean fields)	*Scheduled rotation days*. This field tracks the days of the week on which the user schedules rotations. For each day of the week (Monday through Sunday), enter Y if a rotation occurs on that day. Enter N if a rotation does not occur on that day (example: YNYNYNN).
SHEDBASE		numeric (0 to 23)	*Scheduled rotation base*. Specify the hour of the day on which the first rotation occurs. You can schedule more than one rotation for each day. Refer to the next field.
SHEDINCR		X1, X2, X3, X4, X6, X8, X12, X24, or NOROTATE	*Scheduled rotation increments*. Specify the number of hours between scheduled rotations. Use the first rotation as a base. For example, to schedule rotations at 8:00 a.m and 8:00 p.m, set field SHEDBASE to 8 (8 a.m.). Set field SHEDINCR to X12. If a rotation is not scheduled, enter NOROTATE in this field.

Note: Fields SHEDDAYS, SHEDBASE, and SHEDINCR control the scheduled rotation. The scheduled rotation rotates the recording duty from an active file to the first standby. This scheduled rotation stops recording in one file and starts recording in another file at a particular time. The system interchanges data recording tasks through this process. The earlier active field can be closed, as field ROTACLOS specifies.

DIRPSSYS (continued)

Field descriptions (Sheet 8 of 11)

Field	Subfield or refinement	Entry	Explanation and action
ROTACLOS		BOTH MROTATE SROTATE or NONE	*Rotate close*. Specifiy one of the following options to close the file after the completion of scheduled or manual rotation. • The BOTH option closes files after both scheduled and manual rotations. • The MROTATE option closes files after completion of manual rotation. • The SROTATE closes files after completion of scheduled rotation. • The NONE option does not close files automatically after rotation.
AUTOXFER		FULL NOKEEP PARTIAL or NONE	*Automatic transfer*. This field controls the condition of closed DIRP files. The DIRP directory table DIRPHOLD lists closed files that are not processed in that subsystem if AUTOXFER is set to PARTIAL or FULL. Remote data polling and the DIRP (automatic DIRP) utility use this directory of closed files. If field AUTOXFER is set to NOKEEP in a subsystem, DIRP erases the files in that subsystem. This process occurs when a requirement is present for additional file space. If field AUTOXFER is set to NONE for a subsystem, you must manipulate the subsystem files manually.

DIRPSSYS (continued)

Field descriptions (Sheet 9 of 11)

Field	Subfield or refinement	Entry	Explanation and action
			Enter one of the following: • NONE. If table DIRPHOLD does not contain entries, DIRPAUTO (transfer) functions are not present. When the subsystem records to disk, DIRP must use space in closed files. Use the CLEANUP command at the DIRP level of the MAP terminal to reclaim this space for DIRP. Command CLEANUP renames R files to P files. The DIRP can erase P files as a requirement for recording space occurs. • NOKEEP. If table DIRPHOLD does not contain entries DIRPAUTO or XFER functions are not present. When the subsystem records to disk, DIRP reclaims space in closed files as necessary. The entry in field AUTOXFER must be NOKEEP if the entry in field SSYSNAME is DLOG.

Field descriptions (Sheet 10 of 11)

Field	Subfield or refinement	Entry	Explanation and action
			The DIRPAUTO and XFER functions can access closed files through the PARTIAL and FULL options. A description of the PARTIAL and FULL options appears in the following list. • The PARTIAL option prevents downstream users that interface to the DMS through remote data polling from closing active and standby files. As a result, table DIRPHOLD does not identify these files. The PARTIAL option indicates that DIRPAUTO and XFER functions are present, but XFER cannot rotate or close files. The system can erase files only after XFER or DIRPAUTO process the files. • The FULL option allows downstream users that interface the DMS through remote data polling to close active and standby files. As a result, table DIRPHOLD identifies these files. This event indicates that DIRPAUTO and XFER functions are present, and XFER can rotate and close files. The system can erase files only after XFER or DIRPAUTO process the files.
SPACROTE		Y or N	*Space rotation*Enter Y (yes) or N (no) to specify if DIRP must use feature AF1780 (DIRP Space Rotation) if recording space in the ACTIVE file becomes low. If you set field SPACROTE to Y, DIRP does not erase processed files to obtain more space. The DIRP performs a file rotation. Another name for file rotation is a space rotation. If you set field SPACROTE to N, DIRP erases old processed files to obtain additional space. The DIRP can also perform an emergency rotation if the DIRP cannot erase additional processed files.

DIRPSSYS (continued)

Field descriptions (Sheet 11 of 11)

Field	Subfield or refinement	Entry	Explanation and action
MAXDFSIZ		numeric (5 to 64)	*Maximum disk file size*This field defines the maximum size for DIRP disk files in megabytes. The field allows operating companies to match the size of DIRP files with the capacity of recording tapes. The system uses the recording tapes to process data. This function can eliminate the requirements for multiple tape files when you copy a disk file. The value that you enter in this field is the maximum size for files in the subsystem that the tuple defines. Select a value that matches the capacity of data tapes the system normally uses to process the data in the corresponding subsystem. If a file reaches the maximum size, DIRP performs a space rotation. This rotation occurs if field SPACROTE is Y or N. If DIRP performs a space rotation and field SPACROTE is set to N, DIRP erases old processed files. This process creates additional space.
PRIORTIO		Y or N	*Priority input/output file*Enter Y to mark the files associated with a subsystem as high-priority. High priority files cannot be erased. Only DIRP can erase files marked high-priority. If you do not require this feature, enter N.

The following notes apply to data entry.

Note 1: The identi cation of the subsystem to DIRP (bound-in) must occur before the addition of the subsystem tuple to table DIRPSYSS.

Note 2: The values for eld MINFILES can pre vent the closure of a recording le. In this event, closure would lower the number of les below the limit. Field MINFILES contains this limit.

Note 3: The entry in eld NUMFILES determines the maximum number of open les.

Note 4: If the system must record to disk, set eld NUMFILES to 2. This value maintains one open standby le.

Note 5: The volume assigned as parallel must be correct and properly formatted.

Note 6: The alarm level assignments must designate the 0 FILE level as the most severe. The alarm level assignments must designate the 3 FILE level as the least severe. You can assign similar severities to levels when you adhere to this general design.

Note 7: The addition of a tuple can result in the requirement of a system warm start.

Note 8: The addition of a tuple causes DIRP to attempt to open les. The DIRP attempts to open les to a maximum of the value in eld NUMFILES.

Note 9: If the parameter in eld NUMFILES changes, DIRP attempts to increase or decrease the number of les open for the subsystem.

Note 10: The system updates alarm displays to correspond to changes to the parameters in elds NUMFILES and ALARM0 to ALARM3.

Note 11: The deletion of tuples requires help from the technical support group.

Note 12: Deletion of a tuple removes the ability of the subsystem to record.

Note 13: Deletion of a tuple can only occur if les are not open for that subsystem.

Note 14: When you delete a tuple or change the POOLNAME, the system deletes all entries for les from that subsystem from table DIRPHOLD. Operating company personnel are responsible for these les for transferring or processing.

Note 15: When you specify another value, the parameter in eld MINFILES cannot change to 0 without support from the technical support group.

Note 16: If the entry in eld NUMFILES is a minimum of 1, specify a minimum of one alarm level.

Note 17: If open les are present for the subsystem, you cannot change eld POOLNAME.

Note 18: Uppercase and lowercase differences are important in le name assignments.

DIRPSSYS (continued)

Note 19: The value in eld NUMFILES must be 1, 2, or 4. These v alues make sure correct le assignments are present across the input/output controller (IOC). Specify the value 3 only if three IOCs are present and each value has a recording device. The recording service is disk or tape.

Note 20: The le name on the tape for T APE les is assigned in eld FILENAME or a name that the system generates. The name that the system generates contains the date, time and subsystem. The system uses the name that the system generates if $ is in eld FILENAME.A name that the system generates identi es DISK les to the DMS of ce. The le contains the name assigned in eld FILEN AME in table DIRPSSYS. This name is important for data transferal purposes. If data transfer occurs, eld FILENAME in this table must contain the correct le name. The operating company de nes this le name.The DIRPCOPY command uses the ne w name that the user speci es. The DIRP AUTO command uses the name assigned in eld FILEN AME in table DIRPSSYS. When $ is in eld FILENAME, DIRPAUTO uses the input le name.

Note 21: The severity of an alarm for elds ALARM0 to 3 can be the same in adjacent elds. The alarm cannot increase in se verity as additional les open. For example, the user can set elds ALARM1 and ALARM2 to MN. The user cannot set eld ALARM2 to MJ while eld ALARM1 is at MN.

When an alarm eld is associated with a number of les, enter NA in the alarm eld. These associated les are equal to or greater than the number of les for which the contributing subsystem is con gured. For example, assume that the AMA subsystem con guration includes four les. Field NUMFILES set to 4 identi es this con guration. Data entry for the alarm elds can be as follows:

ALARM0	ALARM1	ALARM2	ALARM3
CR	MJ	MN	MN

If the user sets eld ALARM3 to N A, an alarm condition does not appear if only three les are open. This e vent is not correct.

As another example, assume the con guration of the Station Message Detail Recording (SMDR) subsystem includes two les. Field NUMFILES set to 2 identi es this con guration. Data entry of the alarm elds can be as follows:

ALARM0	ALARM1	ALARM2	ALARM3
MJ	MN	NA	NA

When the system con guration is for two les, the system does not require an alarm condition to indicate that two les are open. The speci cation of an alarm indication for three open les is not a requirement.

Note: When the entry of data for a subsystem is complete, a change in eld SPACROTE from N to Y results in the following warning message:

```
WARNING: SPACE ROTATE ENABLED: UNEXPIRED PROCESSED FILES WILL
NOT BE ERASED
```

A change from Y to N results in the following warning message:

```
WARNING: SPACE ROTATE DISABLED: UNEXPIRED PROCESSED FILES ARE
ERASABLE
```

Note 1: When the entry of data for a subsystem is complete, you can only change eld PRIOR TIO if you set of ce parameter DIRPKILL_IN_EFFECT to Y. This of ce parameter is in table OFCSTD.

Note 2: The recommended eld PRIORTIO value for the AMA subsystem is Y.

Note 3: When the entry of data for the system is complete, change eld PARCONC from N to Y.

Data ll e xample

Sample data ll for table DIRPSSYS appears in the follo wing example.

MAP example for table DIRPSSYS

```
SSYSNAME READWRITE NUMFILES MINFILES POOLNAME FILENAME
ALARM0 ALARM1
ALARM2 ALARM3 RETPD CRETPD PARLPOOL PARCONC MANDPALM
FILDATE SHEDDAYS
SHEDBASE SHEDINCR ROTACLOS AUTOXFER SPACROTE MAXDFSIZ
PRIORTIO
------------------------------------------------------------

      SMDR         Y         2         1 SMDRPOOL           $
   CR      NA
    NA      NA     30      30         $        N        NA
OPENED  NNNNNNN
       0 NOROTATE      NONE      NONE         N        64
   Y
```

DIRPSSYS (continued)

Table history

BCS36

Reference to the NORESTARTSWACT utility was added in BCS36.

Additional information

This section provides information on how to enter data in table DIRPSSYS for speci ced applications.

Log retrieval utility for emergency (E1 & E2) incidents (DLOG)

With this utility, the operating company can capture all logs on permanent store. These logs include logs that you can threshold or suppress in the log utility (LOGUTIL). Field support or Northern Telecom personnel can use the utility as a debugging tool. Personnel can turn this utility on or off.

The DLOG is better than a run of logs to disk through the use of LOGUTIL. The DLOG is better because DLOG uses DIRP to record unformatted logs on permanent store. Logs that are not formatted are compact logs that users cannot read. The DLOG is faster and more compact. The use of DLOG decreases the loss of logs during peak activity.

The LOGFORMAT command formats logs. The SCANLOG command scans logs for analysis. Use of the interface in the form of DLOG allows the user to format logs. The DLOG is a Command Interpreter (CI) level. This interface allows the user to set up formatting parameters through the use of DLOG subcommands. Refer to *Recovery Procedures* for additional information about the DLOG Command Level

Data ll for table DIRPSSYS, if the DLOG utility is present in the switch, appears in the following table.

DLOG data ll (Sheet 1 of 2)

Field name	Datafill
SSYSNAME	DLOG
READRITE	N
NUMFILES	2
MINFILES	1
POOLNAME	LOGSPOOL (corresponds to entry in table DIRPOOL)
FILENAME	$

DLOG data II (Sheet 2 of 2)

Field name	Datafill
ALARM0	MN
ALARM1	MN
ALARM2	NA
ALARM3	NA
RETPD	0
CRETPD	0
PARLPOOL	$
PARCONC	N
MANDPALM	NA
FILEDATE	OPENED
SHEDDAYS	YYYYYYY
SHEDBASE	0
SHEDINCR	X1
ROTACLOS	BOTH
AUTOXFER	NOKEEP
SPACROTE	N
MAXDFSIZ	64
PRIORTIO	Y

Parallel recording

Feature NC0079 (Mandatory DIRP Parallel Recording) allows the operating company to enter an alarm level in table DIRPSSYS.

If the system activates a parallel recording, the system monitors the recording of subsystem data during the hourly subsystem audit. The DIRP raises the

DIRPSSYS (continued)

subsystem (SSYS) mandatory parallel (MP) alarm if the following two conditions occur:

- The parallel le is not a vailable (AVAIL).
- The MP alarm level for the subsystem speci ed in table DIRPSSYS is greater than the no-alarm level.

The state of the parallel volume does not affect this process. The parallel volume states are mounted, not mounted, or in error. Users can specify if subsystem parallel recording can raise the mandatory parallel alarm SSYS MP under speci ed conditions.

Field MANDPALM in table DIRPSSYS provides the following four possible alarm values:

- no alarm (NA)
- minor alarm (MN)
- major alarm (MJ)
- critical alarm (CR)

If the user sets eld MANDP ALM to NA, the system does not activate this feature for the contributing subsystem. If the user sets eld MANDPALM to NA, the DIRP follows the current alarm generation standards. The user does not set eld MANDP ALM to NA and the subsystem parallel le state is not AVAIL. In this event, the system raises a SSYS MP alarm. Field MANDPALM speci es this alarm.

International CAMA (ICAMA)

The data ll for table DIRPSSYS appears in table 4, if the feature package NTX65AA International CAMA (ICAMA) is in the switch.

ICAMA data ll (Sheet 1 of 2)

Field name	Datafill
SSYSNAME	ICMA
NUMFILES	2
MINFILES	1
POOLNAME	ICMAPOOL
FILENAME	$
ALARM0	CR

DIRPSSYS (end)

ICAMA data II (Sheet 2 of 2)

Field name	Datafill
ALARM1	MJ
ALARM2	NA
ALARM3	NA
RETPD	30
CRETPD	30
PARLPOOL	ICMAPARL
PARCONC	N
MANDPALM	NA
FILEDATE	OPENED
SHEDDAYS	NNNNNNN
SHEDBASE	0
SHEDINCR	NOROTATE
ROTACLOS	NONE
AUTOXFER	NONE
SPACROTE	N
MAXDFSIZ	64
PRIORTIO	Y

DISTANCE

Table name

Distance

Functional description

Table DISTANCE determines a rate step after the distance between the calling and called number has been calculated.

Data ll sequence and implications

The following tables must be data lled before table DIST ANCE.

- SCHEDEF
- SCHNAME

Table size

0 to 4096 tuples

Data ll

The following table lists data ll for table DIST ANCE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfields	Index into table. This field consists of subfields SCHNAME and RATESTEP.
	SCHNAME	name from table SCHNAME	Schedule name. Enter a schedule name defined in table SCHNAME with a termination type of NATIONAL.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	RATESTEP	within range in table SCHEDEF	Rate step. Enter a rate step within the range defined in table SCHEDEF for the schedule name above. Note, the first ratestep entered for each schedule name must be the lowest ratestep defined in table SCHEDEF. All subsequent entries must be in numerical order up to the highest ratestep defined in table SCHEDEF.
DIST		0 to 32767	Distance. Enter the upper limit of this distance range. The ratestep included in this entry is assigned to any call which spans a distance larger than the previous entry up to and including this distance. The distances entered for each schedule name must be in incremental order. The distance ranges are interpreted as follows: From distance I-1 up to and including distance I is assigned rate step I. The first distance defined is used as the range from zero (0) up to and including that distance. Also if a distance is larger than any entry in table DISTANCE, then no rate step is assigned to the call. Special case: the entry 32767 is defined as “infinity." This allows defining a rate step to include any call that spans more than the last valid distance entered.

Data ll e xample

The following example shows sample data ll for table DIST ANCE.

MAP display example for table DISTANCE

```
INDEX            DIST
_____________________________________________________________
SCHED5  101      25
SCHED5  102      50
SCHED5  103      75
SCHED5  104      32767
```

DISTANCE (end)

Using the above data ll, sample distances would be associated with rate steps as follows:

Distance between CLG and CLD	RATESTEP
0	101
20	101
25	101
60	103
75	103
20000	104
100000	104

Table history

BCS34

Table DISTANCE was created by feature AF4169 under functionality Global Operator Services Rating, GOS00001.

DIUAM

Table name

Digital Interworking Unit Access Module Table

Functional description

Table DIUAM provides the mapping from each synchronous interface module (SIM) port to the respective peripheral interface (PI) port on the access module (AM).

The following information is provided:

- digital interworking unit (DIU) number
- SIM number
- SIM port number
- AM mnemonic
- PI number
- PI port number

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DIU AM.

Table size

0 to 1 920 tuples

Data ll

The following table lists data ll for table DIU AM.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DIUENDPT		see subfields	*Digital interworking unit end point* This field consists of subfields DIUSIM and SIMPORT.
	DIUSIM	see subfields	*Digital interworking unit SIM* This subfield consists of subfields DIUID and SIM.

DIUAM (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIUID	1 to 255	*Digital interworking unit identifier* Enter the digital interworking unit (DIU) number. This corresponds to the DIU agent number.
	SIM	3 to 17	*Synchronous interface module* Enter the synchronous interface module (SIM) slot number.
	SIMPORT	1 to 8	*Synchronous interface module port* Enter the port number on the specified SIM.
AM		alphanumeric (up to 12 characters)	*Access module* Enter the mnemonic for the access module (AM).
PI		1 to 14, 17 to 30	*Peripheral interface* Enter the peripheral interface (PI) slot number. Any entry outside the range indicated for this field is invalid.
PO		1 to 8	*Peripheral interface port* Enter the PI port number.

Data ll e xample

The following example shows sample data ll for table DIU AM.

MAP display example for table DIUAM

```
DIUENDPT            AM PI PO

_____________________________________________________________

12   3 1           AM1   3   1
```

DIUCONN

Table name

Digital Interworking Unit Connections Table

Functional description

This table describes the digital interworking unit (DIU) con guration in terms of which DS-1 channels are assigned to which synchronous interface module (SIM) ports. Table DIUCONN provides the following information:

- DIU number
- T1 interface module (TIM) number
- channel number
- SIM number
- SIM port number

Data ll sequence and implications

The following tables must be data lled before table DIUCONN:

- PHDSI
- DIUAM

Table size

0 to 1 920 tuples

Data ll

The following table lists data ll for table DIUCONN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DIUENDPT		see subfields	*Digital interworking unit end point* This field consists of subfields DIUTIM and CHANNEL.
	DIUTIM	see subfields	*Digital interworking unit TIM* This field consists of subfields DIUID and TIM.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIUID	1 to 255	*Digital interworking unit identification* Enter the digital interworking unit (DIU) identifier number. This corresponds to the DIU agent number.
	TIM	2 to 16	*T1 interface module* Enter the T1 interface module (TIM) slot number.
	CHANNEL	1 to 24	*Channel* Enter the DS-1 channel number.
SIM		3 to 17	*Synchronous interface module* Enter the slot number where the synchronous interface module (SIM) is located.
SIMPORT		1 to 8	*Synchronous interface port* Enter the SIM port number.

Data ll e xample

The following example shows sample data ll for table DIUCONN.

MAP display example for table DIUCONN

```
DIUENDPT SIM SIMPORT

_____________________________________________________________________

12   2   1    3        1
```

DLCDEV

Table name

Data Link Controller Device Table

Functional description

Table DLCDEV lists the assignments for the data link controller (DLC).

For related information, refer to table MTD.

Data ll sequence and implications

Table IOC must be data lled before table DLCDEV .

Table size

Memory is automatically allocated for one DLC device. Only one DLC can be data lled.

Data ll

The following table lists data ll for table DLCDEV .

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DLCNUM		0	*Data link controller device number* Enter 0 (zero) for the number assigned to the data link controller (DLC) device. Entries other than this value are invalid.
IOCNO		0 to 19	*Input, output controller number* Enter the number of the input/output controller (IOC) to which the DLC device is assigned.
IOCCKTNO		0, 4, 8, 12, 16, 20, 24, 28, or 32	*Input, output controller circuit number* Enter the number of the IOC circuit to which the DLC device is assigned. Entries outside this range are invalid.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BAUD		B1200 or B4800	*Baud rate* Enter the baud rate of the data link. Entries outside this range are invalid.
EQPEC		1X67BA 1X67DA or 1X67DB	*Product engineering code (PEC)* Enter the product engineering code (PEC) of the DLC circuit card. Entries outside this range are invalid.

Data ll e xample

The following example shows sample data ll for table DLCDEV .

MAP display example for table DLCDEV

```
DLCNUM IOCNO IOCCKTNO    BAUD  EQPEQ

_____________________________________________________________

    0     1      12    B4800 1X67BA
```

DMCTLIST

Table name

Deny Malicious Call Termination List Table

Functional description

Table DMCTLIST provides a means of preserving Deny Malicious Call Termination (DMCT) list information over dump and restores. Table DMCTLIST is hidden completely. Read access is only permitted during a dump and restore or when the journal le is being applied, since during this time the table is available temporarily. When the journal le is not active and table DMCTLIST is updated, DMCT log reports are generated to report the updates.

Within any one list, the index numbers are always continuous and start at 0 (zero). If a tuple is deleted from within the list, all entries following it move up by one. If a tuple is added to the list, then all entries move down the list and the new entry has index 0 (zero). The oldest entry is the tuple with the maximum index number.

Deny Malicious Call Termination (DMCT) is a feature that can be applied to ACD groups or individual lines. It allows the subscriber to selectively reject malicious calls. Data ll in table DMCTLIST is recei ved from subscriber interactions as a result of using DMCT. The addition of directory numbers is directed by a voice interface. The subscriber then enters the DTMF commands as required..

Data ll sequence and implications

The following tables must be data lled before table DMCTLIST :

- IBNFEAT
- KSETFEAT
- ACDGRP

Table size

The maximum table size is 4 Meg tuples.

The size of table DMCTLIST is controlled dynamically. It is a function of the number of lines or ACD groups in the of ce and the maximum number of items that can be saved in any list (refer to option DMCT in table CUSTSTN, eld MAXSIZE).

Data ll

The following table lists data ll for table DMCTLIST .

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OWNER		see subfields	*Owner* This field consists of subfields OWNERSEL, LEN, KEY, and ACDGRP. This is the key to the table and identifies the subscriber to whom the list belongs.
	OWNERSEL	A, I, K	*Owner selector* This field identifies the type of owner. A identifies the owner as an Automatic Call Distribution (ACD) group; refinement ACDGROUP is datafilled. I identifies the owner as an individual line; refinement LEN is datafilled. K identifies the owner as an electronic business set (EBS) key; refinements LEN and KEY are datafilled.
	ACDGROUP	alphanumeric	*ACD group* If the entry in field OWNERSEL is A, this field is datafilled. This field identifies the ACD group to which the line belongs.
	LEN	see subfields	*Line equipment number* If the entry in field OWNERSEL is I or K, this field is datafilled. This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. Refer to section “Common entry field LEN" for a complete description of field LEN and associated subfields.

DMCTLIST (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
	KEY	1 to 69	*Key* If the entry in field OWNERSEL is K, this field is datafilled. This field identifies the key on the set.
INDEX		0 to 49	*Index* This field identifies the position of the caller ID within the DMCT list. Items are added in a circular fashion. Index 0 identifies the newest entry, while the highest numbered index identifies the oldest entry. When the subscriber adds an entry to a full list by DMCT list editing, the oldest item is remove and the index of the remaining entries is incremented by one. The new entry is inserted at the beginning of the list.
CALLERID		vector of up to 18 digits, 0 to 9	*Caller identification* This field identifies the station from which the caller called.

Data ll e xample

An example of data ll for table DMCTLIST is sho wn below.

DMCT must be assigned to subscribers and ACD agents, who in turn must add entries using DMCT list editing before any data appears in table DMCTLIST. As well, a DMCT entry must appear in table CUSTSTN for any group which contains DMCT subscribers, in order for those subscribers to be able to access their DMCT list editing sessions.

```
                  OWNER               INDEX
 CALLERID
 ________________________________________________________________

 K HOST  03 0 01 23  1                   0
 3452346567
 K HOST  03 0 01 23  1                   1
 3459847686
         A    ACDGRP99                   0
 3459847686
         A    ACDGRP99                   1
 3458672345
         A    ACDGRP99                   2
 3453870564
         A    ACDGRP99                   3
 3457856455
     I HOST  01 0 02 24
```

Table history

BCS36

Table DMCTLIST was introduced.

DMODEM

Table name

Digital Modem Table

Functional description

Table DMODEM lists the following information:

- the assignment of the external trunk name to each digital modem
- the location and circuit number for each digital modem

When the system provisions an attendant console, each console requires one circuit of each product engineering code (PEC). One PEC in this occurrence is the NT3X02AA Traf c Operator Position System (TOPS) control processor card. The other PEC is the NT3X03AA TOPS digital signal processor card.

Each two-card-set that contains NT3X02AA and NT3X03AA cards provides a total of four digital modem circuits. These cards are on the maintenance trunk module (MTM). The MTM has NT3X02AA cards in odd slots and NT3X03AA cards in even slots. For example, slots 1 and 2 contain modem pair one.

The rst circuit of each card pair requires a list in table DMODEM. The entry in eld TMCKTNO must be a multiple of four . An MTM can contain a maximum of six pairs of digital modem cards. The only values that eld TMCKTNO can have are 0, 4, 8, 12, 16, and 20.

The entry in eld EXTRKNM is the key to identify the digital modem circuit. The entry must be different and must be a multiple of four. Three EXTRKNM numbers that are not in this eld follo w the EXTRKNM number. These EXTRKNM numbers that are not in this eld identify the three circuits of the pair that are not in this eld. F or example, the system assigns eld EXTRKNM 4 to trunk module (TM) no. 1, TM circuit no. 8. The following occurs by default:

- the EXTRKNM 5 refers to TM no. 1, TM circuit no. 9
- the EXTRKNM 6 refers to TM no. 1, TM circuit no. 10
- the EXTRKNM 7 refers to TM no. 1, TM circuit no. 11

Data ll sequence and meaning

Enter data in table TMINV before you enter data in table DMODEM.

Table size

Memory allocation occurs in accordance with the value in eld TRKGRSIZ in table CLLI. This value is for the pseudo common language location identi er (CLLI) code DMODEM. To increase the size of the table, the following occurs:

- deletion occurs of all members of the table DMODEM
- the system increases the value in eld TRKGRSIZ, in table CLLI, for pseudo CLLI DMODEM
- an addition occurs of the members of the table DMODEM

Data ll

Data ll for table DMODEM appears in the follo wing table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
EXTRKNM		0 to 9996 (must be multiple of 4)	*External trunk name*. This is a fixed but different number. Assignment of this number occurs to each digital modem circuit. Correct entries must be a multiple of four. Entries outside this range are incorrect.
TMTYPE		MTM	*Trunk module type*. Enter maintenance trunk module (MTM) for the type of trunk module (TM) which contains the digital modem card. Entries outside this range are incorrect.
TMNO		0 to 2047	*Trunk module number*. Enter the number assigned to the TM which contains the digital modem card.

DMODEM (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TMCKTNO		0, 4, 8, 12, 16 or 20	*Trunk module circuit number* Enter the TM circuit number. This TM circuit number receives assignment of the digital modem card. The system only assigns the first circuit in the modem card or card pair. The correct entry values are the six MTM circuit numbers that appear. Entries outside this range are incorrect.
CARDCODE		3X02AA	*Card code*. Specify the digital modem card type. Card 3X02AA is the only correct entry. Entries outside this range are incorrect.

Data ll e xample

Sample data ll for table DMODEM appears in the follo wing table.

MAP example for table DMODEM

```
EXTRKNM TMTYPE TMNO TMCKTNO CARDCODE
_____________________________________

     0    MTM    5       0   3X02AA
     4    MTM    5       4   3X02AA
```

DNATTRS

Table name

Directory Number Attributes

Functional description

Table DNATTRS contains directory number (DN) attributes for speci c DNs.

The key to table DNATTRS is the DN, which is speci ed in terms of numbering plan area, of ce code digits, and station code digits. In table DNATTRS, DN attributes are data lled for up to tw o logical networks. The attributes are stored as a standard options list for each network.

Table DNATTRS has the following service options:

- Per-Directory Number-Call Type (DN-CT) subscription parameters: PROVCGS, PROVCDS, PROVLLC, PROVHLC, CTPIC, ISDNAMA, and CTLPIC.
- Per-Directory Number-Bearer Capability (DN-BC) subscription parameters: SPEECH, 3_1_KHZ, 7_KHZ, 56KDATA, and 64KDATA.

The subscription parameters for calling party subaddress, CGS, called party subaddress, CDS, low-layer compatibility (LLC), and high-layer compatibility (HLC) apply to circuit-switched calls only, on a DN and a call-type basis.

Enter data for the subscription parameters either for each DN or on a call-type basis in table DNATTRS. If you do not manually enter the appropriate option for a given DN and call type in table DNATTRS, the switch uses the hard-coded default.

For related information, refer to table NETNAMES.

Limitations and restrictions

Before adding options for call types (VBINFO or CMDATA), specify one option, because the switch does not support empty call type lists. You can enter a zero PIC value when entering data in the bearer capability options.

If you describe the VBINFO CTPIC option for a DN, you cannot use the per DN/BC options, SPEECH, 3_1_KHZ and 7_KHZ. If you specify the CMDATA CTPIC option for a DN, you cannot use the per DN/BC options 56KDATA and 64KDATA.

If the per DN/CT CTPIC option is not present for a DN, any combination of the BC options are valid for that DN.

DNATTRS (continued)

Data ll sequence and implications

The following tables must be data lled before table DN ATTRS:

- BCDEF
- ISDNBILL
- LATAXLA

Note: Enter the ISDN Automatic Message Accounting (AMA) group name in table ISDNBILL before using it with the subscription parameter ISDNAMA in table DNATTRS.

Table size

0 to 1 048 320 tuples

Table size restrictions

Table store is continuously allocated. The switch extends the table size automatically as you add tuples.

Data ll

The following table lists the data ll for table DN ATTRS.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
KEY		see subfields	The Directory Number Key field is the key to the table and consists of subfields AREACODE, OFCCODE, and STNCODE.
	AREACODE	numeric, up to 7 digits (0 to 9)	Enter the serving numbering plan area (SNPA) or the serving translation scheme (STS) in subfield Areacode.
	OFCCODE	numeric, up to 7 digits	The Office Code field contains office codes with a length from 0 to 7 digits.
	STNCODE	numeric, 1 to 8 digits	This field contains Station Codes from 1 to 8 digits. If office parameter ACTIVE_DN_SYSTEM contains NORTH_AMERICAN or ENHANCED_NORTH_AMERICAN, the STNCODE field is restricted to four digits through provisioning rules. A maximum of eight digits can be entered in the STNCODE field if the office parameter ACTIVE_DN_SYSTEM contains UNIVERSAL.

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
DATA		see subfields	The Network Attributes field consists of subfields NETNAME, NETOPTS, and OPTID. This vector consists of up to two network names and their attributes. If there is only one network name and its attributes, enter $ to end the vector.
	NETNAME	alphanumeric (up to 32 characters)	Enter a logical network name. A valid logical network name must be previously datafilled in field NETNAME of table NETNAMES.
	NETOPTS	see subfields	The Network Options List field contains a list of options for the network as specified in field NETNAME. The options are listed in subfield OPTID. This vector consists of up to four network options. The options are NAME, PN, SUPPRESS, MEMDISP, NONUNIQUE, SUPPRND, and their subfields. If one option identifier and its subfields are entered, enter $ to end the vector.
	OPTID	NAME, PN, SUPPRESS, SUPPRND, MEMDISP, NONUNIQUE	Enter the Network Option Identifier. The options that can be specified for each network are station or multiple appearance DN (MADN) group name, MADN member name, and whether address and name display are suppressed. If a station or MADN group name is displayed, enter NAME and complete refinement DNAME. If PN (Presentation Number) is selected, enter Y or N in the subfield NN_UNAVAIL. If the number display or name is suppressed, or both, enter SUPPRESS and datafill subfields SUPPDN and SUPPNAME. SUPPRND controls the delivery or suppression for redirecting numbers. Enter data in subfields SUPPRND_UNCOND, SUPPRND_BUSY, and SUPPRND_NO_ANS. If a MADN member name is displayed, enter MEMDISP. No additional fields are required with option MEMDISP.

DNATTRS (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
			The option NONUNIQUE is added automatically to table DNATTRS whenever a line is given a line class code (LCC) or assigned a line option that makes the DN non-unique. The option NONUNIQUE is assigned to all networks datafilled in the table. If a network of PUBLIC is not present for a DN, it is added with the option NONUNIQUE. If the non-unique LCC is changed to a unique LCC and no non-unique options are assigned or once the last non-unique line option has been removed, the NONUNIQUE option is removed from each network datafilled against the DN in table DNATTRS. If the maximum number of networks is present and the public network is not among them, then the NONUNIQUE option cannot be added.

OPTID = NAME

If the entry in eld OPTID is N AME, data ll sub eld DN AME.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
NAME	DNAME	15 alphanumeric	This is the Display Name subfield. Enter the associated station name. For blanks use underscores. The name is enclosed in single quotes for mixed case names.

OPTID = PN

If OPTID is PN, data ll elds PN and NN_UN AVAIL.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
PN	NN_UNAVAIL	Y or N	This is the Network Number Unavailable subfield. Enter Y to indicate to the network that the subscriber's network number is not available for display when a valid presentation number is provided.

OPTID = SUPPRESS

If the entry in eld OPTID is SUPPRESS, data ll sub elds SUPPDN and SUPPNAME.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
SUPPRESS	SUPPDN	Y or N	*Suppress directory number* Enter Y to indicate the DN is suppressed. Otherwise, enter N.
	SUPPNAME	Y or N	*Suppress name* Enter Y to indicate the name is suppressed. Otherwise, enter N. ***Note:*** For the transactions capabilities application part (TCAP) name local lookup feature (AF7157) the suppress name line option does not affect TCAP name privacy values. However, the entry must match the DMS TCAP name database privacy value.

OPTID = SUPPRND

If the entry in eld OPTID is SUPPRND, data ll sub elds SUPPRND_UNCOND, SUPPRND_BUSY, and SUPPRND_NO_ANS.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
SUPPRND	SUPPRND_ UNCOND	Y or N	Suppress RND for unconditional. The suppression value for redirections caused by call forward universal (CFU), call forward intragroup (CFI), and call forward fixed (CFF). A value of Y means suppress the redirecting number (RN) for these redirection types; N means do not suppress.

DNATTRS (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	SUPPRND_BUSY	Y or N	Suppress RND for busy. The suppression value for busy redirections, which call forward busy (CFB) causes for lines; or which CFB, line overflow to DN (LOD), line overflow to route (LOR), and key short hunt (KSH) overflow cause for trunks. A value of Y means suppress the RN for these redirection types; N means do not suppress.
	SUPPRND_NO_ ANS	Y or N	Suppress RND for no answer. The suppression value for no-answer redirections, which call forward no answer (CFD) causes for lines and trunks. A value of Y means suppress the RN for these redirection types; N means do not suppress.

OPTID = OPTDATA

The following table describes the eld OPTD ATA and the selector elds CT or BC.

Field descriptions

Field	Subfield	Entry	Explanation and action
OPTDATA		see subfields	This is the Optional Data field. Field OPTDATA consists of subfields SEL, CTDATA, and BCDATA. This vector contains up to two selector names and their attributes. This field is a vector of up to two multiples.Each multiple holds a selector and other information depending on the selector value. If the NIL selector applies ($), no additional data is in the OPTDATA field.
	SEL	CT or BC	This field contains the selector field of the OPTDATA area. If the optional data is based on DN and call type (DN/CT), enter CT and datafill subfield CTDATA. If the optional data is based on DN and bearer capability (DN/BC), enter BC and datafill subfield BCDATA.

OPTDATA SEL = CT

If the entry in sub eld SEL is CT , data ll sub eld CTD ATA.

Field descriptions for conditional data ll (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
CT	CTDATA		The Call Type Data field consists of subfields CALLTYPE and CTOPTS. This vector consists of up to two multiples.
	CALLTYPE	VBINFO, CMDATA	This is the Call Type field. Enter VBINFO for voiceband information (SPEECH, 3.1kHz, and 7kHz bearer capabilities). Enter CMDATA for circuit-mode data. Any combination of current DN and call type options are valid for both call-type identifiers. If a call-type identifier is not specified for a DN, then the default option values for the VBINFO and CMDATA call-types apply for ISDN basic rate interface (BRI) circuit-mode voiceband information or circuit-mode data calls, or both, from this DN.
	CTOPTS	see subfield	The Call Type Options subfield contains the DN and call type options, and subfield CTOPTID. This vector consists of seven multiples.
	CTOPTID	CTPIC, PROVCDS, PROVCGS, PROVHLC, PROVLLC, ISDNAMA, CTLPIC	This is the Call Type Option Identifier. Enter the DN/CT options as explained as follows.
	CTPIC	alphanumeric	This is the Call Type Primary Inter-LATA Carrier field. If the entry in subfield CTOPTID is CTPIC, enter the primary inter-LATA carrier (PIC) name that is datafilled in table OCCNAME. If PIC information is not specified for a DN, the default PIC value applies for the DN over the unspecified bearer capability (BC).
		CTPIC	Enter CTPIC (call type primary inter-LATA) carrier to indicate that the network associates one primary inter-LATA carrier for each DN/CT.

DNATTRS (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
		PROVCDS	Enter PROVCDS (provide called party subaddress information transfer for basic rate access functional set [BRAFS] only) for ETSI (European Telecommunication Standard Institute) BRI calls to allow the called party to receive the called party subaddress (CDS) from the originating line. For all other calls, enter PROVCDS to allow the calling party to transfer the CDS to the terminating line. The CDS information is present in the incoming SETUP message received by the terminating line for ETSI BRI and for all other calls.
		PROVCGS	Enter PROVCGS (calling party subaddress information transfer for BRAFS only) to indicate that the calling party subaddress that is present in the incoming SETUP message for this DN/CT is transferred to the terminating BRAFS.
		PROVHLC	Enter PROVHLC (high-layer compatibility information transfer for BRAFS only) to indicate that the high-layer compatibility information that is present in the incoming SETUP message for this DN/CT is transferred to the terminating BRAFS in a SETUP message.
		PROVLLC	Enter PROVLLC (low-layer compatibility information transfer for BRAFS only) to indicate that the low-layer compatibility information that is present in the incoming SETUP message is accepted and transferred to the called party by the network.
	GRPNAME	RECORDALL, RECORDNON, RECORDCGS	This is the ISDN Automatic Accounting Message field. If ISDN AMA, (for BRAFS only) enter subfield GRPNAME with multiple RECORDALL, RECORDCGS, (calling party sub address delivery) or RECORDNONE. ISDNAMA allows an operating company to associate an ISDN group name from table ISDNBILL with a DN/CT pair.

Field descriptions for conditional data ll (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
	CTLPIC	alphanumeric	This is the Call Type Primary intra-LATA Carrier Field. If the entry in subfield CTOPTID is CTLPIC, enter the refinement for the primary intra-LATA carrier (PIC) name that is datafilled in table OCCNAME. If PIC information is not specified for a DN, the LPIC from the line option is used. If no LPIC line information is datafilled, the LPIC is identified from the customer group. Enter CTLPIC (call type primary intra-LATA carrier) to indicate that the network associates one primary intra-LATA carrier for each DN/CT.
	CTLPIC_ Choice	Y, N	If the entry in subfield CTOPTID is CTLPIC, enter data in this subfield. Enter Y to allow casual access calling (CAC). Enter N to disallow CAC.

OPTDATA SEL = BC

If the entry in sub eld SEL is BC, data ll sub eld BCD ATA.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
BC	BCDATA	see subfields	The Bearer Capability Data field consists of subfields BCOPTID, BCLPIC, BCLPIC_CHOICE, and BCPIC. There is a vector of up to five DN/BC options.
	BCOPTID	speech, 3_1khz, 7_khz, 56kdata, 64kdata	The Bearer Capability Option Identification field defines the DN/BC options. Enter the bearer capability name that is specified in table BCDEF.
	BCLPIC	alphanumeric	This is the Bearer Capability Primary Intra-LATA Carrier subfield. Enter the name for the bearer capability PIC that is datafilled in table OCCNAME

DNATTRS (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	BCLPIC_CHOICE	Y, N	This is the Bearer Capability Primary Intra-LATA Carrier Choice subfield. If subfield BCLPIC is datafilled, enter the refinement bearer capability BCLPIC_Choice. Enter Y to allow casual access calling (CAC). Enter N to disallow CAC.
	BCPIC		The Bearer Capability Primary Inter-LATA Carrier subfield contains the PIC value that is associated with each BC option. The PIC value can be $ or any valid PIC value. If the PIC is not provided in digit analysis in translations, then table DNATTRS is accessed. If the PIC is not datafilled in table DNATTRS for each DN/CT or DN/BC, then table KSETFEAT is accessed. If PIC information is not specified for a DN, the default PIC value applies for the DN over the unspecified BC.

Data ll e xample

An example of data ll for table DN ATTRS for a DN network with DN/BC, CTLPIC, and SUPPRESS options follows.

MAP display example for table DNATTRS with options DN/BC, CTLPIC, and SUPPRESS

```
KEY      DATA
                   OPTDATA
________________________________________________________________________
202 733 2345
(BNR    (NAME JOHN_DOE) $)
(PUBLIC (SUPPRESS Y N) (NONUNIQUE) (NAME JACK_FLASH)
$(BC(SPEECH CARR1 Y (CARR1$)  (3_1_KHZ CARR1 Y (CARR1) $)
64KDATA CARR1 Y (CARR1) $)$)$
```

Table history

NA012

Added the SUPPRND option for Redirecting Number Privacy for ISDN Call Forward, AT59005918.

MMP12

Added the NN_UNAVAIL (Network Number Unavailable) sub eld.

EUR010

Added the PN (Presentation Number) option.

NA012

Added the SUPPRND option for the feature Redirecting Number Privacy for ISDN Call Forward, AT59005918.

EUR009

Extended the range of the STNCODE sub eld to permit the entry of a station code up to a maximum of eight digits if the ACTIVE_DN_SYSTEM of ce parameter contains UNIVERSAL.

NA009

Added TCAPNM query and local lookup feature information to the SUPPRESS sub elds, SUPPDN and SUPPN AME, for feature AF7157.

EUR008

Deleted the following elds from table DN ATTRS:

- eld SV GNPA
- eld NNX
- eld DEFGDIGS

Added the following elds to table DN ATTRS:

- eld AREA CODE
- eld OFCCODE
- eld STNCODE

NA008

Added CTLPIC and CTLPIC_CHOICE information to CTOPTS eld and sub eld descriptions. Added the CTLPIC option to the MAP display in the data ll e xample.

DNBKSUR

Table name

Directory Number Blocking Surcharge Table

Functional description

Table DNBKSUR is used to de ne the applicable surcharge on calls which are Caller ID Blocked and are rated by the TOPS realtime rating system. The table de nes a dif ferent surcharge for each service class and is indexed by the call completion type.

Table DNBKSUR is mass-table-controlled with duplicate table DNBKSURI. One table is active and the other is inactive. This allows data ll changes in the inactive table and then table activity is exchanged instantaneously without disrupting use of the table. Refer to table CHARGEI for more information on mass-table control.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DNBKSUR.

Table size

0 to 4 tuples

Data ll

The following table lists data ll for table DNBKSUR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLDTYPE		UNKOWN, DOM, DOMIC, OVS, VFY, OPR, LOC, VCA, UCA, OGT, ZEN, SRV, REQ	Call completion type. Key to table. The types are defined as follows: • UNKOWN - Unspecified • DOM - Toll (intralata) • DOMIC - Toll (interlata) • OVS - Overseas • VFY - Verify • OPR - Operator • LOC - Local • VCA - Vacant code announcement • UCA - Unauthorized code • OGT - Outgoing trunk • ZEN - Zenith • SRV -Service • REQ - Required
UNSPEC		0 to 1000	Unspecified. The amount of caller ID blocking surcharge applied to calls whose originating class of service is unknown.
STA		0 to 1000	Station. The amount of caller ID blocking surcharge applied to calls whose originating class of service is station.
HOTEL		0 to 1000	Hotel. The amount of caller ID blocking surcharge applied to calls whose originating class of service is hotel.

DNBKSUR (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
COIN		0 to 1000	Coin. The amount of caller ID blocking surcharge applied to calls whose originating class of service is coin.
REST		0 to 1000	Restricted. The amount of caller ID blocking surcharge applied to calls whose originating class of service is restricted.

Data ll e xample

The following example shows sample data ll for table DNBKSUR.

MAP display example for table DNBKSUR

```
CLDTYPE    UNSPEC    STA    HOTEL    COIN    REST
-------------------------------------------------------
LOC          0         0      75       80     75
DOM          0        25      75       50     25
OVS          0         0       0        0      0
SRV          0        25      75       55     75
```

Table history

NA005

Table DNBKSUR was introduced by functionality GR317/GR394 ISUP to/from TOPS, OSEA0005.

DNBKSURI

Table name

Directory Number Blocking Surcharge Inactive Table

Functional description

Table DNBKSURI is used to de ne the applicable surcharge on calls which are Caller ID Blocked and are rated by the TOPS realtime rating system. The table de nes a dif ferent surcharge for each service class and is indexed by the call completion type.

Table DNBKSURI is mass-table-controlled with duplicate table DNBKSUR. One table is active and the other is inactive. This allows data ll changes in the inactive table and then table activity is exchanged instantaneously without disrupting use of the table. Refer to table CHARGEI for more information on mass-table control.

For further information, refer to table DNBKSUR.

Data ll sequence and implications

Refer to table DNBKSUR.

Table size

Refer to table DNBKSUR.

Data ll

Refer to table DNBKSUR.

Data ll e xample

Refer to table DNBKSUR.

Table history

Refer to table DNBKSUR.

DNCHNL

Table name

Directory Number Channel Type Table

Functional description

Table DNCHNL stores the ISDN basic and supplementary service parameters for data on a directory number (DN) and channel type basis. The X.25 basic and supplementary service parameters in this table are a re nement of the packet mode data (PMD) call type in table DNCTINFO.

Data ll sequence and implications

Table KSETLINE must be data lled before table DNCHNL.

Table size

0 to 32 768 tuples

The store for table DNCHNL is allocated as new DNs are added. The maximum table size is determined by the maximum size of the DN array structure.

Data ll

The following table lists data ll for table DNCHNL.

Field descriptions (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This is the first and key field of the table. It consists of subfields DIGKEY and CHNL.
	DIGKEY	vector of up to 18 digits	*Digilator key* Enter the directory number (DN).
	CHNL	B or D	*Channel* Enter the channel type.
OPTIONS		see subfields	*Channel type options* This field consists of subfield CHNL.

Field descriptions (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	CHNL	B or D	*Channel* Enter the channel type. Enter B for channel type B and datafill refinement BOPTIONS as explained below. Enter D for channel type D and datafill refinement DOPTIONS as explained starting onthe folowing pages.
	BOPTIONS	DTCA, LCA, LLFSQ, LLWS, N2, NDPS, NDWS, PLSQ, T1, T2, or T3	*B-channel type options* Enter up to 11 of the following B channel type options: DTCA (default throughput class assignment). Datafill refinement DTCA onthe following pages. LCA (logical channel assignment). Datafill refinement LCA on the following pages LLFSQ (link level frame sequencing). Datafill refinement LLFSQ on the following pages. LLWS (link level window size). Datafill refinement LLWS on the following pages. N2 (maximum retransmissions). Datafill refinement N2 onthe following pages. NDPS (non-standard default packet size). Datafill refinement NDPS on the following pages. NDWS (non-standard default window size). Datafill refinement NDWS onthe following pages. PLSQ (packet level sequencing). Datafill refinement PLSQ onthe following pages.

DNCHNL (continued)

Field descriptions (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	BOPTIONS		T1 (acknowledgement timer). Datafill refinement T1 onthe following pages. T2 (response timer). Datafill refinement T2 on following pages. T3 (idle channel timer). Datafill refinement T3 on the following pages. Each option must be separated from the next by a blank space.
	DOPTIONS	DTCA, LCA, NDPS, NDWS, PLSQ	*D-channel type options* Enter up to five of the following D channel type options: DTCA (default throughput class assignment). Datafill refinement DTCA onthe following pages. LCA (logical channel assignment). Datafill refinement LCA on the following pages. NDPS (non-standard default packet size). Datafill refinement NDPS on pages. NDWS (non-standard default window size). Datafill refinement NDWS on the pages. PLSQ (packet level sequencing). Datafill refinement PLSQ on the following pages. Each option must be separated from the next by a blank space.
	DTCA	see subfield	*Default throughput class assignment* If the entry in field BOPTIONS is DTCA, datafill this field. This field consists of subfield SUBSCRIBED.

Field descriptions (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	SUBSCRIBED	Y or N	*Subscribed* Enter Y (yes) to subscribe to a default throughput class, that is, a user default throughput class different from the value provided by the network for each direction of communication. Datafill refinements IDTCA and ODTCA. Otherwise, enter N (no). The default value for this field is N.
	IDTCA	75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 48000, 56000, 64000	*Incoming default throughput class assignment* Enter the non-standard default throughput class for incoming calls. There is no default value for this field.
	ODTCA	75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 48000, 56000, 64000	*Outgoing default throughput class assignment* Enter the non-standard default throughput class for outgoing calls. There is no default value for this field.

DNCHNL (continued)

Field descriptions (Sheet 5 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	LCA	SLCNNPVCN OWINNRCN OWO	*Logical channel assignment* If the entry in refinement BOPTIONS is LCA, datafill this refinement. Enter one of the following assigned logical channels for each type of service at the time of subscription: • SLCN (start logical channel number). Datafill refinement SLCN. • NPVC (number of permanent virtual circuit) • NOWI (number of one way incoming logical channel) • NNRC (number of non-restricted channel) • NOWO (number of one way outgoing logical channel) ***Note:*** The parameters SLCN, NPVC, NOWI, NNRC, and NOWO must satisfy the following: NPVC + NOWI + NNRC + NOWO <= 512, and SLCN + NPVC + NOWI + NNRC + NOWO <= 4096
	SLCN	1 to 4095	*Start logical channel number* If the entry in refinement LCA is SLCN, datafill this refinement. Enter the starting channel for the logical channel assignment. The default value for this field is 1.
	NOWO	0 to 512	*Number of one-way outgoing logical channel* Enter the subscribed number of one-way outgoing logical channel. The default value for this field is 0 (zero).

Field descriptions (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	NNRC	1 to 512	*Number of non-restricted channel* Enter the subscribed number of non-restricted logical channels. A minimum of one channel must be subscribed to. The default value for this field is 1. Any entry outside the range indicated for this field is invalid.
	NOWI	0 to 512	*Number of one-way incoming logical channel* Enter the subscribed number of one-way incoming logical channels. The default value for this field is 0 (zero).
	NPVC	0 to 512	*Number of permanent virtual circuit* Enter the subscribed number of permanent virtual circuits. The default value for this field is 0 (zero).
	LLFSQ	MOD8orMOD 128	*Link level frame sequencing* If the entry in refinement BOPTIONS is LLFSQ, datafill this refinement. Enter the sequencing number of frames allowed for each direction of transmission. The default value for this field is MOD8.
	LLWS	1 to 127	*Link level window size* If the entry in refinement BOPTIONS is LLWS, datafill this refinement. Enter the maximum number of frames allowed in transit at one time. Enter a value between 1 and 7 if field LLFSQ contains MOD8. Enter a value between 1 and 127 if field LLFSQ contains MOD128. The default value for this field is 7.

DNCHNL (continued)

Field descriptions (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	T1	10 to 200	*Acknowledgement timer* If the entry in refinement BOPTIONS is T1, datafill this refinement. Enter the time period between the transmission of consecutive frames. Enter a value between 10 to 200 (with an increment of 1 in units of 100 ms). The default value for this field is 20 of 100 ms.
	T2	0 to 4	*Response timer* If the entry in refinement BOPTIONS is T2, datafill this refinement. Enter the response time between reception of the last bit of frame and sending corresponding acknowledgement. Enter a value between 0 (zero) and 4 (with an increment of 1 in units of 100 ms). The default value for this field is 2 of 100 ms.
	T3	1 to 30	*Idle channel timer* If the entry in refinement BOPTIONS is T3, datafill this refinement. Enter the time LAPB can stay idle before layer 3 applies failure procedures. Enter a value between 1 and 30 s in 1-s increments. The default value for this field is 5 s.
	N2	2 to 15	*Maximum retransmissions* If the entry in refinement BOPTIONS is N2, datafill this refinement. Enter the maximum number of attempts to compile a successful transmission. Enter a value between 2 and 15. The default value for this field is 3.

Field descriptions (Sheet 8 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	PLSQ	MOD8orMOD 128	*Packet level sequencing* If the entry in refinement BOPTIONS is PLSQ, datafill this refinement. Enter the sequentially numbering of packets for each direction of transmission. The default value for this field is MOD8.
	NDWS	see subfield	*Non-standard default window size* If the entry in refinement BOPTIONS is NDWS, datafill this refinement. This field allows the user to subscribe to a packet layer window size for each direction of communication. This field consists of subfield SUBSCRIBED.
	SUBSCRIBED	Y or N	*Subscribed* If the entry in refinement BOPTIONS is NDSW, datafill this subfield. Enter Y to subscribe to a packet layer window size for each direction of communication. Datafill refinements IPLWS and OPLWS as explained below. Otherwise, enter N. The default value for this field is N.
	IPLWS	1 to 127	*Incoming packet layer window size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the non-standard window size for incoming calls. Enter a value between 1 and 7 for MOD8. Enter a value between 1 and 127 for MOD128. The default value for this field is 2.

DNCHNL (continued)

Field descriptions (Sheet 9 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	OPLWS	1 to 127	*Outgoing packet layer window size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the non-standard window size for outgoing calls. Enter a value between 1 and 7 for MOD8. Enter a value between 1 and 127 for MOD128. The default value for this field is 2.
	NDPS	see subfield	*Non-standard default packet size* If the entry in refinement BOPTIONS is NDPS, datafill this refinement. This field consists of subfield SUBSCRIBED.
	SUBSCRIBED	Y or N	*Subscribed* If the entry in refinement BOPTIONS is NDPS, datafill this subfield. Enter Y to subscribe to a maximum packet size for each direction of communication. Datafill refinements IMPS and OMPS as explained below. Otherwise, enter N. The default value for this field is N.
	IMPS	16, 32, 64, 128, 256	*Incoming maximum packet size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the maximum allowable packet size for an incoming call. The default value for this field is 128.
	OMPS	16, 32, 64, 128, 256	*Outgoing maximum packet size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the maximum allowable packet size for outgoing calls. The default value for this field is 128.

DOPTIONS = LCA

If sub eld CHNL contains D and re nement DOPTIONS contains LCA, data ll re nement LCA.

Field descriptions for conditional data ll (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	LCA	SLCNNPVCN OWINNRCN OWO	*Logical channel assignment* This field identifies the assigned logical channels for each type of service at the time of subscription. They are: • SLCN (start logical channel number). Datafill refinement SLCN as explained on the following pages. • NPVC (number of permanent virtual circuit). Datafill refinement NPVC as explained onthe following pages. • NOWI (number of one way incoming logical channel). Datafill refinement NOWI as explained onthe following pages. • NNRC (number of non-restricted channel). Datafill refinement NNRC as explained on the following pages. • NOWO (number of one way outgoing logical channel). Datafill refinement NOWO as explained on the following pages. ***Note:*** The parameters SLCN, NPVC, NOWI, NNRC, and NOWO must satisfy the following: NPVC + NOWI + NNRC + NOWO <= 512, and SLCN + NPVC + NOWI + NNRC + NOWO <= 4096
	SLCN	1 to 4095	*Start logical channel number* If the entry in refinement LCA is SLCN, datafill this refinement. Enter the starting channel for the logical channel assignment. The default value for this field is 1.

DNCHNL (continued)

Field descriptions for conditional data II (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NOWO	0 to 64	*Number of one-way outgoing logical channel* If the entry in refinement LCA is NOWO, datafill this refinement. Enter the subscribed number of one-way outgoing logical channel. The default value for this field is 0 (zero).
	NNRC	1 to 64	*Number of non-restricted channel* If the entry in refinement LCA is NNRC, datafill this refinement. Enter the subscribed number of non-restricted logical channels. A minimum of one channel must be subscribed to. Enter a value between 1 and 64. Any entry outside the range indicated for this field is invalid. The default value for this field is 1.
	NOWI	0 to 64	*Number of one-way incoming logical channel* If the entry in refinement LCA is NOWI, datafill this refinement. Enter the subscribed number of one-way incoming logical channels. The default value for this field is 0 (zero).
	NPVC	0 to 64	*Number of permanent virtual circuit* If the entry in refinement LCA is NPVC, datafill this refinement. Enter the subscribed number of permanent virtual circuits. The default for this field is 0 (zero).
	PLSQ	MOD8orMOD 128	*Packet level sequencing* If the entry in refinement DOPTIONS is PLSQ, datafill this refinement. Enter the sequentially numbering of packets for each direction of transmission. The default value for this field is MOD8.

Field descriptions for conditional data II (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NDWS	see subfield	*Non standard default window size* If the entry in refinement DOPTIONS is NDWS, datafill this refinement. This field NDWS allows the user to subscribe to a packet layer window size for each direction of communication. Refinement NDWS consists of subfield SUBSCRIBED and refinements IPLWS and OPLWS.
	SUBSCRIBED	Y or N	*Subscribed* If the entry in refinement DOPTIONS is NDWS, datafill this subfield. Enter Y to subscribe to a packet layer window size for each direction of communication. Datafill refinements IPLWS and OPLWS as explained below. Otherwise, enter N. The default value for this field is N.
	IPLWS	1 to 127	*Incoming packet layer window size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the non-standard window size for incoming calls. Enter a value between 1 and 7 for MOD8. Enter a value between 1 and 127 for MOD128. The default value for this field is 2.
	OPLWS	1 to 127	*Outgoing packet layer window size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the non-standard window size for outgoing calls. Enter a value between 1 and 7 for MOD8. Enter a value between 1 and 127 for MOD128. The default value for this field is 2.

DNCHNL (continued)

Field descriptions for conditional data II (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NDPS	see subfield	*Non standard default packet size* If the entry in refinement DOPTIONS is NDPS, datafill this refinement. This field consists of subfield SUBSCRIBED and refinements IMPS and OMPS.
	SUBSCRIBED	Y or N	*Subscribed* If the entry in refinement DOPTIONS is NDPS, datafill this refinement. Enter Y to subscribe to a maximum packet size for each direction of communication. Datafill refinements IMPS and OMPS. Otherwise, enter N. The default value for this field is N.
	IMPS	16, 32, 64, 128, 256	*Incoming maximum packet size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the maximum allowable packet size for an incoming call. The default value for this field is 128.
	OMPS	16, 32, 64, 128, 256	*Outgoing maximum packet size* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the maximum allowable packet size for outgoing calls.
	DTCA	see subfield	*Default throughput class assignment* If the entry in refinement DOPTIONS is DTCA, datafill this refinement. This field consists of subfield SUBSCRIBED and refinements IDTCA and ODTCA.

Field descriptions for conditional data ll (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SUBSCRIBED	Y or N	*Subscribed* If the entry in refinement DOPTIONS is DTCA, datafill this subfield. Enter Y to subscribe to a default throughput class, that is, a user default throughput class different from the value provided by the network for each direction of communication. Datafill refinements IDTCA and ODTCA. Otherwise, enter N. The default value for this field is N.
	IDTCA	75, 150, 300, 600, 1200, 2400, 4800, 9600	*Incoming default throughput class assignment* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the non-standard default throughput class for incoming calls. There is no default value for this field.
	ODTCA	75, 150, 300, 600, 1200, 2400, 4800, 9600	*Outgoing default throughput class assignment* If the entry in subfield SUBSCRIBED is Y, datafill this refinement. Enter the non-standard default throughput class for outgoing calls. There is no default value for this field.

Data ll e xample

The following example shows sample data ll for table DNCHNL.

DNCHNL (end)

MAP display example for table DNCHNL

```
                  KEY
                                                    OPTIONS
_____________________________________________________________

           7635555 B
B (NDPS Y 128 128) (T1 50) (T2 4) $

D (DTCA Y 4800 4800) (NDPS N ) $
```

Table history

BCS34

Table DNCHNL was introduced.

DNCODE

Table name

Directory Number Code Table

Functional description

Table DNCODE translates directory numbers (DN). The system software makes entries in this read-only table when the user enters tables LENLINES, HUNTGRP, or HUNTMEM. Enter table WRDNCODE to add tuples to table DNCODE.

Fields XLANAME and DNNO are the key to table DNCODE.

When the user adds a tuple to table LENLINES, the switch obtains the service numbering plan area (SNPA) from table LINEATTR. The switch uses this SNPA and the of ce code from table LENLINES to determine the translation name from table DNHEAD. The translation name is in eld XLANAME. To enter the tuple for DNCODE, the switch uses the entry in XLANAME and SNPA, the DN and line equipment number (LEN). The switch determines the DN and LEN from table LENLINES. The switch uses the same method when the user adds a tuple to table HUNTGRP and HUNTMEM.

The user enters table WRDNCODE for DNs that terminate on a treatment, feature, or route. Table WRDNCODE and table DNCODE to use the same data ll storage area in the switch. The system enters the same tuples in table DNCODE that the user enters in table WRDNCODE.

When the digits are not found in table DNCODE, the system performs the blank directory number (BLDN) default treatment. If a DN requires a different treatment, enter a tuple with the number in table WRDNCODE with selector TRMT. Enter the exact treatment required.

See table DNHEAD for related information.

Data ll sequence and meaning

You must enter data in table DNHEAD before you enter data in table DNCODE.

Enter data in table DNHEAD before you enter data in tables LENLINES, HUNTGRP, and HUNTMEM. This entry makes sure that the system enters table DNCODE when you add or change a tuple in these tables.

DNCODE (continued)

Table size

The system allocates memory with each entry in eld XLANAME in the head table. When the user adds or deletes tuples, the system continuously alters size.

Each tuple in table DNHEAD de nes a terminating of ce. Each terminating of ce can have a maximum of 30 000 entries in table DNCODE. Translation of a maximum of 640 000 DNs can occur in an of ce. The 640 000 DNs correspond to 21 full of ces.

Data ll

Data ll for table DNCODE appears in the follo wing table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
XLANAME		alphanumeric (one to eight characters)	*Translation name*. This field contains correct names from the associated head table.
DNNO		numeric (1 to 11 digits)	*Directory number*. This field contains correct DNs.
DNTDATA		see subfields	*Directory number translation data*. This field contains subfield SEL and refinement OPT. Subfield SEL specifies the type of translation. Refinement OPT provides information for the selected translation.
	SEL	FEAT, HUNT, LINE, RTE, or TRMT	*Translation selector*. This subfield contains the required translation selector. The user enters the refinement OPT according to this selector. Translation selector FEAT indicates that the system requires access to a feature. Selector FEAT requires input of a feature name. The feature software binds these names. This bind only allows the access of correct features. This selector causes a termination of translation. The system indicates the start of feature software to return. See refinement OPT on page Section , "SEL = FEAT" on page -159.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Translation selector HUNT indicates that the call terminates on a hunt group. The system uses selector HUNT when the terminating subscriber is a hunt group. The hunt group must be present in tables HUNTGRP and HUNTMEM. When a new hunt group opens in tables HUNTGRP and HUNTMEM the system makes entries with this selector. See refinement OPT on page Section , "SEL = HUNT" on page -160. Translation selector LINE indicates that the call terminates on a line. Selector LINE is used when the terminating subscriber is a line. When the establishment of a new line occurs in table LENLINES the system makes entries with this selector. See refinement LINE on page Section , "SEL = LINE" on page -161.

DNCODE (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Translation selector RTE indicates the system finds a translation result. Translation terminates. When the system finds a translation result and termination of the translation must occur, the system uses selector RTE. The system can find a translation result in a previous table. When the system finds and terminates a translation result, the system can require one of the following: • a new digit collection algorithm • additional digit collection • both a new algorithm and additional digit collection The system does not require additional translation. For overlapped outpulsing, the selection of the outgoing trunk can occur and outpulsing can start. See refinement RTE on page Section , "SEL = RTE" on page -162. Translation selector TRMT indicates that the call routes to a treatment. A treatment is a known exception or failure condition. The necessary action is to terminate translation. Termination of translation indicates the system encounters a treatment. The system decodes the translation to a route. See refinement TRMT on page Section , "SEL = TRMT" on page -163.

SEL = FEAT

If the entry in sub eld SEL is FEA T, the system enters re nement OPT . A description of this entry appears in the following table.

If selector SEL has value FEAT, the system enters re nement OPT . A description of this entry appears in the following table:

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
OPT		see subfields	*Options*. This refinement is a vector of a maximum of six multiples of selector OSEL and refinement FTR. Each multiple corresponds to one option. A blank space separates each entry.
	OSEL	FTR	*Option selector*. This subfield contains FTR. The FTR indicates the feature name option selector.
	FTR	alphanumeric	*Feature name*. This refinement contains the name of the feature to which the call is to transfer. The user dials the access code of this feature. ***Note:*** Feature names are not currently available.

DNCODE (continued)

SEL = HUNT

If the entry in sub eld SEL is HUNT , the system enters re nement OPT . A description of this entry appears in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPT		see subfields	*Options*. This refinement is a vector of a maximum of ten multiples of selector subfield OSEL and refinement GRP or MEM. Each multiple corresponds to one option. A single space separates each subfield. The system opens a new hunt group in tables HUNTGRP and HUNTMEM. When this event occurs, the system enters the OPT refinement with a vector that includes the following: • OSEL value GRP • an entry value for refinement hunt group number (GRP) • OSEL value MEM • an entry value for refinement hunt group member (MEM)
	OSEL	GRP or MEM	*Option selector*. This selector subfield indicates if the following entry value in the OPT vector corresponds to a GRP or a MEM. When a new hunt group opens in tables HUNTGRP and HUNTMEM, the system enters this selector subfield.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	GRP	numeric (0 to 8191)	*Hunt group number*. A new hunt group opens in tables HUNTGRP and HUNTMEM. The system enters this refinement with the hunt group number. This refinement is the reference number to table HUNTGRP.
	MEM	numeric (0 to 255)	*Hunt group member*. A new hunt group opens in tables HUNTGRP and HUNTMEM. The system enters this refinement with a value that corresponds to the hunt group member. This value is the reference number to table HUNTMEM.

SEL = LINE

If the entry in sub eld SEL is LINE, the system enters re nement OPT . A description of this entry appears in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPT		see subfields	*Options*. This refinement is a vector of a maximum of ten multiples of selector subfield OSEL and refinement LEN or PTY. Each multiple corresponds to one option. A single space separates each subfield. When the user enters a new line in table LENLINES, the system enters the OPT refinement with a vector. The vector includes the following: • OSEL value LEN • a refinement LEN entry value • OSEL value PTY • a refinement PTY entry value Entered values for LEN and PTY correspond to values entered in table LENLINES for the new line.

DNCODE (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OSEL	LEN or PTY	*Option selector*. When the user enters a new line in table LENLINES, the system enters this selector subfield. This selector subfield indicates if the following entry value in the OPT vector corresponds to an LEN or a party (PTY).
	LEN	see subfields	*Line equipment number*. The user enters new line in table LENLINES. The system enters this refinement with the entry in field LEN for the new line.
	PTY	R1, T1, R2, T2, R3, T3, R4, T4, R5, T5 or S	*Line party*. The user enters a new line in table LENLINES. The system enters this refinement with the entry in field PTY in table LENLINES for the new line.

SEL = RTE

If the entry in sub eld SEL is R TE, the system enters re nement OPT . A description of this entry appears in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPT		see subfields	*Options*. This refinement is a vector of a maximum of ten multiples of selector subfield OSEL and refinement DEST. Each multiple corresponds to one option. A blank space separates each entry.
	OSEL	DEST	*Option selector*. If the system knows the destination, this subfield contains value DEST.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DEST	numeric (0 to 1023)	*Destination route list index*. This refinement contains the number in the route list of the same translation system. ***Note:*** This number can have a complex mapping. A complex mapping is an different option to mapping trivially into a route list index. An example of complex mapping is time of day routing.

SEL = TRMT

If the entry in sub eld SEL is TRMT , the system enters re nement OPT . A description of this entry appears in the following table.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
OPT		see subfields	*Options* This refinement is a vector of a maximum of ten multiples of selector subfield OSEL and refinement OFC. Each multiple corresponds to one option. A blank space separates each entry. If the system requires less than ten multiples, end the list with a $ (dollar sign).
	OSEL	OFC	*Option selector* This subfield contains selector value OFC. Value OFC specifies the office treatment option. Office treatments are a fixed set of predefined treatments that are standard across the office. The set includes treatments like partial dial and vacant code.
	OFC	alphanumeric (one to four characters)	*Office treatment* This refinement contains a treatment name from subtable TMTCNTL.TREAT, the office treatment subtable.

DNCODE (end)

Data ll e xample

An example of data ll for table DNCODE follo ws. See table DNHEAD for an example that describes the interaction of table DNCODE interacts with other tables.

MAP example for table DNCODE

```
XLANAME    DNNO                    DNTDATA
_____________________________________________________________________

   DN1    1234   (LINE LEN 00 1 04 06) $
```

DNCTINFO

Table name

Directory Number Call Type Information

Functional description

Table DNCTINFO stores ISDN data parameters for each directory number (DN) and call type (CT). The X.25 basic and supplementary service parameters apply to the packet mode data (PMD) call type.

Data ll sequence and implications

Enter data in table KSETLINE before table DNCTINFO.

Table size

0 to 32 768 tuples

The store for this table allocates as you add new DNs. The maximum size of the DN array structure determines the maximum table size. Because of the use of digilators, the number of DNs is limited to a maximum of 32 768 tuples.

Data ll

The following table lists data ll for table DNCTINFO.

Field descriptions (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
KEY		see subfields	Key. This key field is made up of subfields DIGKEY and CT.
	DIGKEY	vector of up to 18 digits	Digilator key. This field is the first part of the key to this table. Enter the DN.
	CT	PMD, CMD, or VI	Call type. This field is the second part of the key to this table. For packet-mode data, enter PMD. For circuit-mode data, enter CMD. For voiceband information, enter VI.
OPTIONS		see subfield	Options. This field contains subfield CT.
	CT	PMD, CMD, or VI	Call type options. Enter a call type. For PMD, datafill subfield PMD_OPTION. For CMD, datafill subfield CMD_OPTION. For VI, datafill subfield VI_OPTION.

DNCTINFO (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
	PMD_OPTION	CUGS, FCPN, FSA, ICB, ICS, LCP, NUI, OCB, RCA, RPOAB, TCN	Packet-mode options. Enter up to 11 packet mode options. Datafill subfield SUBSCRIBED for each option. CUGS (closed user group subscription) enables the DTE to be a part of one or more user groups. Datafill subfield CUGFSEL or PRFCUG. FCPN (flow control parameter negotiation allowed) allows the calling user, called user, and network to engage in a negotiation. They negotiate the flow control parameters for each direction of communication on a virtual call. FSA (fast select acceptance) allows the called party to receive incoming fast select calls. ICB (incoming calls barred) prohibits the network from establishing any incoming calls to the subscriber. ICS (interchange carrier subscription) allows the user to select an interexchange carrier. Datafill subfield E164RPOA or X121RPOA. LCP (local charging prevention) allows subscribers to prohibit charging of virtual calls to their ISDN DN. NUI (network user identification) allows authorized credit card numbers to accept virtual call use charges. OCB (outgoing calls barred) prohibits the network from accepting any outgoing call requests from the subscriber. RCA (reverse charging acceptance) allows the called party to accept call charges.

Field descriptions (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
			RPOAB (registered private operating agency selection barred) allows the signaling of a transit carrier to handle an intra-LATA (local access and transport area) or inter-LATA call. TCN (throughput class negotiation allowed) allows the calling user, called user, and network to engage in a negotiation of the throughput class.
	CUGFSEL	OCUG, CUGOA, CUGIA, or CUGOAIA	Closed user group subscription. If the entry in subfield PMD_OPTION is CUGS, datafill this subfield. This field indicates the restrictions applied to the CUGs to which this DN/CT belongs. There is no default value for this field. Enter one of the following: • OCUG (outgoing closed user group) • CUGOA (closed user group with outgoing access) • CUGIA (closed user group with incoming access) • CUGOAIA (closed user group with outgoing access and incoming access)
	PRFCUG	Y or N	Preferential closed user group. If the entry in subfield PMD_OPTION is CUGS, datafill this subfield. This field indicates if the subscriber selected a distinct CUG for calls requested without indicating a CUG. Enter Y or N.
	E164RPOA	0000-9999	E.164 registered private operating agency. If the entry in subfield PMD_OPTION is ICS, datafill this subfield or subfield X121RPOA. This parameter indicates the selected ISDN packet interexchange carrier. Enter a four-digit data network identification code (DNIC) or ISDN network identification code (INIC).

DNCTINFO (end)

Field descriptions (Sheet 4 of 4)

Field	Subfield	Entry	Explanation and action
	X121RPOA	0000-9999	X.121 registered private operating agency. If the entry in subfield PMD_OPTION is ICS, datafill this subfield or subfield X121RPOA. This parameter indicates the selected PSPDN packet interexchange carrier. Enter a four-digit DNIC or INIC value.
	CMD_OPTION		Circuit-mode options. To be used in a later software release.
	VI_OPTION		Voiceband information options. To be used in a later software release.
	SUBSCRIBED	Y or N	Subscribed. Enter Y (yes) to subscribe to the option. The default for PMD is N (no).

Data ll e xample

The following example shows sample data ll for table DNCTINFO.

MAP display example for table DNCTINFO

```
                    KEY
                                        OPTIONS
_____________________________________________________________

            6132581975 PMD
PMD (NUI N) (TCN Y) (FCPN Y) (CUGS Y OCUG Y) $
```

Table history

NA011

Moved the SLBRI_LATTR option to table KSETLINE for feature AF7726, BRI/Keyset Decoupling.

NA009

Added the SLBRI_LATTR voice option.

BCS34

Created table DNCTINFO.

DNDMSB

Table name

Do Not Disturb and Make Set Busy

Functional description

Table DNDMSB (Do Not Disturb and Make Set Busy) lists the activation status for all the lines with the feature DND or the feature MSB active. Table DNDMSB allows the data to transfer the activation status in the pre-switch activity (PRESWACT) phase of the one-night process (ONP). The operating company personnel can view the lines in the DMS-100 switch that have the feature DND or the feature MSB active. The operating company personnel can not use the Add, Delete, or Change commands in the table DNDMSB. The operating company personnel can use the DND command to activate the DND feature for each line or a group of lines. Table DNDSCHED (Do Not Disturb Schedule) includes a schedule for group activation of the DND feature. The schedule identi es the speci c time that the acti vation of the DND feature is to occur. The query make set busy (QMSB) command allows operating company personnel to view the status of an individual line.

The activation of the DND feature by the attendant console is on each line or group activation.The STATUS eld in table DNDMSB identi es the type of activation. The type of set is an integrated business network (IBN) line, business set, or an integrated services digital network (ISDN) set. The type of activation and the explanation of the entries in the STATUS eld for the DND feature is as follows:

- Do not disturb individual active (DNDIA) indicates the DND feature is active on the line.
- Do not disturb group active (DNDGA) indicates the DND feature is active for the entire group that the line is part of.
- Do not disturb individual group active (DNDIGA) indicates the DND feature is active on the line and on the DND group that the line is part of.

The STATUS eld in table DNDMSB also identi es the type of activation for the MSB feature. The type of activation and the explanation of the entries in the STATUS eld for the MSB feature is as follo ws:

- Make set busy active (MSB_ACT) indicates the MSB feature is active on the line when the assignment of the MSB feature is on a directory number. The type of set is an IBN, business set, or ISDN set. The activation of the MSB feature is by access code.
- Key set make set busy (KMSB_ACT) indicates the MSB feature is active on the complete set when the assignment of the MSB feature is on a feature

DNDMSB (continued)

key. The type of set is ISDN or business set.The activation of the MSB feature is by key activation.

Data ll sequence and meaning

There is no requirement to enter data ll into other tables before table DNDMSB.

Table size

The maximum entries for table DNDMSB is 32 767.

Data ll

The table that follows lists data ll for table DNDMSB.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
DNDKEY		See subfields	Do not disturb key. The DNDKEY field includes the DND LEN, DNDKEY, DND_IDX, and DF subfields.
	DND LEN	A valid line equipment number	Do not disturb line equipment number.The subfield for the line equipment number.
	DNDKEY	0–255	Key. The logical key for the DND feature or the MSB feature on the business set or integrated services digital network (ISDN) set. The key number is 1 to 69 for the business set or the ISDN set. The entry is zero for the IBN set because the assignment of the DND feature or the MSB feature is made to the directory number. Key numbers above 69 are reserved for future use.
	DND_IDX	#0000–#8FFF	Do not disturb index. The subfield for the physical store (segmented store) where the data for this entry is stored.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	DF	DND or MSB	Data feature. The subfield for the active feature on the line DND or MSB.
STATUS		DNDIA, DNDGA , or DNDIGA MSB_ACT, or KMSB_ACT	Activation status. The field to show if the DND feature or MSB feature is active. The entry DNDIA displays if the DND feature is active on a line. The entry DNDGA displays if DND is active on the whole group that the line is part of. The entry DNDIGA indicates the DND feature is active on the line and on the DND group that the line is part of. The entry MSB_ACT displays if the MSB feature is active on a directory number for a IBN, business set, KSET, or ISDN set. (The assignment of MSB is to a distinct DN only.) The entry KMSB_ACT displays if the MSB feature is active on the complete set and the feature is on a feature key.

Data ll e xample

The gure that follo ws shows sample data ll for table DNDMSB.

MAP display example for table DNDMSB

```
                                DNDKEY      STATUS
-------------------------------------------------------
HOST 00 0 01 10   2           0001  DND   DNDIA
HOST 00 1 00 09   5           000C  MSB   MSB_ACT
```

Table history

NA013

The 59012624 feature creates the table DNDMSB.

Additional information

The table DNDMSB requires no additional information.

DNDSCHED

Table name

Do Not Disturb Schedule Table

Functional description

Table DNDSCHED is used for scheduling the Do Not Disturb (DND) feature for All Station Diversion and Selected Group Station Diversion.

The following describes the DND feature, including All Station Diversion and Selected Station Diversion.

The DND feature includes the following capabilities:

Selected Single Station Diversion prevents a single station from receiving direct inward dialing (DID) and station-to-station calls.

prevents selected groups of stations from receiving DID and station-to-station calls. Typically a group consists of a hospital ward or a oor .

All Station Diversionprevents all stations that are organized into diversion groups from receiving DID and station-to-station calls

Attendant Completion of Calls to Diverted Stations While one of the above forms of diversion is active, the attendant can complete a call to the affected station; for example the attendant has override capability

Attendant Control of Station Diversion The attendant can both activate and deactivate the above named forms of diversion.

For the purposes of this section the feature Do Not Disturb (DND) is composed of :

- DNDIS : Do Not Disturb, Individual station.
- DNDGX : Do Not Disturb, Group X, where range of X is 1 to 63.
- DNDALL: Do Not Disturb, All groups.

Note: Groups and All Groups are on a Customer Group basis.

While DND (Do Not Disturb Feature) is active

- Busy Tone is given to the caller if the call type is a station-to-station call.
- Non station-to-station calls can be routed (for DNDGX, DNDALL) to
- the appropriate attendant subgroup

- a preassigned DN which can be part of a hunt group
- a preassigned route ID
- an announcement or tone

The number of DND groups is speci ed in table CUSTSTN.

The DND group for each station is speci ed in table IBNFEA T.

The attendant console requires two feature keys and associated lamps for the DND feature as follows:

- One key and lamp to serve as an ICI. (This is only required if DND calls are routed to the attendant and incoming call identi cation is required.)
- The other key and lamp serves as a feature key and performs the following functions:
  - — activates/deactivates DND
  - — indicates the called station status
  - — overrides DND at the attendant's discretion

The attendant console keys and lamps are assigned in tables ICIDATA and FNMAP.

DNDGX and DNDALL can be scheduled for activation and deactivation using the table editor and table DNDSCHED.

There is no table input for DNDIS, which is activated or deactivated by the attendant only.

For DNDGX, a maximum of four time periods can be speci ed separately for each activation and deactivation occurrence per day, per DND group in increments of 15 min. If time periods are speci ed, activation and deactivation are automatic.

Separate time periods can be speci ed for DND ALL. Any activation or deactivation time speci ed for DND ALL is invoked at the time speci ed and overrides the DND active/not active state for a particular DND group. Time periods (four times per day, 15-min increments) also apply to DNDALL.

The time intervals speci ed for DNDGX and DNDALL must be multiples of 15 min; for example, 15, 30, 45, and so forth.

DNDIS is not affected by the activation/deactivation of DNDALL.

DNDSCHED (continued)

Since no diversion is speci ed for DNDALL, the diversion is taken from each DND group in the customer group where diversion is speci ed. If diversion is not speci ed for each DND group or is speci ed as 0, the diversion taken is 0 (IBN Treatment, number 0).

Where activation/deactivation times have been speci ed, the attendant cannot cancel DND, be it DNDGX or DNDALL. If attempted, the attendant hears 2 s of reorder tone at the end of the DND deactivation keying sequence. If control is not active, the attendant can activate DND for DNDGX or DNDALL.

The attendant is always able to activate/deactivate DNDIS.

The attendant has override capabilities for stations affected by DNDIS, DNDGX, and DNDALL.

Note: Avoid scheduling DND activation/deactivation that coincides with the time that an image is being taken.

Table size

Memory is allocated by eld NUMGRPS of option DND in table CUSTSTN.

Data ll

The following table lists data ll for table DNDSCHED.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DNDSCKEY		see subfields	*DND schedule key* This field is consists of subfields CUSTGRP and GRPIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name that is assigned to the customer group.
	GRPIDX	0 to 63	*DND group index* Enter the selected DND group, 1 to 63, of the customer group, which has DND activated and deactivated.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			GRPIDX 0 is used for the all groups schedule (DNDALL) and takes precedence over the individual DND group schedule (DNDGX).
DIVERSN		0 to 63	*Diversion* Enter the number of the IBN Treatment, 0 to 63, to which the call is diverted when DND is active. If the entry in field GRPIDX is 0 (all groups schedule), this field is ignored. Enter 0 to satisfy table control. Since diversion for all groups schedule is ignored, the diversion for the call is based on the diversion specified for each DND group. If diversion is not specified for each DND group, or is specified as 0, the diversion taken is 0 (IBN Treatment, number 0).
SCHED		see subfields	*DND schedule* This field consists of up to four time periods. Each time period consists of subfields BEGIN and END. Both subfields BEGIN and END consist of subfields HRS (hours) and MIN (minutes). A vector of up to four BEGIN subfields and four END subfields can be datafilled for each DNDSCKEY. If no schedule is required for the DNDSCKEY, enter $ in any column.
	BEGIN	see subfields	*Beginning time for dnd schedule* This field consists of the subfields HRS and MINUTES, which indicate the time the DND feature is activated.
	HRS	0 to 23	*Hour* Enter a digit from 0 to 23 to indicate the beginning hour.

DNDSCHED (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	MIN	0 to 59	*Minutes* Enter one of 0, 15, 30, or 45 to indicate the beginning minute of the beginning hour. Any entry outside of this range of 15-min increments is invalid.
	END	see subfields	*Ending time for dnd schedule* This field consist of the subfields HRS and MINUTES, which indicate the time the DND feature is deactivated.
	HRS	0 to 23	*Hour* Enter a digit from 0 to 23 to indicate the ending hour.
	MIN	0 to 59	*Minutes* Enter one of 0, 15, 30, or 45 to indicate the ending minute of the ending hour. Any entry outside of this range of 15-min increments is invalid.

Data ll e xample

An example of data ll for table DNDSCHED is sho wn below.

The example consists of the following data:

Customer group BNRMC has a DND schedule for all groups consisting of one time period, starting at 23:00 (11:00 p.m.) and ending at 07:00 (7:00 a.m.).

Customer group BNRMC, DND group 1, has a DND schedule consisting of two time periods. The rst time period starts at 10:00 (10:00 a.m.) and ends at noon. The second time period starts at 15:30 (3:30 p.m.) and ends at 16:30 (4:30 p.m.). The diversion is to IBN treatment number 3, which routes the call to the attendant.

Customer group BNRMC, DND group 2, has a DND schedule consisting of no time periods. The attendant activates this DND group. The diversion is to IBN treatment number 2, a route to the person's home phone.

Note: Where DND is active for all groups, call to DND group 1 take diversion 3 and calls to DND group 2 take diversion 2.

MAP display example for table DNDSCHED

```
DNDSCKEY DIVERSN
                                   SCHED
________________________________________________________________

 BNRMC   0       0
                                            (23   0   7   0)$
        BNRMC  1       3
                           (10   0  12   0)  (15 30 16 30)$
         BNRMC  2       2
```

DNFEAT

Table name

Directory Number Features Table

Functional description

Table DNFEAT allows the data ll of certain triggers on a directory number (DN) basis, as opposed to an agent or group basis.

The system blocks users from trying to choose triggers that do not apply to a DN. For example, some triggers apply to an agent only; some apply to a DN only. The application that de nes the trigger determines the restrictions.

The AIN option de nes the agent-related AIN functionality . The AINDN option de nes the DN-related AIN functionality .

Table DNFEAT stores the AIN options for DISA agents and the AINDN options for:

- individual lines
- multiple appearance DN (MADN)
- hunt group
- feature SDN (Secondary DN) (Teen services)
- AIN virtual DNs
- DISA DN

Service order modi cation

When adding an option to a line through the Service Order (SERVORD) tool, enter either the line equipment number (LEN) or DN must. To assign a group of triggers to a DN through SERVORD, use the AINDN option.

Note: Table DNFEAT blocks the subscription of the AINDN option to N or P type Secondary DNs. The N and P type SDNs inherit their AINDN subscription from the primary PDN.

The following table shows the SERVORD commands that support the AINDN option.

SERVORD eld descriptions

Field	Explanation and action
ADO (add option)	Table DNFEAT adds options AIN, AINDN, and PORT.
CDN (change directory number)	Options AIN, AINDN, and PORT are removed from table DNFEAT if the DN is being removed from service. Options AINDN and PORT are transferred to the new DN.
CHDN (change hunt directory number)	Options AIN, AINDN, and PORT are removed from table DNFEAT if the DN is being removed from service. Options AINDN and PORT are transferred to the new DN.
DEL (delete)	Options AIN, AINDN, and PORT are deleted from table DNFEAT when the corresponding DN is removed from service.
DEO (delete option)	Table DNFEAT deletes options AIN, AINDN, and PORT.
NEW (new)	Table DNFEAT adds options AIN, AINDN, and PORT.
OUT (out)	Options AIN, AINDN, and PORT are deleted from table DNFEAT when the corresponding DN is removed from service.
Note: For further information on the SERVORD tool, refer to the *SERVORD Reference Manual*.	

Data ll sequence and implications

The following tables must be data lled before table DNFEA T:

- LENLINES
- IBNLINES
- KSETLINE
- DNROUTE
- TRIGGRP or TRIGITM

Note 1: When the PORT option is assigned to a DN, tables TRIGITM, or TRIGGRP and TRIGDIG must be data lled so that an LNP trigger is based on the dialed digits. The DN resident escape criterion, if any, is ignored and a query is sent to the database, provided other data lled escape criteria are not met.

DNFEAT (continued)

Note 2: For 900 fraud prevention (900FP), for 900 client DNs routing to trunks, data ll table DNR OUTE before table DNFEAT.

ATTENTION

Use SERVORD to assign or remove the metered originator group (MOG), the subscriber premise meter (SPM) and the printed meter check (PMC) options. Do not use the table editor.

Table size

The system dynamically allocates table size from 0 to 128 000 tuples. Depending on the distribution of DNs in table DNFEAT, the table can reach its maximum capacity before attaining the limit. The DMSMON DBLOCKS tool can monitor the size of this table.

Data ll

The following table lists data ll for table DNFEA T.

Field descriptions (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
AREACODE		0 to 9 (3 digits)	*Area code* Enter the service numbering plan area (SNPA) associated with the directory number (DN). The entry in field AREACODE must correspond to an area code already datafilled in tables SNPANAME and TOFCNAME.
OFCCODE		0 to 9 (up to 7 digits)	*Office code* Enter the office code associated with the DN. The entry in field OFCCODE must correspond to an office code already datafilled in table TOFCNAME. If using the North American dial plan, this field is restricted to three digits.

Field descriptions (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
STNCODE		0 to 9 (up to 8 digits)	*Station code* Enter the station code associated with the DN. The entry in this field corresponds to the remaining digits in the DN after the area code and office code. If using the North American dial plan, the entry in this field is the last four digits of the DN.
OPTLIST		see subfield	*Options list* This field consists of subfield DNOPT.
	DNOPT	AIN, AINDN, CLNT900, LPIC, LSPAO, LSPSO, MOG, PIC, PMC, PORT, SPM	*Directory number option* This subfield consists of subfields: AIN, AINDN, CLNT900, LPIC, LSPAO, LSPSO, MOG, PIC, PMC, PORT, SPM Enter AIN for the advanced intelligent network line option and datafill subfield AINGRP. Enter AINDN for the advanced intelligent network DN option and datafill subfield AINGRP. For 900 fraud prevention (900FP), enter CLNT900 to identify a 900 client for which validation is required. LPIC specifies the carrier that carries intraLATA calls for a virtual DN. Enter LSPAO to specify the local service provider account owner and its context. Enter LSPSO to specify the local service provider switch owner. Enter MOG from table MTRMOG for line agent metering.

DNFEAT (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
			Specifies the carrier that carries interLATA calls for a virtual DN. Enter PMC to generate a detailed hard copy report for each answered originated call. Enter PORT for the local number portability (LNP) 10-digit unconditional trigger. This causes an LNP query to the SCP database. Enter SPM to enable the subscriber premises meter. SPM provides meter pulses to the subscriber for metered calls. SPM has a boolean option ESSENTIAL. If ESSENTIAL has the value Y, any call that does not have charging information provided by the CGP is rejected by the network.
	AINGRP	alphanumeric (1 to 16 characters), or TIID	AIN group. Enter the AIN group name to use datafill in table TRIGGRP. Enter TIID to datafill the trigger item provisioning model refinements that follow.
	TDP	1, 3, 4, 17, 19, 20, 22, 30, 32, 33	Trigger detection point. Datafill the appropriate TDP. Subfield TDP includes: Origination _Attempt (1) Info_Collected (3) Info_Analyzed (4) Network_Busy (17) O_Called_Party_Busy (19) Termination_Attempt (20) Term_Resource_Available(22) T_Busy (30) T_No_Answer (32) O_No_Answer (33)

Field descriptions (Sheet 4 of 4)

Field	Subfield	Entry	Explanation and action
	TINAME	alphanumeric vector (1 to 8 characters)	Trigger item name. Datafill the trigger items defined in table TRIGITM at the specified TDP.
	TRIGACT	ON, OFF	Trigger item assignment activation state code. Datafill the value ON to activate the trigger item identified by the TIID. Datafill the value OFF to deactivate the trigger item identified by the TIID

Data ll e xample

The following example shows sample data ll for table DNFEA T.

MAP display example for table DNFEAT

```
AREACODE OFCCODE    STNCODE                    OPTLIST
------------------------------------------------------------
     613     621        0000        (AINDN      DNTRIG)$
```

The following table explains error messages that can occur when you attempt to data ll table DNFEA T.

Message	Explanation	User action
`ERROR: PORT option may not be assigned to a RCF DN when Software Optionality Control option LNP00200 is IDLE.`	SOC option LNP00200 is in the IDLE state.	Activate SOC option LNP00200. Assign the option again.
`ERROR: PORT option may not be assigned to this selector when Software Optionality Control option LNP00200 is IDLE`	SOC option LNP00200 is in the IDLE state.	Activate SOC option LNP00200. Assign the option again.

DNFEAT (continued)

Table history

CCM14

Feature 59016005, Term Resource Available Trigger Processing, adds trigger TRA (22).

MMP13

Added prompt ESSENTIAL to SPM option.

MMP12

Added SPM entry option to eld OPTLIST in table DNFEA T.

NA011

Added information that table DNFEAT blocks the subscription of the AINDN option to N or P type Secondary DNs. Added dump and restore information. Changed table size information.

NA010

Added error messages.

Feature AU2933 adds option TIID to eld AINGRP. Sub elds TDP, TINAME, and TRIGACT contain supporting trigger item provisioning data ll.

Added options LSPAO and LSPSO for remote call forwarding (RCF) directory number (DN). You must use SERVORD to add or change these options.

APC009.1

Feature AU2942, Servord and DNFEAT Support for Metering, adds options MOG and PMC to provision metering options for each DN.

NA009

Feature AU2544 enables PORT option for more line types.

NA008

Added option CLNT900, for 900 fraud prevention (900FP).

NA007

Added option PORT, for Local Number Portability.

BCS36

Table DNFEAT was introduced.

Supplementary information

This section provides information on dump and restore procedures for table DNFEAT.

Dump and restore

Normal dump and restore procedures apply.

Note: For NA011 and further releases, during the One Night Process (ONP), AINDN subscriptions against N or P type SDNs are removed and the subscription of the Primary DN is applied to these DNs. If the AINDN subscription removed differs from the AINDN subscription of the Primary DN, the TRACECI output displays a message displays that indicates the removal of the SDN subscription information.

DNGRPS

Table name

Directory Number Groups

Functional description

This table contains directory number (DN) attributes for blocks of DNs normally assigned to a particular customer group.

The key to the table consists of a digit range corresponding to a block of DNs.

- area code (AREACODE)
- of ce code (OFCCODE)
- lower bound (FROMDIGS)
- upper bound (TODIGS)

DN attributes for a given range can be data lled for up to two logical networks. For each network, the attributes are stored as a list of options.

Station addresses can be speci ed using the wild-card digit N. Each occurrence of this wild-card digit in the address eld indicates that in this place the N is replaced by the corresponding digit in the internal DN. The addresses are re ned into AREACODE, OFCCODE, and STNCODE similar to the key.

For related information, refer to table NETNAMES.

DN uniqueness

The following information de nes the term *DN uniqueness* as it applies to tables DNATTRS and DNGRPS. Refer also to the NONUNIQUE option in table DNGRPS, sub eld OPTION.

A unique DN can be thought of as a subscriber number that has a single DN and a single line equipment number (LEN) associated with it. There are two classes of non-unique DNs:

- a DN that has several LENs associated with it (for example, a multiple appearance directory number)
- a LEN that has several DNs associated with it (for example, a party line)

Another class of calls exists for which uniqueness cannot be determined: a position that has neither a DN nor a LEN associated with it (for example, operator calls that arrive and terminate on trunks). Calls such as these are assigned unknown uniqueness.

DN uniqueness can be expressed as having two attributes:

- a number that reaches a single LEN
- the only number that can reach that LEN

The de nition of a unique DN used in this chapter is as follo ws:

```
"A unique DN is the only number with which to reach a single,
particular LEN."
```

Because CLASS features are used within the public network, DN uniqueness is with respect to a particular network.

DN formatting

In UK switching units that use the North American x ed-format dialing plan, the meaning of the digits in elds NP A, OFC, and DIGS differs.

The MCL Directory Number Formatting feature provides a method for reformatting DNs when presenting them to call detail recording logs and records, to electronic business set calling number displays, to attendant console calling number displays, and to emergency logs (TRK163).

See the explanation of elds NPA, OFC, and DIGS for additional information.

DMS-100 numbering plan

The DMS-100 numbering plan consists of a ten-digit DN containing the elds shown below. The lengths of each of the three elds are x ed.

```
SNPA                 +   NXX          +       DEFG
numbering plan area      office code          extension number
3 digits                 3 digits             4 digits
```

United Kingdom DNs

In the UK, the national subscriber number (NSN) contains a maximum of nine digits. The rst one to three digits of the NSN are kno wn as the national numbering group (NNG). The general form of UK numbers is:

```
NNG (0 to 3 digits) + local number (3 to 7 digits)
```

Note: In the UK, the leading digit 0 (zero) is used as a trunk access code. It is not considered part of the NSN. Some switching units require a leading zero as a trunk pre x. This, when concatenated with the NSN, is referred to as the full national number (FNN).

DNGRPS (continued)

Two major numbering schemes are used in the UK. They are made up of areas called director areas (large cities) and non-director areas (everywhere else).

Director numbers are made up of an NNG along with a x ed-length exchange code and customer number:

```
NNG              +   Exchange code   +       Local number
(1 to 2 digits)      (3 digits)              (4 digits)
```

An example of a director number is 1 + 236 + 4433.

Non-director numbers are made up of the NNG, exchange code, and customer number. The NNG is x ed at three digits, the local exchange code (LEC) contains zero to two digits, and the local number contains three to six digits. The exchange code and local number, which together make up the customer number, must contain three to six digits:

```
NNG          +   Exchange code       +       Local number
(3 digits)       (0 to 2 digits)             (3 to 6 digits)
                 (               3 to 6 digits               )
```

Examples of non-director numbers are 628 + 77 + 0770 and 628 + 76 + 908.

Rules for padding of DNs

This section describes the algorithms used to convert between an NSN in the UK and a ten-digit DN as data lled on the DMS-100 switch. The algorithms involve the use of the pad digit 0 to make the NSN into a ten-digit number. Digit 0 is used because it is a trunk access code in the UK. This means that an NSN or subscriber number (LEC + local number) can never start with 0; thus, 0 can be distinguished from valid digits in a data lled number .

Two algorithms are needed: one for director areas and one for non-director areas.

For director areas, the three-digit LEC and four-digit local number correspond exactly to the NXX and extension number, respectively. They are left as is. The NNG is padded with one or two zeroes on the left as is required to make a three-digit NPA.

For non-director areas, the three-digit NNG corresponds exactly to the NPA. It is left as is. The LEC and local number are considered as a three- to six-digit number and are lled in from the right. This lls up the extension number eld and part of the NXX eld in most cases. What is left o ver in the NXX and extension number is lled with zeroes from the left. According to the de nition of a UK DN, a number cannot consist of a three-digit NNG and three-digit

local number (a total of six digits). Using the above rules, this implies lling a 0 (zero) in the D digit of the extension number.

Table Table , "Examples of DNs" on page -189 shows some examples of how DNs appear in accordance with the above rules.

Examples of DNs

DMS-100 datafill					
NNG	*LEC and local number*	*NPA*	*NXX*	*EXT number*	*Call type*
1	5284111	001	528	4111	Director
21	9876543	021	987	6543	Director
628	4533	628	000	4533	Non-director
628	45333	628	004	5333	Non-director
628	453333	628	045	3333	Non-director
628	77033	628	007	7033	Non-director
628	774333	628	077	4333	Non-director
628	775999	628	077	5999	Non-director

Reformatting of director area DNs

A DN can be recognized as being from a director area by the fact that the rst digit of the SNPA is a 0 (zero). To construct the FNN, all leading zeroes are stripped. A 0 is then inserted in the leftmost position.

Where the DN is 001 5284111, stripping away the zeroes gives 15284111. Adding a zero gives the FNN of 015284111.

Reformatting of non-director area DNs

The SNPA digits are nonzero. The NXX + DEFG is considered a seven-digit number. It is from this part of the DN that the padding must be removed. Leading zeroes are removed from this number. The SNPA is then concatenated and a leading zero is added to the left.

Where the DN is 628 077 0770, removing the zero gives 628 77 0770. Adding a zero to the leftmost position gives 0628770770.

DNGRPS (continued)

Table Table , "Examples of DMS-100 data ll for reformatted DNs" on page -190 shows some examples of how DNs are displayed in accordance with the above rules.

Examples of DMS-100 data ll f or reformatted DNs

NNG	LEC and local number	NPA	NXX	EXT number	Call type
1	5284111	001	528	4111	015284111
21	9876543	021	987	6543	0219876543
628	4533	628	000	4533	06284533
628	45333	628	004	5333	062845333
628	453333	628	045	3333	0628453333
628	77033	628	007	7033	062877033
628	774333	628	077	4333	0628774333
628	775999	628	077	5999	0628775999

Data ll sequence and implications

A valid NETNAME must have been previously data lled in table NETNAMES.

Note: The table editor command POSITION checks for the elds AREACODE, OFCCODE, and FROMDIGS. The POSITION command does not check for the eld T ODIGS. After the POSITION command, the LIST command should be given.

Table size

Table size is automatically allocated.

Data II

The following table lists data ll for table DNGRPS.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
AREACODE		numeric, 1 to 7 digits (0 to 9)	Enter the serving numbering plan area (SNPA) or the serving translation scheme (STS). This entry is the first three digits of the DN.
OFCCODE		numeric, up to 7 digits	Enter the office code.
FROMDIGS		numeric, 1 to 8 digits (0 to 9)	Enter the lower bound of the range of the station code of the DN. This is the third part of the 4-part key to the table. ***Note:*** The table editor command POSITION checks for the fields AREACODE, OFCCODE, and FROMDIGS. The POSITION command does not check for the field TODIGS. After the POSITION command, the LIST command should be given.
TODIGS		numeric, 1 to 8 digits (0 to 9)	Enter the upper bound of the range of the station code of the DN. This is the fourth part of the four-part key to the table.
NETOPTS		a vector of up to two network attribute lists	This field consists of subfields NETNAME and OPTION. There can be up to two network names together with their attributes in this vector.
	NETNAME	alphanumeric (1 to 32 characters)	Enter a logical network name as previously datafilled in table NETNAMES.
	OPTION	a vector of up to seven options	This subfield contains a list of options for the network specified in subfield NETNAME. This subfield consists of subfield OPTION. Enter the option names together with their refinements, for each network name, in this vector.
		ADDRESS	If the address of the station is different than the internal DN, enter ADDRESS and datafill subfields AREACODE, OFCCODE, or STNCODE.

DNGRPS (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
		DNTYPE	If the type of basic rate interface (BRI) functional DN that is datafilled in table KSETLINE is to be defined, enter DNTYPE and datafill subfield TYPE_OF_DN.
		NAME	If a name is required for telephone display purposes, enter NAME and datafill subfield NAME.
		NONUNIQUE	If the station does not have a unique DN, enter NONUNIQUE (see "DN uniqueness" in this table description to determine whether a DN is unique). No additional fields are required with option NONUNIQUE.
		PADDING	If a variable-length DN is used and padding is required, enter PADDING and datafill subfield DN_PADDING_TABLE.
		PN	If the presentation number (PN) is available, subfield NN_UNAVAIL takes the value N or Y to indicate if the subscriber's network number (NN) is available for display. Y indicates to the network that the subscriber's NN is not available for display, N indicates that the NN is available for display.
		SUPPRESS	If the number display or name display is to be suppressed, enter SUPPRESS and datafill subfields SUPPDN and SUPPNAME to indicate whether each attribute is to be suppressed.
	AREACODE	numeric, 1 to 7 digits	Enter the area code.
	OFCCODE	numeric, up to 7 digits	Enter the office code.
	STNCODE	numeric, 1 to 8 digits	Enter the station code.

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
	TYPE_OF_DN	PRIVDN or PUBDN	Enter PRIVDN for private DN or PUBDN for public DN. This option determines the type of number in the called party number information element that is sent in the broadcasted SETUP message. If the option is set to PUBDN, the type of number is set to national number. If the option is set to PRIVDN, the type of number is set to network-specific number.
	NAME	a string of up to 15 characters	Enter the associated station name. Blanks can be entered using underscores. For mixed-case names, the name must be enclosed in single quotes.
	DN_ PADDING_ TABLE	N or P (table of 10 boolean values)	Enter 10 boolean values of either N or P, where each boolean represents a digit in the 10-digit number stored in table KSETLINE. The first three booleans represent the NPA, the next three represent the central office code, and the last four represent the subscriber number. In each case, an indication is made whether padding is involved by the N or P entry. Enter N to indicate that the digit it represents is not a padding digit and is part of the national number. Enter P to indicate that the digit it represents is a padding digit and is not part of the national number. The padding option can be assigned to only one network.
	SUPPDN	Y or N	Enter Y (yes) to suppress the DN from being displayed, or N (no) if no suppression of the DN is required.
	SUPPNAME	Y or N	Enter Y (yes) to suppress the name from being displayed, or N (no) if no suppression of the name is required.

Data ll e xample

The following example shows sample data ll for table DNGRPS.

DNGRPS (end)

MAP display example for table DNGRPS

```
AREACODE OFCCODE FROMDIGS TODIGS
                                                        NETOPTS
_____________________________________________________________
001  366 0000      0999   (BNR (NAME CARLING) $)
                          (PUBLIC (ADDRESS 613 726 1212)
                          (SUPPRESS Y Y)
                          (NONUNIQUE) (NAME BNR) $)$
```

Table history

MMP12

Added the sub eld NN_UN AVAIL to the PN option.

EURO10

Added the Presentation Number option.

EUR008

The following elds and sub elds are deleted from table DNGRPS:

- elds SNP A and OFC
- sub elds NP A, OFC, and DIGS from eld ADDRESS

The following elds are added to table DNGRPS:

- elds AREA CODE and OFCCODE
- sub elds AREA CODE, OFCCODE, and STNCODE to eld ADDRESS

The following elds are changed in table DNGRPS:

- the range of digits in eld T ODIGS to 8 digits
- the range of digits in eld FR OMDIGS to 8 digits

Removed references to SNPA, OFC, and DIGS. Replaced those references with AREACODE, OFCCODE, and STNCODE respectively. Table DNGRPS has been updated for the EUR008 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the EUR008 timeframe.

DNHEAD

Table name

Directory Number Head Table

Overview

The Universal translations directory number (DN) tables appear in the following list:

- DNHEAD
- DNCODE
- DNRTE
- WRDNCODE

Tables DNHEAD, DNCODE, DNRTE, and WRDNCODE can de ne variable-length of ce codes and DN. These tables are used in international loads instead of tables TOFCNAME, DNINV, and DNROUTE.

Tables DNHEAD, DNCODE, and DNRTE have the same meaning as the following tables:

- ACHEAD
- FTHEAD
- PXHEAD
- CTHEAD
- FAHEAD
- OFCHEAD
- AMHEAD
- DNHEAD
- ACCODE
- FTCODE
- PXCODE
- CTCODE
- FACODE
- OFCCODE
- AMCODE
- DNCODE
- ACRTE

DNHEAD (continued)

- FTRTE
- PXRTE
- CTRTE
- FARTE
- OFCRTE
- AMRROUTE
- DNRTE

For example, table DNHEAD de nes of ce codes. To reserve the DN for the line in table DNCODE, add tuples in tables LENLINES or HUNTGRP and HUNTMEM.

The MAP terminal can modify some DNs through the use of dump and restore tables. The user enters these DNs in table DNROUTE.

Refer to table ACHEAD for additional information on the universal translation tables.

Functional description

Table DNHEAD de nes the e xamples of code and route tables. Table DNHEAD also de nes the characteristics of tables.

Data ll sequence and meaning

Enter data in table SNPANAME before you enter data in table DNHEAD.

Table size

The system automatically allocates memory to a maximum of 1024 tuples. The system sets the rst size to 64. The table e xtends automatically.

Data ll

Data ll for table DNHEAD appears in the follo wing table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
XLANAME		alphanumeric (one to eight characters)	*Translation name*. Enter the name assigned to the universal translator.
SNPA		numeric (one to seven digits)	*Serving numbering plan area*. Enter the serving number plan area (SNPA).
OFC		numeric (one to six digits)	*Terminating office code*. Enter the terminating office code (OFC). ***Note:*** The system does not support duplicate office codes even when the SNPA for each code has a different value. The system does not support office codes that are not clear. For example, an OFC that begins with the digit 5 prevents the use of another OFC that begins with 5. Examples of other OFCs that begin with 5 are 5x and 5xx. Another example is if OFC is 44, you cannot use a code that begins with 44. In this event, 46 or 401 are acceptable.

DNHEAD (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CON		CON or NOCON	*Consume digits.* This option applies to the CONT and DMOD selectors of the code table. If digits are not consumed, enter NOCON. Consumption of digits occurs when the system indexes the next table through the same digits as the current table. Consumption does not use the prefix digits. The system uses the digits that follow the index to the current table to begin an index of the next table. When this event occurs, enter CON. Translations consumes the current index digits. Consume does not imply that the system deletes digits from the digit register. The digits remain in the digit register. The digits outpulse unless deleted in the code or route tables. In the CON option, the digits that index the current table do not index the next table.
MAXIDX		STD, 9, C, or F	*Maximum index.* When dialed digits in the range 0 to 9 index the translation tables, enter STD. The default entry is 9. Dialed digits Hex B (*) and Hex C (#) index the translation tables with digits in the range 0 to 9. When this index occurs, enter C Dialed digits in the range 0 to 9 and Hex digits B, C, D, E, and F index the translation tables. When this index occurs, enter F.

Data ll e xample

An example of data ll for the international translation tables appears in this section.

Enter data in table DNHEAD. Enter data in table LENLINES. The system automatically adds the tuple

```
DN11234LINE  LEN  00  1  04  06  $
```

to table DNCODE.

Enter data in table WRDNCODE for directory number 1111, an emergency number, to add a tuple

```
DN11111RTE  DEST  2  $
```

to table DNCODE. When the user dials this number, the system routes the call to the emergency trunk.

Incoming trunks with XLANAME equal to INCTRK1 receive six digits. Incoming trunks with XLANAME equal to INCTRK2 receive ve digits. When incoming trunks only receive ve digits, an additional digit, 2, is inserted in front of the digits the system receives. This insert makes table OFCCODE standard for the of ce.

The incoming trunks with eld XLAN AME set to INCTRK1 can receive digits. For these digits, a description of the translation process appears in table 2.

Digits received, eld XLANAME set to INCTRK1 (Sheet 1 of 2)

Digits received	Explanation
101	*101 test line call*. In table PXCODE, field XLANAME is at INCTRK1 and digits 101 are found. The RTE indicates a termination of translation. The MM 3 3 indicates that three digits in total are expected. The DEST 101 indicates that table PXRTE with INCTRK1 101 gives the route list to use. The route list contains only one member which is T101TRP. Member T101TRP is the 101 test line.
251234	*Call to directory number*. The system does not find digit 2 in table PXCODE, so the system uses default routing from table PXHEAD. This default routes the call to table OFCCODE, with field XLANAME set to OFC25, for additional translation. The digits 25 in table OFCCODE cause translation to continue in the DN tables. These DN tables have field XLANAME set to DN1. When consumption of the digits 25 occurs, the digits 1234 index to table DNCODE. This index occurs where the system directs the call to a subscriber line. Refer to table OFCHEAD for consumption information.

DNHEAD (continued)

Digits received, eld XLANAME set to INCTRK1 (Sheet 2 of 2)

Digits received	Explanation
251111	*Emergency call*. The system does not find digit 2 in table PXCODE, so the system uses default routing from table PXHEAD. This default routes the call to table OFCCODE, with field XLANAME set to OFC25, for additional translation. The digits 25 in table OFCCODE cause the translation to continue in the DN tables. These DN tables have field XLANAME set to DN1. When consumption of the digits 25 occurs, the digits 1111 index to table DNCODE. Refer to table OFCHEAD for consumption information. The system finds digits 1111. The RTE indicates a termination of translation. The DEST 2 indicates that table DNRTE with DN1 2 gives the route list to use. The route list contains only one member. This number is the CLLI EMERGENCY, the emergency trunk.
25xxxx	*Blank directory numbers* (xxxx is not equal to 1234 or 1111). The system does not find digit 2 in table PXCODE. The system routes the call to the office code tables for additional translation. The digits 25 in table OFCCODE cause the translation to continue in the DN tables. These DN tables have field XLANAME set to DN1. When the consumption of digits 25 occurs, the digits xxxx do not appear in table DNCODE. This consumption causes the call to route to blank DN treatment (BLDN). Refer to table OFCHEAD for additional information about consumption.
ABxxxx	*Vacant codes (AB is not 25)* The system does not find digits AB in table PXCODE. The system routes the call to the office code tables for additional translation. When the digits AB do not appear in table OFCCODE, the system routes the call to the standard default. The standard default is the vacant code treatment (VACT).

The incoming trunks with eld XLAN AME set to INCTRK2 can receive digits. In this occurrence, a description of the translation process appears in table 3.

Field descriptions (Sheet 1 of 2)

Digits received	Explanation
101	*101 test line call*. In table PXCODE, field XLANAME is INCTRK2 and digits 101 do not appear. In table PXHEAD, for field XLANAME set to INCTRK2, the minimum number of digits to expect is six. Because the system only receives three digits, the call routes to partial dial treatment (PDIL).
51234	*Call to directory number*. The system finds digit 5 in table PXCODE. The entry in table PXCODE modifies the digit stream to insert a 2 in front of the received digits. The digit stream now contains 251234. For additional translation, the entry in table PXCODE also routes the call to table OFCCODE, field XLANAME set to OFC25. The digits 25 in table OFCCODE cause the translation to continue in the DN tables. The DN tables have field XLANAME set to DN1. When consumption of digits 25 occurs, the system uses the digits 1234 to index to table DNCODE. The index occurs where the system directs the call to a subscriber line. Refer to table OFCHEAD for additional information about consumption.
51111	*Emergency call*. The system finds digit 5 in table PXCODE. The entry in table PXCODE modifies the digit stream to insert a 2 in front of the received digits. The digit stream now contains 251111. For additional translation, the entry in table PXCODE routes the call to table OFCCODE, field XLANAME set to OFC25. The digits 25 in table OFCCODE cause the translation to continue in the DN tables. The DN tables have field XLANAME set to DN1. When consumption of the digits 25 occurs, the system uses digits 1111 to index to table DNCODE. Refer to table OFCHEAD for additional information about consumption. The system finds digits 1111. The RTE indicates a termination of translation. The DEST 2 indicates that table PXRTE with DN1 2 gives the route list to use. The route list contains only one member. This member is the CLLI EMERGENCY, the emergency trunk.

DNHEAD (end)

Field descriptions (Sheet 2 of 2)

Digits received	Explanation
5xxxx	*Blank directory numbers*. (xxxx is not equal to 1234 or 1111). The system finds the digit 5 in table PXCODE. The entry in table PXCODE modifies the digit stream to insert a 2 in front of the received digits. The digit stream now contains 25xxxx. For additional translation, the entry in table PXCODE also routes the call to table OFCCODE, field XLANAME set to OFC25. The digits 25 in table OFCCODE cause the translation to continue in the DN tables. The DN tables have field XLANAME set to DN1. When the consumption of the digits 25 occurs, the digits xxxx do not appear in table DNCODE. In this occurrence, the system routes the call to BLDN. Refer to table OFCHEAD for additional information about consumption.
Bxxxx	*Vacant code* (B is not 5). The system does not find digit B in table PXCODE. The system routes the call to table OFCCODE for additional translation. The digit B is not in table OFCCODE so the system routes the call to standard default, VACT.

Table history

BCS36

The following changes were made in BCS36:

- corrected entries in eld MAXIDX
- replaced references to tables THOUGRP, DN, and WRDN with tables TOFCNAME, DNINV, and DNROUTE

DNIBERT

Table name

Directory Number Integrated Bit Error Ratio Test Table

Functional description

Data call tester (DCT) is a network tool that allows the operating company to test data calls between integrated bit error ratio test (IBERT) devices or between an IBERT and an external bit error ratio test (BERT) device, or between an IBERT and a trunk loopback (TRKLPBK) to run BERT. The tool is used on the DMS-100, DMS-200, and the DMS-100/200. The data call is originated by user commands from the DCT level of the MAP (maintenance and administration position).

Table DNIBERT is used by the DMS terminating of ce to determine which IBERT an incoming call is connected to and the IBERT's associated operating parameters. The actual IBERT device associated with a particular IBERT number is determined through table FMRESINV which contains an inventory of provisioned IBERT devices in the switch.

Associating a directory number (DN) with the value ALL in eld IBER T indicates that any IBERT provisioned for terminating DCT BERT calls in table FMRESUSE and FMRESINV can be used as the common language location identi er (CLLI) DCTTERMBER T.

For related information, refer to table DCTDIAL.

Data ll sequence and implications

The following tables must be data lled after table DNIBER T.

- FMRESUSE
- FMRESINV
- TOFCNAME

Table size

0 to 256 tuples

Table size is allocated dynamically.

DNIBERT (continued)

Data ll

The following table lists data ll for table DNIBER T.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
DN		0 to 9(10 digits)	*Directory number* This field is the key to the table. Enter a directory number (DN) for use by data call test (DCT) termination. The DN consists of the area code, office, and station code. The digits corresponding to the area and office codes must be previously datafilled in table TOFCNAME.
IBERT		0 to 255or ALL	*Integrated bit error ratio test* Enter an integrated bit error ratio test (IBERT) number used when the DN is called. The IBERT number must be previously datafilled in table FMRESINV. Enter ALL to obtain a free IBERT from the IBERT resource manager.
RATE		56K or 64K	*Transmission rate* Enter the transmission rate, 56 kilobytes per second (kbps), or 64 kbps. The default is 56K.
PATTERN		511 or 2047	*CCITT bit error ratio test pattern* Enter the CCITT BERT pattern. The default is 2047.
SYNC		10 to 300	*Synchronize* Enter the time limit, in seconds, for BERT to synchronize after the call is established. The default is 10.

Data ll e xample

The following example shows sample data ll for table DNIBER T.

MAP display example for table DNIBERT

```
DN IBERT BITRATE PATTERN SYNCH
_____________________________________

1001115555   ALL     56K    2047    10
```

Table history

BCS36

Table DNIBERT was introduced.

Supplementary information

This section provides information on dump and restore procedures for table DNIBERT.

Dump and restore

Normal dump and restore procedures apply.

DNINV

Table name

Directory Number Inventory

Functional description

Table DNINV is a read-only table. This table replaces table DN. Table DNINV contains data for all assigned directory numbers. The data includes DNs from table DNROUTE.

Table DNINV automatically gathers information when the operating company

- assigns DNs
- uses DNs from tables other than table DNINV, such as table LENLINES or table IBNLINES.

There is no input form for this table.

ATTENTION

Operating company personnel: Do not change any of the line data tables through table control because you may corrupt the internal database. Use the Service Order System (SERVORD) to update subscriber line data.

The following table describes different selectors for table DNINV.

DNINV features (Sheet 1 of 2)

DN selector	Use
A	IBN Data Network Address
ACDTK	AUTOMATIC CALL DISTRIBUTION TRUNK DIRECTORY NUMBER
C	no longer used
D	Treatment Selector
FEAT	Virtual DN
H	POTS line that is part of a HUNTGROUP
HC	HUNTGROUP member with CALL FORWARD option
IHC	HUNTGROUP member IBN line with CALL FORWARD option
ILC	IBN line with CALL FORWARD option

DNINV features (Sheet 2 of 2)

DN selector	Use
IMC	IBN MDN line with CALL FORWARD option
L	simple POTS line
M	Attendant Console
LC	simple POTS line with CALL FORWARD option
MDN	MULTIPLE DIRECTORY NUMBER
MM	MEET-ME conference (datafill table MMCONF)
P	MULTI PARTY POTS line
SC	SERIES COMPLETION
SCM	SERIES COMPLETION for the primary of an MDN group
SDN	SECONDARY DIRECTORY NUMBER

ISDN Shared DNs

Different logical terminal identi ers (L TID) can share DNs on ISDN Basic Rate Interface (BRI) lines. When this relationship occurs, the DNRESULT eld of table DNINV of the shared DN shows one LTID only. The following rules determine the LTID that appears:

- The voice band information (VI) can share a DN between either the circuit-mode data (CMD) or packet-mode data (PMD) call types. When this relationship occurs, the VI appearance of the LTID shows in eld DNRESULT.
- The CMD can share a DN with the PMD call types. When this relationship occurs, the CMD appearance of the LTID appears in eld DNRESUL T.
- All three call types (Call VI, CMD, and PMD) can share a DN. When these relationships occur, only the VI appearance of the LTID displays in eld DNRESUL T.

Data ll sequence and implications

There is no requirement to data ll other tables before table DNINV .

DNINV (continued)

Table size

As determined by the ACTIVE_DN_SYSTEM parameter, computation of the store requirement depends on the use of the DN systems that follow:

- North American
- Universal
- Enhanced North American

For the North American DN system, table DNINV holds up to 1 000 000 DNs.

For the Universal and Enhanced North American DN systems, when many area code and of ce code combinations are data lled on the switch, table DNINV holds up to 1 000 000 DNs.

The maximum tuple for table DNINV depends on the criteria that follows:

- the number of area codes and of ce codes used
- the number of digits used for the station code

North American DN system

The North American DN system is the best system to use when

- a local switch holds all the numbers used in a given of ce code
- the system uses all thousand groups to near capacity

When local number portability (LNP) and multiple service providers use this system, the system uses a lot of memory.

A TOFCNO (the index for table TOFCNAME or TOFCNAME entry) is a valid area and of ce code combination from table TOFCNAME. Calculate the store required for each TOFCNO (in bytes) with the formula that follows:

100 + 4000 x (number of thousand groups)

The maximum store requirement for each TOFCNAME is 40 100 bytes. The maximum store requirement for a thousand group in a TOFCNAME is 4000 bytes, with a 100-byte overhead for the TOFCNAME.

The North American DN system is the best when the DN structure is tight because it allocates DNs by blocks of 1000.

Universal DN system

The Universal DN system uses more store when the system allocates all the possible station codes. If DNs move across many area codes and of ce codes, table DNINV uses more memory store.

> ***Note:*** The Enhanced North American DN system is like the Universal DN system, except that Enhanced North American uses the 3-3-4 format. Only the APC load uses the Enhanced North American system.

Calculate the store required (in bytes) for each TOFCNO with the formula that follows:

6 x ([tuple count of DNINV] - [tuple count of DNROUTE]) +44 x (1 + [number of 1-digit pre x es] + [number of 2-digit pre x es] +[number of 3-digit pre x es] + [number of 4-digit pre x es] + [...]) + 6

> ***Note:*** In this formula, the tuple count of DNINV is the tuple count of DNINV for the TOFCNAME. The tuple count of DNROUTE is the tuple count of DNROUTE for the TOFCNAME.

This formula applies to more than the North American industry (for example, more than a 3-digit pre x or four-digit station code). Use this formula for station codes of any length.

The maximum store requirement for each TOFCNAME is 108 890 bytes. The maximum store requirement for a thousand group in a TOFCNAME is 10 884 bytes. This requirement includes a 50-byte overhead for the TOFCNAME.

Data ll e xample

The following table is an example of data ll for DNINV for the Universal DN system. The example data ll is for the TOFCNO 709 333. TOFCNO 709 333 contains all station codes with the 102x, 104x format, and a half of the 171x range, These codes are data lled ag ainst lines.

DNINV (continued)

MAP display example for table DNINV

```
AREACODE    OFCCODE     STNCODE      DNRESULT
_____________________________________________________
709         333         1020         L HOST 02 0 05 03
709         333         1021         L HOST 02 0 05 04
709         333         1022         L HOST 02 0 13 06
709         333         1023         L HOST 02 0 13 07
709         333         1024         L REM3 03 0 00 01
709         333         1025         L REM3 03 0 00 10
709         333         1026         L REM3 03 0 01 11
709         333         1027         L REM3 03 0 17 21
709         333         1028         L REM3 03 0 17 16
709         333         1029         L REM3 03 0 16 20
709         333         1040         L REM3 03 0 16 15
709         333         1041         L REM3 03 0 13 26
709         333         1042         L REM3 03 0 13 05
709         333         1043         L REM3 03 0 04 02
709         333         1044         L REM3 03 0 08 00
709         333         1045         L REM3 03 0 12 04
```

In total, the TOFCNO holds 25 DNs (not any of which are in table DNROUTE). The number of pre x es follows:

- The number of 1-digit pre x es (1xxx) is 1.
- The number of 2-digit pre x es (10xx, 17xx) is 2.
- The number of 3-digit pre x es (102x, 104x, 171x) is 3.

Calculate the memory impact for the TOFCNAME as follows:

6 x 25 + 44 x (1 + 1 + 2 + 3) + 6 = 464 bytes

In the North American DN system, these DNs exist in the same thousand group (1xxx). The memory impact for the TOFCNAME is:

100 + 4000 x 1 = 4100 bytes

The following data ll e xample for table DNINV shows:

- DNs with Multiple Appearance Directory Number (MADN) Call Appearance Call Handling (CACH)
- the group size
- call appearance (CA) elds

The VI and CMD call types share the VI appearance of a DN.

MAP display example for table DNINV

```
AREACODE   OFCCODE    STNCODE        DNRESULT
_____________________________________________________
613        621        5962           MDN SCA   2  0
613        621        5963           MDN SCA   3  0
613        621        5964           MDN CACH  55  1
613        621        5965           MDN CACH  10  1
613        621        5966           L EKTS 1
613        621        5966           L EKTS 1
613        621        5966           L EKTS 1
613        621        5966           L EKTS 1
613        621        5967           L ISDN 19
```

Table history

NA012

The system may now dynamically allocate a maximum of 1 000 000 tuples for the Universal and Enhanced North American DN systems. This functionality is introduced by feature 59005926.

NA010

Changed table size. Added table of DNINV features.

Added information about DN Sharing with Different Circuit-Mode Call Types feature.

DNLPIC

Table name

Directory Number Primary Intra-LATA Carrier Table

Functional description

Table DNLPIC maps a directory number (DN) to a primary intra-LATA (local access and transport area) carrier (PIC) data lled in table PICN AME.

Table DNLPIC allows subscribers of non-conforming end of ces (NCEO) that are serviced by a LATA Equal Access System (LEAS) access tandem (AT) to choose a carrier to provide their intra-LATA service.

For related information, refer to table DNPIC.

Data ll sequence and implications

Table PICNAME must be data lled before table DNLPIC.

The carrier name must be data lled in table PICN AME before it can be data lled in eld DNLPIC.

The PIC must also be data lled in table TOPEACAR before it can be data lled in eld DNLPIC. See table DNPIC.

Table size

The minimum number of tuples is 0 and the maximum number is in of ce parameter DNLPIC_MAX_NUM_DN_TUPLES in table OFCENG.

Table DNLPIC is a dynamic table. The following formula is used to calculate the amount of store that the table uses on DMS SuperNode switch.

$(800 \times 4) + (NPA \times 800 \times 4) + (Nxx \times 100 \times 4) + (Nx \times 50)$

where

NPA is the number of different NPAs data lled

Nxx is the number of different Nxxs data lled

Nx is the number of different hundred rst xxs data lled

Data ll

The following table lists data ll for table DNLPIC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNLKEY		see subfields	*Directory number* This field consists of subfields DNLPIC_NPA, DNLPIC_NXX, DNLPIC_MS_XX, and DNLPIC_LS_XX.
	DNLPIC_NP A	200 to 999(3 digits)	*Directory number primary intra-LATA carrier numbering plan area* Enter the numbering plan area (NPA) code.
	DNLPIC_NXX	200 to 999(3 digits)	*Directory number primary intra-LATA carrier numbering xx* Enter the Nxx code.
	DNLPIC_MS_X X	1 to 9(2 digits)	*Directory number primary intra-LATA carrier line code* Enter an xx code for the first two digits of the line number.
	DNLPIC_LS_X X	1 to 9(2 digits)	*Directory number primary intra-LATA carrier line code* Enter an xx code for the last two digits of the line number.
DNLPIC		alphanumeric (1 to 16 characters)	*Primary intra-LATA carrier* Enter a carrier name that is datafilled in table PICNAME. During initial program load (IPL), table control for table PICNAME datafills the first three tuples for field DNLPIC with the entries NODATA, NOCAR, and NILCAR. NODATA is reserved for system use. NOCAR means that a subscriber is served but has not yet chosen a primary carrier. NILCAR means that the nil carrier is assigned. No presubscribed dialing is allowed.

DNLPIC (end)

Data ll e xample

The following example shows sample data ll for table DNLPIC.

MAP display example for table DNLPIC

```
        DNLKEY DNLPIC
_____________________________

212 220 11 11  NOCAR

212 220 12 34  CARR2

212 221 22 09  CARR5

212 221 56 98  CARR3

613 621 12 34 NILCAR

613 621 12 44  CARR2
```

Table history

BCS36

Table size was changed. Field CNLKEY was changed to accept an NPA value between 200 and 999.

DNOWN

Table name

Directory Number Owner Table

Functional description

Table DNOWN associates an owner with a range of directory numbers (DN) to allow customer data change (CDC) access to table CGNSCRN. Table DNOWN is designed to accommodate a variable length dial plan. It can only be used to de ne owners of DNs stored in table CGNSCRN. It cannot be used to de ne o wners of DNs for the service order facility (SERVORD).

Data ll sequence and implications

Table OWNER must be data lled before table DNO WN.

Table size

0 to 8000 tuples

Table DNOWN is a digilator-based table. The store capacity is dependent upon the contiguity of the data. An estimate of the maximum size is 8000 tuples.

Data ll

The following table lists data ll for table DNO WN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Range of calling numbers* The KEY field consists of subfields FROMDIGS and TODIGS. FROMDIGS and TODIGS represent a range of directory numbers (DN) that an owner is associated with.
	FROMDIGS	vector of up to 10 digits (0 to 9)	*From digits* Enter up to 10 digits representing the lower range of DNs with which an owner is associated. It is necessary to enter only enough digits to uniquely identify a range.

DNOWN (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TODIGS	vector of up to 10 digits (0 to 9)	*To digits* If the entry in subfield FROMDIGS represents a block of consecutive DNs, enter the upper bound of the range of DNs with which an owner is associated. If the entry in subfield FROMDIGS represents a single DN, the entry in subfield TODIGS is equal to the entry in subfield FROMDIGS.
OWNER		alphanumeric (1 to 16 characters)	*Owner* Enter the name of the owner of the range of DNs. This must have already been datafilled in table OWNER.

Data ll e xample

The following example shows sample data ll for table DNO WN.

MAP display example for table DNOWN

```
                KEY    OWNER
      ________________________________________________
   023123     023124   DEPT21
```

DNPIC

Table name

Directory Number Primary Inter-LATA Carrier Table

Overview

Table DNPIC maps a directory number (DN) to a primary inter-LATA (local access and transport area) carrier (PIC). The PIC name is data lled in table PICNAME. Table DNPIC also speci es whether the subscriber is allowed to use 10XXX dialing, and notes the names of inter-LATA carriers that have denied service to the subscriber.

Table DNLPIC allows subscribers of non-conforming end of ces (NCEO) that are serviced by a LATA Equal Access System (LEAS) access tandem (AT) to choose a carrier to provide their intra-LATA service.

Table SPLANILN contains the DNs of special lines in a non-equal access end of ce (non-EAEO) and identi es the line type to the non-T raf c Operator Position System (TOPS) LEAS. Special lines are coin, hotel, coinless public, and restricted coin. Table SPLANILN is accessed when a non-EAEO cannot provide the correct automatic number identi cation (ANI) information digit to LEAS when routing calls originating on these lines.

Functional description

Table DNPIC maps a directory number (DN) to a primary inter-LATA carrier data lled in table PICN AME.

Data ll sequence and implications

The following tables must be data lled before table DNPIC:

- OCCNAME
- PICNAME
- TOPEACAR

Table size

The following formula is used to calculate the data store requirements for table DNPIC (expressed in 16-bit words) in a DMS SuperNode switch:

$(800 \times 4) + (NPA \times 800 \times 4) + (NXX \times 100 \times 4) + (XX \times 50)$

where

NPA is the number of different NPAs data lled

DNPIC (continued)

NXX is the number of different NXXs data lled

XX is the number of different hundred rst XXs data lled

Note: Carrier toll denied (CTD) is a heavy user of data store.

Data ll

The following table lists data ll for table DNPIC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DNKEY		see subfields	*Directory number* This field consists of subfields DNPIC_NPA, DNPIC_NXX, DFNPIC_MS_XX, and DNPIC_LS_XX.
	DNPIC_NP A	200 to 999 (3 digits)	*Directory number primary inter-LATA carrier numbering plan area* Enter the numbering plan area (NPA) code.
	DNPIC_NXX	200 to 999 (3 digits)	*Directory number primary inter-LATA carrier numbering xx* Enter the NXX code.
	DNPIC_MS_XX	1 to 9 (2 digits)	*Directory number primary inter-LATA carrier line code* Enter an XX code for the first two digits of the line number.
	DNPIC_LS_XX	1 to 9 (2 digits)	*Directory number primary inter-LATA carrier line code* Enter an XX code for the second two digits of the line number.
DNPIC		alphanumeric (1 to 16 characters)	*Primary inter-lata carrier* Enter a carrier name that is datafilled in table PICNAME.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CHOICE		Y or N	*Choice* Enter Y (yes) if the subscriber is allowed to use 10XXX dialing. Otherwise, enter N (no). If feature package NTX710AA LATA Equal Access System (LEAS) is not present, enter N.
CTD		see subfields	*Carrier toll denied* This field consists of subfields CTDSEL and CARRIERS.
	CTDSEL	Y or N	*Carrier toll selector* Enter Y if one or more carriers have denied service to this subscriber and datafill refinement carriers. Otherwise, enter N. If feature package NTX710AA is not present, enter N.
	CARRIERS	vector of up to 21 multiples	*Carriers* If the entry in field CTDSEL is Y, enter up to three carriers that have denied service to this subscriber. If feature package NTXA24AA (Equal Access Enhanced Carrier Toll Denial) is present in the software and field CTDSEL is set to Y, up to 21 carriers can be entered that have denied service to this subscriber. Enter $ after the last carrier name. During initial program load (IPL), table PICNAME datafills the first three tuples in field CARRIERS with the entries NODATA, NOCAR, and NILCAR. NODATA is reserved for system use. NOCAR means that a subscriber is served, but has not yet chosen a primary carrier. NILCAR means that the nil carrier is assigned. No presubscribed dialing is allowed.

Data ll e xample

The following example shows sample data ll for table DNPIC.

DNPIC (end)

MAP display example for table DNPIC

```
         DNKEY  DNPIC CHOICE

                                                                CTD
_____________________________________________________________________
212 220 11 11  NOCAR      N
                                                                 N
212 220 12 34  CARR2      N
                                                                 N
212 221 22 09  CARR5      Y
Y (CARRX) (CARRY) $

212 221 56 98  CARR3      Y
Y (CARRZ) $

613 621 12 34 NILCAR      Y
                                                                 N
613 621 12 44  CARR2      N
Y (CARRX) (CARRY) (CARRZ) $
```

Table history

BCS36

Table size was changed. Field DNKEY changed to accept an NPA value between 200 and 999.

DNREGION

Table name

Directory Number Region Table

Overview

The reverse translation tables (DNREGION, DNREVXLA) are part of a feature which provides the capability to format a calling party number into a form which is consistent with the called party's dial plan.

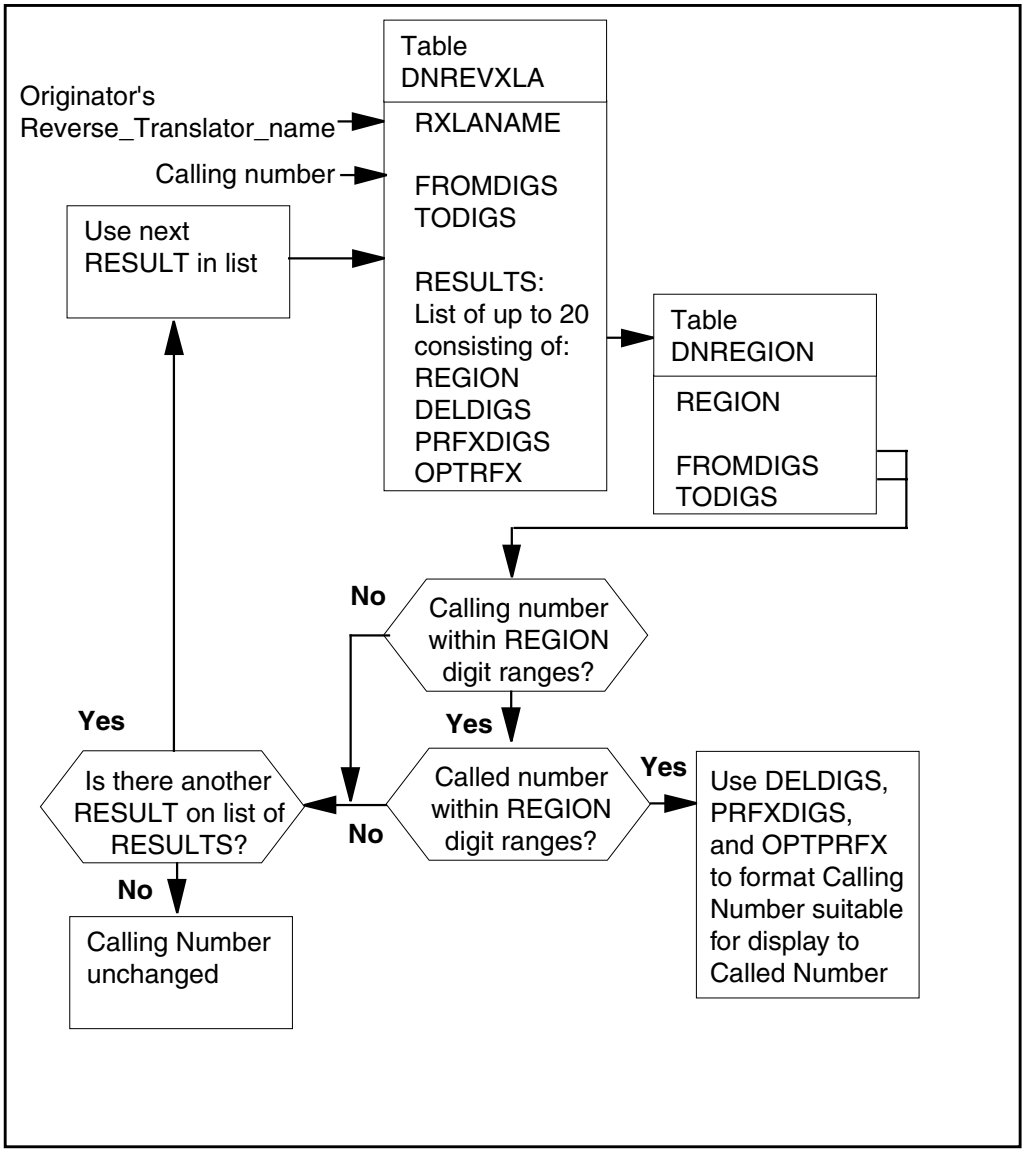
Table DNREGION identi es groups of directory numbers (DN) belonging to the same region (or community of interest).

Table DNREVXLA de nes reverse translation algorithms based on the various regions de ned in table DNREGION.

Together these two tables provide the capability to specify the manner in which calling party digits are manipulated based on whether the calling party and the called party share a particular region or not as shown in the following gure.

DNREGION (continued)

Reverse translation table functional diagram



Functional description

Table DNREGION de nes a re gion name and associates it with a range of directory numbers.

While determining how to format the calling number in a manner suitable for the called number, DMS uses table DNREGION to nd the re gion names associated with the calling and called numbers.

DEFAULT region

A special region, named DEFAULT, can represent all possible digit ranges. Any given digit string is always included in this region.

The DEFAULT region is de ned internally and cannot be speci ed in table DNREGION.

Table size

4096 tuples

Data ll

The following table lists data ll for table DNREGION.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
REGION		alphanumeric up to 15 characters	*Region name* Enter a region name. ***Note:*** If the standard region name INTERNAT is used and the feature DDN International Interworking is active in the office, DDN ignores this datafill. All other features continue using the datafill as usual. With the office parameter DDN_INTERNATIONAL set to 'Y', if the customer tries to provision a region using the INTERNAT region name, the following warning is displayed: `* WARNING *: DDN REVERSE TRANSLATIONS WILL NOT USE INTERNAT REGION DATAFILL IN TABLE DNREGION`
FROMDIGS		numeric (up to 15 digits)	*From digits* Enter the lowest digits of the digit range associated with this region name.
TODIGS		numeric (up to 15 digits)	*To digits* Enter the highest digits of the digit range associated with this region name.

DNREGION (continued)

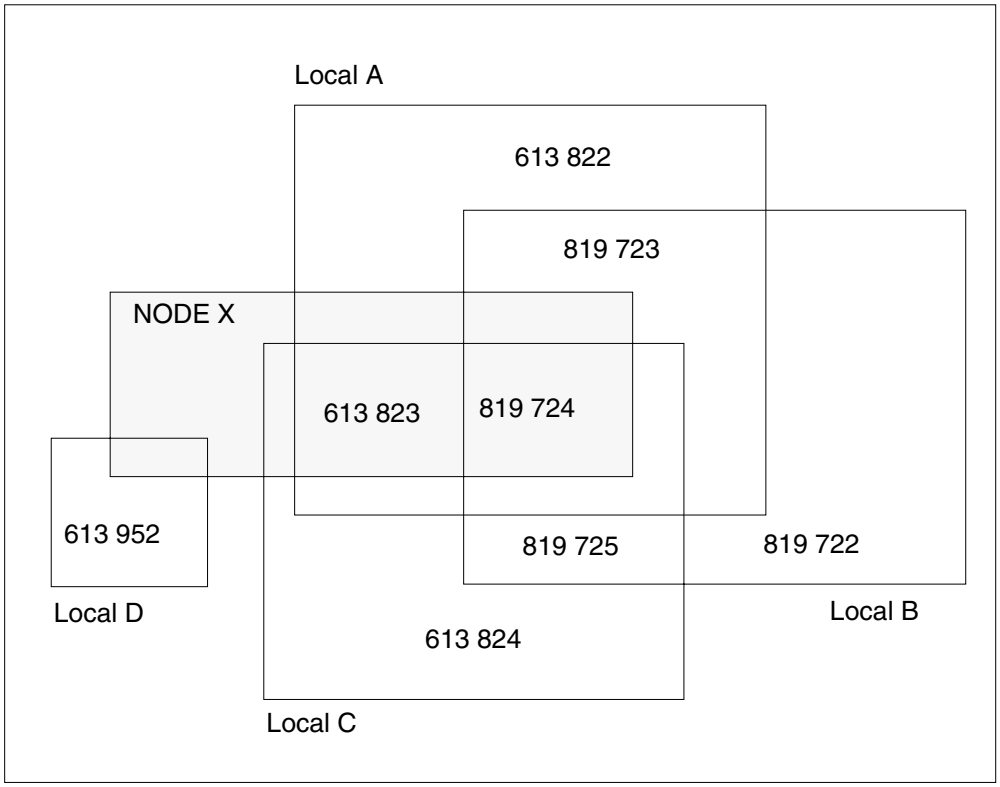
Data ll e xample

Example using the PUBLIC network

This example illustrates a possible reverse translator de ned for an of ce serving the public network. This example is for illustration purposes only as the display of calling party address for calls within the PUBLIC network is not supported by this feature.

The following gure illustrates the dial plan for this h ypothetical of ce (or node) X.

Dial plan for of ce X



This node serves numbers with NPA-NNX combinations of 613 822, 613 823, 613 824, 613 952, 819 722, 819 723, 819 724, and 819 725, which are in four different local calling areas.

Of ce X serv es directory numbers in two distinct numbering plan areas, namely the 613 area and the 819 area. Also, the directory numbers served by this of ce are all included in at least one of four dif ferent local calling areas, namely LOCAL_A, LOCAL_B, LOCAL_C and LOCAL_D. Figure 3 shows how the local calling areas served by of ce X w ould be data lled in table

DNREGION. Note that two toll regions, namely TOLL_613 and TOLL_819, must be de ned since this of ce serv es more than one SNPA.

The conversion algorithm supported by this of ce conforms to the standard dialing plan for local and long-distance calls. The algorithm is de ned as follows:

- For local calls, only the last seven digits of the DN are dialed.
- For long-distance calls from within the same NPA, the subscriber dials a 1 followed by the last seven digits of the called party DN.
- For long-distance calls from outside the subscriber's NPA, the subscriber must dial a 1 followed by the full ten-digit DN of the called party.

Figure 4 illustrates one way in which this algorithm could be data lled in table DNREVXLA for of ce X.

The following table illustrates various results of calling party number conversion based on the reverse translator POTS data lled in of ce X:

Calling party number conversion

Calling number	Called number	Digits to display
(613) 823-xxxx	(613) 824-xxxx	823xxxx
(613) 822-xxxx	(819) 723-xxxx	822xxxx
(613) 822-xxxx	(613) 824-xxxx	1822xxxx
(613) 777-xxxx	(613) 824-xxxx	1777xxxx
(613) 952-xxxx	(819) 732-xxxx	1613952xxxx
(516) 444-xxxx	(819) 724-xxxx	1516444xxxx

Display application example

This section uses an example to illustrate the manner with which DN screening is performed using the reverse translation tables in order to obtain the appropriate digit manipulation result for a given set of calling party and called party digits.

For this example, we assume the following input:

CALLING PARTY NUMBER: 613 823 1234

CALLED PARTY NUMBER: 819 725 5678

DNREGION (continued)

Following is a list of the various steps involved in obtaining the result:

1. The calling party digits locate the appropriate tuple in table DNREVXLA. In this example, the following tuple is used since it includes all numbers beginning with the digits 613:

```
pots        613     613     ( local_a          3   n   n)
( local_c       3   n   n )   ( local_d        3   n   n)
 ( toll_613     3   1   n ) ( default          0   1   n)
```

2. Screening tests are then performed using the rst algorithm speci ed in the tuple. This algorithm speci es that the LOCAL_A re gion is used for directory number screening:

```
 local_a     613822      613823
 local_a     819723      819724
```

3. For a successful screening test, both the calling party and the called party digits must be found in the digit ranges which de ne the given region. In this case, the calling party digits are found in the range 613822 to 613823 but the called party digits are not found in region LOCAL_A. The screening test fails.
4. Since screening for the rst algorithm failed, the second algorithm in the tuple is examined. This algorithm speci es the LOCAL_C re gion:

```
local_c     613823      613824
local_c     819724      819725
```

5. In this case, the calling party digits are found in the range 613823 to 613824 and the called party digits are found in the range 819724 to 819725 of region LOCAL_C. The screening test is successful.
6. The digit manipulation algorithm associated with the successful test is then applied to the calling party digits. This algorithm speci es that the leading 3 digits are deleted (DELDIGS = 3) and that no digits are pre x ed to the result (PRFXDIGS = n and OPTPRFX = n), giving the following result:

   DIGITS TO DISPLAY: 8231234

MAP display example for table DNREGION (Dial plan region data for Node X)

```
          REGION      FROMDIGS      TODIGS
_____________________________________________

        LOCAL_A       613822      613823

        LOCAL_A       819723      819724

        LOCAL_B       819722      819725

        LOCAL_C       613823      613824

        LOCAL_C       819724      819725

        LOCAL_D       613952      613952

       TOLL_613          613         613

       TOLL_819          819         819
```

MAP display example for table DNREVXLA (Reverse translation data for Node X)

```
RXLANAME      FROMDIGS      TODIGS                          RESULTS
_____________________________________________________________________

    POTS           000         612   (DEFAULT  0     1      N)$

    POTS           613         613   (LOCAL_A 3 N N)
                                     (LOCAL_C 3 N N)
                                     (LOCAL_D 3 N N)
                                     (TOLL_613 3 1 N)
                                     (DEFAULT 0 1 N) $

    POTS           614         818   (DEFAULT  0     1      N)$

    POTS           819         819   (LOCAL_A 3 N N)
                                     (LOCAL_B 3 N N)
                                     (LOCAL_C 3 N N)
                                     (TOLL_819 3 1 N)
                                     (DEFAULT 0 1 N) $

    POTS           820         999   (DEFAULT  0     1      N)$
```

Example for subscribers with Automatic Call Back (ACB)

ACB is not supported on the DMS-100G switch.

DNREGION (continued)

This example describes basic steps in data lled A CB/AR on an typical DMS (as described above).

The switch provides service to lines in 2 NPAs: 613 and 819. DNs of lines belonging to this switch are one of the following:

- (613) 224-XXXX
- (613) 560-XXXX
- (819) 243-XXXX
- (819) 595-XXXX

Assume that all lines on this switch are RES lines. We wish to add ACB/AR to all of them.

Dial plan

The dial plan for the 613 lines belonging to the switch is as follows:

- Dial 224-XXXX to reach a (613) 224-XXXX number
- Dial 560-XXXX to reach a (613) 560-XXXX number
- Dial 243-XXXX to reach a (819) 243-XXXX number
- Dial 595-XXXX to reach a (819) 595-XXXX number
- Dial 445-XXXX to reach a (613) 445-XXXX number (located on a different switch).
- Dial 459-XXXX to reach a (819) 459-XXXX number (located on a different switch).
- Dial 1-NXX-XXXX to reach any other (613) NXX-XXXX number.
- Dial 996-NXX-XXXX to reach a (996) NXX-XXXX number.
- Dial 1-NPA-NXX-XXXX to reach any other (NPA) NXX-XXXX number.

The dial plan for the 819 lines belonging to the switch is as follows:

- Dial 224-XXXX to reach a (613) 224-XXXX number.
- Dial 560-XXXX to reach a (613) 560-XXXX number.
- Dial 243-XXXX to reach a (819) 243-XXXX number.
- Dial 595-XXXX to reach a (819) 595-XXXX number.
- Dial 445-XXXX to reach a (613) 445-XXXX number (located on a different switch).
- Dial 459-XXXX to reach a (819) 459-XXXX number (located on a different switch).

- Dial 1-NXX-XXXX to reach any other (819) NXX-XXXX number.
- Dial 996-NXX-XXXX to reach a (996) NXX-XXXX number.
- Dial 1-NPA-NXX-XXXX to reach any other (NPA) NXX-XXXX number.

This dial plan is complex enough that a Network Dial Plan data ll for A CB and AR is needed.

Network dial plan data ll

The concepts used to create the data ll required for each feature follo w.

Network dial plan general algorithms

Network Dial Plan (NDP) relies on the concept of regions. A region is a list of range of DNs. NDP allows range of DNs based on any format. For example, regions can be de ned using seven or ten digit DNs. Each region de ned on a switch should be assigned a distinct name, and must be data lled in table DNREGION.

For example, here is the de nition (using 7 digit DN format) of re gion REGIONX, which includes DNs of form 248-XXXX, 356-11XX, 360-XXXX and 361-XXXX:

MAP display example for table DNREGION (notice the third tuple)

```
          REGION      FROMDIGS       TODIGS
_____________________________________________________

         REGIONX           248          248

         REGIONX         35611        35611

         REGIONX           360          361
```

A prede ned re gion called DEFAULT contains all possible DNs.

After de ning regions, a DN translator (sometimes called a reverse translator) is de ned. F or ACB/AR, a DN translator is a list of tuples (in table DNREVXLA) that describes modi cations on a destination DN, based on that DN and the DN of the ACB/AR subscriber.

The general format of a tuple in table DNREVXLA is as follows:

DNREGION (continued)

Data ll f ormat for table DNREVXLA

```
RXLANAME      FROMDIGS      TODIGS                        RESULTS
_____________________________________________________________________

  (1)     |             (2)          | (    (3)         (4)    )

                                       (    (3)         (4)    )

                                       (    (3)         (4)    )

                                                  .....
                                       (    (3)         (4)    ) $
```

(1)
is a DN translator name. A DN translator can have more than one tuple in table DNREVXLA. All tuples belonging to the same DN translator should have the same DN translator name.

(2)
is a range of DNs (the building unit of regions, since a region may be a LIST of ranges). For ACB/AR, this range describes the range of ACB/AR subscribers to which this tuple applies when they originate requests.

Each occurrence of (3) must be a DN region name previously de ned in table DNREGION.

Each occurrence of (4) is a 3-part eld describing modi cations to perform on the destination DN:

- The rst part of the eld indicates ho w many digits to remove from the destination DN. Digits are removed starting from the left. 0 means no digits are removed.
- This second part of the eld indicates ho w many digits to insert in the destination DN. Digits are inserted starting from the left. N means no digits are inserted.
- The third part of the eld is not used in ACB/AR DN translators and may always be set to N.

An example of an AR DN translator tuple, along with what it means follows. (This example assumes 10 digit DN inputs, which is the normal case for AR.)

MAP display example for table DNREVXLA

```
RXLANAME       FROMDIGS       TODIGS                          RESULTS
_____________________________________________________________________

  ARXLA1         613235       613237    (REG1 3 N N)
                                         (REG2 3 4 N)
                                         (REG3 0 N N)
                                         (REG4 0 2 N) $
```

This tuple applies to AR subscribers whose RES customer group has ARXLA1 as PUBLIC reverse translator name AND whose DNs are 613-235-XXXX, 613-236-XXXX or 613-237-XXXX.

Meaning of the RESULTS entry list:

- If the AR subscriber and the destination DN belong to REG1, then remove the leftmost 3 digits from the destination DN.
- If the AR subscriber and the destination DN belong to REG2, then remove the leftmost 3 digits from the destination DN, and add the digit 4 to the left of the destination DN.
- If the AR subscriber and the destination DN belong to REG3, then leave the destination DN unchanged.
- If the AR subscriber and the destination DN belong to REG4, then add the digit 2 to the left of the destination DN.
- If the AR subscriber and the destination DN do not belong to REG1, REG2, REG3, or REG4, then leave the destination DN unchanged (default action).

For AR, each RES customer group in the switch can have a different DN translator. Which DN translator is used by a RES customer group is determined by the customer groups tuple in table CUSTNTWK.

For ACB, one predetermined DN translator name (ACB) is used for all ACB subscribers in the switch. The ACB DN translator name should not be entered anywhere in table CUSTNTWK.

DNREGION (continued)

ACB Network dial plan data ll

For ACB, NPA ambiguities for seven digit dialing need to be resolved. To do this, we must describe, in data ll, what is the NP A of the called party for all combinations of ACB subscriber/seven digit called DN.

The only ACB subscribers we have to worry about are those located on this switch. Hence, the data is as follows:

- ACB customers with DNs (613) 224-XXXX and (613) 560-XXXX can use seven digit dialing to DNs (613) 224-XXXX, (613) 445-XXXX, (613) 560-XXXX, (819) 243-XXXX, (819) 459-XXXX, (819) 595-XXXX.
- ACB customers with DNs (819) 243-XXXX and (819) 595-XXXX can use seven digit dialing to DNs (613) 224-XXXX, (613) 445-XXXX, (613) 560-XXXX, (819) 243-XXXX, (819) 459-XXXX, (819) 595-XXXX.

We can describe this in Network Dial Plan form as follows. We de ne four DN regions in table DNREGION, using seven digit de nitions:

- Region R613TO613, containing all ACB subscribers with an NPA of 613 on this switch AND all 613 DNs they can reach using seven digit dialing. This region contains DNs 224-XXXX, 445-XXXX, and 560-XXXX.
- Region R819TO819, containing all ACB subscribers with an NPA of 819 on this switch AND all 819 DNs they can reach using seven digit dialing. This region contains DNs 243-XXXX, 459-XXXX, and 595-XXXX.
- Region R613TO819, containing all ACB subscribers with an NPA of 613 on this switch AND all 819 DNs they can reach using seven digit dialing. This region contains DNs 224-XXXX, 560-XXXX, 243-XXXX, 459-XXXX, and 595-XXXX.
- Region R819TO613, containing all ACB subscribers with an NPA of 819 on this switch AND all 613 DNs they can reach using seven digit dialing. This region contains DNs 243-XXXX, 595-XXXX, 224-XXXX, 445-XXXX, and 560-XXXX.

The resulting tuples in table DNREGION are:

MAP display example for table DNREGION

REGION	FROMDIGS	TODIGS
R613TO613	224	224
R613TO613	445	445
R613TO613	560	560
R613TO819	224	224
R613TO819	243	243
R613TO819	459	459
R613TO819	560	560
R613TO819	595	595
R819TO819	243	243
R819TO819	459	459
R819TO819	595	595
R819TO613	224	224
R819TO613	243	243
R819TO613	445	445
R819TO613	560	560
R819TO613	595	595

We now need to describe the NPA relationships. To do this we create new tuples (one tuple per ACB subscribers DN range) in table DNREVXLA describing what NPA each type of called party has.

DNREGION (continued)

MAP display example for table DNREVXLA

```
RXLANAME      FROMDIGS      TODIGS                        RESULTS
_____________________________________________________________________

     ACB           224          224   (R613TO613 0 613 N)
                                      (R613TO819 0 819 N) $


     ACB           243          243   (R819TO819 0 819 N)
                                      (R819TO613 0 613 N) $


     ACB           560          560   (R613TO613 0 613 N)
                                      (R613TO819 0 819 N) $


     ACB           595          595   (R819TO819 0 819 N)
                                      (R819TO613 0 613 N) $
```

This data ll can be translated as follo ws:

1st tuple

If the ACB subscriber has a 224-XXX DN, and

- if the calling and called party belong to region R613TO613, then the NPA of the called party is 613
- if the calling and called party do not belong to region R613TO613 but belong to region R613TO819, then the NPA of the called party is 819
- if the calling and called party do not belong to region R613TO613 or R613TO819, then assume that the called party and calling party have the same NPA

2nd tuple

If the ACB subscriber has a 243-XXXX DN, and

- if the calling and called party belong to region R819TO819, then the NPA of the called party is 819
- if the calling and called party do not belong to region R819TO819 but belong to region R819TO613, then the NPA of the called party is 613
- if the calling and called party do not belong to region R819TO819 or R819TO613, then assume that the called party and calling party have the same NPA

3rd tuple

If the ACB subscriber has a 560-XXXX DN, and

- if the calling and called party belong to region R613TO613, then the NPA of the called party is 613
- if the calling and called party do not belong to region R613TO613 but belong to region R613TO819, then the NPA of the called party is 819
- if the calling and called party do not belong to region R613TO613 or R613TO819, then assume that the called party and calling party have the same NPA

4th tuple

If the ACB subscriber has a 595-XXXX DN, and

- if the calling and called party belong to region R819TO819, then the NPA of the called party is 819
- if the calling and called party do not belong to region R819TO819 but belong to region R819TO613, then the NPA of the called party is 613
- if the calling and called party do not belong to region R819TO819 or R819TO613, then assume that the called party and calling party have the same NPA

Note that for this data ll to w ork properly, the regions R613TO613 and R819TO819 must be rst in the RESUL TS eld of their respecti ve tuples.

Example for subscribers with Automatic Recall (AR)

This example describes basic steps in data lling AR on a standard DMS-100 switch. For the purpose of this example, a ten-digit DN is used for both the AR subscriber and the destination. For both the subscriber and the destination, local calling uses seven digits and local long distance uses eight digits.

AR Network dial plan data ll

For AR, we need to determine, based on an AR subscriber ten digit DN and a destination ten digit DN, what is the dialable form of the destination DN. Because the input DNs are ten digit, we must use DN ranges using ten digit format.

Data ll f or seven digit dialing

For each AR subscriber DN range, we can de ne a region of DNs it can reach using seven digit dialing. In the case of this switch, all AR subscribers can reach the same region of DNs using seven digit dialing. We only need to de ne one seven digit dialing DN region, we will call it RAR7DIGS.

DNREGION (continued)

RAR7DIGS should contain DNs 613-224-XXXX, 613-445-XXXX, 613-560-XXXX, 819-243-XXXX, 819-459-XXXX, 819-595-XXXX. The corresponding tuples in table DNREGION are:

MAP display example for table DNREGION

REGION	FROMDIGS	TODIGS
RAR7DIGS	613224	613224
RAR7DIGS	613445	613445
RAR7DIGS	613560	613560
RAR7DIGS	819243	819243
RAR7DIGS	819459	819459
RAR7DIGS	819595	819595

Data ll f or eight digit dialing

For eight digit dialing, the 613 and the 819 AR subscribers have different DN regions. Hence we will de ne 2 dif ferent regions, R613WITH1 and R819WITH1.

Region R613WITH1 includes 613 AR subscribers and the DN ranges they can reach using eight digit dialing. The corresponding tuples in table DNREGION are:

MAP display example for table DNREGION

REGION	FROMDIGS	TODIGS
R613WITH1	613224	613224
R613WITH1	613256	613256
R613WITH1	613560	613560

Region R819WITH1 will include 819 AR subscribers and the DN ranges they can reach using eight digit dialing.

MAP display example for table DNREGION

REGION	FROMDIGS	TODIGS
R819WITH1	819243	819243
R819WITH1	819422	819422
R819WITH1	819595	819595

Data ll f or ten digit dialing

For ten digit dialing, the 613 and the 819 AR subscribers can both reach (996) NXX-XXXX numbers. We could de ne tw o different regions; one for 613 subscribers and one for 819 subscribers. But we can take advantage of the particulars of region RAR7DIGS, which are placed rst in each DNREVXLA AR tuple. If we de ne RAR10DIGS to include all AR subscribers and all (996) NXX-XXXX numbers, and we place RAR10DIGS after RAR7DIGS in each DNREVXLA tuple, the DN checking for 996 numbers will work correctly.

MAP display example for table DNREGION

REGION	FROMDIGS	TODIGS
RAR10DIGS	613224	613224
RAR10DIGS	613560	613560
RAR10DIGS	819243	819243
RAR10DIGS	819595	819595
RAR10DIGS	996	996

AR data ll f or table DNREVXLA

For this example, we assume all AR subscribers on this switch are in the same RES customer group. We will call the AR DN translator "RESAR". The corresponding entries in table DNREVXLA are as follows:

DNREGION (continued)

MAP display example for table DNREVXLA

```
RXLANAME      FROMDIGS      TODIGS                        RESULTS
_____________________________________________________________________

   RESAR        613224       613224    (RAR7DIGS 3 N N)
                                        (R613WITH1 3 1 N)
                                        (RAR10DIGS 0 N N)
                                        (DEFAULT 0 1 N) $

   RESAR        819243       819243    (RAR7DIGS 3 N N)
                                        (R819WITH1 3 1 N)
                                        (RAR10DIGS 0 N N)
                                        (DEFAULT 0 1 N) $


   RESAR        613560       613560    (RAR7DIGS 3 N N)
                                        (R613WITH1 3 1 N)
                                        (RAR10DIGS 0 N N)
                                        (DEFAULT 0 1 N) $

  RESAR        819595       819595    (RAR7DIGS 3 N N)
                                        (R819WITH1 3 1 N)
                                        (RAR10DIGS 0 N N)
                                        (DEFAULT 0 1 N) $
```

This data ll can be translated as follo ws:

1st tuple

If the calling number has a 613-224-XXXX DN, and

- if the calling and called DN belong to region RAR7DIGS, remove the leftmost 3 digits from the destination DN
- if the calling and called DN do not belong to region RAR7DIGS but belong to region R613WITH1, then remove the leftmost 3 digits from the destination DN and add the digit 1 to the left of the destination DN
- if the calling and called DN do not belong to region RAR7DIGS or R613WITH1 but belong to region RAR10DIGS, then leave the destination DN as is
- if the calling and called DN do not belong to region RAR7DIGS, R613WITH1, or RAR10DIGS, then add the digit 1 to the left of the destination DN

2nd tuple

If the calling number has an 819-243-XXXX DN, and

- if the calling and called DN belong to region RAR7DIGS, remove the leftmost 3 digits from the destination DN
- if the calling and called DN do not belong to region RAR7DIGS but belong to region R819WITH1, then remove the leftmost 3 digits from the destination DN and add the digit 1 to the left of the destination DN
- if the calling and called DN do not belong to region RAR7DIGS or R819WITH1 but belong to region RAR10DIGS, then leave the destination DN as is
- if the calling and called DN do not belong to region RAR7DIGS, R819WITH1, or RAR10DIGS, then add the digit 1 to the left of the destination DN

3rd tuple

If the calling number has a 613-560-XXXX DN, and

- if the calling and called DN belong to region RAR7DIGS, remove the leftmost 3 digits from the destination DN
- if the calling and called DN do not belong to region RAR7DIGS but belong to region R613WITH1, then remove the leftmost 3 digits from the destination DN and add the digit 1 to the left of the destination DN
- if the calling and called DN do not belong to region RAR7DIGS or R613WITH1 but belong to region RAR10DIGS, then leave the destination DN as is
- if the calling and called DN do not belong to region RAR7DIGS, R613WITH1, or RAR10DIGS, then add the digit 1 to the left of the destination DN

4th tuple

If the calling number has an 819-595-XXXX DN, and

- if the calling and called DN belong to region RAR7DIGS, remove the leftmost 3 digits from the destination DN
- if the calling and called DN do not belong to region RAR7DIGS but belong to region R819WITH1, then remove the leftmost 3 digits from the destination DN and add the digit 1 to the left of the destination DN

DNREGION (end)

- if the calling and called DN do not belong to region RAR7DIGS or R819WITH1 but belong to region RAR10DIGS, then leave the destination DN as is
- if the calling and called DN do not belong to region RAR7DIGS, R819WITH1, or RAR10DIGS, then add the digit 1 to the left of the destination DN

Calls from trunks with CLI formatting

When a call comes from a trunk with Calling Line Identi cation (CLI), verify the con guration of the re verse translations dial plan. For example, for an incoming CTUP trunk when the calling DN is 6138230001 and the CLI is de ned as a local format:

```
TABLE TRKSERVCTUPGSF74BWE $(2w_cli continue N Y LCL 9 5555 3 15)
$
```

The calling number is 98230001, which does not include the area code or SNPA, but does include the pre x 9. The re verse translation dial plan is as follows:

```
Table DNREVXLAPUB_A 9823 9823 (LONG_A 1 1613 N) $Table
DNREGIONLONG_A 9823 9823(calling number)LONG_A 819595
819595(called number)
```

16138230001 is the dialable number. However, if NTL format is chosen for the incoming CLI, the area code is included in the calling number (in addition to the pre x).

For the CISUP trunk group, the area code comes with the incoming digits even if the LCL format is set. If the called number is 8195950000 and the calling digits from a CISUP trunk are 96138230000, the reverse translation dial plan is as follows:

```
Table DNREVXLARESAR     9613224    9613224(RAR10DIGS 1 1 N)
$Table DNREGIONRARIODIGS 9613823 9613823(calling
number)RARIODIGS 819595 819595(called number)
```

16138230000 is the dialable number.

The reverse translation dial plan for trunk calls must be con gured according to the settings in table TRKSERV so that DDN and AR can work properly.

DNREVXLA

Table name

Directory Number Reverse Translation Table

Functional description

Table DNREVXLA is used to specify reverse translations algorithms which can be used to determine the manner in which the calling party digits are manipulated.

Each tuple in table DNREVXLA consists of a reverse translator name, a range of digits de ned in elds FR OMDIGS and TODIGS, and up to 20 region translation results.

For related information, refer to table DNREGION.

Data ll sequence and implications

Table DNREGION must be data lled before table DNREVXLA.

Table CUSTNTWK must be data lled before table DNREVXLA.

Table size

The size of table DNREVXLA is increased automatically as new tuples are added. The number of different reverse translators that can be speci ed in eld RXLANAME is limited to 1023. The number of different digit ranges that can be associated with a given translator is limited only by the amount of data store available.

The data store required to hold the information contained in tuples of this table is allocated dynamically.

DNREVXLA (continued)

Data ll

The following table lists data ll for table DNREVXLA.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RXLANAME		alphanumeric (up to 8 characters)	*Reverse translation algorithm name* Enter the reverse translation algorithm name.
FROMDIGS		numeric (up to 15 digits)	*From digits* Enter the lowest digits of the digit range associated with this region name.
TODIGS		numeric (up to 15 digits)	*To digits* Enter the highest digits of the digit range associated with this region name.
RESULTS		see subfields	*Region translation results* This field consists of up to 20 region results. Each result consists of fields REGION, DELDIGS, PRFXDIGS and OPTPRFX.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action

	REGION	DEFAULT
		VACANT or region name from table DNREGION
			Region name
			Enter a region name known to table DNREGION. If table DNREGION is empty, then only the values DEFAULT and VACANT appear in this field because they are predefined.
			If VACANT is specified in field REGION, subfields DELDIGS, PRFXDIGS and OPTPRFX are not prompted and do not appear.
			The DEFAULT region is used to specify a region that includes all possible directory numbers. It can only be specified in the very last result of a particular list.
			Note: If the feature DDN International Interworking is active in the office, the digit manipulation result for international DDN calls must be provisioned using the standard region name INTERNAT. For all other features, the INTERNAT region name behaves just like any other DN region name.
			With the office parameter DDN_INTERNATIONAL set to 'Y', if the customer tries to add the INTERNAT region name to the result list, the following warning is 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 results in the following warning:
			`* WARNING *: PLEASE MAKE SURE THAT THE INTERNAT REGION IS DEFINED IN TABLE DNREGION.`

DNREVXLA (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DELDIGS	0 to 15	*Number of leading digits to delete* Enter the number of leading digits which are deleted from the calling digits.
	PRFXDIGS	N or string of up to 15 digits	*Prefixed digits* Enter the digits prefixed to the calling digits. Enter N when no digits are prefixed to the calling digits.
	OPTPRXX	N or string of up to 11 digits	*Optional prefix digits* Enter the optional digits prefixed to the calling digits at the beginning of the digit string. Certain applications may exclude optional prefix digits. The total number of digits specified in fields PRFXDIGS and OPTPRFX cannot exceed 18. Enter N when no optional digits are prefixed to the calling digits.

Data ll e xample

MAP display example for table DNREVXLA

MAP display example for table DNREVXLA

```
RXLANAME       FROMDIGS      TODIGS                    RESULTS
_____________________________________________________________
MVPREV              0           9      (MVPREG1   3      N     N)$
```

DNROUTE

Table name

Directory Number Route

Functional description

Table DNROUTE lists information for programmable directory numbers (DN) in the switch (such as a DN that identifies a route), rather than line equipment numbers (LEN). Table DNROUTE replaces table WRDN.

Table DNROUTE associates a DN with a specific trunk group member. This DN specifies the lowest numbered DS-0 on the customer premises equipment (CPE) on which a wideband call must terminate. Given the lowest numbered DS-0 and the bandwidth, the incoming wideband call is connected to the CPE.

There are many variations of input for table DNROUTE, as shown in the table that follows. The variations that follow are described in this section, in alphabetical order. Selectors not described in the table that follows are not valid entries for table DNROUTE.

DNROUTE features

DN selector	Usage
D	Treatment
DSVC	Default Service
M	Listed Directory Number
MM	Meet-Me Conference
RSDT	Restricted Dial Tone
SYN	Synonym Directory Number
T	Route List
FEAT	Automatic Call Distribution (ACD)
FEAT	Advanced Intelligent Network (AIN)
FEAT	Automatic Set Relocation (ASR)

Note 1: The selectors C, H, L, P, HC, LC, A, ILC, IHC, MDN, IMC, SDN, SC, ACDTK, and SCM are listed in field DN_SEL. These selectors are not valid entries for table DNROUTE.

Note 2: Selector MTXDNTRIG only applies to the DMS-100 Wireless switch.

DNROUTE (continued)

DNROUTE features

DN selector	Usage
FEAT	Call Forward/Interface Busy
FEAT	Direct Inward System Access (DISA)
FEAT	Message Center DN (MCDN)
FEAT	Message Storage and Retrieval (MSR)
FEAT	Meet-Me Conference (MEETME)
FEAT	Meridian Offnet Access (MONA)
FEAT	Mobile Directory Number Trigger (MTXDNTRIG)
FEAT	Simultaneous Ringing (SIMRING) Virtual DN
FEAT	Subscriber Programmable Ringing for CFDA (SPRING) option RCTL (ring control)
FEAT	Suppressed Ringing Access (SRA)
FEAT	Uniform Call Distribution (UCD)
FEAT	Virtual Office Worker Directory Number (VOWDN)

Note 1: The selectors C, H, L, P, HC, LC, A, ILC, IHC, MDN, IMC, SDN, SC, ACDTK, and SCM are listed in field DN_SEL. These selectors are not valid entries for table DNROUTE.

Note 2: Selector MTXDNTRIG only applies to the DMS-100 Wireless switch.

Note: Tuples for feature Meet-Me Conference are no longer applicable to table DNROUTE. The Meet-Me Conference data is datafilled in table MMCONF, and the meet-me DN information is stored in table DNINV.

Datafill sequence and implications

The following tables must be datafilled before table DNROUTE.

- TOFCNAME
- ACDSGRP
- AVRTDATA
- BCDEF
- BROADCST
- CLLI

- COSMAP
- CUSTHEAD
- HNPACONT
- IBRNTE
- XLAPLAN
- RATEAREA
- MSRTAB
- NARDATA
- NCOS
- OFRT
- PRECONF
- TMTCNTL.TREAT
- TRIGDIG
- TRIGINFO
- TRIGGRP
- KSETFEAT
- UCDGRP

During the One Night Process (ONP), table TABXFR detects DNTRIGGER datafill. The detection does not allow transfer of DNTRIGGER datafill to the inactive side.

The following restrictions apply to the DSVC (Default Service) selector, which identifies a DN in table DNROUTE as a Default Service DN:

- Before you can provision a Default Service DN in table DNROUTE, you must execute the command interpreter (CI) DEFSVCCI tool SETUP command. This command provisions Default Service data on all ISDN interfaces that support Default Service.
- The DEFSVCCI tool REMOVE command removes all provisioning established by the SETUP command. Before using this command, you must remove the Default Service DN from table DNROUTE.

Table size

0 to 640 000 tuples

DNROUTE (continued)

If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the maximum size is 640 000 tuples.

If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to Universal, the maximum size is 500 000 tuples.

Note: Tables DNROUTE and DNINV use the same physical store. The maximum size of table DNROUTE is less than or equal to table DNINV.

The maximum number of advanced intelligent network (AIN) tuples that can be datafilled is 2048.

Datafill

The following table lists datafill for table DNROUTE.

Field descriptions

Field	Subfield	Entry	Explanation and action
AREACODE		0 to 9999999 (1 to 7 digits)	*Area code* The area code identifies a major geographical area served by the switch. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be three digits long.
OFCCODE		0 to 9999999 (0 to 7 digits)	*Office code digit register* The office code is a subregion of the area code. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be three digits long. The office code must be specified in table TOFCNAME. Tuples can be added if the value of field OFCCODE is $ as specified in table TOFCNAME. They cannot contain STNCODEs whose leading digits are an OFCCODE in the same area code.

DNROUTE (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
STNCODE		0 to 99999999 (up to 8 digits)	*Station code* The station code identifies a unique station within the terminating office (TOFC). If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the STNCODE code must be one or four digits in length. If one digit is entered, it is treated as a D-digit, where the D-digit represents the fourth digit in the format ABC-DEFG. A D-digit is then given the appropriate DN result. For example, if area code 613 and office code 226 are entered, and if 5 is entered as the station code, any calls to a number beginning with 6132265 are automatically routed to the specified treatment. If 5 is the D-digit, and DNROUTE is datafilled as 613 226 5 D OPRT, any numbers for 6132265 are routed to the operator treatment as set in table TMTCNTL. Ambiguity within the STNCODEs of one TOFC is not permitted. For example, 8594 and 859 cannot be specified as STNCODEs within one TOFC. ***Note:*** The STNCODE is in DEFG format.
XLAPLAN		alphanumeric(up to 16 characters)	*Translation plan index* Enter the index into the XLAPLAN table.
RATEAREA		alphanumeric (up to 16 characters)	*Area code* Enter the index into the RATEAREA table.

DNROUTE (continued)

Error messages

The following table explains error messages that can occur when you attempt to datafill table DNROUTE.

Note: You cannot assign a Public Office Directory Number (PODN) when Software Optionality Control option LNP00200 is IDLE.

Message	Explanation	User action
`ERROR: PODN may not be assigned when Software Optionality Control option LNP00200 is IDLE.`	SOC option LNP00200 is in the IDLE state.	Activate SOC option LNP00200. Assign the PODN again.

Note: When an Unable To Write New Data error message is displayed at the MAP terminal, an add or change operation to table DNROUTE was unsuccessful. When the add operation fails, no tuple is written to table DNROUTE. When a change operation fails, the existing tuple in table DNROUTE remains unchanged.

Table history

SN07 (DMS)

DNROUTE feature VOWDN added for feature A00002011. Refer to description of "DNROUTE feature VOWDN" for details.

SN06 (DMS)

DNROUTE feature DISA updated to indicate that DISA option RTEOPT is only applicable to trunks and not individual lines. Updated for activity Q00738898.

NA017

Development activity 59030419 added the SIMRING option to the FEAT selector.

NA013

Development actiivity 59006586 added the CFIB option to the FEAT selector.

NA012

Development activity 59006512 added the MSR option to the FEAT selector.

Development activity 59007050 introduced changes to field LINEATTR for selector AIN. This field now accepts an alphanumeric string instead of an integer string.

Removed information about value DNTRIG.

NA011

Added information about the DNTRIG value. Added error message.

Added the XLAPLAN and RATEAREA fields.

NA010

Added an error message.

Feature AU2933 removes option AIN01OPT from the DISA selector.

The RES Simultaneous Ringing feature (AJ4934) added the SIMRING option as a possible DISA option, to access the user interface remotely.

NA009

Added treatment PODN.

Added DSVC (Default Service) DN selector based on Provisioning Support for Default Service feature (AF7346).

Added information on DEFSVCCI tool SETUP and REMOVE commands to “Datafill sequence and implications" section.

Implemented design review changes regarding the Unable To Write New Data error message.

LWW00806

Feature AF7277 added feature selector MTXDNTRIG for the DMS-100 Wireless switch.

NA006

Added option AIN01OPT to feature selector DISA.

EUR006

Added feature MONA to DN selector FEAT.

NA005

Added option RCTL for feature selector SPRING.

APC03

Added option VPNDNOVR to subfield DISAOPT for DISA feature selector.

DNROUTE (end)

CSP02

Information about Advanced Services Protocol Call Control (ASPCC) was removed from DN selector FEAT.

BCS36

The following components were added:

- option NARS for DN feature selector DISA
- NARNAME for option NARS
- option AIN for DN selector FEAT

Fields CUSTGRP, SUBGRP, LINEATTR, OPTION, and NCOS were modified.

Automatic Call Distribution

This selector is required if the directory number (DN) is assigned as an Automatic Call Distribution (ACD) DN for an ACD group.

Table DNROUTE is used to enter the public safety answering points (PSAP) DN for the ACD PSAP group. If the DN entered into table DNROUTE is associated with an ACD PSAP, the PSAP name and DN are written into table E911PSAP. An ACD group must exist in table ACDGRP, with the ACDPSAP option, before a DN can be data lled in table DNR OUTE.

Only one primary ACD PSAP DN is allowed in table DNROUTE for each ACD PSAP group. Primary and supplementary DNs are allowed for ACD PSAP groups. When a primary DN is data lled in table DNROUTE, an entry is also data lled in table E911PSAP .

Note: If a DNTYPE requires modi cation, the tuple must be deleted and then re-entered with the new DNTYPE.

Each of the 1024 ACD groups can be assigned one primary ACD DN and 16 ACD supplementary DN. Each supplementary DN has an associated call priority that indicates the priority of all calls terminating on that DN. Call priorities are speci ed as inte gers in the range 0 to 3, with 0 (zero) being the highest priority and three being the lowest. High priority calls are answered by agents before lower priority calls.

ACD is the mechanism by which trunk calls can be given priority over line calls or calls to the ACD DN that originate from within the switch. There are two priorities associated with the primary DN in this table: a line priority for calls coming in over lines and those originated within the same switch (eld LINE), and a trunk priority for calls coming in over trunks (eld TR UNK).

DNROUTE feature ACD (continued)

Data ll

The following table lists the data ll for table DNR OUTE feature ACD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, FEATURE, ACDGRP, and DNAREA.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
	FEATURE	ACD	*ACD* Enter the feature ACD.
	ACDGRP	alphanumeric (1 to 16 characters)	*Automatic call distribution group* Enter the name in field ACDNAME of table ACDGRP for this ACD DN.
	DNAREA	see subfield	*Directory number area* This field consists of subfield DNTYPE.
	DNTYPE	PRIM or SUPP	*Directory number type* Enter PRIM if the DN is the primary UCD DN for this UCD group. Enter SUPP if the DN is one of the supplementary DNs for this UCD group.

DNTYPE = PRIM

If the value of sub eld DNTYPE is PRIM, data ll re nements TR UNK and LINE as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	TRUNK	0 to 3	*Trunk priority* Enter the priority of trunk calls terminating on this primary ACD DN. The highest priority is 0 (zero).
	LINE	0 to 3	*Line priority* Enter the priority of line calls or calls originating from the same switch as this primary ACD DN. The highest priority is 0 (zero).

DNTYPE = SUPP

If the value of sub eld DNTYPE is SUPP , data ll re nement DNPRIO as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	DNPRIO	0 to 3	*Directory number priority* Enter the priority number given to calls terminating on this ACD DN. The highest priority is 0 (zero).

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature ACD.

The ACD group name is BNRCAR. The primary ACD DN is 226 4695 and the supplementary ACD DN is 226 4696. All numbers are in SNPA 613.

The priority for trunk calls terminating on the primary DN is 0, and the priority for line calls terminating upon the primary ACD DN is 1.

The priority given for calls terminating on the supplementary DN is 1.

DNROUTE feature ACD (end)

MAP display example for table DNROUTE feature ACD

```
AREACODE OFCODE    STNCODE                  DNRESULT
_____________________________________________________
   613   226       4695   FEAT ACD BNRCAR PRIM 0 1  613
  226       4696   FEAT ACD BNRCAR SUPP   1
```

Advanced Intelligent Network (AIN)

The advanced intelligent network (AIN) enables the rapid creation and modi cation of services to subscribers. The tw o components of AIN are the service-switching point (SSP), which is connected to subscriber premises, and the service-control point (SCP), which can be programmed to create or modify services. The SSP can be enabled with triggers to query the SCP for calls that require AIN treatment. A virtual directory number (DN) can be de ned speci cally for AIN treatment.

Enabling AIN indicates a DN is not recognized by the SSP but is recognized by the SCP. A virtual DN can be de ned for both a private Integrated Business Network (IBN) environment or a public environment. Enabling for an IBN environment requires customer group and subgroup information, as well as a network class of service (NCOS) option. Enabling for a public environment requires a line attribute index into table LINEATTR.

To enable an AIN DN to access to AIN triggers, the DN must also be data lled in table DNFEAT with eld DNOPT data lled as AIN.

The maximum number of AIN DNs that can be data lled in table DNROUTE is 2048.

Note: If a call is made to a DN data lled in table DNR OUTE without the associated triggers to send control to the SCP, the call is routed to treatment.

Data ll

The following table lists the data ll for table DNR OUTE feature AIN.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL and DNTYPE.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
FEATURE		AIN	*Feature* Enter the feature AIN.

DNROUTE feature AIN (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DNTYPE(BCS36-)	IBN or NONIBN	*Directory number type* Enter IBN to datafill a directory number (DN) for a private Integrated Business Network (IBN) environment and datafill subfields CUSTGRP and SUBGRP. Subfield OPTION can be datafilled if a network class of service (NCOS) is to be applied to the call. ***Note:*** IBN is valid only if package NTX100 (MDC Base Package) is installed in the software load. Enter NONIBN to datafill a DN for a public environment and datafill subfield LINEATTR. Subfield OPTION can be datafilled if a network class of service (NCOS) is to be applied to the call.
CUSTGRP(BCS36-)		alphanumeric (1 to 16 characters)	*Customer group* Enter the name assigned to the customer group to which the AIN DN belongs.
SUBGRP(BCS36-)		0 to 7	*Customer subgroup* Enter the subgroup number within the customer group to which the AIN DN belongs.
LINEATTR(BCS36-)		alphanumeric (1 to 16 characters)	*Line attribute index* Enter the line attribute index into table LINEATTR for this pseudo DN.
OPTION(BCS36-)		see subfields	*AIN options* Enter the option or options required.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NCOS (BCS36-)	0 to 511	*Network Class of Service* Enter the NCOS to be applied to the call. This must be a value datafilled in table NCOS.
	SMDR (BCS36+)	SMDR	*Station Message Detail Recording* Enter SMDR to generate a SMDR record if a terminating attempt trigger occurs on an AIN IBN virtual DN. ***Note:*** This option cannot be assigned using SERVORD. The TRAVER QDN command does not show that the SMDR option is assigned to a virtual DN.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature AIN.

MAP display example for table DNROUTE feature AIN

```
AREACODE OFCODE    STNCODE                  DNRESULT
_____________________________________________________
 514     722       0540 FEAT AIN IBN COMKODAK 0 (NCOS 0)$
 514     621       1321     FEAT AIN NONIBN 55 $
```

DNROUTE feature ASR

Automatic Set Relocation (ASR)

This selector is required if the directory number (DN) is assigned the Automatic Set Relocation (ASR) feature. Table DNROUTE can specify up to 160 ASR DNs. Feature ASR allows a user to move integrated voice and data (IVD) telephone sets from one location to another without the assistance of operating company personnel. Table DNROUTE is data lled to accommodate up to 160 DNs when they are taken out of service by ASR and require an equal number of DNs put back into service.

Data ll

The following table lists the data ll for table DNR OUTE feature ASR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL and FEATURE.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
	FEATURE	ASR	*Feature* Enter the feature ASR.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature ASR with DN selector FEAT and feature ASR on DN 613 722 5000.

MAP display example for table DNROUTE feature ASR

```
AREACODE  OFCODE     STNCODE                  DNRESULT
_____________________________________________________
     613     722        5000               FEAT     ASR
```

DNROUTE Call Forward/Interface Busy

The CFIB entry is provisioned against a base directory number (base DN) as an option on the FEAT selector in the DNROUTE table. When a call that attempts to route over a base DNs routelist fails due to the trunks being call processing busy, out-of -service, or unavailable and the base DN subscribes to CFIB, the call forwards to a remote DN.

Data ll

The table that follows lists data ll in the DNR OUTE table for option CFIB.

Field descriptions

Field	Subfield	Entry	Explanation and action
FEAT		CFIB	CFIB causes the call to be routed to a remote DN based on the incoming call's bearer capability.
TABNAME		OFRT OFR2 OFR3 OFR4 IBNRTE IBNRT2 IBNRT3 IBNRT4	Specify a routelist that is to be used to route the incoming call to the base DN.
INDEX		1–1023	This field indicates the index into the routing table.
CFIBID		A string of up to 16 characters	This fields indicates the index of table CFIBDATA to get information of remote DNS.
CFIBBASE		common language location indicator CLLI	The PRI CLLI becomes the originator of the forwarded call to the remote DN, when all of the routes in the routelist are busy.
CFIBSBDN		A 10-digit number	This field indicates the billing DN to be used for the base DN to remote DN portion of the CFIB call.
RPNPP		Y or N Default is Y	This field indicates whether the presentation of the remote party number (remote DN) is allowed.

DNROUTE feature CFIB (continued)

Data ll e xample

The gure that follo ws shows sample data ll in the DNR OUTE table for option CFIB.

MAP display example for table DNROUTE with CFIB feature

```
  AREACODE OFCCODE STNCODE
  DNRESULT
-------------------------------------------------------
  613 722 8880
  FEAT  CFIB  IBNRTE  20  CFIB1 CFIBBASE  6135551010  Y
```

Error messages for table DNROUTE

The error messages that follow apply to the DNROUTE table.

Error messages for table DNROUTE (Sheet 1 of 2) (Sheet 1 of 2)

Error message	Explanation and action
THE NUMBER OF CFIB TUPLES CANNOT EXCEED 10,000	The switch generates this message when the maximum number (10 000) of DNs provisioned with CFIB has been reached.
THE ENTERED CFIBID MUST BE PROVISIONED IN CFIBDATA	The switch generates this message while attempting to add a CFIB tuple in DNROUTE which has a CFIBID that is not provisioned in table CFIBDATA.
THE ENTERED ROUTE IS INVALID. THE ROUTE IS NOT PROVISIONED IN TABLE <route table>	The switch generates this message while attempting to add a CFIB tuple in DNROUTE that has an invalid route table index.
IRTE IS NOT SUPPORTED FOR CFIB	The switch generates this message while attempting to add a CFIB tuple in DNROUTE with IRTE as the routing table.

DNROUTE feature CFIB (end)

Error messages for table DNROUTE (Sheet 2 of 2) (Sheet 2 of 2)

Error message	Explanation and action
RRTE IS NOT SUPPORTED FOR CFIB	The switch generates this message while attempting to add a CFIB tuple with RRTE as the routing table.
CANNOT FIND CFIBID IN CFIBDATA - DATA CORRUPTED	The switch generates this message while attempting to position on a CFIB tuple in DNROUTE that has a CFIBID that is out of range. The table CFIBDATA may be corrupt.

DNROUTE feature D

Directory Number Selector D

This selector is required when the originator of a call to this directory number (DN) is routed to one of the treatments in the line or trunk treatment tables. See table TMTCNTL for a list of line and trunk treatment tables.

Initially all DNs are automatically routed to the blank DN treatment in the line and trunk treatment tables by the data ll of table T OFCNAME.

Data ll

The following table lists the data ll for table DNR OUTE feature D.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL and TRMT.
	DN_SEL	D	*Directory number* Enter the DN selector D.
	TRMT	alphanumeric (4 characters)	*Treatment* Enter the treatment in the line treatment table to which calls of the specified DN are routed.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature D.

MAP display example for table DNROUTE feature D

```
AREACODE OFCODE    STNCODE                    DNRESULT
_____________________________________________________
    613    725       2425                      D VPFX
```

DNROUTE feature DISA

Direct Inward Service Access (DISA)

This selector is required if the directory number (DN) is assigned as a direct inward system access (DISA) DN for an Integrated Business Network (IBN) customer group. The customer group can have one or more DNs assigned to the feature. The maximum number of DISA DNs for each switching unit is 1023.

The intragroup flag is for public or family type customer groups. For a description of customer group types and features allowed if a call is intragroup, see tables CUSTENG and CUSTFAM.

Datafill

The following table lists the datafill for table DNROUTE feature DISA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, FEATURE, CUSTGRP, SUBGRP, AUTHREQ, SMDRTO, SMDRFROM, and INTRAGRP.
	DN_SEL	FEAT	*Directory number selector* Enter the DN selector FEAT.
	FEATURE	DISA	*Feature* Enter the feature DISA.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group* Enter the name of the customer group of the listed DN.
	SUBGRP	0 to 7	*Subgroup* Enter the subgroup of the customer group of the listed DN.
	AUTHREQ	Y or N	*Authorization required* Enter Y to indicate that the authorization code is mandatory for users of this DN. Otherwise, enter N.

DNROUTE feature DISA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	SMDRTO	Y or N	*Originating station message detail recording* Enter Y to indicate that station message detail recording (SMDR) is required on the leg of the call where the originator accesses DISA. Otherwise, enter N.
	SMDRFROM	Y or N	*Terminating station message detail recording* Enter Y to indicate SMDR is required on the leg of the call from DISA to the final IBN destination. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y to indicate intragroup calls. Enter N to indicate non-intragroup calls.
	OPTIONS	see subfield	*Options* This field consists of subfield DISAOPT.
	DISAOPT	CFRA, CHGIND, ENTRYID, NARS, NCOSOPT, NFRA, PVNOPT, RDISA, RTEOPT, SIMRING, TIMEOPT, TMTOPT, VPNDNOVR, or USAID	*DISA options* Enter up to seven options. If PVNOPT is specified, private virtual network (PVN) takes precedence. Enter CFRA (call forwarding remote access) to indicate that a call to the DN can access the CFRA feature.

DNROUTE feature DISA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DISAOPT (continued)		The CHGIND option is used by a VPN to allow for non-metering indication on dial-up access. Enter ENTRYID to specify whether Automatic Message Accounting (AMA) calling entry identification provided for AMA billable calls originated from this DISA station. Enter NARS to specify the network access registers required for a call. Enter NCOSOPT to permit specification of the network class of service that is applied to the call when no valid authorization code (AUTHCODE) is entered. If an AUTHCODE is entered, then the NCOS associated with the AUTHCODE is applied to the call. Enter NFRA (network facility remote access) to remotely access the network facility access (NFA) feature and to allow a registered subscriber to place an NFA trunk connection on hold or remove it from hold by entering a flash from the telephone set. Enter PVNOPT to allow application of specific values to PVN DISA access. Enter RDISA to allow the DISA DN to support regular DISA calls as well as remote access PVN calls. This option can be used only in conjunction with option PVNOPT. Enter RTEOPT to allow the customer to specify an alternate route on which to terminate when DISA calls timeout during digit collection. Note that this option is applicable only to incoming trunk calls.

DNROUTE feature DISA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DISAOPT (continued)		Enter SIMRING to allow calls to the DISA DN to access the SimRing user interface remotely. Enter TIMEOPT to allow application of the timeout value to digit collection from trunks. It permits routing to the attendant after dial tone has been applied to the calling party for the specified number of seconds and no digit has been received. The value TIMEOPT is only applicable for DISA if the value of field AUTHREQ is Y. The timer runs only if an AUTHCODE is prompted. If the timer is not used, the four-second timer runs. TIMEOPT has no effect if the value of field AUTHREQ is N. The TIMEOPT option is required if the DISA number is accessed over ISUP trunks. Enter TMTOPT to route the call to a treatment defined in table IBNFEAT when DISA detects an invalid authcode. Enter VPNDNOVR to indicate that the DISA number and not the originating calling number (CGDN) is treated as the calling number. The user has access to the IBN customer group's facilities while billing the DISA DN. The CGDN for billing and outpulsing on an outgoing trunk is the DISA DN. If USAID is entered as an option, subfields AMA_CONNECT, AMA_DIAL, USERID, FORW_ANI, and ANI_FAIL_USE_DISA require datafill.
	AMA_CONNECT	NONE, CALLER, or DISA_DN	AMA connect. This subfield determines if call code 174 with module code 047 appended is generated for USAID access and to which party such a record is billed.
	AMA_DIAL	NONE, CALLER, or DISA_DN	AMA dial. This subfield controls AMA generation and determines if call code 175 with module code 047 is appended when the IP extends a call for the use.

DNROUTE feature DISA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	USERID	CALLER, or DISA_DN	User identification. This subfield determines whether the CLID or the DISA_DN is sent to the IP as the SAID user identification.
	ANI_FAIL_USE_DISA	Y or N	ANI failed, use DISA. This subfield determines the behavior of USAID when ANI and CLID are not available. Datafill of Y indicates that if ANI spill fails, DISA DN may be used as ANI spill information.
	FORW_ANI	Y or N	Forward ANI. This subfield determines the SAID user id that is used when CLID is not available.

DISAOPT = CHGIND

If the value of subfield DISAOPT is CHGIND, datafill refinement CHGIND as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CHGIND	CHG or NOCHG	*Charge indication* Enter CHG to indicate metering, or NOCHG to indicate non-metering. If CHG is specified, then the DISA number supports billing.

DNROUTE feature DISA (continued)

DISAOPT = NARS

If the value of subfield DISAOPT is NARS, datafill refinement NARNAME as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NARNAME	alphanumeric (up to 16 characters) or NILNAR	*Network access register name* Enter a character string to specify the network access register (NAR) that a call must have access through to continue, or enter NILNAR if no NAR is applicable. The NAR name must be defined in table NARDATA.

DISAOPT = NCOSOPT

If the value of subfield DISAOPT is NCOSOPT, datafill refinement NCOS as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NCOS	0 to 511	*Network class of service* Enter the NCOS.

DISAOPT = PVNOPT

If the value of subfield DISAOPT is PVNOPT, datafill refinements PINLENTH, NCOS, and LINEATTR as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	PINLENTH	1 to 15	*Personal identification number length* Enter the personal identification number (PIN) length. The PINLENTH provides the operating company with the capability to specify the number of digits collected as PIN for each DISA (remote access) number. If the value of field SECRECY in table CUSTHEAD is Y, only the number of digits specified for field PINLENTH are collected (digits entered beyond the PINLENTH are ignored). If the value of field SECRECY is N, up to 15 digits are collected as PIN (digits entered beyond 15 digits are ignored).
	NCOS	0 to 511	*Network class of service* Enter the NCOS.
	LINEATTR	0 to 1023	*Line attribute* Enter the line attribute to use when the caller has difficulties entering the PIN and called number (no PIN and called number entered). Field LINEATTR provides the operating company with the capability to specify the line attributes number used when the caller has difficulties entering the PIN and called number. If the called number is entered, then the line attribute number associated with GEN selector in table IBNXLA is used for call translation. Field LINEATTR in table DNROUTE and LATTR associated with GEN selector in table IBNXLA must be datafilled with the same line attribute number.

DNROUTE feature DISA (continued)

DISAOPT = RTEOPT

If the value of subfield DISAOPT is RTEOPT, datafill refinements TBLNAME and IDX as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TBLNAME	OFRT or IBNRTE	*Table name* Enter the table name to which the call routes.
	IDX	0 to 1023	*Index* Enter the table index.

DISAOPT = TIMEOPT

If the value of subfield DISAOPT is TIMEOPT, datafill refinement TIMEOUT as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TIMEOUT	4 to 40	*Time out* Enter the length of time that dial tone is applied before the caller is routed to an attendant if there is no digit collection.

DISAOPT = TMTOPT

If the value of subfield DISAOPT is TMTOPT, datafill refinement IDX as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IDX	0 to 63	*Index* Enter the treatment index.

Datafill example

The following example shows sample datafill for table DNROUTE feature DISA with options NCOSOPT, PVNOPT, and RDISA.

DNROUTE feature DISA (continued)

The DISA DN is 226 4149 and is in SNPA 613 and subgroup 1 of customer group BNRMC.

Authorization codes are not mandatory by users of this DN and SMDR is not required.

Incoming calls are not intragroup. The DISA option required is NCOSOPT, and the NCOS is 0. The PIN length is 10, NCOS is 2, and LINEATTR is 4 for the PVNOPT. This DISA DN supports regular DISA calls as well as remote access PVN calls.

MAP display example for table DNROUTE feature DISA with options NCOSOPT, PVNOPT, and RDISA

```
AREACODE OFCODE    STNCODE                    DNRESULT
_____________________________________________________
613      226       4149 FEAT DISA BNRMC 1 N N N N
                      NCOSOPT 0 PVNOPT 10 2 4 RDISA
```

The following example shows sample datafill for table DNROUTE feature DISA with option USAID. This option allows DISA DNs to be used as Universal Speech Activated Intelligent Dialing (USAID) DNs. The datafill of each DISA DN used for USAID access specifies if AMA records should be generated per access or for intelligent peripheral (IP) dialing.

The DISA DN is 621 1000 and is in SNPA 613 and subgroup 2 of customer group IBNTST. Subfield AMA_CONNECT indicates the AMA record is billed to the caller. Subfield USERID indicates the DISA_DN is sent to the IP as the SAID user identification.

MAP display example for table DNROUTE feature DISA with option USAID

```
AREACODE  OFCCODE  STNCODE                          DNRESULT
_____________________________________________________
613       621    1000  FEAT DISA IBNTST 2 N N N Y USAID
                            CALLER CALLER DISA_DN N Y
```

DNROUTE feature DISA (end)

The following example shows sample datafill for table DNROUTE feature DISA with option SIMRING. This option assigns Simultaneous Ringing to the DISA number. The DN becomes the SimRing user interface DN.

MAP display example for table DNROUTE feature DISA with option SIMRING

```
AREACODE  OFCCODE  STNCODE                          DNRESULT
_____________________________________________________________
613       621    1000  FEAT DISA RESG200 0 Y Y Y Y
(SIMRING) $
```

Directory Number Trigger (DNTRIG)

The directory number (DN) trigger (DNTRIG) capability allows a caller to dial a designated DN from any station in the public switched network to build and send a query to a service control point (SCP) database to obtain routing instructions for the call.

Data ll

The following table lists the data ll for table DNR OUTE feature DNTRIG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, FEATURE, and DNTRIG.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
	FEATURE	DNTRIG	*Feature* Enter DNTRIG.
	DNTRIG	see subfields	*Directory number trigger* This field consists of subfields DNTYPE, LINEATTR, CUSTGRP, SUBGRP, and SMDR.
DNTYPE		IBN or NONIBN	*Directory number type* Enter IBN for Integrated Business Network calls or NONIBN for residential DN types.
LINEATTR		0 to 2047	*Line attribute* Enter the line attribute associated with the DN trigger.

DNROUTE feature DNTRIG (end)

DNTYPE = IBN

If the value of sub eld DNTYPE is IBN, data ll re nements CUSTGRP , SUBGRP, and SMDR as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric (1 to 16 characters)	*Customer group* Enter the name of the customer group of the listed DN. Enter an IBN CUSTGRP for an IBN type of DN trigger. Enter the RES customer group for a NONIBN type of DN trigger.
SUBGRP		0 to 7	*Subgroup* Enter the subgroup number of the originating station.
SMDR		Y or N	*Station Message Detailed Recording* Enter Y (yes) to indicate that station message detailed recording for the IBN type of DN trigger are required. Otherwise, enter N (no).

DNTYPE = NONIBN

If the value of sub eld DNTYPE is NONIBN, data ll re nement CUSTGRP as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric (1 to 16 characters)	*Customer group* Enter the name of the customer group of the listed DN. Enter an IBN CUSTGRP for an IBN type of DN trigger. Enter the RES customer group for a NONIBN type of DN trigger.

Data ll e xample

An example of data ll for selector DNTRIG is not pro vided.

Default Service (DSVC)

The DSVC selector in table DNROUTE identi es a directory number (DN) as a Default Service DN. The Default Service tuple also contains the customer group, subgroup, and network class of service (NCOS) of the Default Service DN.

Default Service provides limited voice service for ISDN basic rate interface (BRI) lines in conditions when voice service is not otherwise available. Default Service provides the following capabilities for new and existing ISDN BRI lines using fully initializing terminals (FIT) or non-initializing terminals (NIT):

- origination of voice calls (processing of and reply to a SETUP message sent by the customer premises equipment [CPE])
- access to Basic Rate Interface Veri cation (BRIV) testing

  Note: The BRIV feature provides dial access to allow operating company installation and maintenance personnel to identify the termination of an access line. The BRIV feature is accessible over the BRI access line at the customer premises from a FIT or NIT.

- access to any three-digit (611 or 911), seven-digit, or ten-digit telephone numbers that the local exchange carrier (LEC) provisions for the feature

Each switch can have only one Default Service DN.

Data ll

Only one tuple in table DNROUTE can have the DN_SEL eld set to DSVC. Attempts to provision more than one Default Service DN are blocked with the following error message:

```
Only one Default Service DN per switch.  The Default
Service DN is nnn nnn nnnn.
```

Before you can provision a Default Service DN in table DNROUTE, you must execute the command interpreter (CI) DEFSVCCI tool SETUP command. This command provisions Default Service data on all ISDN interfaces that support Default Service. The following error message displays if you do not execute the SETUP command before you provision a Default Service DN:

```
Default Service has not been set up on all eligible
ISDN loops. To set up all ISDN loops use the CI
command DEFSVCCI and run SETUP. Then you will be able
to add the Default Service DN to Table DNROUTE.
```

DNROUTE feature DSVC (end)

The DEFSVCCI tool REMOVE command removes all provisioning established by the SETUP command. Before using this command, you must remove the Default Service DN from table DNROUTE.

Removal of the Default Service DN and entry of a new Default Service DN in table DNROUTE triggers static data download messages. These messages update the DN information to each XMS-based peripheral module (XPM) that is in service and supports BRI lines.

The following table lists the data ll for table DNR OUTE feature DSVC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	Directory number result. This field consists of subfields DN_SEL, CUSTGRP, SUBGRP, and NCOS.
	DN_SEL	DSVC	Directory number selector. Enter the DN selector DSVC.
	CUSTGRP	alphanumeric (1 to 16 characters)	Customer group. Enter the name of the customer group of the Default Service DN.
	SUBGRP	0 to 7	Subgroup. Enter the subgroup of the customer group of the Default Service DN.
	NCOS	0 to 511	Network class of service. Enter the NCOS of the Default Service DN.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature DSVC.

MAP display example for table DNROUTE feature DSVC

```
AREACODE OFCCODE    STNCODE                      DNRESULT
_____________________________________________________________
     919    991       9999           DSVC DEFSVCGRP 0 0
```

Directory Number Selector M

This selector is required when the directory number (DN) is assigned as the listed DN for an Integrated Business Network (IBN) customer group. The customer group can be assigned one or more listed DNs.

Data ll

The following table lists the data ll for table DNR OUTE feature M.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, CUSTGRP, SUBGRP, ICI, and LDN_OM_REPORT.
	DN_SEL	M	*Directory number selector* Enter the directory number (DN) selector M.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group* Enter the name of the customer group of the listed DN.
	SUBGRP	0 to 7	*Subgroup* Enter the subgroup of the customer group of the listed DN.
	ICI	0 to 255	*Incoming call identification codes* Enter the incoming call identification code assigned to the listed DN. Any entry outside the range indicated for this field is invalid.
	LDN_OM_ REPORT	Y or N	*Listed directory number report* Enter Y (yes) to indicate whether the listed DN is monitored by the operational measurement (OM) file. Otherwise, enter N (no).

Data ll e xample

The following example shows sample data ll for table DNROUTE feature M.

DNROUTE feature M (end)

The listed DN is 226 5400 in SNPA 613 and is in subgroup 1 of customer group BNRMC.

The listed DN is assigned to incoming call identi cation code 1.

The incoming call identi cation code 26 is assigned to k ey and lamp number 3 on the attendant console. The assignment of ICI to key and lamp is speci ed in table FNMAP.

A station external to the customer group or an incoming or two-way IBN trunk group with pulsing or with seize only, is routed upon dialing 226 5400.

MAP display example for table DNROUTE feature M

```
AREACODE OFCODE    STNCODE                  DNRESULT
_____________________________________________________
     613    226       5400     M  BNRMC  1  26    Y
```

Message Center Directory Number (MCDN)

This selector is required if the directory number (DN) is assigned as a Message Center DN (MCDN). This is the number dialed by a station to retrieve a message from or to forward a message for storage by the message center attendant.

Data ll

The following table lists the data ll for table DNR OUTE feature MCDN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, FEATURE, DEST, DIDORG, CUSTNAME, and SUBGRP.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
	FEATURE	MCDN	*Feature* Enter the feature MCDN.
	OPTION	see subfield	*Option* This field consists of subfield DEST.
	DEST	EXTCON or INTCON	*Destination* If the value of field DIDORG is Y, enter EXTCON so that subscribers can retrieve their messages by calling from a station external to their subgroup. If the value of field DIDORG is N, enter EXTCON so that subscribers can retrieve their messages by calling from a station in their own subgroup. Enter INTCON so that the MCDN can only be used by IBN stations to activate call forwarding to or pick up messages from their own subgroup. Integrated Business Network (IBN) stations can specify a subgroup other than their own to act as a message center.

DNROUTE feature MCDN (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CUSTNAME	alphanumeric (1 to 16 characters)	*Customer group name* If the entry in field DEST is EXTCON, enter the name of the customer group of the subgroup assigned as a message center.
	SUBGRP	0 to 7	*Subgroup* If the entry in field DEST is EXTCON, enter the subgroup of the customer group assigned as a message centre.
	DIDORG	Y or N	*DID retrieve* If the value of field DEST is EXTCON, enter Y (yes) or N (no). If the value of field DEST is INTCON, enter N.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature MCDN.

The Message Center DN (MCDN) for customer group BNRMC is 726 4152, and each subgroup acts as a message center for the stations in that subgroup. Stations dialing this number can only call forward or pick up messages from their own subgroup and customer group.

The MCDN for customer group BNRCARL is 726 3089, and subgroup 4 acts as a message center for the stations in the customer group. Stations dialing this number can retrieve messages from stations external to their subgroup.

The MCDN for customer group BNRKAN is 726 5060, and subgroup 3 acts as a message center for the stations in that customer group. Stations dialing this number can only call forward or pick up messages from their own subgroup and customer group.

DNROUTE feature MCDN (end)

MAP display example for table DNROUTE feature MCDN

```
AREACODE OFCODE     STNCODE                  DNRESULT
_____________________________________________________
     613     726        4152        FEAT MCDN INTCON N
                                   BNRMC
     613     726        3089        FEAT MCDN EXTCON Y
                                          BNRMCARL 4
     613     726        5060        FEAT MCDN EXTCON N
                                          BNRKAN   3
```

DNROUTE feature MM

Directory Number Selector MM

This selector is required when the directory number (DN) is listed in table MMCONF as a Meet Me (MM) conference DN. Data ll for table DNROUTE is automatically produced by table MMCONF table control when the DN is added to table MMCONF.

Data ll

The following table lists the data ll for table DNR OUTE feature MM.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number result* This field consists of subfields DN_SEL, CUSTGRP, and CONF.
	DN_SEL	MM	*Selector* Enter the directory number (DN) selector MM.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group* Enter the name of the customer group of the listed DN.
	CONF	0 to 15	*Conference number* Enter the conference number assigned to the DN in table MMCONF.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature MM.

This example shows data produced by data ll of the Meet Me Conference table for the example shown in table MMCONF. DN 226 5400 in SNPA 613 and customer group BNRMC are assigned to conference number 1.

DNROUTE feature MM (end)

MAP display example for table DNROUTE feature MM

```
AREACODE  OFCODE     STNCODE                    DNRESULT
_____________________________________________________________
     613     226        5400        MM    BNRMC        1
```

DNROUTE feature MONA

Meridian OffNet Access (MONA)

Meridian SuperNode Network access

In certain markets, this selector is required for access to the Meridian SuperNode Network (MSN). The MONA directory number (DN) controls the Travel Card authorization code and its length, the authorization code and account code combined, or feature ACR by way of the MONA customer group.

It is recommended that only one customer group be used for the MONA DN as the generic customer group and that one MONA DN be data lled ag ainst the trunk groups so that the network class of service (NCOS) of the authorization codes can be used to determine the different dial plans for different customers. Fields SMDRTO and SMDRFROM (selector DISA) are not used for MSN type calls and are bypassed when option MSN is data lled in table CUSTSMDR for MSN calls.

Meridian OffNet Access billing

Software added in release EUR006 enables customers to migrate from CDR to AMA billing formats. Support for AMA billing for Authcode service is provided by the ENTRYID selector in table DNROUTE, feature MONA. These enhancements allow AMA records to be generated for the leg of the call that was made from MONA.

Billing information for MONA is captured in a module 046 that is appended to the AMA record for the call, using the 00510 structure code. The information captured in the module 046 depends on the type of agent used to access MONA, as explained in the following table. Information is captured in the order shown in the table.

Agent type and module 046 billing information

Originating agent	Information captured in module 046 record
ISUP trunk	ENTRYID (parameter in ISUP IAM), billing number, or CLI
PRI trunk	Billing number or CLI
BTUP trunk	CLI or billing number
Other trunk types	billing number

The ENTRYID information for an ISUP call is either the originator's calling line identi cation (CLI) or the billing number of the trunk used to access MONA.

If none of the expected information is available for a call, a module 046 is not generated.

Addition of the module 046 is controlled by data lling ENTRYID in sub eld MONAOPT.

Data ll

The following table lists the data ll for table DNR OUTE feature MONA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, FEATURE, and DIALPLAN.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
	FEATURE	MONA	*Feature* Enter the feature MONA. An 800 universal access number must be datafilled in table DNROUTE as a MONA DN or the call is blocked and the call receives vacant code treatment (VACT).
	DIALPLAN	alphanumeric (16 characters)	*Dial plan* Enter the dial plan name.
	MONAOPT	ENTRYID	*MONA billing options* Enter ENTRYID to generate a billing record. If ENTRYID is specified, a module 046 record is appended to the AMA record for the leg of the call that was made from a MONA DN. The module 046 contains the ISUP ENTRYID, the originator's CLI, or the billing number of the trunk used to access MONA.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature MONA.

DNROUTE feature MONA (end)

In the rst e xample, the MONA DN is 722 4149 and is in SNPA 613. The default dialplan name is used.

In the second example, the MONA DN is 879 8997 and is in SNPA 162. The dialplan name is KINGSBPLAN. MONA billing selector ENTRYID generates billing for the leg of the call that was made using MONA.

MAP display example for table DNROUTE feature MONA

```
AREACODE OFCODE     STNCODE                        DNRESULT
_____________________________________________________________

     613     722        4149           FEAT  MONA  DEFAULT

     162     879        8997
                         FEAT  MONA  KINGSBPLAN (ENTRYID)
```

Directory Number Selector RSDT

This selector is required when the Restricted Dial Tone (RSDT) feature is active in an of ce. The RSDT feature allo ws an operating company to deny termination and limit the dialing patterns of lines that are normally put out of service on a DMS100 switch.

The RSDT selector contains a line attribute index that can be provisioned to de ne dialing restrictions. The k ey for the DNROUTE tuple with the RSDT selector is a DN that is referred to as the RSDT DN.

Data ll

The following table lists the data ll for table DNR OUTE selector RSDT.

Note: When table OFCENG parameter RSDT_ENABLED is set to Y, it not possible to change modify, add or delete any elds in this tuple using table editor commands or DMOPRO. The RSDT CI command must be used to perform any modi cations to the RSDT DN or LN ATTIDX. When RSDT_ENABLED is set to N and in_effect lines remain in table RSDTLINE, the RSDT DNROUTE tuple cannot be changed using table editor commands or DMOPRO.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY			The key field of the subtable.
	AREACODE	Valid NPA	The NPA of the RSDT DN.
	OFCCODE	Valid NXX	The NXX of the RSDT DN.
	STNCODE	4 digits (0 - 9)	The last four digits of the RSDT DN.
DN_SEL		RSDT	The RSDT selector identifies the RSDT DN in table DNROUTE.
RSDTIDX		0	Index for the RSDT DN used as an identifier for tuples in table RSDTLINE. The only valid value for this field is 0. This field may be used for future enhancements.

DNROUTE feature RSDT (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LINEATTR		Valid Line Attribute Index from table LINEATTR	The Line Attribute Index that defines the dialing restrictions of lines with table RSDTLINE state IN_EFFECT.
XLAPLAN		Valid key from table XLAPLAN	This field identifies the table XLAPLAN entry that applies to all lines with a table RSDTLINE state of IN_EFFECT.
RATEAREA		Valid key from table RATEAREA	This field identifies the table RATEAREA entry that applies to all lines with a table RSDTLINE state of IN_EFFECT.

Data ll e xample

The following example shows sample data ll for table DNR OUTE selector RSDT.

MAP display example for table DNROUTE selector RSDT

```
AREACODE OFCCODE STNCODE                          DNRESULT
_____________________________________________________________

  613      621     0000 RSDT 0 71 613_P621_0 L613_NILLA_0
```

Note: The MAP display example shown here may not re ect the e xact MAP display shown on your MAP terminal, since other elds ma y have been removed or added by other features following the introduction of RSDT. Therefore, it is recommended that you consult the DMS-100 documentation suite associated with the software release that is running on your switch for the most up-to-date information.

Error messages for RSDT

Error messages for table DNROUTE selector RSDT

Error message	Description	Result
CANNOT ADD ANOTHER RSDT DN	Attempting to create more than one RSDT DN in DNROUTE	The addition or change is blocked and an error message is generated at the MAP.
UNABLE TO FIND THIS LINE ATTRIBUTE IN LINEATTR	Attempting to datafill a non-existent line attribute index.	The addition is blocked and an error message is generated at the MAP.
CANNOT ADD, DELETE, or CHANGE THE RSDT DN TUPLE.USE RSDT COMMAND	Attempting to add, delete, or change RSDT DN tuple, when RSDT_ENABLED is set to Y, or when RSDT_ENABLED is set to N and IN_EFFECT lines remain.	The change is blocked, and an error message is generated at the MAP.
THIS LINEATTR IS INCONSISTENT WITH THE AREA CODE	Attempting to datafill a line attribute index with an inconsistent area code.	The addition or change is blocked and an error message is generated at the MAP

DNROUTE feature RSDT (end)

Warning messages for RSDT

Warning messages for table DNROUTE selector RSDT

Warning message	Description	Result
`THIS LINEATTR IS INCONSISTENT WITH A 1FR/1FR-RES LCC`	Attempting to datafill a line attribute index with an LCC other than 1FR or 1FR-RES.	The addition or change is blocked and a warning message is generated at the MAP.
`RSDTIDX VALUE WILL DEFAULT TO 0`	Attempting to datafill a non-zero value as the RSDTIDX.	The datafill is successfully entered using the default value and a warning message is generated at the MAP.

DNROUTE feature SIMRING

Simultaneous Ringing

This selector is required if a virtual directory number (VDN) is assigned as the Simultaneous Ringing (SimRing) pilot DN (PDN) for a SimRing group. The SimRing option can be added for a DN that does not have a physical line card appearance on the switch (a virtual DN). Normally, the PDN is the SimRing group member DN that first receives a call. For the SimRing VDN pilot, however, the PDN does not actually receive the call; only the non-pilot member DNs (NPMDN) ring when the SimRing PDN is dialed.

The SimRing VDN pilot does not function as a physical line. It cannot ring, cannot be answered, and cannot originate calls. When the SimRing VDN pilot is dialed, only the NPMDNs are alerted, and only the NPMDNs can answer the call. Normally with the SimRing feature, a call to a single DN rings up to 5 different locations at the same time. But because the PDN in this case is not a physical line, this feature supports ringing for only 4 different locations (that is, the 4 NPMDNs).

Datafill

The table that follows lists datafill for table DNROUTE feature SIMRING.

Field descriptions

Field	Subfield	Entry	Explanation and action
DNRESULT		see subfields	Directory number results. This field consists of subfields DN_SEL, FEATURE, ACDGRP, and DNAREA.
	DN_SEL	FEAT	Directory number selector. Enter the directory number (DN) selector FEAT.
	FEATURE	SIMRING	SIMRING. Enter the feature SIMRING.
	SIMR_GRPKEY	integer	SIMRING group key. Enter the index into table PILOTGRP.
	SIMR_CUSTGRP	alphanumeric	Customer group. Enter the name assigned to the customer group to which the SimRing VDN belongs
	SIMR_SUBGRP	0 to 7	Customer subgroup. Enter the subgroup number within the customer group to which the SimRing VDN belongs.

DNROUTE feature SIMRING (end)

Field descriptions

Field	Subfield	Entry	Explanation and action
	SIMR_NCOS	0 to 255	Network Class of Service. Enter the NCOS to be applied to the call. This must be a value datafilled in table NCOS.
	SIMR_STATE	ACT or INACT	SimRing State. Enter the desired state for the SimRing group.
	SIMR_PIN	2 to 10 digits	PIN code for the SimRing group. This is the personal identification number used to make changes to SimRing group data. ***Note:*** This field is not shown when the tuple is displayed but is replaced by $. This field can be changed, however.

Datafill example

The figure that follows shows sample datafill for table DNROUTE feature SIMRING. The customer group name is IBNTST.

MAP display example for table DNROUTE feature SIMRING

```
 AREACODE   OFCCODE    STNCODE                DNRESULT
-------------------------------------------------------------------------------------------------
    613         621       2500   FEAT SIMRING 1 IBNTST 0 0 ACT $
```

Release history

NA017

Feature (59030419) SIMRING adds as a new refinement for DN_SEL = FEAT.

Subscriber Programmable Ringing for CFDA (SPRING)

The RCTL (ring control) feature identi er allo ws a virtual directory number (DN) to be associated with the SPRING feature in table DNROUTE. This virtual DN allows for remote access of the SPRING feature. Remote access allows an end user to change the ring count setting for a DN other than the DN from which the end user is calling. The end user must dial the DN assigned by the operating company for SPRING access. Once accessed, the end user is prompted for the entries required to effect the change.

Data ll

The following table lists the data ll for table DNR OUTE feature SPRING.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL and FEATURE.
	DN_SEL	FEAT	*Directory number selector* Enter the DN selector FEAT.
	FEATURE	RCTL	*Feature* Enter the feature RCTL (ring control).

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature SPRING.

MAP display example for table DNROUTE feature SPRING

```
AREACODE   OFCODE   STNCODE                          DNRESULT
_____________________________________________________________
     919      555      1234                          FEAT   RCTL
```

DNROUTE feature SRA

Suppressed Ringing Access (SRA)

The Suppressed Ringing Access (SRA) capability allows any authorized server to establish a connection to an end user's line without applying audible ringing.

Data ll

The table that follows lists the data ll for table DNR OUTE feature SRA.

Field descriptions (Sheet 1 of 5)

Field	Subfield	Entry	Explanation and action
DN_SEL		FEAT	*Directory number selector* This field specifies the directory number (DN) selector FEAT.
FEATURE		SRA	*Feature* This field contains SRA as the feature selector.
ACCESS		NORING, OSI, RING	*Access* This field specifies the access type. NORING indicates suppressed ringing, OSI indicates suppressed ringing with OSI setup, and RING indicates one-cycle-ringing. The default is NORING. If RING is entered, complete fields RPATTERN and DURATION described in the next table. ***Note:*** When changing the entry in this field, from RING to one of the other two access types, fields in the tuple will be cleared of inputs. These fields are cleared, due to the ACCESS field being a normal field as opposed to a selector field. This method fulfills the need to maximize the amount of information that SRA requires in the tuple.
BILLMAST		ON or OFF	*Master Billing* This field is used to turn off all SRA AMA generation. This option disables SRA billing without having to change the settings for the individual billable events. The default is OFF.

DNROUTE feature SRA (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield	Entry	Explanation and action
BILLOPT		Y or N	*Line Option Billing* This field specifies whether an AMA record is generated. The default is N. An AMA record is generated if BILLMAST is set to ON, this field is set to Y, and an SRA attempt is made to an SRA-compatible line where the SRA option is not enabled.
BILLBUSY		Y or N	*Busy Billing Option* This field specifies whether an AMA record is generated. The default is N. An AMA record is generated if BILLMAST is set to ON, this field is set to Y, and an SRA call reaches a busy end-user's line.
BILLCTHR		Y or N	*Cut-Through Billing* This field specifies whether an AMA record is generated. The default is N. An AMA record is generated if BILLMAST is set to ON, this field is set to Y, and an SRA call has successfully reached cut-through.
BILLINTR		Y or N	*Incoming Call Interrupt Billing* This field specifies whether an AMA record is generated. The default is N. An AMA record is generated if BILLMAST is set to ON, this field is set to Y, BILLCTHR is set to Y, and an incoming call interrupts an ongoing SRA call.
TCALL		1 - 999 (sec) or DISABLED	*Maximum Call Interrupt* This field specifies the maximum call duration timer from PAM/IINF message until call disconnect. The default is 150 seconds.
CALLINTR		Y or N	*Incoming Call Interrupt* The incoming call interrupt is used to enable or disable incoming call interruption. The default is Y.

DNROUTE feature SRA (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield	Entry	Explanation and action
OSIDISC		1 - 255 (units of 10 milliseconds) or DISABLED	*Open Switch Interval (OSI) upon Disconnect* This field indicates the time period before an OSI disconnect is applied. The default is 80. ***Note:*** In streams prior to NA006, the duration of OSI disc was fixed at 800 milliseconds and field OSIDISC had two possible values; YES or NO. During an ONP from loads <NA006, field OSIDISC is reformatted. The OSIDISC field will be set to DISABLED if it was set to N in the old load. OSIDISC will be set to 200 if it was set to Y and the patch was active in the old load. OSIDISC will be set to 80 if it was set to Y and the patch was not active in the old load.
LCASCREEN		Y or N	*Local Calling Area Screening* When LCASCREEN is set to Y, SRA performs standard LCA screening from the SRA routing DN to the terminating DN. LCA screening ensures that the routing DN and the terminating DN are within the same LCA. When the two DNs are in different LCAs, the LCA screening ensures proper billing. There is no default value for this field. ***Note:*** In loads prior to NA011, LCA screening was enabled through the LINEATTR field in table DNROUTE. In NA011 LINEATTR is replaced by LCASCREEN and its refinements. During an ONP to NA011, the LINEATTR field is reformatted. LCASCREEN will be set to N when there is no value entered for LINEATTR. Similarly, LCASCREEN will be set to Y and LCANAME and HSTS will be properly initialized when LINEATTR is datafilled on the old side.

DNROUTE feature SRA (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield	Entry	Explanation and action
	LCANAME	alphanumeric	*Local Calling Area Name* This refinement only applies for SRA calls that have LCANAME set to Y. The LCA screening between the SRA DNROUTE DN and the terminating DN requires the LCA name.
	HSTS	alphanumeric	*Home Service Translation Scheme* This refinement only applies for SRA calls that have LCANAME set to Y. The LCA screening between the SRA DNROUTE DN and the terminating DN requires the HSTS. There is no default value for this field.
SECUMAST		OFF or ON	*Master Security* This field indicates whether the server must pass SRA security to gain access to the suppressed ringing functionality. If this field is set to OFF, SRA security is not performed. The default is ON.

DNROUTE feature SRA (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield	Entry	Explanation and action
SCRNTBL		DNROUTE, or SRASCRN	*Screen Table* This field specifies the name of the table that holds the screening list. If SRASCRN is entered, the screening list is taken from the SCREENING LIST field of table SRASCRN. In this case the SECURITY LIST field of table DNROUTE will contain a list of indices to table SRASCRN. The default is DNROUTE.
SECURITY		DN, BG, or CG	*Security Type* This field identifies the type of security that is used for a Routing DN. If DN is entered, a list of up to 5 DNs or 10 indices to table SRASCRN are stored in the security list field. If BG is entered, a list of up to 5 BGids or 10 indices to table SRASCRN are stored in the security list field. If CG is entered, a list of up to 5 customer group names or 10 indices are stored in the security list field. The default is DN. ***Note:*** The information found in the security list field depends on the values specified in the SCRNTBL and SECURITY fields. If SECUMAST is ON and Security List is empty, no SRA calls will be allowed for this Routing DN.

ACCESS = RING

The table that follows lists the conditional data ll.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
RPATTERN		0 - 15	*Ring Pattern* If field ACCESS = RING, enter a value to specify a ring pattern. The default is 6.
DURATION		1 - 255 (units:0.1 sec)	*Duration* If field ACCESS = RING, enter a value to specify the length of time for which ringing is applied. The default is 60 (in units of 0.1 seconds is 6 seconds).

Data ll e xample

The gure that follo ws shows sample data ll for table DNR OUTE feature SRA

MAP example for table DNROUTE feature SRA

```
AREACODE   OFCODE                          DN_RESULT
_____________________________________________________
6137651234 FEAT SRA NORING OFF Y Y Y Y 999 N 80 N ON
DNROUTE DN $
```

DNROUTE feature SYN

Synonym Directory Number (SYN)

This selector is required for a switching unit with ISDN. It allows the use of synonym directory numbers (DN) that make it possible to specify the bearer capability (BC) of a call in order to terminate upon a call appearance (CAP). This is necessary when the originator's default BC does not allow termination on the desired CAP.

Inbound modem pooling (IMP) for ISDN is used if a data call is made to an ISDN terminal using analog facilities at any point in the call.

Data ll

The following table lists the data ll for table DNR OUTE feature SYN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number result* This field consists of subfields DN_SEL, NPA, OFC, DEFGDIGS, BCNAME, and FEATLIST.
	DN_SEL	SYN	*Selector* Enter the directory number (DN) selector SYN.
	SNPA	numeric	*Serving number plan area* Enter the SNPA of the DN that the user must dial to reach the DN specified in the key.
	OFC	numeric (up to 3 digits)	*Office code* Enter the three-digit office code of the DN that the user must dial to reach the DN specified in the key.
	DEFGDIGS	numeric (up to 4 digits)	*DEFG digits* Enter the DEFG digits of the DN that the user must dial to reach the DN specified in the key.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* Enter the BC name that is associated with the synonym DN as assigned in table BCDEF.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	FEATLIST	see subfield	*Feature list* This field consists of subfield SYNFEAT.
	SYNFEAT	IMP or $	*ISDN synonym directory number* Enter IMP to indicate that feature inbound model pooling (IMP) is assigned. Otherwise, enter $.
IMPGLIST		see subfield	*Inbound modem pooling group list* This field consists of subfield IMPGRP.
	IMPGRP	alphanumeric (up to 16 characters) or $	*Inbound modem pooling group name* Enter the IMP group name or enter $ to designate the use of the default group name assigned in table KSETFEAT.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature SYN.

In this example, a user must dial to reach DN 613 226 5450 which has the BC name SPEECH.

MAP display example for table DNROUTE feature SYN

```
AREACODE OFCODE    STNCODE                     DNRESULT
___________________________________________________________
     613    226        5244      SYN 613 226 5450 SPEECH
                                  IMP B007A
```

DNROUTE feature T

Directory Number Selector T

This selector is required if calls to a directory number (DN) are routed to one of the route lists in a routing table.

Data ll

The following table lists the data ll for table DNR OUTE feature T.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL and TUPLID.
	DN_SEL	T	*Directory number* Enter the directory number (DN) selector T.
	TUPLID	see subfields	*Tuple identifier* This field consists of subfields TABID and KEY.
TABID		IBNRT2, IBNRT3, IBNRT4, IBNRTE, OFR2, OFR3, OFR4, or OFRT	*Table name* Enter the office route or IBN route table name to which the call is routed when the specified DN is dialed. Any entry outside the range indicated for this field is invalid.
KEY		0 to 1023	*Key* Enter the index to the office or IBN route tables.

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature T.

This example shows input for a short-circuit test line in a local or combined local/toll switching unit. The DN for the short-circuit test line is 725 1192 and is in SNPA 613.

DNROUTE feature T (end)

MAP display example for table DNROUTE feature T

```
AREACODE OFCODE     STNCODE                    DNRESULT
_____________________________________________________________
     613     725        1192         T       OFRT      15
```

DNROUTE feature UCD

Uniform Call Distribution (UCD)

This selector is required if the directory number (DN) is assigned as a uniform call distribution (UCD) DN for a UCD group.

Each of the 256 UCD groups can be assigned one primary DN and four supplementary DNs.

Field TOLLPRIO for a primary DN is only applicable to DMS-100 (not SL-100) switching units, and only if the switching unit is a combined LOCAL-TOLL/IBN installation. The operation of POTS translation determines whether the call is a local or a toll call.

The data for each UCD group is assigned in table UCDGRP.

Data ll

The following table lists the data ll for table DNR OUTE feature UCD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DNRESULT		see subfields	*Directory number results* This field consists of subfields DN_SEL, FEATURE, UCDGRP, and DNAREA.
	DN_SEL	FEAT	*Directory number selector* Enter the directory number (DN) selector FEAT.
	FEATURE	UCD	*Feature* Enter UCD.
	UCDGRP	alphanumeric (1 to 16 characters)	*Uniform call distribution group* Enter the name in field UCDNAME of table UCDGRP for this UCD DN.

DNROUTE feature UCD (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DNAREA	see subfields	*Directory number area* This field consists of subfields DNTYPE, TOLLPRIO, MEMNO, and DNPRIO.
	DNTYPE	PRIM or SUPP	*Directory number type* Enter PRIM if the DN is the primary UCD DN for this UCD group. Enter SUPP if the DN is one of the supplementary DNs for this UCD group.

DNTYPE = PRIM

If the value of sub eld DNTYPE is PRIM, data ll re nement TOLLPRIO as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	TOLLPRIO	0 to 3	*Toll priority* Enter the priority of toll calls terminating on the primary UCD DN. The highest priority is 0 (zero).

DNTYPE = SUPP

If the value of sub eld DNTYPE is SUPP , data ll re nements MEMNO and DNPRIO as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	MEMNO	0 to 3	*Member number* Enter the UCD member number of this DN for this UCD group.
	DNPRIO	0 to 3	*Directory number priority* Enter the priority of calls terminating on the UCD DN. The highest priority is 0 (zero).

DNROUTE feature UCD (end)

Data ll e xample

The following example shows sample data ll for table DNR OUTE feature UCD.

The UCD group name is ADMIN. There is one primary UCD DN, 226 4691 and three supplementary UCD DNs, 226 4692, 226 4693 and 226 4694. All numbers are in SNPA 613.

The priority for toll calls terminating on the primary DN is 0. The DN priority for member number 1 is 1, and the DN priority for members 2 and 3 is 2.

MAP display example for table DNROUTE feature UCD

```
AREACODE OFCODE    STNCODE                  DNRESULT
_____________________________________________________
     613    226       4691  FEAT  UCD ADMIN PRIM  0
     613    226       4691  FEAT  UCD ADMIN SUPP
                                          1   1
     613    226       4691  FEAT  UCD ADMIN SUPP
                                          2   2
     613    226       4691  FEAT  UCD ADMIN SUPP
                                          3   2
```

DNROUTE feature VOWDN

Virtual Office Worker Directory Number (VOWDN)

This feature allows telecommuters who do not have dedicated physical phone sets to access their dedicated Directory Number (DN) and associated features/options by logging into their dedicated DN from any of a pre-designated group of phone sets.

In table DNROUTE, a unique DN will be allocated for each VOWDN set which already has a VOW user logged in. This tuple is created automatically when a VOW user logs in, and it is automatically removed when a VOW user logs out.

Field FEATURE is modified within the FEAT result selector to allow a new FTRDN_CODE value of VOWDN. If VOWDN is present as the value of FEATURE, then two new fields are required:

- VOWDNIDX
- CUSTGRP

Datafill

The following table lists the datafill for table DNROUTE feature VOWDN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FEATURE	FEATUREDN _CODE	VOWDN	*Feature Directory Number Code* Enter VOWDN for this feature. If VOWDN is present as the value of FEATURE, then fields VOWDNIDX and CUSTGRP are required.
	VOWDNIDX	0 to 4095	*Virtual Office Worker Directory Number Index* This entry is used primarily to provide and display a unique index value for each VOWDN directory number in the system. When adding the FEAT VOWDN tuple, if the index value is already used, the system provides the user with an available index.
	CUSTGRP	alphanumeric	*Customer group* Enter the customer group associated with the tuple.

DNROUTE feature VOWDN (end)

Datafill example

The following example shows sample datafill for table DNROUTE feature VOWDN.

MAP display example for table DNROUTE feature VOWDN

```
AREACODE OFCCODE STNCODE DNRESULT
---------------------------------
919 657 7293 FEAT VOWDN 1045 BNRRTP
```

Feature history

SN07 (DMS)

DNROUTE feature VOWDN introduced by feature A00002011, Virtual Office Worker.

DNRTE

Table name

Directory Number Route Table

Functional description

Table DNRTE specifies translation routes. The key to this table consists of fields XLANAME and RTEREF. The route reference index corresponds to the destination number (from the DEST option) used in table CODE for the given XLANAME.

RTELIST is the route list associated with field RTEREF. The list contains a maximum eight routes, each route has a selector and data.

Universal translation stages for directory number codes (tables DNHEAD and DNRTE) are used for translating some segments of the incoming digit string and form an integral part of the universal digit translations scheme.

The universal translation tables translate the incoming digit string in segments. Table DNRTE translates the office code digit segment, together with tables OFCHEAD and OFCRTE.

For a description of the universal translation tables, refer to table ACHEAD and table DNHEAD.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table DNRTE.

Table size

As tuples are added, the table size increases to accommodate the largest route reference index.

Memory is allocated dynamically. When the first tuple for a given XLANAME is added, the table accommodates the given route reference.

DNRTE (continued)

Datafill

The following table lists datafill for table DNRTE.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
XLANAME		alphanumeric (1 to 8 characters)	*Translation name* Enter the name assigned to the corresponding head table.
RTEREF		1 to 1023	*Route reference* Enter the route reference index. 0 (zero) is not a valid entry.
RTELIST		see subfields	*Route list* This field consists of subfields RTESEL and refinements dependent on the value in field RTESEL.
	RTESEL	N, NOT, CDN, RT, S, T, or TMEM	*Route selector* Enter CND and datafill refinement CONDITION. If the route is conditional depending on the time of day, the call is transferred to the route list or element specified, if one of the times specified in field TIMES matches one of the times specified in table TIMEODAY. If a congestion message is received, the conditional network rerouting selector (CND NRR) of the universal routing tables is executed. The selector supports three types of conditional instructions: step (ST), skip (SK), and table (T). ***Note:*** The CND NRR option is not supported in GSM offices. If no conditional reroute selectors are found in the route list on receipt of a congestion message, the call goes to treatment.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	RTESEL (continued)		If the route is non-standard, enter N and datafill fields CLLI, MODCHG, DELETE, and PFXDIGS. A trunk is selected from the trunk group and the digits outpulsed according to the DELETE and PFXDIGS fields. The digits to prefix are shown in field PFXDIGS. The digits to prefix are outpulsed first, followed by the received digits, with the exception of the received prefix digits and the number of digits given by field DELETE. The standard charging characteristics can be modified by field MODCHG. If conditional instructions are not to be executed if congestion occurs, enter NOT and datafill subfields CONDITION and CONDRTE. The next route in the route list is attempted. As the NOT NRR selector appears as an entry in the route list, it can be indexed due to normal overflow. In this instance, conditional instructions are executed, since congestion has not occurred. Enter RT and datafill subfields RTDIGITS, XLASYS, and XLANAME, if digits received are replaced entirely by the numbers specified and then retranslated in the specified translation system. If the route is standard, enter S and datafill subfield CLLI. A trunk is selected from the trunk group (given by the CLLI) and digits are outpulsed according to the standard outpulsing algorithm. This algorithm ignores prefix digits, and outpulses the rest of the received digits.

DNRTE (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	RTESEL (continued)		If the route is to a route table, enter T and datafill subfields TABNAME, XLASYS, XLANAME, and RTEREF. The control is passed to the route list specified. Further routes in the route list are ignored. The passing of control overcomes the restriction of having only eight routes in a route list by making it possible to chain together any number of route lists, each with up to eight routes. If the route to an individual trunk is tested, in an office with the automatic transmission measurement equipment (ATME 2) for DMS-100I (international end-office switch) multifrequency compelled (MFC) feature, enter TMEM and datafill subfields CLLI and EXTRKNM. The RTSEL entry SO is not valid for table DNRTE.

RTESEL = CND

If RTESEL is set to CND, datafill refinement CONDITION as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CONDITION	see subfields	*Condition for routing* This refinement consists of subfields CNDSEL, TODNAME, and TIMES.
	CNDSEL	CND, TOD, or NRR	*Conditional selector* Enter the conditional selector CND. Enter TOD for the time of day and datafill subfields TODNAME and TIMES. Enter NRR to execute the CONDRTE instructions if congestion occurs. ***Note:*** The CND NRR option is not supported in GSM offices. The CNDSEL values ALWAYS, CALLCHR, COSMAP, EA, INTERLATA, RND, SITE, SNPA, TOPEAALT, and TOPEAXFR are not valid for universal translation RTE tables.
	TODNAME	alphanumeric	*Time-of-day name* Enter the name of the time-of-day system previously assigned in table TODHEAD.
	TIMES	up to 14 characters (0 to 9, A to F)	*Times set* Enter the times (maximum of 11 characters with no space between each time) when the transfer to another route list or element can occur. The time ranges are defined in table TIMEODAY, field TOD. If the current time is one of the times in the set, refinement CONDRTE is executed.

DNRTE (continued)

RTESEL = N

If RTESEL is set to N, datafill the refinements as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the CLLI of the trunk group to which the call is routed.
	MODCHG	NOMOD CANCHG CANTOLL ADDCHG	*Modify charging* If no charge modification is required, enter NOMOD. The zone is calculated by translations is used for billing. If a route is normally chargeable and the charge is canceled, enter CANCHG. If a route is normally chargeable and the charge is reduced to a local charge, enter CANTOLL. If the route is normally free of charge and the charge is added based on the zone calculated by translation, enter ADDCHG. At present, this can only be implemented for terminations to announcements, which allows billing of announcements as required.
	DELETE	0 to 18	*Delete digits* Enter the number of digits deleted before outpulsing.
	PFXDIGS	numeric (1 to 11 digits) or N	*Prefix digits* Enter the digits prefixed before outpulsing. If no digits are prefixed, enter N.
	PFXAFTER	0 to 15	*Number of digits after which to insert prefix digits* Enter a number from 0 to 15, which specifies the number of digits after which to insert the prefix digits in the digit stream before outpulsing.

RTESEL = NOT

If RTESEL is set to NOT, datafill the subfields CONDITION and CONDRTE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CONDITION	see subfield	*Condition for routing* This subfield consists of subfield CNDSEL.
	CNDSEL	NRR	*Conditional selector* Enter NRR to not execute the CONDRTE instructions if congestion occurs. Instead, the next route in the route list is attempted. If selector NOT NRR is indexed due to normal overflow, the CONDRTE instructions are executed, since congestion has not occurred. ***Note:*** The CND NRR option is not supported in GSM offices.
	CONDRTE	see subfields	*Conditional route* This field consists of subfields RTETYPE, RTEREF, SKIPNUM, TABNAME, XLASYS, XLANAME, RTEREF, and INDEX.
	RTETYPE	SK, ST, or T	*Route type* Enter SK and datafill subfield SKIPNUM if the call is to skip to another route element in the same route list. Enter ST and datafill subfield RTEREF if the call is to transfer to another route list in the same table. Enter T and datafill subfields TABNAME, XLASYS, XLANAME, and RTEREF. Enter T and datafill subfields TABNAME, and INDEX, if the call is to transfer to a route list in one of the universal translation route tables.

DNRTE (continued)

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RTEREF	0 to 1023	*Route reference number* Enter the route reference number in the same table, to which the call is transferred when the condition is met, if the entry in field RTETYPE is ST. The route reference number to which the call is transferred must be a higher number than the route reference number from which it was transferred. Leave the field blank, if entry in field RTETYPE is other than ST.
	SKIPNUM	0 to 7	*Skip number* If the entry in field RTETYPE is SK, enter the number of elements within the same route list to skip in order for the call to transfer to the proper route when the condition is met. Leave this field blank if the entry in field RTETYPE is other than SK.
	TABNAME	IRTE	*Table name* Enter IRTE, and datafill subfields XLASYS, XLANAME, and RTEREF, if entry in field RTETYPE is T.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	XLASYS	AC, AM, CT, DN, FA, FT, NIL, NSC, OFC, or PX	*Translation system* Enter the translation system to which the call transfers if the entry in field RTETYPE = T and the entry in field TABNAME = IRTE. The choice of translation systems are: • AC (access) • AM (ambiguous) • CT (country) • DN (directory number) • FA (foreign area) • FT (utility) • NIL (nil) ***Note:*** The XLASYS value NIL must not be datafilled by the operating company. • NSC (number service code) • OFC (office) • PX (prefix)
	XLANAME	alphanumeric	*Translation name* Enter the translation name of the table instance within the XLASYS that the call is to transfer, if the entry in field RTETYPE is T and the entry in field TABNAME is equal to IRTE.
	RTEREF	0 to 1023	*Route reference index* Enter the index of the route table specified to which the call is to transfer, if entry in field RTETYPE is T and entry in field TABNAME is equal to IRTE.
Note: If RTETYPE = T and TABNAME = OFRT, OFR2, OFR3, or OFR4, datafill fields TABNAME and INDEX.			

DNRTE (continued)

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TABNAME	OFRTOFR2OFR3orOFR4	*Table name* Enter the office route table name and datafill field INDEX. Entries IBNRTE, IBNRT2, IBNRT3, IBNRT4, and SERVICE are not valid for table DNRTE.
	INDEX	0 to 1023	*Route reference index* If entry in field RTETYPE = T and entry in field TABNAME = OFRT, OFR2, OFR3, or OFR4, enter the index of the route table specified to which the call is to transfer.

RTESEL = RT

If RTESEL is set to RT, datafill the refinements as described in the following table.

xx Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RTDIGITS	numeric (1 to 11 digits)	*Digits to retranslate* Enter the digits that are retranslated in the translation system table and that replace the digits dialed.
	XLASYS	AC, AM, CT, DN, FA, FT, NIL, NSC, OFC, or PX	*Translation system* Enter the translation system where the digits that are retranslated are transferred. The choice of translation systems are: • AC (access) • AM (ambiguous) • CT (country) • DN (directory number) • FA (foreign area) • FT (utility) • NIL (nil) ***Note:*** The XLASYS value NIL must not be datafilled by the operating company. • NSC (number service code) • OFC (office) • PX (prefix)
	XLANAME	alphanumeric (1 to 8 characters)	*Translation name* Enter the translation name of the table instance within the XLASYS field to which the retranslated digits are transferred.

DNRTE (continued)

RTESEL = S

If RTESEL is set to S, datafill the refinement CLLI as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric	*Common language location identifier* Enter the CLLI of the trunk group to which the call is routed.

RTESEL = T

If RTESEL is set to T, datafill the refinements as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TABNAME	OFRTOFR2OFR3 OFR4, IBNRTEorIRTE	*Table name* If the call is to route to an office route table, enter OFRT, OFR2, OFR3, or OFR4 and datafill subfield INDEX. The entries for TABNAME = SERVICE and TOPS are not valid for table DNRTE. If the call is to route to the IBN route table, enter IBNRTE and datafill field INDEX. If the call is to route to a route table in the universal translation system, enter IRTE and datafill fields XLASYS, XLANAME, and RTEREF.
	INDEX	0 to 1023	*Route index* If TABNAME is OFRT, OFR2, OFR3, OFR4, or IBNRTE, enter the route index of the specified table to which the call proceeds.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	XLASYS	AC, AM, CT, DN, FA, FT, NIL, NSC, OFC, or PX	*Translation system* If TABNAME = IRTE, enter the next translation system to use, followed by a space, then datafill subfield XLANAME (the instance of the translation system). The choice of translation systems are: • AC (access) • AM (ambiguous) • CT (country) • DN (directory number) • FA (foreign area) • FT (utility) • NIL (nil) ***Note:*** The XLASYS value NIL must not be datafilled by the operating company. • NSC (number service code) • OFC (office) • PX (prefix)
	XLANAME	alphanumeric (1 to 8 characters)	*Translation name* If TABNAME is IRTE, enter the translation name of the table instance within the XLASYS that the call is routed to and datafill subfield RTEREF.
	RTEREF	0 to 1023	*Route reference index* If TABNAME is IRTE, enter the index of the specified route table to which the call routes.

DNRTE (continued)

RTESEL = TMEM

If RTESEL is set to TMEM, datafill the refinements as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the CLLI of the outgoing trunk group to which the call is routed.
	EXTRKNM	0 to 9999	*External trunk number* Enter the external trunk number assigned to the trunk to which the call is routed.

Note: When an Unable To Write New Data error message is displayed at the MAP terminal, an add or change operation to table DNRTE was unsuccessful. When the add operation fails, no tuple is written to table DNRTE. When the change operation fails, the existing tuple in table DNRTE remains unchanged.

Datafill example

The following example shows sample datafill for table DNRTE.

MAP display example for table DNRTE

```
XLANAME  RTEREF
                                                  RTELIST
_____________________________________________________________

   XLA1      555
             (NOT  NRR ST  7) (THEM OGC1NONEAB   0)$
```

For additional examples refer to table DNHEAD.

Table history

NA009

Added an error message that is the result of design review comments.

BCS35

Added selector NRR to field CNDSEL and selector NOT to field RTESEL.

DNRTEID

Table name

Directory Number Route Identi er T able

Functional description

Table DNRTEID identi es the type of device used for billing. Each directory route number is assigned to a device for generating a charge report.

An attendant pay station (APS) is a public service hall where telephone calls are placed under the supervision of an attendant. At the service hall, the attendant assigns a telephone to the customer. When the call is terminated, the account is settled with the attendant.

Table DNRTEID is also used for hotel billing applications. The hotel operator assigns a telephone line to the hotel guest in the same way as the attendant in a service hall operation.

There are two types of billing record devices to assist the attendant or the hotel operator in determining the cost of each call: the auto quote (AQ) device and the voice quote (VQ) device.

- An AQ device is a printer that is located at the service hall or the hotel premises. It receives a charge report for direct dial calls.
- A VQ device is a printer is located at the central of ce. It receives charge reports for direct dial calls that do not have an AQ route. The VQ device serves the same purpose as the AQ device.

The hotel billing information center (HOBIC) is a centralized operator-attended location for handling all hotel and APS billings. If there is an AQ device at the hotel or APS, then all messages for that hotel or APS are routed to the AQ. If there is no AQ on site, the message is sent to the VQ printer and a HOBIC operator calls the hotel or APS with the billing information.

The of ce administration must ensure that an y lines data lled in table DNRTEID as APS or hotel has the APS or hotel line option set, (that is, AQAPS and VQAPS for APS option, or AQHOT and VQHOT for HOTEL option).

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DNR TEID.

Table size

0 to 8192 tuples

DNRTEID (continued)

Table size is dynamically determined by the number of tuples added.

Data ll

The following table lists data ll for table DNR TEID.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DNKEY		0 to 9(up to 18 digits)	*Digilator table key* Enter the directory number (DN) of the originating party. Only the first ten digits, that consist of the area code, office code and station code, are valid.
DEVICE		AQAPS AQHOT NILDVC VQAPS VQHOT	*Device* Enter the type of billing record device assigned to the DN. Enter AQAPS for the device located at the service hall premises in an APS operation. Datafill refinement DVCRTE. Enter AQHOT for the device located at the hotel premises in a hotel operation. Datafill refinement DVCRTE. Enter NILDVC if no device is assigned to the directory number. No refinements require datafill. Enter VQAPS or VQHOT for the devices located at the central office. No refinements require datafill.
	DVCRTE	1 to 999	*Device route* If the entry in field DEVICE is AQAPS or AQHOT, datafill this refinement. Enter the device route number to identify the AQ device to which the billing record is sent. For an APS operation, a maximum of 12 AQ devices is allowed in a service hall. The allowed range in field DVCRTE is 1 to 12. For a hotel operation, this field indexes key field DEVNO in table ITOPSDEV. A maximum of 510 AQ devices are allowed in a HOBIC system. The full range is valid.

Data ll e xample

The following example shows sample data ll for table DNR TEID.

There are four DNs entered.

The billing report of the rst DN is generated by a VQAPS printer located at the Central Of ce. The APS log report generated has an APS100 header (this is the default for all VQAPS devices). The second DN has the billing device located at the service hall. When the call is terminated, the billing is automatically printed on the AQAPS 10 printer. The device route is 10 and the APS log report has a header APS110. The last two digits of the APS report specify the device.

The last two DNs are used in hotel operations. The third DN has its billing report generated at the central of ce. The fourth DN has A Q number 89 located at the hotel premises.

MAP display example for table DNRTEID

```
         DNKEY     DEVICE
________________________________________________________

     122243214  VQAPS
         44312  VQAPS  10
         34777  VQHOT
         34654  AQHOT  89
```

DNSCRN

Table name

Directory Number Screening (DNSCRN)

Functional description

Table DNSCRN provides information for call processing. Call processing uses the information to perform call screening and call validation. Call screening and call validation occurs on speci ed directory numbers (DN) for the DMS-100 MMP switch. The system routes blocked calls to treatment CNAD.

Data ll sequence and meaning

Tables SCRGRP and LTDEF must be data lled before table DNSCRN.

Table size

0 to 8 000 000 tuples

Data ll

The data ll for table DNSCRN appears in the follo wing table.

Field descriptions (Sheet 1 of 6)

Field	Subfield	Entry	Explanation and action
DN		see subfield	*Directory number* This field contains subfield DNDIGS.
	DNDIGS	vector (a maximum of 24 digits)	*Directory number digits* Enter the directory number (DN) for the calling line number or the called line number.

Field descriptions (Sheet 2 of 6)

Field	Subfield	Entry	Explanation and action
ATTROPTS		NIL ADDCODE1 ADDCODE2 ADDCODE3 ACCTREQ BCSUBS BLCKCALL CARRSNAM CCR CLILTID1 CLILTID2 CLISERV CLISI CLIVD CS CUSTINFO NETAOCD NTCLANG PRESEL RSA SCRGRP1 SCRGRP2 THIRDPTY TONEBURST TOPSCIC TOPSDB UNPAID	*Screening attribute options* Enter the screening attributes. ***Note:*** For the U.S., only NIL and TOPSDB attributes apply. For Japan, only the BLCKCALL attribute applies. The entry of data in NIL against a DN does not affect screening for the DN. This entry is the default. ADDCODE1, ADDCODE2, and ADDCODE3 are type attributes that are the same. These attributes specify the correct destination for third-party-billed calls. You can specify a maximum of three destinations. ACCTREQ is account code request. This field specifies that a CLI must collect cost center code (CCC) digits. Enter data in subfields ACCTLEN and ACCTTONE. BCSUBS is bearer capability subscribed. This attribute indicates if the subscriber subscribed to the entered bearer capabilities. BLCKCALL indicates that the DN cannot make or receive calls.

DNSCRN (continued)

Field descriptions (Sheet 3 of 6)

Field	Subfield	Entry	Explanation and action
ATTROPTS (continued)			CARRSNAM indicates the carrier or carrier reseller name associated with the DN, as entered in either table CARNAME or table RESNAME. Enter data in CCR to provide screening against customers that exceed the cumulative charge limit. Call processing uses CLILTID1 and CLILTID2 attributes for screening. Each of these attributes can accommodate a maximum of six logical terminal identifiers (LTID) for each DN. As entered in table LTDEF. For Japan INS datafill, you must enter the LTID in table LTDEF with the variant INSPRI. You must enter the LTID before you can enter the LTID in table DNSCRN. For North American PRI datafill, you must enter the LTID. You must enter the LTID in table LTDEF with the variant NIPRI or NTNAPRI. You must enter the LTID in table LTDEF before you can enter the LTID in table DNSCRN. CLISERV allows the use of CLI service screening and CLI based routing. CLISI indicates that you can use the DN to identify the origin of the call. CLIVD specifies a numeric index that matches option CLIVD in table LTDATA. The correct range is from 0 to 2047. CS specifies the DN used for Carrier Selection CLI screening. Optionally, use subfield CARRID to specify a maximum of eight carrier identifications.

Field descriptions (Sheet 4 of 6)

Field	Subfield	Entry	Explanation and action
			CUSTINFO indicates that the calling line identifier (CLI) takes on the customer group and network class of service (NCOS) appearance. The CLI takes on the customer group and network class of service (NCOS) appearance before retranslation of the destination DN.
ATTROPTS (continued)			NETAOCD indicates whether an ITX message is sent to the originator. This message is required for the backward charging facility on French telephony user part (FTUP) trunks. This facility sends billing information to the (calling subscriber's) switch that performs the billing. The facility allows the service provider to control the billing of the call. The system can use NTCLANG to assign a maximum of three languages for the NTC callback announcement. The calling party number determines the assignment of languages. The system uses PRESEL to assign a preselected carrier identification code for each CLI. This attribute supersedes any preselected carrier the system assigns through table TRKGRP. Registered site access (RSA) overwrites the direct inward systems access (DISA) directory number (DN) customer group from table DNROUTE. RSA overwrites the DISA DN with the customer group and network class of service (NCOS) recorded for the calling line identifier (CLI) in table DNSCRN. ***Note:*** You must enter data in CUSTINFO if you use the RSA option.

DNSCRN (continued)

Field descriptions (Sheet 5 of 6)

Field	Subfield	Entry	Explanation and action
			Call processing uses SCRGRP1 and SCRGRP2 for screening and as valid interfaces for a particular CGN. Each of these attributes can accomodate multiple SCRGRPs ranging from 1 to 6 on a per DN basis. As entered in table SCRGRP. SPID indicates a service provider identifier. Enter data for subfield SPID. The system uses THIRDPTY for automatic third party billing. TONEBURST indicates that an audible toneburst applies to call answer. ***Note:*** When you enter data for a UK switch, enter data in subfields TONEBURST, CUSTGRP, and NCOS for field ATTROPTS.
ATTROPTS (continued)			TOPSCIC indicates a carrier ID code for global TOPS calls. This option provides support when table TOPCATRK field DNSCRN = Y for a TOPS GCA call without a CIC. Enter data in subfield CARRID. TOPSDB allows DNs in table DNSCRN to index into tables TOPSDB and AUTHGRP. Enter data in subfields TOPSDB and AUTHGRP. UNPAID indicates that the subscriber did not pay the DN account.
	TONEBURST (UK002-)	Y or N	*Toneburst* Enter Y (yes) to apply audible toneburst on answer. Enter N (no) to have no toneburst on answer.
	CUSTGRP (UK002-)	alphanumeric (1 to 16 characters)	*IBN customer group* Enter any correct IBN customer group number.

Field descriptions (Sheet 6 of 6)

Field	Subfield	Entry	Explanation and action
	NCOS (UK002-)	1-511	*IBN network class of service* Enter the NCOS associated with the IBN customer group in CUSTGRP.
	ACCTLEN	0 to 14	*Account code length* Enter the count of the CCC digits. For two-stage interconnect CLI service calls with CCC, set the ACCTLEN field to a value of 2 or 3. For two-stage interconnect CLI service calls that do not have CCC, set the ACCTLEN field to zero (0).
	ACCTTONE	CDT, SDT, or DT	*Account code tone* Enter the tone to apply before digit collection. The range is carrier dial tone (CDT), special dial tone (SDT), and dial tone (DT).

ATTROPTS = ACCTREQ

If the entry in eld A TTROPTS is ACCTREQ, enter data in ACCTLEN and ACCTTONE. A description of these actions appears in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	ACCTLEN	0 to 14	*Account code length* Enter the correct account code length for the two-stage interconnect CLI service call, with or without CCC.
	ACCTTONE	CDT, SDT, or DT	*Account code tone* Enter the tone to apply before digit collection.

DNSCRN (continued)

ATTROPTS = ADDCODE1

If the entry in eld A TTROPTS is ADDCODE1, enter data in ADDCD1DN. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	ADDCD1DN	vector (a maximum of 15 digits)	*Add code one directory number* Enter the destination digits for the third-party-billed calls. This entry allows blocking of the third party call to occur. Blocking can occur if the address digits of the called party do not appear in the ADDCODE attribute. Calls proceed if the start of the destination digits match a minimum of one of the ADDCODEs entered.

ATTROPTS = ADDCODE2

If the entry in eld A TTROPTS is ADDCODE2, enter data in ADDCD2DN. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	ADDCD2DN	vector (a maximum of 15 digits)	*Add code two directory number* Enter the destination digits for the third-party-billed calls. This entry allows blocking of the third party call to occur. Blocking can occur if the address digits of the called party do not appear in the ADDCODE attribute. Calls can continue if the start of the destination digits matches a minimum of one of the ADDCODEs entered.

ATTROPTS = ADDCODE3

If the entry in eld A TTROPTS is ADDCODE3, enter data in ADDCD3DN. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	ADDCD3DN	vector (a maximum of 15 digits)	*Add code three directory number* Enter the destination digits of a valid destination for third-party-billed calls. Calls proceed if the initial dialed digits match at least one of the entered ADDCODEs. If the dialed digits do not match one of the ADDCODEs, the call fails.

ATTROPTS = BCSUBS

If the entry in eld A TTROPTS is BCSUBS, enter data in BCOPTS. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	BCOPTS	alphanumeric (a maximum of four names)	*Bearer capability options* Enter the bearer capability names from table BCDEF. If you enter the bearer capability names against a DN, these names indicate the subscriber subscribes to the bearer capabilities you entered.

DNSCRN (continued)

ATTROPTS= CARRSNAM

If the entry in eld ATTROPTS is CARRSNAM, enter data in CARRSNAM. A description of this action appears in the following table.

eld descriptions f or conditional data ll

Field	Subfield	Entry	Explanation and Action
	CARRSNAM	8 character vector	*Carrier or Reseller name* Enter the Carrier or carrier reseller name associated with the DN, as entered in either table CARNAME or table RESNAME. The carrier reseller that is assigned using the CARRSNAM option in table DNSCRN must already be entered in either table CARNAME or table RESNAME.

ATTROPTS = CLILTID1 or CLIDTID2

If the entry in eld A TTROPTS is CLILTID1 or CLILTID2, enter attributes LTGRP and LTNUM. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	LTGRP	a maximum of eight characters	*Logical terminal group* Enter the logical terminal group of the user. Correct group names appear in field GROUP of table LTGRP. For ISDN terminals, the name of the group is ISDN. For ISDN DN screening, LTGRP and LTNUM are the key in table LTDEF.
	LTNUM	numeric (1 to 1022)	*Logical terminal number* Enter the logical terminal number in the group.

ATTROPTS = CLISERV

This option allows the use of CLI service screening and CLI based routing. It has one sub eld, PR OFIDX, that indicates the service pro le to be used in service screening.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	PROFIDX	numeric, 0 to 32766	*Service profile identifier* Enter the service profile to be used for CLI screening. PROFIDX must be a valid profile, as defined in table CLISRVPF. The PROFIDX value must be defined in table CLISRVPF before you can use it in this option.

ATTROPTS = CS

If the entry in eld A TTROPTS is CS, data ll the sub eld CARRID appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	CARRID	00 to 9999 (a maximum of eight entries is allowed)	*Carrier Identification* If using whitelist CLI screening, enter a list of up to eight carrier identifications that the directory number (field DN) can access. If using blacklist CLI screening, enter a list of up to eight carrier identification that the directory number (field DN) is not allowed to access. Refer to the *ETSI ISUP V2 Carrier Selection Parameter* section of the *European Translations Guide* for further details on whitelist and blacklist CLI screening.

DNSCRN (continued)

ATTROPTS = NETAOCD

If the entry in eld A TTROPTS is NETAOCD, enter the sub eld ORIG. DISCOUNT INDEX as shown in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	ORIG. DISCOUNT INDEX	0 to 115, or None	*Originating discount index* Enter the discount class applicable to the customer. This defines a discount, applicable to the call charge rate, obtained from the metering database. Enter NONE when no discount is applicable.

ATTROPTS = NTCLANG

If the entry in eld ATTROPTS is NTCLANG, data ll sub eld NTCLANG as it appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	NTCLANG	vector (a maximum of three identifiers)	*Notification of Time and Charge language option* Enter a maximum of three NTC language identifiers entered in field LANGNAME in table NTCLANGS. You can enter NTC language identifiers against a DN. If you perform this action, the NTC language identifiers indicate the languages in which the subscriber receives the NTC callback announcement.

ATTROPTS = PRESEL

If the entry in eld A TTROPTS is PRESEL, enter data in CARRID. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	CARRID	6-digits from 0 to FFFFFF	*Carrier identification* Enter the 6-digit carrier identification code. The default value is 9999.

ATTROPTS = SCRGRP1 or SCRGRP2

If the entry in eld A TTROPTS is SCRGRP1 or SCRGRP2, enter data in sub eld SCRGRP_IDX. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	SCRGRP_IDX	1 to 16 characters	*Screening group name* Enter a valid screening group name. Valid group names are listed in the field SCRGNAME of table SCRGRP.

ATTROPTS = SPID

If the entry in eld ATTROPTS is SPID, enter data in SPID. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	SPID	value from table SPID	*Service provider identifier* Enter a value that table SPID defines. If a default SPID is not a requirement, you must not enter the SPID in this field. Enter the default in table TOPSPARM parameter DEFAULT_SPID. Set the TOPSPARM parameter BRAND_USING_DEFAULT_SPID to Y.

ATTROPTS = THIRDPTY

If the entry in eld ATTROPTS is THIRDPTY, enter data in THDPTYDN. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	THDPTYDN	vector (a maximum of 15 digits)	*Third party directory number* Enter the third party billing number. The absence of the THIRDPTY attribute indicates that automatic third party billing cannot occur for the DN.

DNSCRN (continued)

ATTROPTS = TOPSCIC

If the entry in eld A TTROPTS is TOPSCIC, enter data in CARRID. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
CARRID		value from TOPCACAR	Preselect carrier ID. Enter the carrier identification code (CIC) for the carrier assigned to the subscriber's number. The value must be present in table TOPCACAR.

ATTROPTS = TOPSDB

If the entry in eld A TTROPTS is TOPSDB, enter data in TOPSDB and AUTHGRP. A description of this action appears in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	TOPSDB	0 to 32 766	*TOPS data base* Enter an index in table TOPSDB.
	AUTHGRP	0 to 32 766	*Authorization group* Enter an index in table AUTHGRP.

Data ll e xample

Sample data ll for table DNSCRN appears in the follo wing example.

MAP example for table DNSCRN

```
DN
                                                ATTROPTS
_____________________________________________________

628794321
( CLISI )$
```

Limitations and Restrictions

A corresponding Screening Group (SCRGRP) must be provisioned in table SCRGRP when attempting to data ll attrib ute SCRGRP1 or SCRGRP2 in table DNSCRN.

Table history

MMP15

Option CLISERV sub eld PROFIDX range is changed to 0-32766 by activity 59023556.

NA015

Feature A59023407 added two attributes, SCRGRP1 and SCRGRP2, to table DNSCRN.

MMP13

Added option RSA for eld A TTROPTS.

PRESEL option increased to 6 digits.

MMP12

Option CARRSNAM added to eld A TTROPTS in table DNSCRN.

GTOP11

Option TOPSCIC added by feature AF7576.

EUR010

Added option NETAOCD for activity AU3283.

Added option CLISERV for activity AJ5351.

EUR009

Added the CS attribute and CARRID sub eld for the ETSI ISUP V2 Carrier Selection Parameter feature.

EUR008

These notes detail changes in applicability of existing table options in this software release.

The attributes UNPAID and BLCKCALL, only, are used by the new feature, CLI Screening via Translations.

APC009

Attribute CLIVD was added to eld ATTROPTS to support feature PBX CLI Management (AU2580) in APC009.

APC008.1

Option CCR was added to eld A TTROPTS in APC0008.1.

DNSCRN (end)

NA008

A description of data ll for v alues CLILTID1 and CLILTID2 in eld ATTROPTS was added in NA008. This addition allows the support of feature PRI Call Screening (AF6863). This feature is for NIPRI and NTNAPRI.

APC008

Option PRESEL and sub eld CARRID were added to eld A TTROPTS in APC008.

TOPS07

Feature AF6711 in functionality Branding via SPID, ENSV0017 added value SPID to eld A TTRPTS in TOPS07.

APC006

Values CLILTID1, CLILTID2, and NTCLANG were added to eld ATTROPTS in APC0006.

NA005

Sub elds T OPSDB and AUTHGRP were added in NA005.

CSP02

References to Intelligent Services Node (ISN) were removed in CSP02.

BCS36

The following information was added in BCS36:

- value TOPSDB to eld A TTROPTS
- maximum table size of 500 000 tuples for ISN
- blocked calls routed to treatment CNAD

BCS35

The following information was added in BCS35:

- options BCSUBS and ISNDATA to eld A TTROPTS
- sub elds BCOPTS, SPMNUM, MBXA TTRS, and ISATRKEY

BCS34

Table DNSCRN was introduced in BCS34.

DOMBILL

Table name

TOPS Domestic Billing Restrictions Table

Functional description

Table DOMBILL is used to associate domestic region names with billing restrictions. One entry (tuple) is allowed for each unique region name. Each name is associated with the following information:

- credit card restrictions
- third number restrictions
- station and person collect call restrictions
- station rate calls restrictions
- terminating call screening restrictions applied for this country on Automatic Calling Card Service (ACCS) calls from certain coin stations

If a third number does not pass the checks, the digits in the operator's special number eld ash. If a credit card does not pass the checks, the digits in the operator's special number eld ash.

Information on the operator screen is shown in accordance with the manner in which the call is billed. If the call is billed as a station collect call, the operator screen displays STA COL. If the call is billed as a person collect call, the operator screen displays PER COL. In each case, billing restrictions are indicated by the ashing of character strings in response to an operator's billing request.

If the PERONLY eld has value N (no), which indicates that both personal and station rate calls are allowed, the operator screen is updated as shown in the following table.

For related information, refer to table HOTLIST.

Operator screen updates for PERONLY eld v alue of N (Sheet 1 of 2)

COLLECT field value	Displayed when operator presses STA COL key	Displayed when operator presses PER COL key
DEN	STA steady	PER steady
	COL flashes	COL flashes

DOMBILL (continued)

Operator screen updates for PERONLY eld v alue of N (Sheet 2 of 2)

COLLECT field value	Displayed when operator presses STA COL key	Displayed when operator presses PER COL key
PER	STA flashes	(call passes checks and is allowed)
	COL steady	
MAN	STA flashes	PER flashes
	COL flashes	COL flashes

If the PERONLY eld has v alue Y (yes), which indicates that only personal rate calls are allowed, the operator screen is updated as shown in the following table.

Operator screen updates for PERONLY eld v alue of Y

COLLECT field value	Displayed when operator presses STA COL key	Displayed when operator presses PER COL key
DEN	STA flashes	PER steady
	COL steady	COL flashes
PER	STA flashes	(call passes checks and is allowed)
	COL steady	
MAN	STA flashes	PER flashes
	COL steady	COL flashes

If a site launches a billing validation center (BVC) or line information database (LIDB) query into a database, the query overrides the entry in this table if the query is the same as the entry in the table. For example, if an entry in table DOMBILL is marked as person collect and a query returns a denied collect number, the call is blocked because of the database query.

Data ll sequence and implications

Table SYSDATA must be data lled before table DOMBILL.

Table REGNUM must be data lled after table DOMBILL.

Table size

Storage for this table is allocated in table SYSDATA.

Data ll

The following table lists data ll for table DOMBILL.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
REGION		alphanumeric (1 to 16 characters)	Region name. Enter a region name that is associated with an area within the North American Dialing Plan. Region names must be unique.
COLLECT		ALW, DEN, MAN, or PER	Collect call restriction. This field indicates the type of collect call restriction that applies. Enter ALW if both station and person collect calls are allowed. Enter DEN if both station and person collect calls are denied. Enter PER if only person collect calls are allowed. Enter MAN if both station and person collect calls are allowed but a manual record must be made of the called party's name.
PERONLY		Y or N	Personal rate only. This field indicates the type of rate calls that are allowed. Enter Y (yes) if only personal rate calls are allowed. Enter N (no) if both personal rate calls and station rate calls are allowed.

DOMBILL (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
THIRDNUM		ALL, NONE, or REG	Third number restriction. This field indicates which calls can be billed to a third number. Enter ALL if all calls can be billed to a third number. Enter NONE if no calls can be billed bill to a third number. Enter REG if calls can be billed to a third number only if the third number and the called number are in the same region.
CCARD		ALL, NONE, or REG	Credit card restriction. This field indicates which calls are allowed to bill to a credit card. Enter ALL if all calls can be billed to a credit card. Enter NONE if no calls can be billed to a credit card. Enter REG if calls can be billed to a credit card only if the credit card and the called number are in the same region.
CCSCRN		Y or N	Calling card screening. In offices with the TOPS Terminating Code Screening feature, enter Y to indicate that terminating code screening is applied for this country. Otherwise, enter N. Terminating code screening is only applied to Automatic Calling Card Service (ACCS) calls from coin stations listed in table TERMSCRN.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
COLSCRN		Y or N	Collect call screening. In offices with the TOPS Terminating Code Screening feature, enter Y to indicate that terminating code screening is applied for AABS (Automated Alternate Billing Service) collect calls or potential AABS collect calls to a corresponding region. Otherwise, enter N. Collect call screening is only applied to AABS calls.
THRDSCRN		Y or N	Third-party-billed call screening. In offices with the TOPS Terminating Code Screening feature, enter Y to indicate that terminating code screening is applied for AABS third-party-billed calls or potential AABS third-party-billed calls to a corresponding region. Otherwise, enter N. Third-party-billed call screening is only applied to AABS calls.

Data ll e xample

The following example shows sample data ll for table DOMBILL.

```
REGION COLLECT  PERONLY  THIRDNUM  CCARD  CCSCRN  COLSCRN  THRDSC
_____________________________________________________________

BARBADOS    PER        N       NON   NONE       N        N       N
```

DPACDEV-Canada only

Table name

Datapac Device Table

Functional description

Table DPACDEV lists assignments for each data packet controller (DPC) circuit card the system con gures. The circuit card con guration occurs in the input/output controller (IOC).

Refer to table MTD for additional information.

The minimum number of logical channels must be three for complete diagnostics.

Data ll sequence and meaning

You must enter data in table IOC before you enter data in table DPACDEV.

Table size

The system allocates memory for 16 DPC devices.

Data ll

Data ll for table DP ACDEV appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DPACNUM		0 to 15	*Data packet controller device number* Enter the number the system assigned to the data packet controller (DPC) circuit card.
IOCNO		0 to 19	*Input/ output controller number* Enter the number of the input/output controller (IOC) that the system assigns the DPC.
IOCCKTNO		0, 4, 8, 12, 16, 20, 24, 28, or 32	*Input/output controller circuit number* Enter the number of the IOC circuit to which the system assigns the DPC. The entry must be a multiple of four. Entries outside this range are incorrect.

DPACDEV-Canada only (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NODENUM		numeric (a maximum of eight digits)	*Node number* Enter the node number of the DPC circuit card. The Datapac network vendor provides the node number. Entries outside this range are incorrect.
MAXLCHAN		1 to 15	*Maximum number of logical channels (calls)* Enter the number of logical channels the system requests from the Datapac network vendor at time of subscription. Entries outside this range are incorrect.
PKWINDOW		2 to 7	*Packet window width* Enter the number of packages that you can send before you receive an acknowledgement. The Datapac network vendor provides the packet window width.
EQPEC		1X67BB or 1X67DB	*Product engineering code* Enter the product engineering code (PEC) of the DPC circuit card.
PROTOCOL		DATAPAC or DATAPACB	*Protocol* Enter the identifier for the X.25-modeled protocol the DPC uses. Entry DATAPAC corresponds to the link access procedure (LAP). Entry DATAPACB corresponds to the link access procedure balanced (LAPB) mode. Entries outside this range are not correct.
DMSMODE		DTE or DCE	*Data switching mode* The DPC can operate as data terminal equipment (DTE) or data circuit terminating equipment (DCE). Specify which equipment type the DPC operates as in a point-to-point connection. The system only supports the DTE.

Data ll e xample

Sample data ll for table DP ACDEV appears in the following example.

DPACDEV-Canada only (end)

In the example, the switching unit has two DPC circuit cards.

MAP example for table DPACDEV-Canada only

```
DPACNUM IOCNO IOCCKTNO NODENUM MAXLCHAN PKWINDOW EQPEC PROTOCOL
DMSMODE
_____________________________________________________________________________

      0     0         4 12345678        1        2 1X67BB  DATAPAC
    DTE
```

DPCTSCRN

Table name

Dial Plan and Call Type Screening

Functional description

Table DPCTSCRN is one of three tables that provide table control for six-digit screening. Table DPCTSCRN contains screening plans for six-digit screening. A screening plan consists of a name and a set of screening options. Use this table to establish a set of screening rules.

This table provides the equivalent functionality the PFXFOR10 eld in table LCASCRCN provides, but it offers additional e xibility. Table DPCTSCRN allows you to de ne unique screening plans based on dialing pattern, call type, and desired treatment. Table LCAINFO references table DPCTSCRN to connect screening rules with local calling areas.

Data ll sequence and implications

Complete the DPCTSCRN table before the table LCAINFO.

After you de ne the plans in table DPCTSCRN, add the plans to table LCAINFO to connect your screening rules with the local calling areas. You must enter the dial plan and call type screening names and options in Table DPCTSCRN before table LCAINFO can reference them.

Table size

1 to 1000 tuples.

You do not require a CC-restart type to increase the size.

DPCTSCRN (continued)

Data II

The following table lists the possible entries for table DPCTSCRN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DPCTNAME		1 to 16 characters	Dial plan and call type screening name. This field is the key index field. Enter the dial plan and call type screening name. The switch rejects any attempt to add the name of NONE to this table. The screening plan name PFXFOR10 is always the first tuple. It is permanent and read only. Table LCAINFO can always reference the PFXFOR10 tuple. For any other desired screening behavior, define a screening plan in table DPCTSCRN. Reference the screening plan on a local calling area basis from table LCAINFO.
SCRNOPTS		1 to 12 characters	Screening options. This field contains the screening options associated with a dial plan and call type screening name. There can be as many as 12 screening options, one for each combination of dialing pattern and call type. Each screening option contains three fields, DIALPAT, CALLTYPE, and TREAT. A dollar sign ($) indicates no screening options. In that case, all call scenarios default to UNDT treatment and complete with no screening.
	DIALPAT	SEVEND, PFXPLUS7D, TEND, PFXPLUS10D	Dialing patterns. Enter SEVEND for 7 digits, PFXPLUS7D for 0/1+ 7 digits, TEND for 10 digits, and PFXPLUS10D for 0/1+10 digits.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CALLTYPE	NP, DD, OA	Call types. Enter NP, DD, or OA for the call type.
	TREAT	EXTENDED_TREATMENT	Treatment. Enter EXTENDED_TREATMENT to indicate all standard treatments of this type.

Data ll e xample

The following example shows sample data ll for table DPCTSCRN.

MAP display example for the DPCTSCRN table

```
DPCTNAME                        SCRNOPTS
_____________________________________________________________
PFXFOR10          (SEVEND DD MSCA)(PFXPLUS7D DD MSCA)
                  (TEND NP MSLC)(PFXPLUS10D NP MSLC)
LCA1PLAN          (PFXPLUS7D DD MSCA)(PFXPLUS10D OA MSOA)
SOCLOC005         (PFXPLUS7D NP MSCA)(PFXPLUS7D DD MSCA)
                  (PFXPLUS7D OA MSOA)
```

Table history

NA010

Introduced table DPCTSCRN.

Supplementary information

This table has a tuple threshold limit of 75 percent. If you add a tuple that reaches this limit, you get the warning “Table threshold of 75 percent exceeded." You can still add this tuple, but the switch displays the warning. Additionally, the switch generates a DFIL800 log report indicating you have exceeded the threshold.

DPNSSLK

Table name

DPNSSLK

Functional description

Table DPNSSLK de nes the association among a carrier, the signaling link of the carrier and a signaling terminal (ST). Data ll can control some of the characteristics of the link. Examples of these characteristics are retransmission counts and time-out periods. The carrier that connects to the link identi es the link. This association is a x ed association.

The following restrictions and limits connect to table DPNSSLK:

- the carrier must be pulse code modulation 30 (PCM30)
- the carrier cannot be in use if the system de nes the link
- you cannot delete the link if the carrier is in use
- the ST must be a Digital Private Network Signaling System (DPNSS) ST. This condition applies if you do not use the Digital Trunk Controller Offshore ISDN plus (DTCOi+) platform.
- more than one link cannot reserve the ST
- there must be an inter-peripheral message link (IPML) from the ST message switch buffer (MSB) to the PCM30 digital trunk controller (PDTC)

Data ll sequence and meaning

You must enter the following tables before you enter data in table DPNSSLK:

- LTCINV
- LTCPSINV
- MSBINV
- STINV
- IPMLINV

You must enter data in table DPNSSLK before other tables de ne DPNSS trunks.

Data ll

Data ll for table DPNSSLK appears in the follo wing table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
LINK		see subfields	*Link* This field contains subfield XPMTYPE, XPMNO, and CARRIDX.
	XPMTYPE	PDTC	*Peripheral module type* Enter the peripheral module (PM) type for this link. The only PM that supports PCM30 carriers and DPNSS call processing is the PDTC. An entry outside the range indicated for this field is not correct.
	XPMNO	0 to 255	*Peripheral module number* Enter the external number of the PM.
	CARRIDX	0 to 19	*Carrier index* Enter the index number of the carrier.
ST		Y (followed by 0 to 1023) or N	*Signaling terminal number* Enter Y to indicate ST based signaling. The signaling terminal number from table STINV follows. Enter N to indicate non-ST based signaling terminations.
ENDPOINT		A or B	*Endpoint identifier* Enter the DPNSS link protocol endpoint identifier. One end of the link is end A, and the other is end B. The two ends of the link must use opposite values.
TIMEOUT		0 to 255	*Time-out* Enter the frame retransmission timeout value in 20-ms units. The recommended entry is 25 (0.5 s).
RETRANS		0 to 255	*Retransmissions* Enter the maximum number of frame retransmissions. The recommended entry is 64.

DPNSSLK (end)

Data ll e xample

Sample data ll for table DPNSSLK appears in the follo wing example.

MAP display example for table DPNSSLK

```
              LINK       ST  ENDPOINT  TIMEOUT   RETRANS
-------------------------------------------------------

      PDTC  32  2  Y    1          A       25        64
      PDTC  40  1       N          A       25        64
```

DPP

Table name

Distributed Processing Peripheral Table

Functional description

Table DPP data ll creates distrib uted processing peripheral (DPP) maintenance processes and provides terminal information, audit interval information, DPP download le information for the central control (CC), and scan circuit information for recording alarms.

Table DPP is used by the DMS-100 CC to de ne the following characteristics of the DPP data transmission device:

- maintenance interface port identi ers
- audit time interval
- DPP download le name
- scan point information for reporting DPP alarms

Table DPP speci es two terminal controller circuit card identi ers, established in table TERMDEV, to identify the DPP device to the CC.

The two terminal controllers speci ed in table DPP must be associated with different IOCs.

Table DPP also de nes the audit time interv al for the two maintenance interface links for a DPP. Both links are audited each time a period of inactivity occurs on the links greater than the audit interval speci ed in table DPP.

Table DPP provides the CC with the address of the DPP download le for use in the DPP download process (see “Special notes").

One dedicated DMS scan circuit is required to report DPP alarm status to the DMS. Table DPP identi es the follo wing information:

- the circuit number of the 0X10AA scan card used for reporting DPP unit alarms
- the number of the trunk module (maintenance trunk module [MTM] or of ce alarm unit [O AU]) on which the scan circuit resides
- the type of trunk module (MTM or OAU) on which the scan circuit resides.

DPP (continued)

The DPP alarms are connected from the DPP811A connector to the main distribution frame (MDF) and are connected from the MDF to scan points on the dedicated DPP scan card.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DPP .

Table DIRPOOL must be data lled after table DPP .

Table size

Each tuple in table DPP de nes an application of the DPP unit. Currently , AMA is the only application of the DPP unit, and only one DPP unit may be provisioned per of ce. Only one tuple is currently allo wed in table DPP.

If all tuples are deleted from table DPP, the DMS-100 maintenance processes for the DPP, including the DPP MAP level, are disabled. If the DPP MAP level is in use, tuples cannot be removed from table DPP.

Tuples can only be removed when the DPP MAP level is not in use.

Data ll

The following table lists data ll for table DPP .

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DPPKEY		AMA	*DPP index (application)* Enter the function of the distributed processing peripheral (DPP). Currently, AMA (automatic message accounting) is the only application.
DPPTERM1		alphanumeric (up to 8 characters)	*DPP terminal port one* Enter the first terminal port to which the DPP is connected. See table TERMDEV.
DPPTERM2		alphanumeric (up to 8 characters)	*DPP terminal port two* Enter the second terminal port to which the DPP is connected. See table TERMDEV.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DPPDNLD		alphanumeric (up to 8 characters)	*DPP download file* Enter the name of a DPP download file. See “Special notes".
DPPAUDIT		numeric	*DPP audit time* Enter, in minutes, the period of inactivity that occurs on the maintenance interface links before an audit is run. The recommended audit interval is from 3 to 5 min.
SCTMTYPE		MTM or OAU	*Scan circuit trunk module type* Enter the trunk module type. MTM (maintenance trunk module) or OAU (office alarm unit) are the only trunk modules on which a scan circuit can reside.
SCTMNO		0 to 2047	*Scan circuit trunk module number* Enter the trunk module numbers of the MTM or OAU on which the DPP scan circuit resides. These values must be provided by the operating company.
SCTMCTNO		0 to 29	*Scan circuit trunk module circuit number* Enter the circuit number (on the MTM or OAU) of the DPP scan circuit.
SCCARDCD		0X10AA	*Scan card code* Enter the card code of the card on which the scan circuit resides. The 0X10AA card is the only valid card code. This field is an administrative field.
XTRAALMS		Y or N	*Extra Alarms* Enter Y if the DPP dedicated scan card can detect low voltage, thermal A, and thermal B alarm conditions. Enter N if the DPP dedicated scan card cannot detect low voltage, thermal A, and thermal B alarm conditions. N is the default value.

DPP (continued)

Data ll e xample

The following example shows sample data ll for table DPP .

This tuple establishes the maintenance interface ports between the DMS-100 and one DPP unit, identi es the do wnload le for the DPP , and speci es the frequency of maintenance audits for the DPP by the DMS.

For alarm reporting, the tuples identify the trunk module (TM) type on which the dedicated scan circuit resides, the TM number of the MTM or OAU on which the scan circuit resides, the scan circuit number of the dedicated scan circuit, and the card code on which the scan circuit resides.

See NTX243AA documentation for information on data ll for other tables that must precede data ll for table DPP .

MAP display example for table DPP

```
DPPKEY DPPTERM1 DPPTERM2 DPPDNLD DPPAUDIT SCTMTYPE SCTMNO SCTMCTNO
 SCCARDCD XTRAALMS
_____________________________________________________________________

AMATPS  DPP1LNK1 DPP1LNK2 DPPA3A  3         MTM      2       2
  0X10AA  N
```

Supplementary information

This section provides information on data lling table DPP for speci c applications and product descriptive information related to table DPP.

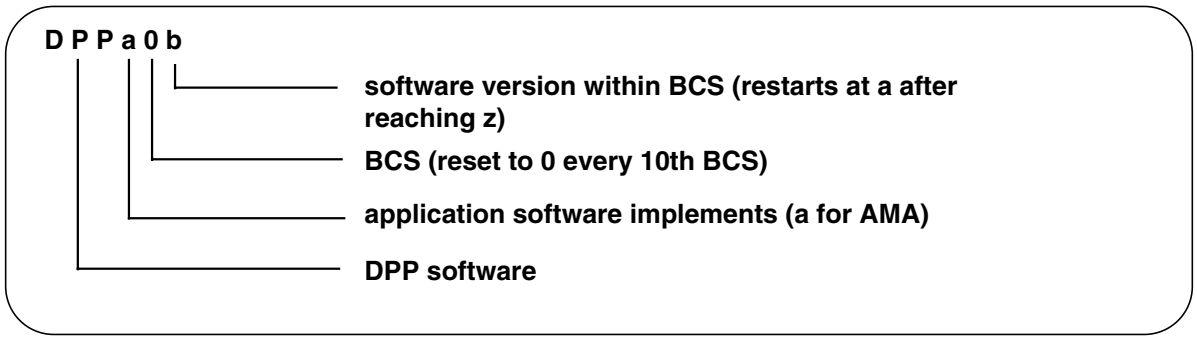
Special notes

Terminal data required by the CC exists in both table DPP and table TERMDEV. Since tuples may be altered or deleted from tables DPP and TERMDEV independently, it is extremely important never to delete or alter terminal data from table TERMDEV without deleting or altering the same data in table DPP.

A difference in terminal data in tables DPP and TERMDEV can cause serious, adverse effects on the function of the DPP maintenance interface.

The naming convention for DPP download les is sho wn in the following gure.

DPP download lenames



Prior to data lling eld DPPDNLD of table DPP , the device on which the download le is stored must be listed in the users directory. Listing the device lets the system know the address of the DPP download le.

One of the command interpreter (CI) commands shown in the following table can be used to list the le storage de vice:

CI commands to list le stora ge devices

Device	List command
DISK	CI: DSKUT; LISTVOL <device_name> ALL
Random Access Memory	CI: LISTSF ALL
TAPE	CI: LIST T<drive_no>

After listing the download storage device, the address of the download le is stored at DPP download by the CC. It can then be used for future DPP downloads.

After data ll, if the de vice on which the download le is stored becomes unavailable, or if the download le is mo ved from one device to another without re ecting the change in table DPP , the download process fails. Any changes made in the location of the download le must be re ected in table DPP.

Fields DPPDNLD and DPPAUDIT of table DPP are the only elds that can be changed after the tuple is data lled. If the audit interv al eld is changed, the new audit interval takes effect when the audit timer is reset, either after the

DPP (continued)

currently active audit timer expires or after the processing of all current requests has been completed.

Error messages

The following error messages can be generated while attempting to data ll table DPP. They indicate an error condition that prevents the current data ll from being accepted for some reason. Reasons for the errors and corrective actions are listed in the table below.

Error messages (Sheet 1 of 2)

Error message	Reason	Action
<user> MUST LEAVE MAP LEVEL BEFORE DATA CAN BE DELETED	The DPP MAP level is currently in use by <user>.	Wait for <user> to leave the DPP MAP level and try again.
TERMINALS MUST BE ON SEPARATE IOCS	The two terminal identifiers are either the same, or are on the same IOC.	Terminal identifiers located on separate IOCs must be used to provide hardware redundancy.
COULD NOT ADD CLLI	This error only occurs when table DPP is initially datafilled. If the tuple for the DPP scan circuit CLLI (DPPSC) does not exist in table CLLI, this error occurs and table DPP cannot be datafilled.	First, datafill table CLLI with DPPSC. This datafill normally occurs at loadbuild.
FAILED TO BIND SCAN DATA	The circuit datafilled for the DPP scan points is already in use somewhere else in the system.	Dedicate only unused circuits for the DPP.
INVALID SCAN CIRCUIT	The circuit datafilled for the DPP is not an analog circuit, or is not on a peripheral module (PM) known to the system.	Verify that data used for the scan circuit is valid. The circuit must reside on an existing MTM or OAU.

Error messages (Sheet 2 of 2)

Error message	Reason	Action
COULD NOT ADD MEMBER TO CLLI TABLE	The DPP scan circuit CLLI already exists for the DPP being added. This error condition does not occur unless table DPP is corrupted.	CLLI members are created when a DPP is added to table DPP. Each DPP has a unique CLLI member for the scan circuit assigned to its DPP. These members are deleted when the DPP is deleted from table DPP.
CHANGE TO CRUCIAL DATA NOT ALLOWED	Only the download file field and the audit invalid field can be changed. Also generated when a change to the port assignments or to the scan circuit assignment is attempted on a tuple in table DPP.	To change any other fields, delete the tuple and add again with the new data. Also, changing the port assignments is not allowed. The tuple must be deleted and added again to change the data.

Warning messages

The following warning messages can be generated while attempting to data ll table DPP. The user must be aware of conditions indicated in the warning messages. Reasons for the warning messages are listed in table Table , "Error messages" on page -359 below.

Error messages

Warning message	Reason
DNLD FILE NOT FOUND OR HAS BAD FORMAT TRY LISTING FILE DIRECTORY	The download file specified must exist in the user's directory at the time of datafill. If the file specified does not exist or is in a bad format, the tuple can succeed, but subsequent downloads fail.
DNLD FILE NOT CHANGED-OLD FILE WILL BE USED	A download file with the same name as the previous file was specified but was not found in the user's directory. The same information from the previous download file is used.
AUDIT DELAY MUST BE AT LEAST A MINUTE	The audit interval specified in field AUDTIME was less than 1 min. AUDTIME defaults to 1 min.

DPROFILE

Table name

Data Unit Pro le T able

Functional description

Table DPROFILE contains parameters that characterize a data unit (DU). The data in this table is used to support downloading of pro le information to DUs. The DU pro le captures data from service order input, table control input and dynamic DU input (the operating company is able to alter certain feature switch settings, such as the data rate).

The abbreviation DU is used to encompass other data access modules, such as the asynchronous interface line card (AILC), data above voice line card (DAVLC), and Meridian asynchronous data option (MADO).

The de ned set of parameters and the possible v alues of these parameters represent a superset. For each class of DU, that is, low-speed, modem-pool, or AILC, its pro le is a subset of the parameters, limited in both number and range. There is no prompting for elds for which there is only one allo wed value within the range.

The following table shows the data rates for synchronous and asynchronous transmission and the corresponding entries for table control.

If eld SYNC is set to Y (yes), the data rate is permitted. If eld SYNC is set to N (no), the data rate is not permitted.

Data rates for synchronous and asynchronous transmission (Sheet 1 of 2)

Data rate (bit/s)	Synchronous		Table control entry (field DATARATE)
50	N	Y	50
75	N	Y	75
110	N	Y	110
134.5	N	Y	134
150	N	Y	150
300	N	Y	300
600	N	Y	600
1200	Y	Y	1200

Data rates for synchronous and asynchronous transmission (Sheet 2 of 2)

Data rate (bit/s)	Synchronous		Table control entry (field DATARATE)
1800	N	Y	1800
2000	N	Y	2000
2400	Y	Y	2400
3600	Y	Y	3600
4800	Y	Y	4800
7200	Y	Y	7200
9600	Y	Y	9600
14400	Y	N	14400
19200	Y	Y	19200
38400	Y	N	38400
40800	Y	N	40800
48000	Y	N	48000
56000	Y	N	56000
64000	Y	N	64000

Data ll sequence and implications

The following tables must be data lled before table DPR OFILE.

- KSETINV
- RESINV
- KSETLINE

The entry in table DPROFILE must be deleted before attempting to delete the entries in tables KSETINV or RESINV.

Table size

Memory is automatically allocated for each DU.

A maximum of 32 768 DUs can be assigned.

DPROFILE (continued)

Data ll

The following table lists data ll for table DPR OFILE.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DPKEY		see subfield	*Data unit profile key* This field is the key to table DPROFILE and consists of subfield LEN.
	LEN	see subfields	*Line equipment number* This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. Refer to section “Common entry field LEN" for a complete description of field LEN and associated subfields. Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
CLASSVAR		see subfield	*Class of data unit variable area* This field consists of subfield CLASSDU.
	CLASSDU	see entries	*Class of data unit* Enter the data unit (DU) type and associated refinements. Each CLASSDU and its refinements must be separated by a blank space. Use as many records as required to complete the list of CLASSDU and associated refinements. If a CLASSDU is not wanted, then no input for that DU is required.
		AILC	AILC (asynchronous interface line card) and datafill refinements DOWNLOAD, DATARATE, CHARLEN, PARITY, KBDTPVAR, IDLETO, and DPOPTS.
		CCU	CCU (controller COAX unit) and datafill refinements DOWNLOAD and DPOPTS.

Note: Canada only

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			CMADO (continuous calling Meridian asynchronous data option) and datafill refinements DIGIT1, DIGIT2, DIGIT3, DIGIT4, and DELAY. DAVLC (data above voice line card) and datafill refinements DOWNLOAD, DATARATE, CHARLEN, PARITY, KBDTPVAR, and DPOPTS. HS (high-speed data unit) and datafill refinements DOWNLOAD, CONFIG, DATARATE, CLOCKSRC, DUPLEX, SACVAR, LOCALCTS, DELAYA, DELAYB, and DPOPTS. HSEXT (high-speed loop extended data unit) or and datafill refinements DOWNLOAD, DATARATE, CLOCKSRC, DUPLEX, EXTFACIL, SACVAR, and DPOPTS. (see note) LS (low-speed data unit) and datafill refinements DOWNLOAD, IDLETO, CONFIG, SYNCHVAR, DUPLEX, KEYBDVAR, SACVAR, LOCALCTS, DELAYA, DELAYB, and DPOPTS. LSEXT (low-speed extended data unit) and datafill refinements DOWNLOAD, DATARATE, CLOCKSRC, DUPLEX, EXTFACIL, SACVAR, and DPOPTS. (see note) MADO (Meridian asynchronous data option) and datafill refinements DOWNLOAD, DATARATE, CHARLEN, PARITY, AUTOMODEM, KBDTPVAR, and DPOPTS. MP (modem pool data unit) and datafill refinements DOWNLOAD, MIMIC, CONFIG, SYNCHVAR, DUPLEX, and DPOPTS.
Note: Canada only			

DPROFILE (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			MPDA (Meridian programmable data adaptor) and datafill refinements DOWNLOAD, DATARATE, CHARLEN, PARITY, HOTLINE, VLL, IDLETO, KBDTPVAR, and DPOPTS. OPEN (open) and datafill no refinements. TCU (terminal COAX unit) and datafill refinements DOWNLOAD, IDLETO, KBDTYP, and DPOPTS.
Note: Canada only			

DPROFILE data unit type AILC

Asynchronous interface line card

If the entry in sub eld CLASSDU is AILC, data ll re nements DOWNLOAD, DATARATE, CHARLEN, PARITY, KBDTPVAR, IDLETO, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPROFILE data unit type AILC.

Field descriptions for conditional data ll (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	DATARATE	110, 150, 300, 600, 1200, 2400, 4800, 9600, or 19200	*Data rate* Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CHARLEN	7 to 8	*Character length* Enter the number of bits in characters exchanged between the operating company's equipment and the DU. Enter 7 if the number is 7 bits + parity. Enter 8 if the number is 8 bits + no parity.

DPROFILE data unit type AILC (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PARITY	E, O, or N	*Parity treatment* Enter the code representing the type of parity treatment applied to data exchanged between the operating company's equipment and the DU. Enter E for even parity, O for odd parity, or N for no parity. If refinement CHARLEN is set to 7, enter E or O. If refinement CHARLEN is set to 8, enter N. Any entry outside the range indicated for this field is invalid.
	KBDTPVAR	see subfield	*Type of keyboard dialing variables* This refinement consists of subfield KBDTYP.
	KBDTYP	SYMB	*Type of keyboard dialing* Enter the code to select the required type of keyboard dialing (SYMB [symbolic]) and datafill refinement PROMPTS. This refinement is applicable only if keyboard dialing is required. Any entry outside the range indicated for this field is invalid.
	PROMPTS	Y or N	*Keyboard dialing prompts* Enter Y if keyboard dialing call progress prompt strings are required at the terminating data terminal equipment (DTE). Enter N to suppress the prompts at the terminating DTE.
	IDLETO	0 to 3	*Idle time-outs* Enter the code that selects the inactivity time out period. The call is released automatically if the inactivity timer expired. Enter 0 (zero) for no idle time-out, 1 for 15-min time-out, 2 for 30-min time-out and 3 for 60-min time-out.

DPROFILE data unit type AILC (continued)

Field descriptions for conditional data ll (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DPOPTS	ADAPTPRO ASERTDTR ATDCPI AUTOANS AUTOBAUD AUTOORIG DIALAN SPEEDRES	*Dialing profile option* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to the far-end DU. Enter ASERTDTR to force local data terminal ready on. Enter ATDCPI to enable the DU to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOBAUD to enable automatic detection of baud rate.
	DPOPT		Enter AUTOORIG if the DU is able to originate calls automatically. Enter DIALAN if the enhanced AILC is being configured for the DIALAN operation. Enter SPEEDRES to enable the Speed Restricted Calling feature.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type AILC.

This is an example of data ll for table DPROFILE with an AILC that operates at 9600 bit/s. Pro le do wnloading is allowed and option AUTOBAUD is enabled.

DPROFILE data unit type AILC (end)

MAP display example for table DPROFILE data unit type AILC

```
            DPKEY
                                                    CLASSVAR
_____________________________________________________________

HOST  00 0 03 03
AILC Y 9600 8 N SYMB N 0 (AUTOBAUD) $
```

Controller COAX unit

If the entry in sub eld CLASSDU, data ll re nements DO WNLOAD and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPROFILE data unit type CCU.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	DPOPTS	AUTOANS MINSYNC	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter AUTOANS if the automatic answer option is automatically assigned. Do not input any data for this option. Enter MINSYNC (minimum synchronization checking) to indicate that a call connected to the DU is taken down after a minimum time compression multiplexing (TCM) synchronization loss has occurred. The default value is 0 (zero) which is the default value of the active TCM synchronization debounce software. The DU and data line card (DLC) are able to handle short duration synchronization losses without dropping the call.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type CCU.

This is an example of data ll for table DPR OFILE with a CCU DU that operates synchronously at 56 kbit/s. Pro le downloading is allowed. Option AUTOANS is automatically assigned.

DPROFILE data unit type CCU (end)

MAP display example for table DPROFILE data unit type CCU

```
            DPKEY
                                                    CLASSVAR
_____________________________________________________________

HOST  00 0 03 02
CCU   Y (AUTOANS) $
```

Continuous calling Meridian asynchronous data option

If the entry in sub eld CLASSDU is CMADO, data ll re nements DIGIT1, DIGIT2, DIGIT3, DIGIT4, and DELAY as follows.

The CMADO DU is a NONRES test tool used only by Bell Northern Research (BNR) or Northern Telecom (NT) to generate traf c to and from a digital line module (DLM).

The CMADO is a Meridian asynchronous data option (MADO) containing continuous-calling rmw are and is activated by the receipt of a valid pro le. The pro le re nement for a CMADO includes only the four digits continuously dialed and the delay factor that serves as both the delay between calls and the call duration.

The pro le is sent down upon CMADO power-up, CMADO return-to-service (RTS), or RTS of the DLM unit serving the CMADO. Within approximately 30 s, the CMADO begins dialing the four-digit number received in the pro le.

Table IBNXLA must be data lled properly to translate and route the four digits to the desired EXTNs. After the speci ed delay period, the call is released. The CMADO then delays for the same period of time before originating the next call.

Data ll

The following table lists the data ll for table DPR OFILE data unit type CMADO.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIGIT1	0 to 9	*First digit* Enter the first of four digits to dial. Only digits 1 to 8 are recognized by the firmware. Digit 0 (zero) is treated as 1 and digit 9 is treated as 8.
	DIGIT2	0 to 9	*Second digit* Enter the second digit of four to dial. Only digits 0 (zero) to 7 are recognized by the firmware. Digits 8 and 9 are treated as 7.

DPROFILE data unit type CMADO (end)

Field descriptions for conditional data ll (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIGIT3	0 to 9	*Third digit* Enter the third of four digits to dial. Only digits 0 (zero) to 7 are recognized by the firmware. Digits 8 and 9 are treated as 7.
	DIGIT4	0 to 9	*Fourth digit* Enter the fourth of four digits to dial. Only digits 0 (zero) to 7 are recognized by the firmware. Digits 8 and 9 are treated as 7.
	DELAY	0 to 9	*Delay* Enter the time, in approximately 0.5-s intervals, allowed for the delay. In addition to serving as the delay period between successive calls, this entry serves as the call duration period.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type CMADO.

This is an example of data ll for table DPR OFILE with a CMADO DU that continuously outpulses the digits 8000 with a delay of 1 s.

MAP display example for table DPROFILE data unit type CMADO

```
              DPKEY
                                                    CLASSVAR
_____________________________________________________________

HOST   00 0 03 02
                                                CMADO 8 0 0 0 2
```

DPROFILE data unit type DAVLC

Data above voice line card

If the entry in sub eld CLASSDU is D AVLC, data ll re nements DOWNLOAD, DATARATE, CHARLEN, PARITY, KBDTPVAR, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type DAVLC.

Field descriptions for conditional data ll (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	DATARATE	110, 150, 300, 600, 1200, 2400, 4800, 9600, or 19200	*Data rate* Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CHARLEN	7 to 8	*Character length* Enter the number of bits in characters exchanged between the operating company's equipment and the DU. Enter 7 if the number is 7 bits + parity. Enter 8 if the number is 8 bits + no parity.

DPROFILE data unit type DAVLC (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PARITY	E, O, or N	*Parity treatment* Enter the code representing the type of parity treatment applied to data exchanged between the operating company's equipment and the DU. Enter E for even parity, O for odd parity, or N for no parity. If refinement CHARLEN is set to 7, enter E or O. If refinement CHARLEN is set to 8, enter N. Any entry outside the range indicated for this field is invalid.
	KBDTPVAR	see subfield	*Type of keyboard dialing variables* This refinement consists of subfield KBDTYP.
	KBDTYP	SYMB	*Type of keyboard dialing* Enter the code to select the required type of keyboard dialing (SYMB [symbolic]), and datafill refinement PROMPTS. This refinement is applicable only if keyboard dialing is required. Any entry outside the range indicated for this field is invalid.

DPROFILE data unit type DAVLC (continued)

Field descriptions for conditional data ll (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PROMPTS	Y or N	*Keyboard dialing prompts* Enter Y if keyboard dialing call progress prompt strings are required at the terminating data terminal equipment (DTE). Enter N to suppress these prompts at the terminating DTE.
	DPOPTS	ADAPTPRO ASERTDTR ATDCPI AUTOANS AUTOBAUD AUTOORIG SPEEDRES	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to that of the far end DU. Enter ASERTDTR to force local data terminal ready on. Enter ATDCPI to enable the DU to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS then sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOBAUD to enable automatic detection of baud rate. Enter AUTOORIG if the DU is able to originate calls automatically. Enter SPEEDRES to enable the Speed Restricted Calling feature.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type DAVLC.

This is an example of data ll for table DPR OFILE with a DAVLC DU that operates at 9600 bit/s.

DPROFILE data unit type DAVLC (end)

MAP display example for table DPROFILE data unit type DAVLC

```
            DPKEY
                                                    CLASSVAR
_____________________________________________________________

HOST  00 0 03 02
DAVLC Y 9600 8 N SYMB N (AUTOBAUD) $
```

DPROFILE data unit type HS

High-speed data unit

If the entry in sub eld CLASSDU is HS, data ll re nements DO WNLOAD, CONFIG, DATARATE, CLOCKSRC, DUPLEX, SACVAR, LOCALCTS, DELAYA, DELAYB, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type HS.

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	CONFIG	DCE or DTE	*Data access module configuration indicator* Enter DCE if the data access module is connected to a data communication equipment modem. Enter DTE if the data access module is connected to a data terminal equipment terminal.
	DATARATE	4800056000or64000	*Data rate* Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CLOCKSRC	E or I	*Clocking source* Enter E if the clocking is derived externally from the operating company's equipment. Enter I if the DU derives its clocking source for data transmission internally.
	DUPLEX	F or H	*Full or half duplex* Enter F for full-duplex data communication or H for half-duplex communication.

DPROFILE data unit type HS (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SACVAR	see subfield	*Synchronous auto calling variables* This refinement consists of subfield SAC.
	SAC	Y or N	*Synchronous auto calling* Enter Y to activate the synchronous auto calling feature on the DU and datafill refinement SACMODE. Otherwise, enter N and go to refinement LOCALCTS.
	SACMODE	BIT or CHAR	*Synchronous auto calling mode* If subfield SAC is set to Y, datafill this refinement. Enter the transmission format mode as character oriented (CHAR) or bit oriented (BIT) sequence.
	LOCALCTS	Y or N	*Local clear to send delay* Enter N. This field is for future use.
	DELAYA	Y or N	*Clear to send delay A* Enter N. This field is for future use.
	DELAYB	Y or N	*Clear to send delay B* Enter N. This field is for future use.

DPROFILE data unit type HS (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DPOPTS	ADAPTPRO ASERTCD ASERTDTR ASERTRTS ATDCPI AUTOANS AUTOORIG DYNINPUT ECHO RESTARTS SPEEDRES MINSYNC	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to that of the far end DU. Enter ASERTCD if the CD lead is asserted. Enter ASERTDTR to force local data terminal ready on. Enter ASERTRTS to force local request to send on. Enter ATDCPI to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch then sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOORIG if the DU is able to originate calls automatically. Enter DYNINPUT if the DU allows dynamic input, that is, the operating company can alter certain feature switch settings.

DPROFILE data unit type HS (end)

Field descriptions for conditional data ll (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DPOPTS (continued)		Enter ECHO if the DU is required to echo characters back to the operating company's equipment. Enter RESTARTS to enable restarts in the inband data communications protocol. This option is only applicable to high-speed DUs. Enter SPEEDRES to enable the Speed Restricted Calling Feature. Enter MINSYNC to indicate that a call connected to the DU is taken down after a minimum time compression multiplexing (TCM) synchronization loss has occurred. The default time is 0 (zero) which is the default value of the active TCM synchronization debounce software. The DU and data line card (DLC) can handle short duration synchronization losses without dropping the call.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type HS.

This is an example of data ll for table DPR OFILE with an HS DU that operates synchronously at 56 bit/s. Pro le do wnloading is allowed. Feature SAC is not assigned. Options AUTOANS, ADAPTPRO, and RESTARTS are assigned.

MAP display example for table DPROFILE data unit type HS

```
           DPKEY
                                                          CLASSVAR
_____________________________________________________________________

HOST  00 0 03 02
HS Y DTE 56000 I F Y CHAR N N N (AUTOANS) (ADAPTPRO) (RESTARTS) $
```

DPROFILE data unit type HSEXT or LSEXT

High-speed loop extended data unit or low-speed extended data unit

If the entry in sub eld CLASSDU is HSEXT or LSEXT , data ll re nements DOWNLOAD, DATARATE, CLOCKSRC, DUPLEX, EXTFACIL, SACVAR, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type HSEXT or LSEXT.

Field descriptions for conditional data ll (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	DATARATE	19000 48000 56000 or 64000	*Data rate* Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CLOCKSRC	E or I	*Clocking source* Enter E if the clocking is derived externally from the operating company's equipment. Enter I if the DU derives its clocking source for data transmission internally.
	DUPLEX	F or H	*Full or half duplex* Enter F for full-duplex data communication or H for half-duplex communication.
	EXTFACIL	see subfield	*Loop extension facility* This refinement consists of subfield EXTYPE.

DPROFILE data unit type HSEXT or LSEXT (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	EXTYPE	MODEM OTHER or REPEATER	*Loop extension facility type* Enter the type of loop extension facility employed. If the facility is REPEATER, datafill refinements NRRUPRES and FRRUPRES. If the facility is MODEM or OTHER, go to refinement SACVAR.
	NRRUPRES	Y or N	*Near repeater unit* If the entry in subfield NRRUPRES is REPEATER, datafill this refinement. If a near repeater unit is employed in the loop extension facility, enter Y. Otherwise, enter N.
	FRRUPRES	Y or N	*Far repeater unit* If the entry in subfield NRRUPRES is REPEATER, datafill this refinement. If a far repeater unit is employed in the loop extension facility, enter Y. Otherwise, enter N.
	SACVAR	see subfield	*Synchronous auto calling variables* This refinement consists of subfield SAC.
	SAC	Y or N	*Synchronous auto calling* Enter Y to activate the synchronous auto calling feature on the DU and datafill refinement SACMODE. Otherwise, enter N and go to refinement DPOPTS.
	SACMODE	BIT or CHAR	*Synchronous auto calling mode* If the entry in subfield SAC is Y, datafill this refinement. Enter the transmission format mode as character oriented (CHAR) or bit oriented (BIT) sequence.

DPROFILE data unit type HSEXT or LSEXT (continued)

Field descriptions for conditional data ll (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DPOPTS	ADAPTPRO ASERTCD ASERTDTR ASERTRTS ATDCPI AUTOANS AUTOORIG DYNINPUT ECHO RESTARTS SPEEDRES	*Dialing profile options* Enter ADAPTPRO to allow the DU to adapt its profile to that of the far end DU. Enter ASERTCD if the CD lead is asserted. Enter ASERTDTR to force local data terminal ready on. Enter ASERTRTS to force local request to send on. Enter ATDCPI to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch then sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOORIG if the DU is able to originate calls automatically. Enter DYNINPUT if the DU allows dynamic input, that is, the operating company can alter certain feature switch settings. Enter ECHO if the DU is required to echo characters back to the operating company's equipment.
	DPOPTS (continued)		Enter RESTARTS to enable restarts in the inband data communications protocol. This option is only applicable to high-speed DUs. Enter SPEEDRES to enable the Speed Restricted Calling feature.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type HSEXT or LSEXT.

DPROFILE data unit type HSEXT or LSEXT (end)

This is an example of data ll for table DPR OFILE with an HSEXT DU that operates synchronously at 56 kbit/s. Pro le downloading is allowed. The type of loop extension facility employed is REPEATER and far and near repeater units are employed in the loop extension facility. This unit has feature SAC, with character transmission format and the CD lead enabled. Options AUTOANS, ADAPTPRO, and RESTARTS are assigned.

MAP display example for table DPROFILE data unit type HSEXT or LSEXT

```
           DPKEY
                                                          CLASSVAR
_____________________________________________________________________________

HOST  00 0 03 02
HSEXT Y 56000 I F REPEATER Y Y Y CHAR (AUTOANS) (ADAPTPRO) (RESTARTS) $
```

DPROFILE data unit type LS

Low-speed data unit

If the entry in sub eld CLASSDU is LS, data ll re nements DO WNLOAD, IDLETO, CONFIG, SYNCHVAR, DUPLEX, KEYBDVAR, PROMPTS, SCVAR, LOCALCTS, DELAYA, DELAYB, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type LS.

Field descriptions for conditional data ll (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	IDLETO	0 to 3	*Idle time-out*Enter the code that selects the inactivity time out period. The call is released automatically if the inactivity timer expired. Enter 0 (zero) for no idle time-out, 1 for 15-min time-out, 2 for 30-min time-out and 3 for 60-min time-out.
	CONFIG	DCE or DTE	*Data access module configuration indicator* Enter DCE if the data access module is connected to a data communication equipment modem. Enter DTE if the data access module is connected to a data terminal equipment terminal.
	SYNCHVAR	see subfield	*Synchronous variable*T his subfield consists of subfield SYNCHRO.
	SYNCHRO	A or S	*Synchronous/asynchronous selector* Enter A for asynchronous transmission and datafill refinements DATARATE, CHARLEN, PARITY, and STOPBIT. Enter S for synchronous transmission and datafill refinements DATARATE and CLOCKSRC.

DPROFILE data unit type LS (continued)

Field descriptions for conditional data II (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DATARATE	300, 1200, 2400, 4800, 9600, or 19200	*Data rate* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CHARLEN	5 to 8	*Character length* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the number of bits in characters exchanged between the operating company's equipment and the DU.
	PARITY	E, O, or N	*Parity treatment* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the code representing the type of parity treatment applied to data exchanged between the operating company's equipment and the DU. Enter E for even parity, O for odd parity, or N for no parity. If refinement CHARLEN is set to 7, enter E or O. If refinement CHARLEN is set to 8, enter N. Any entry outside the range indicated for this field is invalid.
	STOPBIT	1 to 3	*Stop bit treatment* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the code representing the type of stop bit treatment applied to data exchanged between the operating company's equipment and the DU. Enter 1 for 1 stop bit, 2 for 2 stop bits or 3 for 1.5 stop bits.

DPROFILE data unit type LS (continued)

Field descriptions for conditional data II (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DATARATE	1200, 2400, 4800, 9600, or 19200	*Data rate* If the entry in subfield SYNCHRO is S, datafill this refinement. Enter the speed at which the operating company's equipment can transmit and receive data. Entry 300 is not applicable. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CLOCKSRC	E or I	*Clocking source* If the entry in subfield SYNCHRO is S, datafill this refinement. Enter E if the clocking is derived externally from the operating company's equipment. Enter I if the DU derives its clocking source for data transmission internally.
	DUPLEX	F or H	*Full or half duplex* Enter F for full-duplex data communication or H for half-duplex communication.
	KEYBDVAR	see subfield	*Keyboard dialing variable* This refinement consists of subfield KEYBDIAL.
	KEYBDIAL	Y or N	*Keyboard dialing* Enter Y if the DU is required to allow keyboard dialing and datafill refinement KBDTYP. Otherwise, enter N and go to refinement SACVAR.
	KBDTYP	SYMB	*Type of keyboard dialing* If the entry in subfield KEYBDIAL is Y, datafill this refinement. Enter the code SYMB which selects the required type of keyboard dialing. Any entry outside the range indicated for this field is invalid.

DPROFILE data unit type LS (continued)

Field descriptions for conditional data II (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	PROMPTS	Y or N	*Keyboard dialing prompts* If the entry in subfield KEYBDIAL is Y, datafill this refinement. Enter Y if keyboard dialing call progress prompt strings are required at the terminating data terminal equipment (DTE). Enter N to suppress the prompts at the terminating DTE.
	SACVAR	see subfield	*Synchronous auto calling variables* This refinement consists of subfield SAC.
	SAC	Y or N	*Synchronous auto calling* Enter Y to activate the synchronous auto calling feature on the DU and datafill refinement SACMODE. Otherwise, enter N and go to refinement LOCALCTS.
	SACMODE	BIT or CHAR	*Synchronous auto calling mode* If the entry in subfield SAC is Y, datafill this refinement. Enter the transmission format mode as character oriented (CHAR) or bit oriented (BIT) sequence.
	LOCALCTS	Y or N	*Local clear to send delay* If the mode of operation for the clear to send (CTS) delay is local, enter Y. If the mode of operation for the CTS delay is end to end, enter N.
	DELAYA	Y or N	*Clear to send delay A* If the mode of operation for the CTS delay is local and the delay timer value is 30 ms or 60 ms, enter Y. If the mode of operation for the CTS delay is end-to-end and the delay timer value is 50 ms or 150 ms, enter Y. If the delay timer value is 0 (zero) (actual value is approximately 10 ms) or 45 ms, enter N. If the delay timer value is approximately 10 ms to 20 ms (no time delay) or 100 ms, enter N.

DPROFILE data unit type LS (continued)

Field descriptions for conditional data II (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DELAYB	Y or N	*Clear to send delay B* If the mode of operation for the CTS delay is local and the delay timer value is 45 ms or 60 ms, enter Y. If the mode of operation for the CTS delay is end-to-end and the delay timer value is 100 ms or 150 ms, enter Y. If the mode of operation for the CTS delay is end-to-end and the delay timer value is 0 (zero) (actual value is approximately 10 ms) or 30 ms, enter N. If the delay timer value is approximately 10 ms to 20 ms (no time delay) or 50 ms, enter N.

DPROFILE data unit type LS (continued)

Field descriptions for conditional data II (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DPOPTS	ADAPTPRO ASERTCD ASERTDTR ASERTRTS ATDCPI AUTOANS AUTOORIG DYNINPUT ECHO RESTARTS SPEEDRES MINSYNC	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to that of the far end DU. Enter ASERTCD if the CD lead is asserted. Enter ASERTDTR to force local data terminal ready on. Enter ASERTRTS to force local request to send on. Enter ATDCPI to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch then sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOORIG if the DU is able to originate calls automatically. Enter DYNINPUT if the DU allows dynamic input, that is, the operating company can alter certain feature switch settings.

DPROFILE data unit type LS (continued)

Field descriptions for conditional data ll (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DPOPTS (continued)		Enter ECHO if the DU is required to echo characters back to the operating company's equipment. Enter RESTARTS to enable restarts in the inband data communications protocol. This option is only applicable to high-speed DUs. Enter SPEEDRES to enable the Speed Restricted Calling feature. Enter MINSYNC to indicate that a call connected to the DU is taken down after a minimum time compression multiplexing (TCM) synchronization loss has occurred. The default time is 0 (zero) which is the default value of the active TCM synchronization debounce software. The DU and data line card (DLC) can handle short duration synchronization losses without dropping the call.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type LS.

In this example an LS DU that operates asynchronously and autobauding (option AUTOBAUD) with symbolic keyboard dialing and call progress prompts appearing at the terminator. DTR (option ASERTDTR) has been asserted. Pro le do wnloading is allowed. Feature SAC is active, having HDLC (BIT) transmission format; the asserted CD lead is used, the RTS/CTS is local, and the delay is 0 ms (actual delay is approximately 10 ms).

DPROFILE data unit type LS (end)

MAP display example for table DPROFILE data unit type LS

```
          DPKEY
                                                          CLASSVAR
_____________________________________________________________________________

HOST  00 0 03 02
LS Y 2 DTE A 9600 8 N 1 F Y SYMB Y Y CHAR N N N (ASERTDTR) (AUTOBAUD)
(ASERTCD) $
```

DPROFILE data unit type MADO

Meridian asynchronous data option

If the entry in sub eld CLASSDU is MADO, data ll re nements DOWNLOAD, DATARATE, CHARLEN, PARITY, AUTOMODEM, KBDTPVAR, PROMPTS, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type MADO.

Field descriptions for conditional data ll (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	DATARATE	110, 150, 300, 600, 1200, 2400, 4800, 9600, or 19200	*Data rate* Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CHARLEN	7 to 8	*Character length* Enter the number of bits in characters exchanged between the operating company's equipment and the DU. Enter 7 if the number is 7 bits + parity. Enter 8 if the number is 8 bits + no parity.
	PARITY	E, O, or N	*Parity treatment* Enter the code representing the type of parity treatment applied to data exchanged between the operating company's equipment and the DU. Enter E for even parity, O for odd parity, or N for no parity. If refinement CHARLEN is set to 7, enter E or O. If refinement CHARLEN is set to 8, enter N. Any entry outside the range indicated for this field is invalid.
	AUTOMODEM	Y or N	*Automatic modem insertion* Enter Y if automatic modem insertion is required. Otherwise, enter N.

DPROFILE data unit type MADO (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	KBDTPVAR	see subfield	*Type of keyboard dialing variables* This refinement consists of subfield KBDTYP.
	KBDTYP	SYMB	*Type of keyboard dialing* Enter the code to select the required type of keyboard dialing (SYMB [symbolic]) and datafill refinement PROMPTS. This refinement is applicable only if keyboard dialing is required. Any entry outside the range indicated for this field is invalid.

DPROFILE data unit type MADO (continued)

Field descriptions for conditional data ll (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PROMPTS	Y or N	*Keyboard dialing prompts* Enter Y if keyboard dialing call progress prompt strings are required at the terminating data terminal equipment (DTE). Enter N to suppress the prompts at the terminating DTE.
	DPOPTS	ADAPTPRO ASERTDTR ATDCPI AUTOANS AUTOORIG AUTOBAUD SPEEDRES	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to that of the far end DU. Enter ASERTDTR to force local data terminal ready on. Enter ATDCPI to enable the DU to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch then sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to automatically answer calls. Enter AUTOORIG if the DU is able to automatically originate calls. Enter AUTOBAUD to enable automatic detection of baud rate. Enter SPEEDRES to enable the Speed Restricted Calling feature.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type MADO.

This is an example of data ll for table DPROFILE with a MADO that operates at 9600 bit/s. Pro le do wnloading is allowed. Option AUTOBAUD is enabled.

DPROFILE data unit type MADO (end)

MAP display example for table DPROFILE data unit type MADO

```
           DPKEY
                                                        CLASSVAR
_____________________________________________________________

HOST  00 0 03 02
MADO Y 9600 8 N N SYMB N (AUTOBAUD) $
```

DPROFILE data unit type MP

Modem pool data unit

If the entry in sub eld CLASSDU is MP , data ll re nements DO WNLOAD, MIMIC, CONFIG, SYNCHVAR, DUPLEX, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type MP.

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	MIMIC	LI, LN, PI, or PN	*Mode indicator/mode indicator common control* Enter the code for control on the MI/MIC leads. Enter LI for level inverted, LN for level normal, PI for pulse inverted, or PN for pulse normal.
	CONFIG	DCE or DTE	*Data access module configuration indicator* Enter DCE if the data access module is connected to a data communication equipment modem. Enter DTE if the data access module is connected to a data terminal equipment terminal.
	SYNCHVAR	see subfield	*Synchronous selector variable* This refinement consists of subfield SYNCHRO.
	SYNCHRO	A or S	*Synchronous/asynchronous selector* Enter A for asynchronous transmission and datafill refinements DATARATE, CHARLEN, PARITY, and STOPBIT. Enter S for synchronous transmission and datafill refinement DATARATE and CLOCKSRC.

DPROFILE data unit type MP (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DATARATE	300, 1200, 2400, 4800, 9600, or 19200	*Data rate* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CHARLEN	5 to 8	*Character length* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the number of bits in characters exchanged between the operating company's equipment and the DU.
	PARITY	E, O, or N	*Parity treatment* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the code representing the type of parity treatment applied to data exchanged between the operating company's equipment and the DU. Enter E for even parity, O for odd parity, or N for no parity. If refinement CHARLEN is set to 7, enter E or O. If refinement CHARLEN is set to 8, enter N. Any entry outside the range indicated for this field is invalid.
	STOPBIT	1 to 3	*Stop bit treatment* If the entry in subfield SYNCHRO is A, datafill this refinement. Enter the code representing the type of stop bit treatment applied to data exchanged between the operating company's equipment and the DU. Enter 1 for 1 stop bit, 2 for 2 stop bits or 3 for 1.5 stop bits.

DPROFILE data unit type MP (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DATARATE	200, 2400, 4800, 9600, or 19200	*Data rate* If the entry in subfield SYNCHRO is S, datafill this refinement. Enter the speed at which the operating company's equipment can transmit and receive data. 300 is not applicable. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CLOCKSRC	E or I	*Clocking source* If the entry in subfield SYNCHRO is S, datafill this refinement. Enter E if the clocking is derived externally from the operating company's equipment. Enter I if the DU derives its clocking source for data transmission internally.

DPROFILE data unit type MP (continued)

Field descriptions for conditional data ll (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DUPLEX	F or H	*Full or half duplex* Enter F for full-duplex data communication or H for half-duplex communication.
	DPOPTS	ADAPTPRO ASERTDTR ASERTRTS AUTOANS AUTOORIG DYNINPUT ECHO	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to that of the far end DU. Enter ASERTDTR to force local data terminal ready on. Enter ASERTRTS to force local request to send on. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOORIG if the DU is able to originate calls automatically. Enter DYNINPUT if the DU allows dynamic input, that is, if the operating company can alter certain feature switch settings. Enter ECHO if the DU is required to echo characters back to the operating company's equipment.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type MP.

This is an example of data ll for table DPR OFILE with an MP DU that operates asynchronously at 1200 bit/s and PULSE NORMAL control for MI/MIC leads is required. Pro le downloading is allowed. Option ECHO is assigned.

DPROFILE data unit type MP (end)

MAP display example for table DPROFILE data unit type MP

```
          DPKEY
                                                    CLASSVAR
_____________________________________________________________

HOST  00 0 03 02
MP Y PN DCE A 1200 8 N 1 F (ECHO) $
```

DPROFILE data unit type MPDA

Meridian programmable data adaptor

If the entry in sub eld CLASSDU is MPD A, data ll re nements DOWNLOAD, DATARATE, CHARLEN, PARITY, HOTLINE, VLL, IDLETO, KBDTPVAR, PROMPTS, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPR OFILE data unit type MPDA.

Field descriptions for conditional data ll (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	DATARATE	110, 150, 300, 600, 1200, 2400, 4800, 9600, or 19200	*Data rate* Enter the speed at which the operating company's equipment can transmit and receive data. ***Note:*** There are different ranges of speed depending upon synchronization or operation.
	CHARLEN	7 to 8	*Character length* Enter the number of bits in characters exchanged between the operating company's equipment and the DU. Enter 7 if the number is 7 bits + parity. Enter 8 if the number is 8 bits + no parity. Any entry outside the range indicated for this field is invalid.

DPROFILE data unit type MPDA (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PARITY	E, O, or N	*Parity treatment* Enter the code representing the type of parity treatment applied to data exchanged between the operating company's equipment and the DU. Enter E for even parity, O for odd parity, or N for no parity. If refinement CHARLEN is set to 7, enter E or O. If refinement CHARLEN is set to 8, enter N. Any entry outside the range indicated for this field is invalid.
	HOTLINE	Y or N	*Hotline* Enter Y if the MPDA is used in the hotline mode. Otherwise, enter N.
	VLL	Y or N	*Virtual leased line* Enter Y if the MPDA is used as a virtual leased line. Otherwise, enter N.
	IDLETO	0 to 3	*Idle time-outs* Enter the code that selects the inactivity time out period. The call is released automatically if the inactivity timer expired. Enter 0 (zero) for no idle time-out, 1 for 15-min time-out, 2 for 30-min time-out and 3 for 60-min time-out.
	KBDTPVAR	see subfield	*Type of keyboard dialing variables* This refinement consists of subfield KBDTYP.
	KBDTYP	SYMB	*Type of keyboard dialing* Enter the code to select the required type of keyboard dialing (SYMB [symbolic]) and datafill refinement PROMPTS. This refinement is applicable only if keyboard dialing is required. Any entry outside the range indicated for this field is invalid.

DPROFILE data unit type MPDA (continued)

Field descriptions for conditional data ll (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PROMPTS	Y or N	*Keyboard dialing prompts* Enter Y if keyboard dialing call progress prompt strings are required at the terminating data terminal equipment (DTE). Enter N to suppress the prompts at the terminating DTE.
	DPOPTS	ADAPTPRO ASERTDTR ATDCPI AUTOANS AUTOBAUD AUTOORIG DIALAN SPEEDRES	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ADAPTPRO to allow the DU to adapt its profile to the far end DU. Enter ASERTDTR to force local data terminal ready on. Enter ATDCPI to enable the DU to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch sends call progress indication messages back to the originating DU. Enter AUTOANS if the DU is able to answer calls automatically. Enter AUTOBAUD to enable automatic detection of baud rate. Enter AUTOORIG if the DU is able to originate calls automatically. Enter DIALAN if the enhanced AILC is being configured for the DIALAN operation. Enter SPEEDRES to enable the Speed Restricted Calling feature.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type MPDA.

This is an example of data ll for table DPR OFILE with an MPDA that operates at 19 200 bit/s. Pro le downloading is allowed. Option AUTOBAUD is enabled.

DPROFILE data unit type MPDA (end)

MAP display example for table DPROFILE data unit type MPDA

```
            DPKEY
                                                        CLASSVAR
_____________________________________________________________

HOST  00 0 03 02
MPDA Y 19200 8 N N N 1 SYMB Y (AUTOBAUD) $
```

DPROFILE data unit type TCU

Terminal COAX unit

If the entry in sub eld CLASSDU is TCU, data ll re nements DOWNLOAD, IDLETO, KBDTYP, and DPOPTS as follows.

Data ll

The following table lists the data ll for table DPROFILE data unit type TCU.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DOWNLOAD	Y or N	*Profile download* Enter Y if profile downloading is allowed. Otherwise, enter N.
	IDLETO	0 to 3	*Idle time-outs* Enter the code that selects the inactivity time out period. The call is released automatically if the inactivity timer expired. Enter 0 (zero) for no idle time-out, 1 for 15-min time-out, 2 for 30-min time-out and 3 for 60-min time-out.
	KBDTPVAR	see subfield	*Type of keyboard dialing variables*This refinement consists of subfield KBDTYP.

DPROFILE data unit type TCU (continued)

Field descriptions for conditional data ll (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	KBDTYP	SYMB	*Type of keyboard dialing* Enter the code to select the required type of keyboard dialing (SYMB [symbolic]). This refinement is applicable only if keyboard dialing is required. Any entry outside the range indicated for this field is invalid.
	DPOPTS	ATDCPI AUTOORIG MINSYNC	*Dialing profile options* Enter up to 14 options. If less than 14 options are required, end the list with a $ (dollar sign). Enter ATDCPI to enable the DU to connect an audio tone detector (ATD) circuit into the call path during outgoing interswitch calls. The ATD searches for call progress tones returning from the network and notifies the DMS switch. The originating DMS switch sends call progress indication messages back to the originating DU. Enter AUTOORIG if the DU is able to originate calls automatically. Enter MINSYNC to indicate that a call connected to the DU is taken down after a minimum time compression multiplexing (TCM) synchronization loss has occurred. The default time is 0 (zero) which is the default value of the active TCM synchronization debounce software. The DU and data line card (DLC) can handle short duration synchronization losses without dropping the call.

Data ll e xample

The following example shows sample data ll for table DPR OFILE data unit type TCU.

This is an example of data ll for table DPR OFILE with a COAX DU that operates synchronously at 56 kbit/s with symbolic keyboard dialing and call progress prompts. Pro le do wnloading is provided. Option AUTOORIG is assigned.

DPROFILE data unit type TCU (end)

MAP display example for table DPROFILE data unit type TCU

```
            DPKEY
                                                          CLASSVAR
_____________________________________________________________________

HOST  00 0 00 00
                                      TCU Y 1 SYMB (AUTOORIG) $
```

DPTRKMEM

ATTENTION
This table applies to new or modified content for SN07 (DMS) that is valid through the current release.

Provisioning DPTRKMEM trunks dynamically

Table Dynamic Packet Trunk Member Provisioning (DPTRKMEM) is used to provision BICC and SIP-T trunks dynamically for both the ATM and IP network. For BICC, Table DPTRKMEM provides a means to associate a trunk group CLLI with ranges of external trunk names (EXTRKNM) and circuit identification codes (CIC). For SIP-T, Table DPTRKMEM provides a means to associate a trunk group CLLI with ranges of external trunk names (EXTRKNM).defines.

This table provides an efficient logical interface by allowing the customer to provision DPT trunk group members without manually datafilling Table TRKMEM and Table C7TRKMEM one member at a time. Table DPTRKMEM allows the customer to assign a CIC range associated with an EXTRKNM range whereby the range determines the number of trunk members in the group.

When a tuple is datafilled into DPTRKMEM, a logical TID (or Convener TID) is allocated for each member that is included in the tuple. The LTIDs will serve as a substitute for TIDs that are no longer defined by provisioning of Table TRKMEM. Each member is automatically added to Table TRKMEM with the member info containing the logical TID and LDPT PM_TYPE. If the signaling selector is BICC, then each member is also automatically added to Table C7TRKMEM.

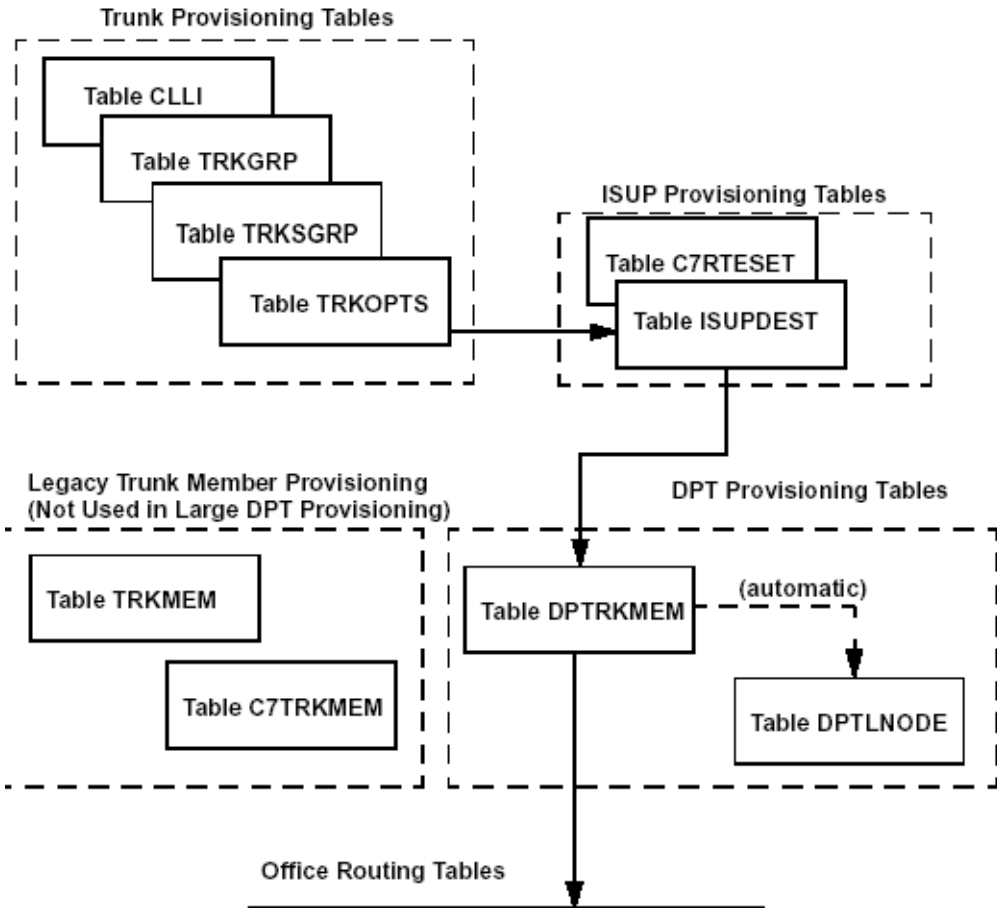
Note: The DPT tuples added to tables TRKMEM and C7TRKMEM are hidden and are not displayed. These DPT tuples need not be displayed as they are already represented in table DPTRKMEM in range form and only would be administratively cumbersome.

When a tuple is deleted from DPTRKMEM, the members are removed from Table TRKMEM (for BICC and SIP-T) and C7TRKMEM (for BICC) automatically.

When changing a tuple in Table DPTRKMEM, the end user may change one or more ranges, but there must be at least one range present in the tuple for the change to succeed.

Figure 1 shows DPTRKMEM integration in the DMS with respect to Dynamic Packet Trunking Provisioning.

Figure 1 DPTRKMEM integration



Note: The tables TRKMEM and C7TRKMEM are not visible to the user.

Datafill sequence and implications

The datafill order is as follows:

- CLLI
- TRKGRP
- TRKSGRP
- ISUPDEST
  Required only for BICC DPT trunks. Not datafilled for SIP-T DPT trunks

- TRKOPTS
- DPTRKMEM

Table size

0 to 8192 tuples

Datafill

The following table lists datafill for table DPTRKMEM.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DPTRKKEY	DPTRKMEM_KEY	CLLI	This defines the common language name.
RANGEINF	DPT_RANGE_AREA	Multiple with SIGSEL {ISUP,BICC,SIPT} Refinements: {BICC} multiple with RANGEINFO vector of up to 4 multiples with START_CIC vector of up to 10 digits END_CIC vector of up to 10 digits Otherwise NIL_RANGE_INFO_TYPE	RANGEINFO is datafillable only for BICC DPT trunks. Up to 4 RANGEINFO entries are allowed per tuple. At least one RANGEINFO entry must be present. A total of up to 65535 CICs can be datafilled in up to 4 RANGEINFO entries.
MAXCALLS	TEN_DIGIT_REGISTER	Vector of up to 10 digits	This field indicates the maximum number of simultaneous calls allowed on the DPT trunkgroup. For BICC DPT trunks, the MAXCALLS value is calculated automatically by the table control system as the number of CICs specified in the RANGEINFO entries. Any value entered manually is ignored. For SIP-T DPT trunks, a MAXCALLS of up to 262144 can be datafilled.

Datafill example

The tuples contain the following:

- The first tuple contains a SIP-T DPT trunk with a MAXCALLS value of 6.
- The second tuple contains a SIP-T DPT trunk with a MAXCALLS value of 262144, which is the maximum allowed value for a SIP-T DPT trunk.
- The third tuple contains a BICC DPT trunk with a total of 40001 CICs specified in 4 ranges. Accordingly the MAXCALLS field has been set to 40001 by the table control system.
- The fourth tuple contains a BICC DPT trunk with a single CIC. The CIC value of 429967295 is the maximum value allowed by the system. The MAXCALLS field has been set to 1 by the table control system.

Note 1: The total number of DPT CICs allowed in the table is 650,000. The total number of DPT CICs is determined by adding the total number of DPT CICs in each range in every tuple in table DPTRKMEM.

Note 2: When a tuple is added or changed in table DPTRKMEM, the ranges in that tuple are sorted by START_CIC and displayed in that same START_CIC order, irrespective of the order in which they were entered.

The following example shows sample datafill for table DPTRKMEM.

MAP display example for table DPTRKMEM

```
DPTRKEY                 RANGEINF                                MAXCALLS
-------------------------------------------------------------------------
VRDN_MCS80              SIPT                                    6
VRDN_MCS90              SIPT                                    262144
CS2K50TT2SIPCHL         BICC (10000 20000) (20001 30000)
                             (30001 40000) (40001 50000)$       40001
CS2K50TT3SIPCHL         BICC (429967295 429967295)$             1
```

Error messages

The following error messages apply to table DPTRKMEM.

Error messages for table DPTRKMEM for tuple ADD checks

Error message	Explanation and action
`Trunk is not datafilled as DPT in Table TRKOPTS`	The DPT group being added to DPTRKMEM must first be provisioned in Table TRKOPTS with the application type set to DPT. This error message is displayed, and the ADD tuple is rejected, if this CLLI is not present with the DPT application type.
`Trunk has no routeset datafilled in ISUPDEST`	Before a DPT group can be added to table DPTRKMEM, the routeset must be provisioned in Table ISUPDEST. This error message is displayed, and the ADD tuple is rejected, if the routeset is not provisioned in table ISUPDEST for the CLLI and subgroup of the DPT group. This error message can be generated for BICC DPT trunks only.
`At least 1 RANGEINF must be supplied`	When adding a DPT tuple, at least one range must be entered. If a $ is entered, indicating no more ranges, and no range information has been entered, this error message is displayed, and the ADD tuple is rejected.
`CIC range contains invalid digits`	This error message is displayed, and the ADD tuple is rejected, if any of the digits entered in the digit string of the START_CIC or END_CIC are invalid. When entering the START_CIC or END_CIC, it is possible to input the DIGITs: N, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, B, C, D, E, or F. Of these DIGITs only 1,2,3,4,5,6,7,8,9, and 0 are valid digits for START_CIC and END_CIC.

Error messages for table DPTRKMEM for tuple ADD checks

Error message	Explanation and action
CIC exceeds maximum value of 4,294,967,295	This error message is displayed, and the ADD tuple is rejected, if a value 10 digit value is entered and is greater than 4,294,967,295. The maximum value allowed for a START_CIC or END_CIC is 4,294,967,295. Since 10 digits can be entered for a START_CIC or END_CIC, it is possible to input a value greater than 4,294,967,295.
`START_CIC must be less than or equal to END_CIC`	This message is displayed, and the ADD tuple is rejected, If a START_CIC greater than the END_CIC is entered. For each range the START_CIC cannot be greater than the END_CIC.
Maximum number of CICs in a DPT group cannot exceed 65535	This message is displayed, and the ADD tuple is rejected, if the total number of CICs in the tuple exceeds 65535 in each of the two following cases. For each range the number of CICs in the range cannot exceed 65535. Also, if more than one range exist, the sum of the CICs in all ranges for the DPT group cannot exceed 65535.
Duplicate CIC exists in another range on this group	This error message is displayed, and the ADD tuple is rejected, if a CIC exists in more than one range in the tuple. If more than one range is being added in a tuple then a comparison of CICs in the ranges are made to ensure that no CIC exists in more than one range in the tuple.
`CIC in range is already provisioned on RS`	This error message is displayed, and the ADD tuple is rejected, if any CIC in a range being added is already present on the routeset. The CICs specified in the ranges being added must be checked to insure that they are not already provisioned against the routeset.

Error messages for table DPTRKMEM for tuple ADD checks

Error message	Explanation and action
`Maximum number of CICs in DPTRKMEM cannot exceed 650,000`	This error message is displayed, and the ADD tuple is rejected, if a tuple being added exceeds this 650,000 CIC limit. The total number of CICs allowed in table DPTRKMEM is 650,000. This number includes the sum of all the CICs in all CIC ranges in all tuples in table DPTRKMEM.
DPT subgroup to node registration failed	This message is displayed, and the ADD tuple is rejected, if subgroup data download to a peripheral node fails. When a DPT group is added to table DPTRKMEM, the group is associated with all DPT enabled nodes in the office. If an error occurs while trying to associate the group to the nodes a message is displayed at the MAP warning the craftsperson that the subgroup data was not added to the node for every node that failed. The proper course of action is to delete the DTP group from DPTRKMEM and try to add it in again. A DPT member should not be RTSed if its subgroup data is missing in any of the DPT enabled nodes. Call failures will occur every time a DPT member in this group is associated to a circuit in the node that failed to get the subgroup data.

Error messages for table DPTRKMEM for tuple DELETE checks

Error message	Explanation and action
`All ranges must be INB to delete tuple`	This message is displayed, and the DELETE tuple is rejected, when there is an attempt to delete a tuple in DPTRKMEM without each range state being set to INB. Before a tuple can be deleted from table DPTRKMEM each range in the tuple must be INB. This is performed in the MAPCI;MTC;TRKS;DPTRKS level.

Error messages for table DPTRKMEM for tuple CHANGE checks

Error message	Explanation and action
`At least 1 RANGEINF must be supplied`	This message is displayed, and the CHANGE tuple is rejected, if a $ is entered, indicating no more ranges, and no range information has been entered. When changing a DPT tuple, at least one range must be entered.
CIC range contains invalid digits	This message is displayed, and the CHANGE tuple is rejected, if any of the digits entered is invalid. During a tuple CHANGE the START_CIC and END_CIC of each range must include valid digits as described in the ADD command above.
CIC exceeds maximum value of 4,294,967,295	This message is displayed, and the CHANGE tuple is rejected, if a 10 digit value is entered that is greater than 4,294,967,295. During the CHANGE command, each START_CIC and END_CIC are checked to insure that they don't exceed the maximum value allowed which is 4,294,967,295. Since 10 digits can be entered for a START_CIC or END_CIC, it is possible to input a value greater than 4,294,967,295.
START_CIC must be less than or equal to END_CIC	This error message is displayed, and the CHANGE tuple is rejected, if a START_CIC greater than the END_CIC is entered. During a CHANGE, the START_CIC cannot be greater than the END_CIC.
Maximum number of CICs in a DPT group cannot exceed 65535	This error message is displayed, and the CHANGE tuple is rejected, for either case below, if the total number of CICs in the tuple exceeds 65535. During a CHANGE, each range is checked to ensure that the number of CICs in the range don't exceed 65535. Also, if more than one range exist, the sum of the CICs in all ranges for the DPT group being changed cannot exceed 65535.

Error messages for table DPTRKMEM for tuple CHANGE checks

Error message	Explanation and action
Duplicate CIC exists in another range on this group	This message is displayed, and the CHANGE tuple is rejected, if a CIC exists in more than one range. During a tuple CHANGE, a comparison of CICs in the ranges is made to ensure that no CIC exists in more than one range in the tuple.
CIC in range is already provisioned on RS	This message is displayed, and the CHANGE tuple is rejected, if any CIC in a range being changed is already present on the routeset. During a CHANGE, the CICs specified in the ranges being changed must be checked to insure that they are not already provisioned against the routeset.
Maximum number of CICs in DPTRKMEM cannot exceed 650,000	This message is displayed, and the CHANGE tuple is rejected, if a tuple being changed exceeds this 650,000 CIC limit. During a tuple CHANGE, the total number of CICs are checked to insure that the tuple change does not exceeded the 650,000. CIC limit.
Range state must be INB to allow change	This error message is displayed, and the CHANGE tuple is rejected, if the state of the range being changed is required to INB and is not INB. If a tuple CHANGE is attempted, where CICs are being added by adding a new range, any pre-existing range in the tuple that is unchanged does not need to be INB. If a tuple CHANGE is attempted where CICs are being added or removed from an existing range then the range being changed must be INB. If the CHANGE is eliminating an existing range during the CHANGE command then the range being eliminated by the CHANGE must be INB.

Table history

SN07 (DMS)

CR Q01083781 required that Table DPTRKMREM is documented and published in the appropriate NTPs.

Feature A59020226 redefines the entry requirements for RANGEINF, subfield DPT_RANGE_AREA.

SN02 (DMS)

Feature A59015739 introduced Table DPTRKMEM.

DQMODEM

Table name

Dial-up Autoquote Modem Table

Functional description

Table DQMODEM contains data related to the dial-up autoquote (DUAQ) modem con guration. Modems de ned in table DQMODEM are for the exclusive use of the DUAQ.

Modems available for the DUAQ application are placed in availability queues for retrieval. The number of DUAQ modem queues is determined by the different values that can be assigned to the DUAQ baud rate (eld DQBAUD).

Initially, modems are placed in the DUAQ modem queues in the same sequence in which they appear in table DQMODEM. However, as modems are allocated and deallocated, modem sequence becomes random.

If a request for a DUAQ modem is received and a modem is available, the request is lled immediately . If no modem is available, the user is informed accordingly.

For related information, refer to tables HOBICDEV and DMODEM.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DQMODEM.

When an NT3X02 card (Traf c Operator Position System [T OPS] control processor) is placed in service, all four circuits are added. When the NT3X02 card is removed, all four tuples associated with that card are deleted.

The following procedure represents the proper data ll sequence for table DQMODEM:

1. Add tuples to the common language location identi er (CLLI) as described in table CLLI.
2. Add trunk groups.
3. Add trunk group members.
4. Add tuples to table DQMODEM.

Table size

0 to 512 tuples

DQMODEM (continued)

Table size is determined by the entry in eld TRKGRSIZ for DQB300 in table CLLI. No default tuples are added at load build time.

Data ll

The following table lists data ll for table DQMODEM.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DQMODKEY		see subfields	Dial-up autoquote modem key. This field consists of subfields BAUD_RATE and MODEM_NO.
	BAUD_RATE	BD 300, BD 1200	Dial-up autoquote baud rate. Enter the preset modem baud rate at which the dial-up autoquote (DUAQ) modem transmits data.
	MODEM_NO	0 to 511	Dial-up autoquote modem number. Enter the number of the individual DUAQ modem within the baud rate category specified by subfield BAUD_RATE. This number identifies modems within each queue.
TMTYPE		MTM	Trunk module type. Together, the trunk module (TM) fields (TMTYPE, TMNO, and TMCKTNO) specify a modem position on the network for the given circuit. Enter the TM type. MTM (maintenance trunk module) is the only valid entry.
TMNO		0 to 2047	Trunk module number. Enter the TM number. Any entry outside the range indicated for this field is invalid.
TMCKTNO		0 to 29	Trunk module circuit number. Enter the number of the TM circuit. Any entry outside the range indicated for this field is invalid.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TKGRPNM		alphanumeric (1 to 16 characters)	Trunk group name. Enter the common language location identifier (CLLI) (as datafilled in table CLLI) of the incoming trunk group. Distinct trunk groups are defined for BD300 modems and are unique among modems at the same baud rate.
TKMEMNO		0 to 9999	Trunk group member number. Enter the number of the trunk group member. The number is a unique member number within the unique trunk group name that identifies the individual trunks within the trunk group. Any entry outside the range indicated for this field is invalid.

Data ll e xample

The following example shows sample data ll for table DQMODEM.

MAP display example for table DQMODEM

```
DQMODKEY TMTYPE TMNO  TMCKTNO     TKGRPNM TKMEMNO
_____________________________________________________

BD300   0    MTM    0        0         SYNCH        0
```

Table history

BCS36

Field names for sub elds B AUD_RATE and MODEM_NO were corrected.

DRAMPHRS

Table name

DRAM Phrases

Functional description

Table DRAMPHRS provides a standard table control interface. This interface allows for the transfer of digital recorded announcement machine (DRAM) phrase information during a software upgrade. The DRAM phrase information that table DRAMPHRS stores contains the following:

- the DRAM number
- the phrase name
- the internal phrase number
- the block number
- the phrase length
- if the system records or assigns the phrase
- if the system uses a pad with the phrase (recorded phrases only)
- the start location of the phrase (recorded phrases only)

Table DRAMPHRS stores a de ntion of the information by the use of the ASSIGN, ERASE, POSITION, and RECORD commands. The DRAMPHRS stores this information in the DRAM record (DRAMREC) utility. Use the command ASSIGNDUMP COMMANDS to display DRAM phrase information.

If table DRAMPHRS contains data, you can transfer the DRAM phrase information during the one-night process (ONP). The operating company de nes the DRAM phase information. T o transfer this information, use the standard table transfer tool (TABXFR).

Data ll sequence and meanings

You must enter data in table DRAMS before you enter data in table DRAMPHRS.

You must enter data in the following tables after table DRAMPHRS.

- DRAMTRK
- DRMUSERS

Table size

0 to 131 072 tuples

Data ll

Data ll for table DRAMPHRS appears in the follo wing table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DRAM		0 to 63	*DRAM number* This field is the first part of the two-part key to the table. Enter the DRAM number that contains the phrase. Enter the DRAM in table DRAMS before you enter data in this field.
PHRSNAME		a maximum of 16 alphanumeric characters	*Phrase name* This field is the second part of the two-part key to the table. Enter the phrase name for the phrase.
PHRASENO		0 to 63	*Phrase number* Enter the internal phrase number for the phrase.
BLOCK		0 to 7 for North America, 0 to 31 outside of North America	*Block number* Enter the block number for the phrase. The block number identifies the block of the DRAM where the system stores phrase.
LENGTH		0 to 31	*Phrase length* Enter the phrase length in seconds.
RECORDED		Y or N	*Phrase recorded boolean* Enter Y to indicate that the system records the phrase. If the entry is Y, enter data in refinements PADINUSE and START Enter N to indicate that the system assigns the phrase. When the system loads special information tones (SIT) data, the system can assign SIT to a random access memory (RAM) card. The system records a recorded phrase live or from a pre-recorded tape. An assigned phrase is already present on a programmable read-only memory (PROM) card.

DRAMPHRS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PADINUSE	Y or N	*Pad in use boolean* Enter Y to indicate the use of a pad with the phrase. Enter N to indicate that the system does not use a pad with the phrase.
	START	0 to 31	*Start location* Enter the start location for the phrase in seconds.

Data ll e xample

Sample data ll for table DRAMPHRS appears in the follo wing example.

MAP example for table DRAMPHRS

```
DRAM      PHRSNAME  PHRASENO  BLOCK  LENGTH  RECORDED
-------------------------------------------------------
  0           ENG1        48      0       1         N
  0           ENG2        49      0       1         N
  0           ENG3        50      0       1         N
  0           ENG4        51      0       1         N
  0           ENG5        52      0       1         N
  0           ENG6        53      0       1         N
  0           ENG7        54      0       1         N
  0           ENG8        55      0       1         N
  0           ENG9        56      0       1         N
  0           ENG0        47      0       1         N
  2        SILENCE         9      1       1    Y N  1
  2     AINNORMAL         14      0       5    Y N  6
  2   AINNORMALPRO        19      0       5    Y N 11
  2  AINFIXED5DIGS        29      0       5    Y N 21
  2 AINFIXEDNODIGS        34      0       5    Y N 26
  2   AINVARIABLE         24      0       5    Y N 16
```

Table history

TL08

Table DRAMPHRS was introduced in TL08.

DRAMS

Table name

Digital Recorded Announcement Machine

Functional description

Table DRAMS can contain information on the trunk cards that constitute a digital recorded announcement machine (DRAM). Table DRAMS can contain information on the trunk cards that constitute an enhanced digital recorded announcement machine (EDRAM).

The code assigned to the controller and a card number identify each card assigned to a DRAM. This action occurs at the trunk test position (TTP) of the MAP display.

The digital recorded announcements (DRA) in the DMS switch use table DRAMS.

DRAM

Each DRAM contains one DRA controller card that is an NT1X75AA or an NT1X75BA. Each DRAM can contain one or more of the following on a maintenance trunk module: one or more programmable read-only memory (PROM), random access memory (RAM), or electrically erasable programmable read-only memory (EEPROM) memory cards on a maintenance trunk module.

Each DRAM is assigned a number from 0 to 63 in eld DRAM.

Each DRAM cards is assigned a card number from 0 to 8. A maximum of nine DRAM cards can be present. The DRAM controller (CTLR) card must be assigned card number 0 and trunk module circuit number 0.

The location of the trunk module type and number of the card must be speci ed for each card.

The card type must be speci ed for each card. The follo wing are the options:

- CTLR
- EEPROM
- PROM
- RAM

If the card is a CTLR card, enter the code that represents the DRAM in table CLLI.

DRAMS (continued)

If the card type is an EEPROM, PROM or RAM card, specify the speech block or blocks (0 to 7) on the card. Specify the block or blocks. The single-density cards, NT1X76AA, NT1X76AB, NT1X76BA, NT1X77AA, and NT1X79AA contain one speech block. The double-density cards contain two speech blocks.

EDRAM

An (EDRAM) is a second generation DRAM card with the following features:

- one card for all announcements, NT1X80
- announcements download to the EDRAM from a disk or tape
- announcements download as voice les
- One 4 min EDRAM NT1X80AA can hold a maximum of eight single-density voice les or four double-density v oice les. One 16 min EDRAM NT1X80BA can hold a maximum of 32 single-density voice les or 16 double-density voice les. See table EDRAMINV for additional information.

Each EDRAM is assigned a number from 0 to 63 in eld DRAM.

Each virtual card in an EDRAM can be assigned a card number from 0 to 8 for NT1X80AA. Each virtual card in an EDRAM can be assigned a card number from 0 to 32 for NT1X80BA. Each virtual card must be assigned a card type of CTLR, PROM, or RAM.

The EDRAMs do not have a separate controller card. Each EDRAM has one assigned virtual controller card. To enter data in table DRAMS for EDRAMs, enter a virtual controller tuple. The controller card must be assigned card number 0. The virtual controller tuple must be assigned trunk module circuit number 0.

In eld CLLI for the controller tuple, the code that represents the EDRAM in table CLLI must be assigned.

Each EDRAM has virtual memory cards speci ed as PR OM or RAM in CARDTYPE eld. Y ou can enter a maximum of eight virtual memory cards with data for the NT1X80AA. You can enter a maximum of 32 virtual memory cards with data for the NT1X80BA.

The BLKLIST vector is speci ed for PROM and RAM cards. Each BLKLIST vector contains one or two virtual speech block numbers that map to the EDRAM card. Each BLKLIST contains speech block number from 0 to 7 for the NT1X80AA. Each BLKLIST contains speech block numbers from 0 to 31 for the NT1X80BA. Tuples speci ed as RAM card types are single-density

virtual cards. You can enter these tuples with one speech block number. Two speech block number normally are the entries for PROM card types. The PROM card type represents the recorded announcement voice le entered in table EDRAMINV. If the announcement voice le equals a double-density card, enter the tuple DRAMS. Enter the tuple as a double-density card with two block numbers. If the announcement voice le is a single-density card, enter the data in the tuple in table DRAMS. Enter the tuple as a single-density card with one block number.

Use card type PROM to load phrases to the NT1X80 card when a prerecorded announcement (ANN) voice le recei ved data in table EDRAMINV. The voice le can contain speech phrases or special information tones (SIT) data phrases. For custom recorded phrases, use card type RAM. The SIT data phrases can be assigned to block numbers 0 and 1 when you enter the EDRAM as card type RAM.

To change current data ll for a DRAM requires the follo wing actions. To convert the data ll for a 4 min EDRAM to enter data for a 16 min EDRAM requires the following actions.

- erase all current phrases
- remove data ll from the follo wing tables:
  - — the DRAMS
  - — the EDRAMINV
  - — the TMINV
  - — the CLLI
- add data ll for the 16 min EDRAM

Data ll sequence and meaning

Enter data in tables TMINV and CLLI before you enter data in table DRAMS for a DRAMS.

Enter data in tables TMINV, EDRAMINV, PMLOADS, and CLLI before you enter table DRAMS for an EDRAM.

Enter data in table DRAMS before you enter data in table DRAMPHRS.

Verify eld TRKGRPSIZ for the EDRAM CLLI in table CLLI before you enter data in table DRAMS.

DRAMS (continued)

Note: Enter the following in a track list eld TRCKLIST in table ANNMEMS.

- trunk module (TM) type, eld TMTYPE
- the TM number, eld TMNO
- the TM circuit, eld TMCKT

Enter data in the trunk modules before the DRAM trunks can become busy or put in service.

Enter eld TMTYPE as DTM. Enter eld CARDCODE as 1X80AA or 1X80BA for Audiogram Delivery Services (ADS). The EDRAM only supports ADS announcements. Refer to the Audiogram Delivery Services-Offer of Services Prompt functionality (ENSV0013) for additional information.

Table size

Table size increases for each new DRAM number that you enter in table DRAMS. You can enter a maximum of 64 DRAM numbers.

The maximum memory con guration for a single DRAM number is dynamically allocated by default for table DRAMS. The allocation occurs when you enter the rst speech block for the DRAM or EDRAM. Y ou can enter speech blocks 0 through 31 for an NT1X80BA EDRAM or a non-North American DRAM. You can enter speech blocks 0 through 7 for a DRAM or an NT1X80AA EDRAM.

Data ll

Data ll for EDRAM in table DRAMS appears in the rst table. Data ll for DRAM in table DRAMS appears in the next four tables.

Enhanced DRAM (EDRAM)

Data ll for EDRAM appears in the follo wing table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DRAMCARD		see subfields	*Digital recorded announcement machine key*. This field contains subfields DRAM and CARD.
	DRAM	0 to 63	*Digital recorded announcement machine*. Enter the number assigned to DRAM.
	CARD	0 to 8 for NT1X80AA, 0 to 32 for NT1X80BA	*Card*. Enter 0 for the virtual CTLR card. Enter 1 to 32 for the virtual memory cards. Entries out of the range of indicated values for this field are not correct. ***Note:*** Card numbers cannot repeat for the same DRAM or EDRAM.
TMTYPE		DTM	*Trunk module type*. Enter DRAM trunk module type DTM.
TMNO		0 to 2047	*Trunk module number*. Enter the trunk module number to which the trunk card is assigned.
TMCKT		0 to 29	*Trunk module circuit*. Enter the trunk module circuit number to which the trunk card is assigned for the NT1X80AA. Enter 0 for the NT1X80BA. Enter 0 for the EDRAM CTLR tuple. Two DRAMs or EDRAMs cannot have the same TMTYPE, TMNO, and TMCKT group. One 16 min EDRAM (NT1X80BA) has the same TMTYPE, TMNO, and TMCKT values for each tuple. Entries out of the range of indicated values for this field are not correct.

DRAMS (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE		1X80AA or 1X80BA	*Card codes*. Enter 1X80AA for the 4 min EDRAM. or 1X80BA for the 16 min EDRAM. Entries out if the range of indicated values for this field are not correct.
CARDINFO		see subfields	*Card information*. This field contains subfields CARDTYPE, CLLI, and BLKLIST.
	CARDTYPE	CTLR, PROM, or RAM	*Card type*. Enter CTLR for the virtual CTLR tuple and enter data in refinement CLLI. Enter PROM for prerecorded messages, or RAM for recordable memory. Enter data in refinement BLKLIST. Entries out of the range of indicated values for this field are not correct.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CARDINFO (continued)	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier*. Enter the code that represents the EDRAM in table CLLI.
	BLKLIST	vector of one character (0 to 31) or vector of two characters (0 to 31)	*Block list*. Enter the number of the speech block or blocks assigned to the voice file. The entry occurs if the entry in field CARDTYPE is PROM or RAM. Entries out if the range of indicated values for this field are not correct. Single-density voice files have one speech block. Double-density cards have two speech blocks. An example of a single voice file is a voice file equivalent to an NT1X76AA. An example of a double density card is the voice file equivalent to an NT1X76BA. If you enter the speech block numbers for double-density voice files, the numbers must be next to each other. The numbers must begin with an even-numbered speech block. The use of two speech block numbers for RAM card types for EDRAM does not provide an advantage. A correlatetion of DRAMREC display command results and the PM MAP level UPLOAD command results is easier to perform. The correlation occurs when the RAM card types as single speech block numbers. Enter 0 to 7 for NT1X80AA or 0 to 31 for NT1X80BA. ***Note:*** Block numbers cannot repeat for the same DRAM or EDRAM. Separate each speech block number, vector by a minimum of one blank.

DRAM

Data ll for DRAM cards appears in the follo wing four tables.

DRAMS (continued)

DRAM controller (CTLR) cards

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DRAMCARD		see subfields	*Digital recorded announcement machine key*. This field contains subfields DRAM and CARD.
	DRAM	0 to 63	*Digital recorded announcement machine*. Enter the number assigned to the DRAM.
	CARD	0	*Card*. Enter 0 for the DRAM CTLR card.
TMTYPE		MTM or STM	*Trunk module type*. Enter the trunk module (TM) type, maintenance trunk module (MTM) or service trunk module (STM) of the card.
TMNO		0 to 2047	*Trunk module number*. Enter the trunk module number assigned to the MTM or STM.
TMCKT		0	*Trunk module circuit*. Enter 0 for the DRAM CTLR card.
CARDCODE		1X75AA or1X75BA	*Card code*. Enter the peripheral module (PM) equipment code of the digital recorded announcement controller card. Entries out of the range of indicated values for this field are not correct.
CARDINFO		see subfields	*Card information*. This field contains subfields CARDTYPE and CLLI.
	CLLI	alphanumeric 1 to 16 characters	*Common language location identifier*. Enter the code that represents DRAM in table CLLI.

DRAM recordable memory (RAM) cards

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DRAMCARD		see subfields	*Digital recorded announcement machine key*. This field contains subfields DRAM and CARD.
	DRAM	0 to 63	*Digital recorded announcement machine*. Enter the number assigned to DRAM.
	CARD	1 to 8	*Card*. Enter the number assigned to the card.
TMTYPE		MTM or STM	*Trunk module type*. Enter the trunk module type, maintenance trunk module MTM of the card.
TMNO		0 to 2047	*Trunk module number*. Enter the trunk module number to which the trunk card is assigned.
TMCKT		0 to 29	*Trunk module circuit*. Enter the trunk module circuit number to which the trunk card is assigned.
CARDCODE		1X77AA	*Card code*. Enter 1X77AA for the single-density DRAM RAM speech memory card.
CARDINFO		see subfields	*Card information*. This field contains subfields CARDTYPE and BLKLIST.

DRAMS (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CARDTYPE	RAM	*Card type*. Enter RAM for the recordable memory card.
	BLKLIST	vector of one character 0 to 7 or vector of 16 characters 0 to 31	*Block list*. Enter the number of the speech block assigned on the card. A maximum of 16 speech blocks can be present with the range of block number 0 to 31. The speech blocks are for non-North American DRAM. Block numbers cannot repeat in the same DRAM. Telephone operating companies in Australia must enter one speech block. Separate each speech block number, vector, by a minimum of one blank.

DRAM electrically erasable (EEPROM) cards

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DRAMCARD		see subfields	*Digital recorded announcement machine key*. This field contains subfields DRAM and CARD.
	DRAM	0 to 63	*Digital recorded announcement machine*. Enter the number assigned to DRAM.
	CARD	1 to 8	*Card*. Enter the number assigned to the card.
TMTYPE		MTM or STM	*Trunk module type*. Enter the trunk module type, maintenance trunk module MTM, of the card.
TMNO		0 to 2047	*Trunk module number*. Enter the trunk module number to which the trunk card is assigned.
TMCKT		0 to 29	*Trunk module circuit*. Enter the trunk module circuit number to which the trunk card is assigned.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE		1X79AA	*Card codes*. Enter 1X79AA for the single-density DRAM EEPROM speech memory card. Entries out of the range of indicated values for this field are not correct.
		see subfields	*Card information*. This field contains subfields CARDTYPE and BLKLIST.
	CARDTYPE	EEPROM	*Card type*. Enter EEPROM for the electrically erasable card. Entries out of the range of indicated values for this field are not correct.
CARDINFO (continued)	BLKLIST	vector of one character (0 to 7) or vector of 16 characters (0 to 31)	*Block list*. Enter the number of the speech block assigned on the card. For non-North American DRAM, a maximum of 16 speech blocks can be present with a block number range of 0 to 31. Block numbers cannot repeat in the same DRAM. Operating companies in Australia must enter one speech block. Separate each speech block number, vector, by a minimum of one blank. Entries out of the range of indicated values for this field are not correct.

DRAM prerecorded message (PROM) cards

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
DRAMCARD		see subfields	*Digital recorded announcement machine key*. This field contains subfields DRAM and CARD.
	DRAM	0 to 63	*Digital recorded announcement machine*. Enter the number assigned to the DRAM.

DRAMS (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	CARD	1 to 8	*Card*. Enter the number assigned to the card.
TMTYPE		MTM or STM	*Trunk module type*. Enter the trunk module type MTM of the card.
TMNO		0 to 2047	*Trunk module number*. Enter the trunk module number to which the trunk card is assigned.
TMCKT		0 to 29	*Trunk module circuit*. Enter the trunk module circuit number to which the trunk card is assigned. Entries outside the range of indicated values for this field are not correct.
CARDCODE			*Card code*. Enter the product engineering code (PEC) for the card:
		1X76AA	1X76AA for DRA standard announcements—English
		1X76AB	1X76AB for US Bell standard announcements—English
		1X76AE	1X76AE for automated coin toll service (ACTS) English announcements
		1X76AF 1X76AG	1X76AF, 1X76AG for auxiliary operator services system voice response (AOSSVR) English PROM speech cards
		1X76AH	1X76AH for automatic coin calling services (ACCS)—English announcements
		1X76AJ 1X76AK	1X76AJ, 1X76AK for CLASS phase I English announcements (ACB/AR/COT)
		1X76AM	1X76AM for call forwarding remote access (CRFA)—English announcements

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE(continued)		1X76AP 1X76AQ 1X76AR 1X76AS 1X76AT 1X76AU 1X76AV 1X76AW	1X76AP, 1X76AQ, 1X76AR, 1X76AS, 1X76AT, 1X76AU, 1X76AV, 1X76AW for screening list editing (SLE) English announcements
		1X76BA	1X76BA for DRA standard announcements—French
		1X76BF 1X76BG	1X76BF, 1X76BG for AOSSVR French announcements PROM speech cards
		1X76BH	1X76BH for ACCS French announcements
		1X76BJ 1X76BK	1X76BJ, 1X76BK for CLASS phase I French announcements (ACB/AR/COT)
		1X76BM	1X76BM for CFRA French announcements
		1X76BP 1X76BQ 1X76BR 1X76BS 1X76BT 1X76BU 1X76BV 1X76BW	1X76BP, 1X76BQ, 1X76BR, 1X76BS, 1X76BT, 1X76BU, 1X76BV, 1X76BW for SLE French announcements
		1X76CA	1X76CA for mechanized credit card service (MCCS) English announcements
		1X76GA 1X76GB 1X76GC	1X76GA, 1X76GB, 1X76GC for SLE for list sizes from 13 to 31 entries
		1X76GE	1X76GE for SLE custom phrases for Bell South
		1X76GF	1X76GF for SLE custom phrases for Bell Atlantic

DRAMS (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE(continued)		1X76GG	1X76GG for SLE custom phrases for United Telephone
		1X76GH	1X76GH for SLE custom phrases for GTE
		1X76GJ	1X76GJ for SLE custom phrases for Pacific Bell
		1X76GK	1X76GK for SLE custom phrases for Ameritech
		1X76GL 1X76GM 1X76JA 1X76JB	
CARDINFO		see subfields	*Card information*. This field contains subfields CARDTYPE and BLKLIST.
	CARDTYPE	PROM	*Card type*. Enter PROM. Entries out of the range of indicated values for this field are not correct.
	BLKLIST	vector of one character 0 to 7, vector of two characters 0 to 7, or vector of 16 characters 0 to 31	*Block list*. Enter the number of the speech block or blocks that are assigned on the card. Single density cards (like, 1X76AA) have one speech block. The double density cards (like, 1X76BA) have two speech blocks. If you enter the speech block numbers for double density cards, the numbers must be next to each other. The speech block number must begin with an even numbered speech block. Block numbers cannot repeat in the same DRAM.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
CARDINFO (continued)	BLKLIST (continued)		A maximum of two speech blocks can be present with the range of block number 0 to 7. This entry occurs for North American DRAM and telephone companies in Australia. For non-North American DRAM, a maximum of 16 speech blocks cannot be present with the range of block number 0 to 31. Separate each speech block number, vector, by a minimum of one blank. Entries out of the range of indicated values for this field are not correct.

Data ll e xample

Data ll for table DRAMS for BCS35 and later v ersions appear in the following example.

DRAMS (end)

Data ll e xample for table DRAMS

```
DRAMCARD TMTYPE TMNO TMCKT CARDCODE          CARDINFO
_____________________________________________________

   0 0    MTM    4     0   1X75AA   CTLR  DRAM0

   0 1    MTM    1     2   1X76AA   PROM  (0) $

   0 2    MTM    4     4   1X76BA   PROM  (2) (3) $

   0 5    MTM    4     6   1X77AA    RAM  (4) $

   0 4    MTM    4     8   1X77AA    RAM  (5) $

   0 5    MTM    4    10   1X77AA    RAM  (6) $

   0 6    MTM    4    12   1X77AA    RAM  (7) $

   1 0    DTM    1     0   1X80AA   CTLR  EDRAM1

   1 1    DTM    1     2   1X80AA   PROM  (0) $

   1 2    DTM    1     4   1X80AA   PROM  (2) (3)$

   2 0    DTM    2     0   1X80AA   CTLR  EDRAM2

   2 1    DTM    2     2   1X80AA   PROM  (0) (1)$

   2 3    DTM    2     6   1X80AA    RAM  (4) $
```

Table history

TL08

Information on table DRAMPHRS was added in TL08.

APC06

Information for the 16 min EDRAM (NT1X80BA) was added in APC06.

NA005

Feature AN1542 in the functionality Audiogram Delivery Services-Offer of Service Prompt functionality (ENSV0013) introduces announcements that only EDRAM supports.

DRAMTRK

Table name

Digital Recorded Announcement Machine Track Table

Functional description

The names for the phrases assigned to each track of an announcement appear in table DRAMTRK. Use the digital recorded announcement machine (DRAM) recording utility (DRAMREC) to de ne phrases. You can enter data in table DRAMPHRS to de ne phrases. In table DRAMTRK, you can combine phrases to create language tracks.

Do not use table DRAMPHRS for standard recording. You cannot use this table to record a message.

Enter custom announcements in table DRMUSERS. A custom announcement is an announcement common language location identi er (CLLI). Use this announcement if the entry in eld ANTYPE of table ANNS is an announcement that is not the standard announcement (STND).

Note: Announcements the operating company records, entered as STND in table ANNS, and in table DRAMTRK, are not custom announcements.

Data ll sequence and meaning

Enter data in the following tables before you enter data in table DRAMTRK:

- ANNMEMS
- DRAMPHRS

Table size

0 to 2040 tuples

Memory is dynamically allocated for table DRAMTRK.

If package NTXN26AA, Announcement Enhancements or NTX983AB, Service Switching Point Private Virtual Networking, is in the switch, the maximum table size is 16 384 tuples.

DRAMTRK (continued)

Data ll

Data ll for table DRAMTRK appears in the follo wing table.

Field descriptions

Field	Subfield	Entry	Explanation and action
ANNTRACK		see subfields	*Announcement track key*. This field contains subfields ANN and TRACK.
	ANN	alphanumeric or blank	*Announcement*. For the first entry of the announcement track, enter the code for the announcement in table CLLI. Leave the field blank for other conditions.
	TRACK	0 to 31 or blank	*Track*. For the first entry of the announcement track, enter the track number assigned to the announcement. Leave this field blank for other conditions. The track numbers in table ANNMEMS index in table DRAMTRK for DRAM announcements. For example, use a track number in table ANNMEMS and a related entry in table ANNMEMS is not present. If this entry is missing, a complete track is missing from the playback of the announcement.
PHSLIST		alphanumeric (maximum of 16 names)	*Phrase list*. Enter the name or names assigned to the phrase or phrases. Separate each phrase from the next phrase with blank space. If less than 16 names are required, end the list with a $ (dollar sign). The system does not support phrase NIL. If you do not use an announcement or if you record the announcement again, set field PHSLIST to SILENCE.

Data ll e xample

The gure that follo ws shows sample data ll for table DRAMTRK.

Input for tracks 0 and 1 for the No Circuit Announcement (CLLI is NCA) appear in this example. Input for tracks 0, 1, and 2 for the Vacant Code Announcement (CLLI is VCA) that contain three languages appears in this example. These three languages are English, French, and Spanish.

Track 0 receives the phrase name NCAENG, the English version for No Circuit Announcement (NCA). Track 1 receives the phrase name NCAFRE, French version, for NCA.

On the primary language track, special information tones (SIT) phrase SIT32 plays rst. The English v ersion of the NCA follows. On the next track, SILENCE plays rst. The French v ersion of the NCA follows.

Track 0 receives the phrase name VCAENG for VCA. Track 1 receives the phrase name VCAFRE for VCA. Track 2 contains two phrase names, VCASPA and ANNSPA, for VCA. Phrases VCAENG and VCAFRE are prerecorded announcements. Phrases VCASPA and ANNSPA are recordable announcements. Phrase ANNSPA can be “This is a recording” in Spanish. You can use this phrase after other Spanish announcements. The VCASPA is the Spanish version of the VCA “I am sorry, but the number you have dialed...”.

The SIT phrase SIT26 plays rst on the primary language track. The primary language announcement follows the SIT phrase.

The SILENCE phrase comes before each of the announcements on tracks 2 and 3.

Track 1 receives the phrase list CNAGER, the German version for Calling Number Announcement, CNALINE. The CNALINE is for speci ed licensee use. The SILENCE phrase precedes and follows this announcement.

MAP example for table DRAMTRK

```
ANNTRACK
PHSLIST
-----------------------------------------------------
NCA       0       (SIT32)    (NCAENG) $
NCA       1       (SILENCE)  (NCARFR) S
VCA       0       (SIT26)    (VCAENG) S
VCA       1       (SILENCE)  (VCAFRE) S
VCA       2      (SILENCE)  (VCASPA)  (SILENCE)  (ANNSPA)$
CNALINE   1       (SILENCE)  (CNAGER)  (SILENCE)  $
```

Table history

TL08

Information on table DRAMPHRS was added.

DRAMTRK (continued)

BCS36

The following modi cations were made:

- Notes to clarify BCS35 restriction regarding custom announcements were added.
- A note that indicates that the system does not support an entry of NIL for eld PHSLIST w as added.

Additional information

Information on how to assign the SIT in table DRAMTRK with commands SITLOAD and ASSIGN appears in this section. The information is for switches with PROM and RAM cards.

Machine detectable encodings (SIT)

The system treats calls that route to an announcement as completed calls. The system provides voice responses for these calls are provided as a result of analysis of machine detectable encodings by call disposition equipment. A machine detectable encoding provides a quicker call disposition if the encoding is at the beginning of each recorded announcement. These machine detectable encodings are special information tones (SIT). The maximum number of SITs is 32. Each SIT has three different frequencies and durations. The SIT indicate that a machine-generated announcement follows.

This feature is optional.

SITs in PROM or RAM speech cards

A DRAM can store SITs in PROM or RAM speech cards.

The PROM speech cards can store all data for SITS.

Some switches can only use RAM speech cards. These switches do not require standard Bell Canada format announcements of PROM cards. The SIT data can be stored in central control (CC) data store. The data can be downloaded to the RAM speech cards when a switch equipped only with RAM cards goes in service. The additional download is a requirement if RAM cards memory is lost. The download time is approximately 3 min.

The CC instructs the DRAM to play the SIT and the announcement for a call that terminates on an announcement.

The DRAMRC commands ASSIGN and RECORD supply the CC with information on each announcement phrase in the DRAM. The ASSIGN command provides information to the CC on phrases the PROM cards store. The RECORD command has parameters that provide information on phrases

to record on RAM cards. These commands do not identify the phrases with speci ed SITs.

The SITs can download from data store to RAM cards. This download can only occur in switches that do not have PROM cards.

Each RAM card contains a 128-kbyte block that includes four kbytes of menu and SIT data. The 124 kbytes that remain store speech data. The download requires two RAM cards for the SIT tones. The menu data that relates to the SITs can be split. One half of the SITS is in one RAM card. The other half of the SITS is in another RAM card. The SIT data is compressed to save recording space. The same SIT data must be stored in both cards. If only one RAM card stores the SIT data, store for 8 s of speech tones on that card are removed to accommodate all the SIT phrase identi ers.

Module DRAMSIT downloads SIT data from the CC store to the RAM speech store of the DRAM. The command interpreter (CI) command SITLOAD initiates the download of SITs. The SIT tone data is a data string in the CC data store. This data is downloaded on the rst tw o available RAM cards in table DRAMS. The rst 16 SITs are on the rst RAM card. The next 16 SITs are on the second RAM card.

When the download completes, a message that indicates the completed download appears to the user.

Use the ASSIGN command to assigns phrases to PROM cards. Use the ASSIGN command to assign SIT phrase identi ers to PROM and RAM cards.

The DRAM announcement phrases in each track of a multitrack announcement are the same length. The duration of a SIT is 1 s. The SIT is only on the primary language track. The secondary language track is 1 s shorter than the prime language track. The two tracks next to each other go out of synchronization because of this difference. To overcome this problem, a 1 s SILENCE phrase is assigned on a PROM card or a RAM card. The phrase plays at the beginning of each of the tracks that are next to each other.

SITLOAD command

The SITLOAD command downloads SIT data from data store to the rst two RAM cards. In the example below, the SITs are loaded to DRAM number 0.

```
>SITLOAD  0
```

If you enter a PROM card in table DRAMS, do not use command SITLOAD. The PROM cards store SITS. Use only the ASSIGN command to notify the system that with regard to SITs in switches with PROM cards.

DRAMTRK (continued)

Before you use the SITLOAD command, make sure that a minimum of two RAM cards are in the maintenance trunk module (MTM) shelf. The MTM shelf relates to the DRAM used. Make sure that the required data ll for these RAM cards is in table DRAMS.

The phrase names that relate to each SIT require assignment when the SITLOAD command activates.

ASSIGN command

If the ASSIGN command is in use to assign SIT phrases and the SILENCE phrase, the following rules apply.

Switching units with PROM cards

To assign a SIT phrase name in a switching unit with PROM cards, use the command

```
>ASSIGN <dram_ no> <SIT phrase name> <length> <block> <phrase
_no>
```

In the following example, assign the SILENCE phrase

- for 1 s
- to DRAM number 0, entered in table DRAMS
- to the block number assigned to the rst PR OM card, entered in table DRAMS

```
>ASSIGN  0  SILENCE  1  1  0
```

Assign each separate SIT phrase. The phrase numbers, the SIT parts, and the SIT phrase names appear in the following table. The SIT phrase assignments are limited to the rst PR OM card only.

An example of an assignment of separate SIT phrases appears in the following table.

Example assigning individual SIT phrases (Sheet 1 of 3)

Phrase number	SIT components	SIT phrase names
8	lSISIS	SIT1
9	lSISIL	SIT2
10	lLISIS	SIT3
Note: l = low frequency, h = high frequency, S = short duration, L = long duration		

Example assigning individual SIT phrases (Sheet 2 of 3)

Phrase number	SIT components	SIT phrase names
11	lShLIL	SIT4
12	lShSIS	SIT5
13	lShSIL	SIT6
14	lShLIS	SIT7
15	lShLIL	SIT8
16	lLISIS	SIT9
17	lLISIL	SIT10
18	lLILIS	SIT11
19	lLhLIL	SIT12
20	lLhSIS	SIT13
21	lLhSIL	SIT14
22	lLhLIS	SIT15
23	lLhLIL	SIT16
24	hShSIS	SIT17
25	hShSIL	SIT18
26	hShLIS	SIT19
27	hShLIL	SIT20
28	hShSIS	SIT21
29	hShSIL	SIT22
30	hShLIS	SIT23
31	hShLIS	SIT24
32	hLISIS	SIT25
33	hLISIL	SIT26
Note: l = low frequency, h = high frequency, S = short duration, L = long duration		

DRAMTRK (continued)

Example assigning individual SIT phrases (Sheet 3 of 3)

Phrase number	SIT components	SIT phrase names
34	hLILIS	SIT27
35	hLILIL	SIT28
36	hLhSIS	SIT29
37	hLhSIL	SIT30
38	hLhLIS	SIT31
39	hLhLIL	SIT32
Note: l = low frequency, h = high frequency, S = short duration, L = long duration		

The rmw are can give the SIT phrase a phrase number of 8. The software can give the SIT phrase the phrase name SIT1. The preceding table indicates that these actions can occur to a SIT phrase with the following components:

- rst component tone of lo w (l) frequency, short duration (S)
- second component tone of low (l) frequency, short duration (S)
- third component tone of low (l) frequency, short duration (S)

When you assign all SIT phrases, the data ll in table DRAMTRK changes to include the SIT and the SILENCE tones.

See the above example for SIT and SILENCE phrase assignment.

Switching units with RAM cards

Enter data in a minimum of two RAM cards and no PROM cards in table DRAMS. The SITLOAD command must be a success. Assign the SILENCE phrase to the rst RAM card. Assign the rst 16 SIT phrases to the rst RAM card. Assign the last 16 SIT phrases to the second RAM card. The ASSIGN command has the same format as the format that appears for the PROM card in this document.

An example of how to assign SIT phrases to RAM cards appears in the following gure.

Example of data ll f or table DRAMS

```
DRAMCARD TMTYPE TMNO TMCKT CARDCODE
                                                    CARDINFO
_____________________________________________________________
0 0   MTM        3 0   1X75AA
                                    CTLR        DRAM0
0 1   MTM        3 2   1X75AA
                                    RAM3
0 2   MTM        3 4   1X75AA
                                    RAM4
```

In the gure above, the command SITLOAD loads the data for the rst 16 SIT phrases into RAM card 1, block number 3. The command SITLOAD loads the second set of 16 SIT phrases in RAM card 2, block number 4.

The rst phrase in the rst set 16 SIT is assigned as follo ws:

```
>ASSIGN  0  SIT1  1  3  48
```

The rst phrase from the second set of 16 SIT is assigned as follo ws:

```
>ASSIGN  0  SIT17  1  4  48
```

The SILENCE phrase is assigned only one time as follows:

```
>ASSIGN  0  SILENCE  1  3  0
```

When you assign all SIT phrases, enter data in these phrases in table DRAMTRK. The SIT phrases includes the SILENCE phrase.

See the “Data ll e xample” section for an example of data ll in table DRAMTRK.

DRAMTRK (continued)

An example of phrase numbers assigned on the rst RAM card appears in the following table.

Phrase numbers on r st RAM card

Phrase number	SIT components	SIT phrase names
48	lSlSlS	SIT1
49	lSlSlL	SIT2
50	lSlLlS	SIT3
51	lSlLlL	SIT4
52	lShSlS	SIT5
53	lShSlL	SIT6
54	lShLlS	SIT7
55	hLlLlS	SIT8
56	lLlSlS	SIT9
57	lLlSlL	SIT10
58	lLlLlS	SIT11
59	lLlLlL	SIT12
60	lLhSlS	SIT13
61	lLlSlL	SIT14
62	lLhLlS	SIT15
63	lLhLlL	SIT16

Note: l = low frequency, h = high frequency, seconds = short duration, L = long duration

An example of phrase numbers assigned on the second RAM card appears in the following table.

Phrase numbers on second RAM card

Phrase number	SIT components	SIT phrase names
48	hSISIS	SIT17
49	hSISIL	SIT18
50	hSILIS	SIT19
51	hSILIL	SIT20
52	hShSIS	SIT21
53	hShSIS	SIT22
54	hShSIS	SIT23
55	hShLIL	SIT24
56	hLISIS	SIT25
57	hLISIL	SIT26
58	hLILIS	SIT27
59	hLILIL	SIT28
60	hLhSIS	SIT29
61	hLhSIL	SIT30
62	hLhLIS	SIT31
63	hLhLIS	SIT32

Note: l = low frequency, h = high frequency, S = short duration, L = long duration

Announcements

In table DRAMTRK, the SIT that comes before each standard announcements follows the guidelines that appear in the following table. The operating

DRAMTRK (end)

company decides which SIT phrases come before the customized recorded announcements.

Standard announcements

SIT	Category	Announcements
SIT2	Customer irregularity	Automatic Intercept System (AIS), blank directory number
		Integrated Business Network (IBN) numbers, change and non-working stations
		Access code not dialed
		Access code dialed in error
SIT8	Equipment irregularity	Reorder
SIT26	Vacant code	Vacant code
		Unauthorized centralized automatic message accounting (CAMA)
SIT32	Trunk blockage	No circuit emergency

The SIT phrase names that correspond to the standard Bell Canada announcements appear in the following table.

Standard Bell Canada announcements

SIT	Category	Announcements
SIT2	BLKDN	Blank directory number
	PSPD	Permanent signal/partial dial
	NOD1	Do not dial prefix 1
	D1ER	Prefix digit 1 not dialed
	ROH	Receiver off-hook
SIT26	VCA	Vacant code
SIT32	NCA	No circuit

DRMAPPL

Table name

Distributed Recording Manager Applications Table

Functional description

Table DRMAPPL associates an application with a pool of volumes. Table DRMAPPL speci es operational parameters. When an application re gisters with the distributed recording manager (DRM), the system enters tables DRMPOOL and DRMAPPL. You cannot add tuples to table from the command interpreter (CI). You cannot delete tuples from table DRMAPPL from the CI. You can change values in table DRMAPPL from the CI.

Data ll sequence and meaning

Enter data in table DRMPOOL before you enter data in table DRMAPPL.

De ne a pool in table DRMPOOL before you enter the pool in eld POOLNAME of table DRMAPPL. When an application registers with DRM, the system enters tables DRMPOOL and DRMAPPL in that order.

Table size

The system de nes table size.

Data ll

Data ll for table DRMAPPL appears in the follo wing table.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
APPLNAME		alphanumeric (one to four characters)	*Application name*. This field specifies the application name. The application name is the key to table DRMAPPL.
POOLNAME		alphanumeric (a maximum of eight characters)	*Pool name*. Enter a pool name to associate a pool of volumes with the application. This entry must be the same as the entry that corresponds in table DRMPOOL. This field is the key to table DRMPOOL. Only one application can use a specified pool name. The applications cannot share pools.

DRMAPPL (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
ALARMMN		0 to 32 767	*Alarm minor*. Enter the minor alarm threshold value, in megabytes. If the amount of total free volume space falls below the threshold value, the system generates a minor alarm. The recommended and default minor alarm value is 50.
ALARMMJ		0 to 32 767	*Alarm major*. Enter the major alarm threshold value, in megabytes. If the amount of total free volume space falls below the threshold value, the system generates a major alarm. The recommended and default major alarm value is 20.
ALARMCR		0 to 32 767	*Alarm critical*. Enter the critical alarm threshold value, in megabytes. If the amount of total free volume space falls below the threshold value, the system generates a critical alarm. The recommended and default critical alarm value is 1.
RETPD		0 to 365	*Retention period in days*. Enter a value to specify the file retention period, in days. A file expires when the file is on the disk for longer than the retention period, since the filedate. The filedate is the date in the filename. After this period the system erases processed files. Refer to field FORCBKUP.
FILEDATE		OPENED or CLOSED	*File date*. Enter OPENED to date the file when the file is opened. Enter CLOSED to date the file when the file is not the active file.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
SHEDDAYS		vector of 7 values (Y or N)	*Scheduled rotation days*. Enter Y (yes) for each day of the week, Monday through Sunday, that a rotation must occur. Enter N (no) for each day of the week, Monday through Sunday, that a rotation must not occur. Fields SHEDDAYS, SHEDBASE, and SHEDINCR define a scheduled rotation for the application.
SHEDBASE		0 to 23	*Schedule rotation base*. Enter a value from 0 to 23 to indicate the hour of the day when the first rotation occurs. You can schedule more than one rotation each day. Refer to field SHEDINCR.
SHEDINCR		X1, X2, X3, X4, X6, X8, X12, X24, or NOROTATE	*Scheduled rotation increments*. Enter a value that represents the number of hours between scheduled rotations. Use the first rotation as a base. Enter NOROTATE if you do not schedule a rotation.
CLOSTATE		P, R, or U	*File state when closed*. This field specifies the state that the closed file changes to. Enter P for processed state, R for removed state, or U for unprocessed state.
MAXFSIZE		O to 600	*Maximum file size*. Enter a value to define the maximum size for distributed recording manager (DRM) files. Enter the value in megabytes. This value is the maximum size for files in the application that this tuple defines. The DRAM allows this value. If you enter 0 (zero), only the volume size limits the file size.

DRMAPPL (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
FORCBKUP		Y or N	*Force backup onto DAT tapes*. Enter Y (yes) to instruct the DRM system audit to erase processed files (P-files) that expire. Only erase the files that back up to digital audio tape (DAT). Enter N (no) to instruct the DRM system audit to erase P-files that expire.
MINSPACE		0 to 32 767	*Minimum space* Enter a free pool space value in megabytes. The recommended and default value is 100. The value in field MINSPACE must be greater than the alarm level values in fields ALARMMN, ALARMMJ, and ALARMCR. The application must not be in an alarm condition when the system sends the ready_to_record message. When an application receives the ready_to_record message, the application starts to record. The system sends the ready_to_record message to the application when the amount of free pool space is in service. Field MINSPACE specifies the amount of free pool space. The in-service free space is the total amount free pool space that is not in use.

Data ll e xample

Sample data ll for table DRMAPPL appears in the follo wing example.

MAP display example for table DRMAPPL

```
APPLNAME POOLNAME ALARMMN ALARMMJ ALARMCR RETPD FILEDATE
SHEDDAYS    SCHEDBASE  SHEDINCR  CLOSTATE  MAXFSIZE
FORCBKUP  MINSPACE


_____________________________________________________________
AMA      AMAPOOL  50      20      1       30    OPENED
YYYYYYY     3           X24       U        100
Y         100
```

Table history

BCS34

Table was DRMAPPL introduced in BCS34.

DRMPOOL

Table name

Distributed Recording Manager Pool Table

Functional description

Table DRMPOOL de nes pools of recording v olumes for assignment to registered applications. When an application registers with the distributed recording manager (DRM), the system enters default tuples for the application in tables DRMPOOL and DRMAPPL. Table DRMPOOL assigns recording volumes to a pool name. Table DRMAPPL assigns the pool name to the application. You cannot use the table editor to add recording volumes in table DRMPOOL. You cannot use the table editor to delete recording volumes in table DRMPOOL. Use the DRM commands MOUNT or DEMOUNT to add or delete recording volumes in table DRMPOOL.

Data ll sequence and meaning

Enter data in table DRMAPPL before you enter data in table DRMPOOL.

Table size

The system de nes table size.

Data ll

Data ll for table DRMPOOL appears in the follo wing table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
POOLNAME		alphanumeric (a maximum of eight characters)	*Pool name*. This field is the key field of the table. This field contains the volume pool name.
VOLUME0-17		alphanumeric (a maximum of 20 characters) or $	*Volumes 0 to 17*. Fields VOLUME0 to VOLUME17 specify the volumes assigned to the pool. Each field contains a volume name. The $ indicates that the position does not have a volume assigned.

Data ll e xample

Sample data ll for table DRMPOOL appears in the follo wing example.

MAP example for table DRMPOOL

```
FIELD      ENTRY
_____________________________________________


POOLNAME   AMAPOOL
VOLUME0    FPOODKOOVOLUME01
VOLUME1    $
```

Table history

BCS34

Table DRMPOOL was introduced in BCS34.

DRMTRANS

Table name

The DIRP to DRM Translation Table

Functional description

Table DRMTRANS activates a generic translation layer for current device-independent recording package (DIRP) subsystems. This table activates the translation layer to allow DIRP requests to translate to distributed recording manager (DRM) requests. This process allows the system to write compute module (CM) data to le processor (FP) storage de vices.

Table DRMTRANS contains one tuple for each subsystem identi ed, bound in, to DIRP. Table DRMTRANS contains these tuples if entry of the subsystem occurs in table DIRPSSYS. Table DRMTRANS contains one tuple for each subsystem identi ed to DIRP if the subsystem does not occur in table DIRPSSYS.

To use the DIRP-to-DRM translation layer for a DIRP subsystem, set eld ENABLED in table DRMTRANS to Y (yes). Set this eld to Y for the tuple that corresponds to that subsystem. If the translation layer can register the subsystem with DRM, the response OPERATION SUCCESSFUL appears. A default tuple for that subsystem, application, appears in each of the DRM tables DRMAPPL and DRMPOOL.

An attempt to activate the translation layer can result in one of three possible failure responses. The response:

```
OPERATION FAILED. TOO MANY APPLICATIONS REGISTERED WITH DRM
```

indicates that DRM has the maximum number of users. The response:

```
OPERATION FAILED. TRY AGAIN
```

indicates that DRM cannot process the request at this time. The response:

```
OPERATION FAILED. DRM APPLICATION NAME ALREADY IN USE
```

indicates that the DIRP subsystem name is the same as another application that uses DRM. The other application is not a DIRP application. In each of these three events, the system rejects the change.

Activation of changes to table DRMTRANS requires a warm restart. When you activate the translation layer for a subsystem, make sure that table DRMAPPL contains the correct con guration v alues. Make sure that the volumes assigned to the application appear in table DRMPOOL. The amount

of volume space that eld MINSP ACE of table DRMAPPL allocates to the subsystem must allow recording to begin. To activate the translation layer, the DRM state of the application must be IDLE or ACTIVE before the restart. The state of the application must not be WAIT RTR. The application can begin to record when the restart completes.

To deactivate the translation layer for a speci ed subsystem, set eld ENABLED of table DRMTRANS to N (no). Set this eld to N for the tuple that corresponds to that subsystem. When the next restart occurs, the system automatically deletes the associated tuples in the DRM tables DRMAPPL and DRMPOOL. To reactivate DIRP perform a warm restart.

Data ll sequence and meaning

A tuple can appear in table DRMTRANS for a speci ed subsystem, when the subsystem is bound in to DIRP minimum one time. You must meet the requirements when you enter the subsystem in table DIRPSSYS. You must meet these requirements for the default tuple for the subsystem to appear in table DRMTRANS. For example, for billing streams, table CRSFMT requires an applicable tuple.

If the data in the table does not meet the above requirements the system deactivates the translation layer. For example, if deletion of the billing stream tuple in table CRSFMT occurs, the system deactivates the translation layer. The system deletes tuples associated with the subsystem from tables DRMTRANS, DRMAPPL, and DRMPOOL.

Table DIRPSSYS does not require an associated tuple for a tuple to appear in table DRMTRANS.

Table size

This table contains 1 to 24 tuples

DRMTRANS (end)

Data ll

Data ll for table DRMTRANS appears in the follo wing table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SSYSNAME		see subfield	*Subsystem name* This field contains subfield SSYSCHARS.
	SSYSCHARS	alphabetic (a maximum of four characters)	*Subsystem characters*. This field is the key to the table. The subsystem name determines this field. The subsystem name is bound in to DIRP. The system enters this field.
ENABLED		Y or N	*Enable translation layer*. Enter Y (yes) to enable or N (no) to disable the DIRP-to-DRM translation layer for the named DIRP subsystem. ***Note:*** The system can allow only the Call Recording System streams. These streams are in table CRSFMT. The system cannot allow other streams, like journal file (JF) and operational measurement (OM). These tuples must be present.

Data ll e xample

Sample data ll for table DRMTRANS appears in the follo wing example.

MAP display example for table DRMTRANS

```
SSYSNAME     ENABLED
_____________________________________________________

      AMA        Y
       JF        N
       OM        N
```

Table history

BCS35

Table DRMTRANS was introduced in BCS35.

DRMUSERS

Table name

Digital Recorded Announcement Machine Users

Functional description

Descriptions of the announcement requirements for the following features appear in Table DRMUSERS:

- Mechanized Calling Card Service (MCCS)
- Automatic Coin Toll Service (ACTS)
- Auxiliary Operator Service System Voice Response (AOSSVR)
- Automatic Calling Card Service (ACCS)
- Call Forwarding Remote Access (CFRA)
- Custom Local Calling Area Signaling Services (CLASS)
- Notification of Time and Charge (NTC)
- Station Programmable PIN (SPP)
- Subscriber Activated Call Blocking (SACB)
- Capability Set 1 Revised (CS-1R) announcements
- CS-1R Pre-Paid Services

Mechanized Calling Card Service

The system does not assign a channel to a specified MCCS announcement. These announcements are single track. Table DRAMTRK specifies the tracks for each language. Table DRAMTRK is not in use for MCCS phrases.

The MCCS announcements take the form of pre-recorded phrases on two NT1X76CA double density erasable programmable read-only memory (EPROM) cards. Use of DRAMREC, the Digital Recorded Announcement Machine (DRAM) Recording Utility, defines all phrases.

To customize a thank you announcement for an inter-LATA carrier, create a new external phrase name. Enter the phrase name against a new index in table DRMUSERS or ANNS.

DRMUSERS (continued)

A maximum of 20 inter-LATA carriers can have customized thank you announcements for MCCS.

MCCS pre-recorded phrases

Phrase name	Contents
MCCS1ENG	Please dial your card number or zero for an operator now.
MCCS2ENG	Please dial your card number again now (pause). The card number you have dialed is not valid.
MCCS3ENG	Please dial your card number.
MCCS4ENG	Please hang up and dial zero plus the number you are calling (pause). The card number you have dialed is not valid.
MCCS5ENG	You may dial another call now.
MCCS6ENG	Please dial the number you are calling again now (pause). The number you have dialed is not correct.
MCCS7ENG	Please dial the number you are calling.
MCCS8ENG	Please hang up and dial zero plus the number you are calling (pause). The number you have dialed is not correct.
MCCS9ENG	Please hang up and dial zero plus the number you are calling.
MCCS10ENG	Valid number, unrestricted PIN, RAO XXX.
MCCS11ENG	Valid number, restricted PIN, RAO XXX.
MCCS12ENG	Valid number, unrestricted PIN, RAO unavailable.
MCCS13ENG	Invalid number, please dial again now.
MCCS14ENG	Invalid number, please hang up.
MCCS15ENG	Please hang up and dial direct (pause). This number cannot be dialed as a sequence call.
MCCS16ENG	Thank you.
MCCS17ENG	Please dial your card number or zero for an operator now.

MCCS pre-recorded phrases

Phrase name	Contents
MCCSALERT	(Alert tone follows an announcement)
ENG1	One
ENG2	Two
ENG3	Three
ENG4	Four
ENG5	Five
ENG6	Six
ENG7	Seven
ENG8	Eight
ENG9	Nine
ENG10	Zero

The French phrase names are MCCS1FRE through MCCS16FRE and FRE0 through FRE9.

The operating company chooses the phrase names, except ENG0 through ENG9 and FRE0 through FRE9. You must not change these phrase names.

Automatic Coin Toll Service

Circuit pack NT1X76AE provides the following pre-recorded announcements for paid coin toll calls.

To customize a thank you announcement for an inter-LATA carrier, create a new external phrase name. Enter the phrase name against a new index in table DRMUSERS.

A maximum of 20 inter-LATA carriers can have customized thank you announcements for ACTS.

DRMUSERS (continued)

Locations ACTSTOPS 20-23 are for functionality TOPS Pre-Paid Coin Overtime, ENSV0007. These announcements appear in the following table.

ACTS pre-recorded announcements

State description	Index in table DRMUSERS	External phrase identifier
Initial deposit request	ACTSTOPS 1	(ACTS_VAR_CHARGE) (ACTS_ PLEASE) (ACTS_PAUSE) (ACTS_PLS_DEPOSIT)(ACTS_ VAR_CHARGE) (ACTS_FOR_ FIRST) (ACTS_VAR_PERIOD)
Initial coin prompt	ACTSTOPS 2	(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)
Intercoin prompt	ACTSTOPS 3	(ACTS_PLS_DEPOSIT) (ACTS_ VAR_CHARGE) (ACTS_MORE)
Acknowledgement of a correct deposit	ACTSTOPS 4	(ACTS_THANK_YOU)
Acknowledgement of an overdeposit	ACTSTOPS 5	(ACTS_THANK_HAVE) (ACTS_VAR_ CREDIT) (ACTS_CR_OVERTIME)
Coin notification	ACTSTOPS 6	(ACTS_ALERT) (ACTS_VAR_ PERIOD) (ACTS_END_SIGNAL)
Charge due deposit request, post-pay	ACTSTOPS 7	(ACTS_ALERT) (ACTS_VAR_ CHARGE) (ACTS_PLEASE) (ACTS_ PAUSE) (ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) (ACTS_FOR PAST) (ACTS_VAR_PERIOD)

ACTS pre-recorded announcements

State description	Index in table DRMUSERS	External phrase identifier
Charge due deposit request with previous overdeposit, post-pay	ACTSTOPS 8	(ACTS_ALERT) (ACTS_VAR_ CHARGE) (ACTS_PLEASE) (ACTS_PAUSE) (ACTS_YOU_HAVE) (ACTS_VAR_CREDIT) (ACTS_ CREDIT) (ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) (ACTS_ MORE) (ACTS_FOR_PAST) (ACTS_VAR_PERIOD)
Time and charge quotations	ACTSTOPS 9	(ACTS_ALERT) (ACTS_CHARGES_ARE) (ACTS_VAR_CHARGE) (ACTS_ PLUS_TAX) (ACTS_VAR_PERIOD)
Non-coin notification	ACTSTOPS 10	(ACTS_ALERT) (ACTS_VAR_ PERIOD) (ACTS_HAS_ENDED)
Future development	ACTSTOPS 11	(ACTS_TST_DEPOSIT) (ACTS_ VAR_COIN)
Future development	ACTSTOPS 12	(ACTS_VAR_COIN)
Future development	ACTSTOPS 13	(ACTS_TST_ENDED)
Overtime repeat prompt	ACTSTOPS 14	(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)
Second overtime repeat prompt	ACTSTOPS 15	(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)
Overtime intercoin prompt	ACTSTOPS 16	(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) (ACTS_MORE)
Overtime acknowledgement of a correct deposit	ACTSTOPS 17	(ACTS_THANK_YOU)

DRMUSERS (continued)

ACTS pre-recorded announcements

State description	Index in table DRMUSERS	External phrase identifier
Overtime acknowledgement of an overdeposit	ACTSTOPS 18	(ACTS_THANK_HAVE) (ACTS_VAR_CREDIT) (ACTS_CR_OVERTIME)
Repeat time and charges quotation	ACTSTOPS 19	(ACTS_ALERT) (ACTS_CHARGES_ARE) (ACTS_VAR_CHARGE) (ACTS_ PLUS_TAX) (ACTS_VAR_PERIOD)
Charge due deposit request, pre-pay	ACTSTOPS 20	(ACTS_ALERT) (ACTS_VAR_CHARGE)(ACTS_ PLEASE) (ACTS_PAUSE)(ACTS_PLS_D EPOSIT) (ACTS_VAR_CHARGE)(ACTS_ FOR_NEXT) (ACTS_VAR_PERIOD)
Charge due deposit request with previous overdeposit, pre-pay	ACTSTOPS 21	(ACTS_ALERT) (ACTS_VAR_CHARGE)(ACTS_ PLEASE) (ACTS_PAUSE)(ACTS_YOU_H AVE) (ACTS_VAR_CREDIT)(ACTS_ CREDIT) (ACTS_PLS_DEPOSIT)(ACTS_ VAR_CHARGE) (ACTS_MORE)(ACTS_FOR_N EXT) (ACTS_VAR_PERIOD)
Default, available for customization	ACTSTOPS 22	(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)
Default, available for customization	ACTSTOPS 23	(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)

Auxiliary Operator Service System

The important PHRASELIST changes to this feature are mapped internally. The phrase remapping allows use of the Traffic Operator Position - Multi

Protocol (TOPS-MP) with the DRAM. The PHRASELIST remapping follows:

- TOPSDAnn to OSVRDAnn
- AOSSDAnn to OSVRDAnn
- TOPSINTnn to OSVRnn
- AOSSINTnn to OSVRnn

The phrase names and phrase contents of the Auxiliary Operator Services System (AOSS) voice response DRAM utility appear in the following table.

AOSSVR English announcements

AOSSVR English announcements appear in the following tables.

Directory assistance announcements

Identifier	Announcement content
OSVRDA01	The number is (7D).
OSVRDA02	The number is 1-(7D).
OSVRDA03	The number is (3D)-(7D).
OSVRDA04	The number is 1-(3D)-(7D).
OSVRDA05	The toll-free number is 1-800-(7D).
OSVRDA06	At the customer's request, the number is not published. It is not listed in our records.

Intercept announcements

Identifier	Announcement content
OSVR01	Automatic Intercept: You have reached (DN). At the customer's request, service has been temporarily disconnected.Operator-Handled Intercept: At the customer's request, the service at (DN) has been temporarily disconnected.
OSVR02	Automatic Intercept: You have reached (DN). There is no service at this number. Operator-Handled Intercept: There is no service.
OSVR03	Automatic Intercept: You have reached (DN). Service has been disconnected. Operator-Handled Intercepts service at (DN) has been disconnected.

DRMUSERS (continued)

Intercept announcements

Identifier	Announcement content
OSVR04	Automatic Intercept: You have reached (DN). It has been changed to a non-published number and is not listed in our records.Operator-Handled Intercept: The number (DN) has been changed to a non-published number. It is not listed in our records.
OSVR05	Automatic Intercept: You have reached (DN). The customer is moving. The new service is not yet connected. Operator-Handled Intercept: The customer at (DN) is moving. The new service is not yet connected.
OSVR06	Automatic Intercept: You have reached (DN). Service has been temporarily disconnected.Operator-Handled Intercept: The service at (DN) has been temporarily disconnected.
OSVR07	Automatic Intercept: You have reached (DN). That line is equipped for outgoing service only. Operator-Handled Intercept: The line at (DN) is equipped for outgoing service only.
OSVR08	Automatic Intercept: You have reached (DN). Due to fire, service has been disconnected. Operator-Handled Intercept: Due to fire, the service at (DN) has been disconnected.
OSVR09	Automatic Intercept: You have reached (DN). The line is temporarily out of order. Operator-Handled Intercept: The line at (DN) is temporarily out of order.
OSVR10	Automatic Intercept: You have reached (DN). The service is not yet connected. Operator-Handled Intercept: The service at (DN) is not yet connected.
OSVR11	Automatic Intercept: You have reached (DN). The customer has moved. Service has been disconnected. Operator-Handled Intercept: The customer at (DN) has moved. Service has been disconnected.
OSVR12	Automatic Intercept: You have reached (DN). The line is being checked for trouble. Please try your call again later. Operator-Handled Intercept: The line at (DN) should be in service. Please try your call again.

Intercept announcements

Identifier	Announcement content
OSVR13	Automatic Intercept: You have reached (DN). The number has been changed to (DN). OR You have reached (DN). The number has been changed. You can now call toll-free 1-800 (DN). Operator-Handled Intercept: The number (DN) has been changed to (DN). OR The number (DN) has been changed. You can now call toll-free 1-800 (DN).
OSVR14	Automatic Intercept: You have reached (DN). The number has been changed to (DN). It is no longer a free call. Operator-Handled Intercept: The number (DN) has been changed to (DN). It is no longer a free call.
OSVR15	Automatic Intercept: You have reached (DN). Service has been disconnected. The customer can be reached at (DN). OR You have reached (DN). Service has been disconnected. You can now call toll-free 1-800 (DN). Operator-Handled Intercept: The service at (DN) has been disconnected. The customer can be reached at (DN). OR The service at (DN) has been disconnected. You can now call toll-free 1-800 (DN).
OSVR16	Automatic Intercept: You have reached (DN). Due to fire, service has been disconnected. The customer can be reached at (DN). Operator-Handled Intercept: Due to fire, the service at (DN) has been disconnected. The customer can be reached at (DN).
OSVR17	Automatic Intercept: You have reached (DN). The line is temporarily out of order. Calls are being taken at (DN). Operator-Handled Intercept: The line at (DN) is temporarily out of order. Calls are being taken at (DN).
OSVR18	Automatic Intercept: You have reached (DN). At the customer's request, service has been temporarily disconnected. The customer can be reached at (DN). Operator-Handled Intercept: At the customer's request, the service at (DN) has been temporarily disconnected. The customer can be reached at (DN).

DRMUSERS (continued)

Intercept announcements

Identifier	Announcement content
OSVR19	Automatic Intercept: You have reached (DN). Calls are being temporarily taken at (DN). Operator-Handled Intercept: Calls for (DN) are being temporarily taken at (DN).
OSVR20	Automatic Intercept: You have reached (DN). The number has been changed to (DN). It is no longer a free call. You may call collect. Operator-Handled Intercept: The number (DN) has been changed to (DN). It is no longer a free call. You may call collect.

Automatic Calling Card Service

The DMS-200 switching unit for the ACCS feature in the Canadian market provides the following announcements.

The announcements are in English and French. The operating company can enter tables so that DRAM reports the required announcements in one or two languages.

The DMS-200 selects a free DRAM channel. The DMS-200 delivers the correct announcement during an ACCS call.

Announcements 1 to 17 are standard announcements. Announcements 17 to 25 are customized announcements.

The DRAM PROM memory cards 1X76AH, English, and 1X76BH, French, are in use.

Input for standard and customized announcements appear in the following examples.

Announcement 1

Reason for announcement

An initial prompt announcement returns to a subscriber with the tone plus prompt announcement treatment.

ACCS announcement 1

Phrase name	Announcement
ACCSENG1	Please enter your calling card number or dial zero to reach an operator. This is a recording.
ACCSFRE1	Veuillez entrer votre numéro de Carte d'appel ou faire le zéro pour joindre le téléphoniste. C'était un message enregistré.

Announcement 2

Reason for announcement

An error announcement returns to a subscriber that enters a rejected calling card number or makes a keying error.

ACCS announcement 2

Phrase name	Announcement
ACCSENG2	The card number received is not valid. Please enter your card number again.
ACCSFRE2	Le numéro de carte d'appel reçu n'est pas valide. Veuillez entrer à nouveau votre numéro de carte.

Announcement 3

Reason for announcement

A prompt announcement returns after an error occurs and the system gives the prompt tone.

ACCS announcement 3

Phrase name	Announcement
ACCSENG3	Please enter your card number.
ACCSFRE3	Veuillez entrer votre numéro de carte d'appel.

DRMUSERS (continued)

Announcement 4

Reason for announcement

A termination failure announcement returns when a subscriber reaches the threshold for keying error or rejected calling card number. The customer must hang up and originate the call again.

ACCS announcement 4

Phrase name	Announcement
ACCSENG4	The card number received is not valid. Please hang up, then dial zero and the number you are calling.
ACCSFRE4	Le numéro de Carte d'appel reçu n'est pas valide. Veuillez raccrocher, puis faire le zéro et composer le numéro que vous voulez joindre.

Announcement 5

Reason for announcement

A prompt announcement returns for a sequence call.

ACCS announcement 5

Phrase name	Announcement
ACCSENG5	You may place another call now.
ACCSFRE5	Vous pouvez maintenant faire un autre appel.

Announcement 6

Reason for announcement

An error announcement returns after errors occur in the called number for a sequence call.

ACCS announcement 6

Phrase name	Announcement
ACCSENG6	An incorrect number was dialed. Please redial the number you are calling.
ACCSFRE6	Le numéro que vous avez composé est inexact. Veuillez composer à nouveau le numéro que vous voulez joindre.

Announcement 7

Reason for announcement

A second error announcement returns when the following two conditions occur:

- the system gives an error announcement
- the subscriber does not enter a new called number for a sequence call

ACCS announcement 7

Phrase name	Announcement
ACCSENG7	Please dial the number you are calling.
ACCSFRE7	Veuillez composer le numéro que vous voulez joindre.

Announcement 8

Reason for announcement

A termination announcement returns when a subscriber reaches the threshold for a wrong called number in a sequence call.

ACCS announcement 8

Phrase name	Announcement
ACCSENG8	An incorrect number was dialed. Please hang up, then dial zero and the number you are calling.
ACCSFRE8	Le numéro que vous avez composé est inexact. Veuillez raccrocher, puis faire le zéro et composer le numéro que vous voulez joindre.

Announcement 9

Reason for announcement

A termination error announcement returns when the following two conditions occur:

- the system gives a prompt announcement
- the subscriber does not enter a new calling card number

DRMUSERS (continued)

The announcement applies to a called number for a sequence call.

ACCS announcement 9

Phrase name	Announcement
ACCSENG9	Please hang up, then dial zero and the number you are calling.
ACCSFRE9	Veuillez raccrocher, puis faire le zéro et composer le numéro que vous voulez joindre.

Announcement 10

Reason for announcement

This announcement is a reply to an inward, non-TOPS validation. These validations include accepted calling card number, unrestricted personal identification number (PIN) and known revenue accounting office (RAO).

ACCS announcement 10

Phrase name	Announcement
ACCSENG10	Valid number, unrestricted PIN, R A O: XXX.
ACCSFRE10	Numéro valide, NIP autorisé, B R C: XXX.

Announcement 11

Reason for announcement

This announcement is a reply to an inward, non-TOPS validation. These validations include accepted calling card number, restricted PIN and known RAO.

ACCS announcement 11

Phrase name	Announcement
ACCSENG11	Valid number, restricted PIN, R A O: XXX.
ACCSFRE11	Numéro valide, NIP non autorisé, B R C: XXX.

Announcement 12

Reason for announcement

This announcement is a reply to an inward, non-TOPS validation. Validation of the calling card number does not occur because of a database access problem or failure.

ACCS announcement 12

Phrase name	Announcement
ACCSENG12	Valid number, unrestricted PIN, R A O unavailable.
ACCSFRE12	Numéro valide, NIP autorisé, B R C indisponible.

Announcement 13

Reason for announcement

This announcement is a reply to an inward, non-TOPS validation. The system rejects the calling card number.

ACCS announcement 13

Phrase name	Announcement
ACCSENG13	Invalid number.
ACCSFRE13	Numéro non valide.

Announcement 14

Reason for announcement

This announcement is a reply to an inward, non-TOPS validation. The system rejects the calling card.

ACCS announcement 14

Phrase name	Announcement
ACCSENG14	Invalid number.
ACCSFRE14	Numéro non valide.

Announcement 15

Reason for announcement

A termination announcement returns when you cannot access the database because of technical difficulties or outages. The system blocks the call. The subscriber must try the call again.

DRMUSERS (continued)

This announcement is for possible future use only. The system does not block calls because of database problems. The system processes the calls. Validation does not occur.

ACCS announcement 15

Phrase name	Announcement
ACCSENG15	We are sorry, your call did not go through. Please try your call again. This is a recording.
ACCSFRE15	Des difficultés téchniques nous empechent pour l'instant d'acheminer votre appel. Veuillez composer de nouveau. C'était un message enregistré.

Announcement 16

Reason for announcement

This announcement returns to a subscriber that enters an accepted calling card number or correct called number for a sequence call.

ACCS announcement 16

Phrase name	Announcement
ACCSENG16	Thank you.
ACCSFRE16	Merci.

Announcement 17

Reason for ACCSTONE

A tone returns to subscriber to indicate that the subscriber can enter the calling card number.

Tones contain 60 ms DTMF # tone, 941/1477 Hz at -10 dbm. A 940 ms of exponentially decayed dial tone follows this tone immediately. The exponentially decayed dial tone is 440/350 Hz with time constant of 200 ms initially at -10 dbm.

Call Forwarding Remote Access

The operating company can enter tables so that the DRAM reports the required announcements in one or two languages.

The DRAM PROM memory cards NT1X76AM, English, and NT1X76BM, French, are in use.

The announcements appear in the following table. The first phrase name is the English version. The second phrase name is the French equivalent.

Announcement CFRAANN 1

Please enter the X digit telephone number to forward, followed by your PIN number.

CFRAANN 1

Phrase name	Phrase
CFRAEDNPIN1 CFRAFDNPIN1	Please enter
CFRAEDIGITS CFRAFDIGITS	X digit (see Note)
CFRAEDNPIN2 CFRAFDNPIN2	telephone number to forward, followed by your PIN number.

Note: 'X' can be from 1 to 15.

Announcement CFRAANN 2

Please enter a code to activate or deactivate call forwarding.

CFRAANN 2

Phrase name	Phrase
CFRAEFAC CFRAFFAC	Please enter a code to activate or deactivate call forwarding.

Announcement CFRAANN 3

Calls to your number will be forwarded to another number. Please enter the number now.

CFRAANN 3

Phrase name	Phrase
CFRAEFWDN CFRAFFWDN	Calls to your number will be forwarded to another number. Please enter the number now.

DRMUSERS (continued)

Announcement CFRAANN 4

Calls to your telephone will be forwarded to XXX XXXX. To confirm this, press one; to forward to a different number, press two; to cancel this, please hang up now.

CFRAANN 4

Phrase name	Phrase
CFRAEFWD1 CFRAFFWD1	Calls to your telephone will be forwarded to
ENGVARDNF FREVARDNF	XXX XXXX
CFRAEFWD2 CFRAFFWD2	To confirm this, press one; to forward to a different number, press two; to cancel this, please hang up now.

Announcement CFRAANN 5

Your calls cannot be forwarded to XXX XXXX. Please enter another number now.

CFRAANN 5

Phrase name	Phrase
CFRAEERR1 CFRAFERR1	Your calls cannot be forwarded to
ENGVARDNF FREVARDNF	XXX XXXX
CFRAEERR2 CFRAFERR2	Please enter another number now.

Announcement CFRAANN 6

Your calls cannot be forwarded to XXX XXXX.

CFRAANN 6

Phrase name	Phrase
CFRAEERR1 CFRAFERR1	Your calls cannot be forwarded to
ENGVARDNF FREVARDNF	XXX XXXX

Custom Local Area Signaling Services

These announcements are a requirement for a switching unit with Residential Enhanced Services (RES), CLASS and directory number (DN) attributes software packages.

The operating company can enter tables so that the DRAM records the required announcements in one or two languages.

The two announcements appear in the following table. The first phrase name is the English version. The second phrase name is the French equivalent.

Announcement CLASSANN 1

Information about incoming calls will now be sent to your telephone.

CLASSANN 1

Phrase name	Phrase
CNDEINF CNDFINF	Information about incoming calls
CNDEACT CNDFACT	Will now be sent to your telephone.

Announcement CLASSANN 2

Information about incoming calls will no longer be sent to your telephone.

CFRAANN 2

Phrase name	Phrase
CNDEINF CNDFINF	Information about incoming calls
CNDEDACT CNDFDACT	Will no longer be sent to your telephone.

Notification of Time and Charge

The NTC feature provides a notification of time and charge announcement. The feature performs this function after answer and release of the call occurs. This call is the call that requests this service. You can enter spoken phrases and silence pauses in table DRMUSERS.

The NTC is available over Integrated Business Network (IBN) integrated services digital network (ISDN) user part (ISUP) trunks to the Japanese domestic market with NCCI Version 1 or 2 protocols.

DRMUSERS (continued)

You can use the NT1X80AA, 4 min EDRAM, and NT1X80BA, 16 min EDRAM, cards to store NTC announcements.

The phrases are available to a switch with the NTC feature. The operating company can enter tables so that the EDRAM records the required announcements in nine languages.

Phrase names NTCENG and NTCJPN are language delimiters. The phrase names do not have corresponding recorded announcements.

The phrase names and announcement contents for the required and recommended NTC announcement phrases in different languages appear in the following table. These languages include Japanese, English, Mandarin Chinese, Korean, Malay, Portuguese, Spanish, Tagalog and Thai.

Required phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN1	zero
NTCJPN2	ichi
NTCJPN3	ni
NTCJPN4	sann
NTCJPN5	yonn
NTCJPN6	yo
NTCJPN7	go
NTCJPN8	roku
NTCJPN9	nana
NTCJPN10	hachi
NTCJPN11	hatt
NTCJPN12	kyuu
NTCJPN13	ku
NTCJPN14	jyuu
NTCJPN15	jyutt
NTCJPN16	jyuu ichi

Required phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN17	jyuu ni
NTCJPN18	jyuu san
NTCJPN19	jyuu yonn
NTCJPN20	jyuu yo
NTCJPN21	jyuu go
NTCJPN22	jyuu roku
NTCJPN23	jyuu nana
NTCJPN24	jyuu hachi
NTCJPN25	jyuu kyuu
NTCJPN26	jyuu ku
NTCJPN27	ni jyuu
NTCJPN28	san jyuu
NTCJPN29	yon jyuu
NTCJPN30	go jyuu
NTCJPN31	roku jyuu
NTCJPN32	nana jyuu
NTCJPN33	hachi jyuu
NTCJPN34	kyuu jyuu
NTCJPN35	hyaku
NTCJPN36	pyaku
NTCJPN37	byaku
NTCJPN38	ni hyaku
NTCJPN39	san byaku
NTCJPN40	yon hyaku

DRMUSERS (continued)

Required phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN41	go hyaku
NTCJPN42	rop pyaku
NTCJPN43	nana hyaku
NTCJPN44	hap pyaku
NTCJPN45	kyuu hyaku
NTCJPN46	senn
NTCJPN47	zenn
NTCJPN48	ni senn
NTCJPN49	sann zenn
NTCJPN50	yon senn
NTCJPN51	go senn
NTCJPN52	roku senn
NTCJPN53	nana senn
NTCJPN54	has senn
NTCJPN55	kyuu senn
NTCJPN56	ichi man
NTCJPN57	ni man
NTCJPN58	sann man
NTCJPN59	yon man
NTCJPN60	go man
NTCJPN61	roku man
NTCJPN62	nana man
NTCJPN63	hachi man
NTCJPN64	kyuu man

Required phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN65	man
NTCJPN66	is sen
NTCJPN67	hyaku man
NTCJPN68	byou
NTCJPN69	zero byou
NTCJPN70	ichi byou
NTCJPN71	ni byou
NTCJPN72	sann byou
NTCJPN73	yonn byou
NTCJPN74	go byou
NTCJPN75	roku byou
NTCJPN76	nana byou
NTCJPN77	hachi byou
NTCJPN78	kyuu byou
NTCJPN79	jyuu byou
NTCJPN80	ni jyuu byou
NTCJPN81	san jyuu byou
NTCJPN82	yonn jyuu byou
NTCJPN83	go jyuu byou
NTCJPN84	funn
NTCJPN85	punn
NTCJPN86	zero funn
NTCJPN87	ip punn
NTCJPN88	ni funn

DRMUSERS (continued)

Required phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN89	sann punn
NTCJPN90	yonn punn
NTCJPN91	go funn
NTCJPN92	rop punn
NTCJPN93	nana funn
NTCJPN94	hap punn
NTCJPN95	kyuu funn
NTCJPN96	jyu punn
NTCJPN97	ni jyu punn
NTCJPN98	san jyu punn
NTCJPN99	yonn jyu punn
NTCJPN100	go jyu punn
NTCJPN101	jikan
NTCJPN102	ichi jikan
NTCJPN103	ni jikan
NTCJPN104	sann jikan
NTCJPN105	yo jikan
NTCJPN106	go jikan
NTCJPN107	roku jikan
NTCJPN108	nana jikan
NTCJPN109	hachi jikan
NTCJPN110	ku jikan
NTCJPN111	yen
NTCJPN112	ichi yen

Required phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN113	ni yen
NTCJPN114	sann yen
NTCJPN115	yo yen
NTCJPN116	go yen
NTCJPN117	roku yen
NTCJPN118	nana yen
NTCJPN119	hachi yen
NTCJPN120	kyuu yen
NTCJPN122	de
NTCJPN123	deshita
NTCJPN124	ate

Recommended phrases for Japanese NTC announcements

Phrase name	Announcement
NTCJPN121	Kochirawa idc desu. Tadaimano kokusaidenwano ryokinwa
NTCJPN125	zerozerorokuni goriyou arigatougozaimashita
NTCJPN126	optional
NTCJPN127	optional
NTCJPN128	optional
NTCJPN129	optional
NTCJPN130	optional

DRMUSERS (continued)

Required phrases for English NTC announcements

Phrase name	Announcement
NTCENG3	hours
NTCENG4	hour
NTCENG5	minutes
NTCENG6	minute
NTCENG7	seconds
NTCENG8	second
NTCENG9	long and cost
NTCENG10	yen
NTCENG11	one
NTCENG13	two
NTCENG14	three
NTCENG15	four
NTCENG16	five
NTCENG17	six
NTCENG18	seven
NTCENG19	eight
NTCENG20	nine
NTCENG21	ten
NTCENG22	eleven
NTCENG23	twelve
NTCENG24	thirteen
NTCENG25	fourteen
NTCENG26	fifteen
NTCENG27	sixteen

Required phrases for English NTC announcements

Phrase name	Announcement
NTCENG28	seventeen
NTCENG29	eighteen
NTCENG30	nineteen
NTCENG31	twenty
NTCENG32	thirty
NTCENG33	forty
NTCENG34	fifty
NTCENG35	sixty
NTCENG36	seventy
NTCENG37	eighty
NTCENG38	ninety
NTCENG39	hundred
NTCENG40	thousand
NTCENG41	million
NTCENG43	zero

Recommended phrases for English NTC announcements

Phrase name	Announcement
NTCENG1	This is IDC. The international call you have just made
NTCENG2	was
NTCENG12	Thank you for using IDC. This is a recording.
NTCENG42	repeat
NTCENG44	This is IDC. The international call you have just made was
NTCENG45	the number
NTCENG46	to

DRMUSERS (continued)

Recommended phrases for English NTC announcements

Phrase name	Announcement
NTCENG47	optional
NTCENG48	optional
NTCENG49	optional
NTCENG50	optional
NTCENG51	optional

Recommended phrases for English CLASS announcements

Phrase name	Announcement
CLASSENG65	no telephone number is stored.

Required phrases for Mandarin Chinese NTC announcements

Phrase name	Announcement
NTCCHMAN2	xiaoshi
NTCCHMAN3	fen
NTCCHMAN4	miao
NTCCHMAN6	yuan
NTCCHMAN10	yi
NTCCHMAN11	er
NTCCHMAN12	san
NTCCHMAN13	si
NTCCHMAN14	wu
NTCCHMAN15	liu
NTCCHMAN16	qi
NTCCHMAN17	ba
NTCCHMAN18	jiu
NTCCHMAN19	liang

Required phrases for Mandarin Chinese NTC announcements

Phrase name	Announcement
NTCCHMAN20	shi
NTCCHMAN21	shiyi
NTCCHMAN22	she ir
NTCCHMAN23	shisan
NTCCHMAN24	shis
NTCCHMAN25	shisi
NTCCHMAN26	shiwu
NTCCHMAN27	shiliu
NTCCHMAN28	shiqi
NTCCHMAN29	shiba
NTCCHMAN30	shijiu
NTCCHMAN31	bai
NTCCHMAN32	quian
NTCCHMAN33	wan
NTCCHMAN34	er-shi
NTCCHMAN35	san-shi
NTCCHMAN36	si-shi
NTCCHMAN37	wu-shi
NTCCHMAN38	liu-shi
NTCCHMAN39	qi-shi
NTCCHMAN40	ba-shi
NTCCHMAN41	jiu-shi

DRMUSERS (continued)

Recommended phrases for Mandarin Chinese NTC announcements

Phrase name	Announcement
NTCCHMAN1	Zhe Li Shi IDC. Ning Da De Guo Ji Dian Hua Yong La
NTCCHMAN5	Jin E Shi
NTCCHMAN6	yuan
NTCCHMAN7	Chong Fu Yi Bian
NTCCHMAN8	dui fang hao ma shi
NTCCHMAN9	Gan xie nin shi yong IDC guo ji dian hua. Gang cai nin.

Required phrases for Korean NTC announcements

Phrase name	Announcement
NTCKOREAN3	bun
NTCKOREAN4	cho
NTCKOREAN10	pun
NTCKOREAN11	kong
NTCKOREAN12	il
NTCKOREAN13	i
NTCKOREAN14	sam
NTCKOREAN15	sa
NTCKOREAN16	o
NTCKOREAN17	yuk
NTCKOREAN18	ch'il
NTCKOREAN19	p'all
NTCKOREAN20	ku
NTCKOREAN21	yong
NTCKOREAN22	ship
NTCKOREAN23	ship-il

Required phrases for Korean NTC announcements

Phrase name	Announcement
NTCKOREAN24	ship-i
NTCKOREAN25	ship-sam
NTCKOREAN26	ship-sa
NTCKOREAN27	ship-o
NTCKOREAN28	ship-yuk
NTCKOREAN29	ship-ch'il
NTCKOREAN30	ship-p'ai
NTCKOREAN31	ship-ku
NTCKOREAN32	paek
NTCKOREAN33	ch'on
NTCKOREAN34	man
NTCKOREAN35	i-ship
NTCKOREAN36	sam-ship
NTCKOREAN37	sa-ship
NTCKOREAN38	o-ship
NTCKOREAN39	yuk-ship
NTCKOREAN40	ch'il-ship
NTCKOREAN41	p'ai-ship
NTCKOREAN42	ku-ship
NTCKOREAN43	han
NTCKOREAN44	tu
NTCKOREAN45	se
NTCKOREAN46	ne
NTCKOREAN47	tasot

DRMUSERS (continued)

Required phrases for Korean NTC announcements

Phrase name	Announcement
NTCKOREAN48	yosot
NTCKOREAN49	ilgop
NTCKOREAN50	yodoi
NTCKOREAN51	ahop
NTCKOREAN52	yui
NTCKOREAN53	yui-han
NTCKOREAN54	yui-tu
NTCKOREAN55	yui-se
NTCKOREAN56	yui-ne
NTCKOREAN57	yui-tasot
NTCKOREAN58	yui-yosot
NTCKOREAN59	yui-ilgop
NTCKOREAN60	yui-yodoi
NTCKOREAN61	yui-ahop
NTCKOREAN62	sum
NTCKOREAN63	sumui
NTCKOREAN64	sorun
NTCKOREAN65	mapun
NTCKOREAN66	shun
NTCKOREAN67	yesun
NTCKOREAN68	ilpun
NTCKOREAN69	yudun
NTCKOREAN70	apun

Recommended phrases for Korean NTC announcements

Phrase name	Announcement
NTCKOREAN1	YogninunIDC imnida Yoropunkeso iyonhagci keshimun kucche chonanun
NTCKOREAN5	en imnida
NTCKOREAN6	Tashi maisum dourkessumnida
NTCKOREAN7	en imyo
NTCKOREAN8	purkwa tonhwahayosssumnida
NTCKOREAN9	IDC nui iyonhayo chusyuso dedani kamsahamnida Igosun nogum teipuimnida
NTCKOREAN71	to yogumun

Required phrases for Malay NTC announcements

Phrase name	Announcement
NTCMALAY3	jam
NTCMALAY4	minit
NTCMALAY5	saat
NTCMALAY7	yen
NTCMALAY12	Kosong
NTCMALAY13	Satu
NTCMALAY14	Dua
NTCMALAY15	Tiga
NTCMALAY16	Empat
NTCMALAY17	Lima
NTCMALAY18	Enam
NTCMALAY19	Tujuh
NTCMALAY20	Lapan
NTCMALAY21	Sembilan

DRMUSERS (continued)

Required phrases for Malay NTC announcements

Phrase name	Announcement
NTCMALAY22	Sepuluh
NTCMALAY23	Sebalas
NTCMALAY24	DuaBelas
NTCMALAY25	TigaBelas
NTCMALAY26	EmpatBelas
NTCMALAY27	LimaBelas
NTCMALAY28	EnamBelas
NTCMALAY29	TujuhBelas
NTCMALAY30	LapanBelas
NTCMALAY31	SembilanBelas
NTCMALAY32	DuaPuluh
NTCMALAY33	Seratus
NTCMALAY34	Ratus
NTCMALAY35	Seribu
NTCMALAY36	Ribu
NTCMALAY37	Sejuta
NTCMALAY38	TigaPuluh
NTCMALAY39	EmpatPuluh
NTCMALAY40	LimaPuluh
NTCMALAY41	EnamPuluh
NTCMALAY42	Tujuhpuluh
NTCMALAY43	LapanPuluh
NTCMALAY44	SembilanPuluh
NTCMALAY45	Jutah

Recommended phrases for Malay NTC announcements

Phrase name	Announcement
NTCMALAY1	Ini ialah IDC Pangilan antarabangsa yang baru saja anda buat,
NTCMALAY2	selama
NTCMALAY6	bayarannya ialah
NTCMALAY8	duilangi
NTCMALAY9	panngilan ke
NTCMALAY10	nombor
NTCMALAY11	Terima kasih kerana menggunakan IDC.

Required phrases for Portuguese NTC announcements

Phrase name	Announcement
NTCPORTG2	horas
NTCPORTG3	minutos
NTCPORTG4	e
NTCPORTG5	segundos
NTCPORTG6	hora
NTCPORTG7	minuto
NTCPORTG8	segundo
NTCPORTG10	iene
NTCPORTG11	ienes
NTCPORTG15	zero
NTCPORTG16	um
NTCPORTG17	dois
NTCPORTG18	tres
NTCPORTG19	quatro
NTCPORTG20	cinco

DRMUSERS (continued)

Required phrases for Portuguese NTC announcements

Phrase name	Announcement
NTCPORTG21	seis
NTCPORTG22	sete
NTCPORTG23	oto
NTCPORTG24	nove
NTCPORTG25	des
NTCPORTG26	onze
NTCPORTG27	doze
NTCPORTG28	treze
NTCPORTG29	quatorze
NTCPORTG30	quinze
NTCPORTG31	dessesseis
NTCPORTG32	dessessete
NTCPORTG33	dezoto
NTCPORTG34	deznove
NTCPORTG35	vinte
NTCPORTG36	vinte e
NTCPORTG37	trinta
NTCPORTG38	trinta e
NTCPORTG39	quarenta
NTCPORTG40	quarenta e
NTCPORTG41	cinquenta
NTCPORTG42	cinquenta e
NTCPORTG43	sessenta
NTCPORTG44	sessenta e

Required phrases for Portuguese NTC announcements

Phrase name	Announcement
NTCPORTG45	setenta
NTCPORTG46	setenta e
NTCPORTG47	otenta
NTCPORTG48	otenta e
NTCPORTG49	noventa
NTCPORTG50	noventa e
NTCPORTG51	cem
NTCPORTG52	cemto
NTCPORTG53	cemto e
NTCPORTG54	duzentos
NTCPORTG55	duzentos e
NTCPORTG56	trezentos
NTCPORTG57	trezentos e
NTCPORTG58	quatrocentos
NTCPORTG59	quatrocentos e
NTCPORTG60	quinhentos
NTCPORTG61	quinhentos e
NTCPORTG62	seiscentos
NTCPORTG63	seiscentos e
NTCPORTG64	setecentos
NTCPORTG65	setecentos e
NTCPORTG66	otocentos
NTCPORTG67	otoscentos e
NTCPORTG68	novecentos

DRMUSERS (continued)

Required phrases for Portuguese NTC announcements

Phrase name	Announcement
NTCPORTG69	novecentos e
NTCPORTG70	mil
NTCPORTG71	mil e
NTCPORTG72	mihao de
NTCPORTG73	mihao e
NTCPORTG74	mihao
NTCPORTG75	mihoes de
NTCPORTG76	mihoes e
NTCPORTG77	mihoes
NTCPORTG78	de
NTCPORTG79	uma
NTCPORTG80	duas
NTCPORTG81	duzentas

Recommended phrases for Portuguese NTC announcements

Phrase name	Announcement
NTCPORTG1	Aqui e a IDC. A chamada internacional qua acaba de ser feat tave a duracao de
NTCPORTG9	a custou
NTCPORTG12	Repatimos
NTCPORTG13	a camada toi para.
NTCPORTG14	Agradecamos por utilizar a IDC.

Required phrases for Spanish NTC announcements

Phrase name	Announcement
NTCSPAIN2	horas
NTCSPAIN3	minutos
NTCSPAIN4	segundos
NTCSPAIN5	hora
NTCSPAIN6	minuto
NTCSPAIN7	segundo
NTCSPAIN9	yenes
NTCSPAIN10	yen
NTCSPAIN15	cero
NTCSPAIN16	uno
NTCSPAIN17	dos
NTCSPAIN18	tres
NTCSPAIN19	cuatro
NTCSPAIN20	cinco
NTCSPAIN21	seis
NTCSPAIN22	siete
NTCSPAIN23	ocho
NTCSPAIN24	nueve
NTCSPAIN25	un
NTCSPAIN26	diez
NTCSPAIN27	once
NTCSPAIN28	doce
NTCSPAIN29	trece
NTCSPAIN30	catorce

DRMUSERS (continued)

Required phrases for Spanish NTC announcements

Phrase name	Announcement
NTCSPAIN31	quince
NTCSPAIN32	dieciseis
NTCSPAIN33	diecisiete
NTCSPAIN34	dieciocho
NTCSPAIN35	diecinueve
NTCSPAIN36	viente
NTCSPAIN37	vientun
NTCSPAIN38	trienta
NTCSPAIN39	y
NTCSPAIN40	trienta y
NTCSPAIN41	cuarenta
NTCSPAIN42	cuarenta y
NTCSPAIN43	cinquenta
NTCSPAIN44	cinquenta y
NTCSPAIN45	sesenta
NTCSPAIN46	sesenta y
NTCSPAIN47	setenta
NTCSPAIN48	setenta y
NTCSPAIN49	ochenta
NTCSPAIN50	ochenta y
NTCSPAIN51	noventa
NTCSPAIN52	noventa y
NTCSPAIN53	cien
NTCSPAIN54	ciento

Required phrases for Spanish NTC announcements

Phrase name	Announcement
NTCSPAIN55	doscientos
NTCSPAIN56	trescientos
NTCSPAIN57	cuatrocientos
NTCSPAIN58	quinientos
NTCSPAIN59	seiscientos
NTCSPAIN60	setecientos
NTCSPAIN61	ochocientos
NTCSPAIN62	novecientos
NTCSPAIN63	mil
NTCSPAIN64	million de
NTCSPAIN65	vientidos
NTCSPAIN66	vientitres
NTCSPAIN67	vienticuatro
NTCSPAIN68	vienticinco
NTCSPAIN69	vientiseis
NTCSPAIN70	vientisiete
NTCSPAIN71	vientiocho
NTCSPAIN72	vientinueve
NTCSPAIN73	million
NTCSPAIN74	milliones de
NTCSPAIN75	milliones
NTCSPAIN76	una
NTCSPAIN77	vientiuna

DRMUSERS (continued)

Recommended phrases for Spanish NTC announcements

Phrase name	Announcement
NTCSPAIN1	Habia IDC. La tamada internacional que acaba de realizar duro
NTCSPAIN8	de duracion
NTCSPAIN11	Repetimos
NTCSPAIN12	y ei importe es de
NTCSPAIN13	al numero.
NTCSPAIN14	Gracias por usar IDC. Esta Es una grabacion.

Required phrases for Tagalog NTC announcements

Phrase name	Announcement
NTCTGALO2	oras
NTCTGALO3	minuto
NTCTGALO4	segundo
NTCTGALO6	yen
NTCTGALO13	sero
NTCTGALO14	one
NTCTGALO15	two
NTCTGALO16	three
NTCTGALO17	four
NTCTGALO18	five
NTCTGALO19	six
NTCTGALO20	seven
NTCTGALO21	eight
NTCTGALO22	nine
NTCTGALO23	isang
NTCTGALO24	dalawang

Required phrases for Tagalog NTC announcements

Phrase name	Announcement
NTCTGALO25	tatlong
NTCTGALO26	apatna
NTCTGALO27	limang
NTCTGALO28	animna
NTCTGALO29	pitong
NTCTGALO30	walong
NTCTGALO31	slyamna
NTCTGALO32	sampung
NTCTGALO33	labing-isang
NTCTGALO34	labin-dalawang
NTCTGALO35	labin-tatlong
NTCTGALO36	labing-apatna
NTCTGALO37	labin-limang
NTCTGALO38	labing-animna
NTCTGALO39	labim-pitong
NTCTGALO40	labing-walong
NTCTGALO41	labin-siyamna
NTCTGALO42	dalawampung
NTCTGALO43	dalawampu't
NTCTGALO44	tatlumpung
NTCTGALO45	tatlumpu't
NTCTGALO46	apatnapung
NTCTGALO47	apatnapu't
NTCTGALO48	limampung

DRMUSERS (continued)

Required phrases for Tagalog NTC announcements

Phrase name	Announcement
NTCTGALO49	limampu't
NTCTGALO50	animnapung
NTCTGALO51	animnapu't
NTCTGALO52	pitumpung
NTCTGALO53	pitumpu't
NTCTGALO54	walumpung
NTCTGALO55	walumpu't
NTCTGALO56	siyamnapung
NTCTGALO57	siyamnapu't
NTCTGALO58	daang
NTCTGALO59	daa't
NTCTGALO60	raang
NTCTGALO61	raa't
NTCTGALO62	libong
NTCTGALO63	libo't
NTCTGALO64	milyong
NTCTGALO65	milyon at

Recommended phrases for Tagalog NTC announcements

Phrase name	Announcement
NTCTGALO1	Ito pong IDC. Ang inyong international call kanina ay
NTCTGALO6	at umobot ng
NTCTGALO7	Uullin ko po
NTCTGALO8	ang inyo pong tawag
NTCTGALO9	sa

Recommended phrases for Tagalog NTC announcements

Phrase name	Announcement
NTCTGALO10	numerong
NTCTGALO11	Maraming saiamat po sa inyong paggamit ng IDC
NTCTGALO12	Ito po ay recording

Required phrases for Thai NTC announcements

Phrase name	Announcement
NTCTHAI2	chuamong
NTCTHAI3	naathii
NTCTHAI4	winaathii
NTCTHAI6	yen
NTCTHAI12	Soon
NTCTHAI13	Nurng
NTCTHAI14	Too
NTCTHAI15	Saam
NTCTHAI16	Sii
NTCTHAI17	Haa
NTCTHAI18	Hok
NTCTHAI19	Jed
NTCTHAI20	Paad
NTCTHAI21	Gao
NTCTHAI22	Song
NTCTHAI23	Sip
NTCTHAI24	SipEd
NTCTHAI25	SipSong
NTCTHAI26	SipSaam

DRMUSERS (continued)

Required phrases for Thai NTC announcements

Phrase name	Announcement
NTCTHAI27	SipSii
NTCTHAI28	SipHaa
NTCTHAI29	SipHok
NTCTHAI30	SipJed
NTCTHAI31	SipPaad
NTCTHAI32	SipGao
NTCTHAI33	YiiSip
NTCTHAI34	Ed
NTCTHAI35	Rooi
NTCTHAI36	Phan
NTCTHAI37	Murn
NTCTHAI38	Saan
NTCTHAI39	Laan
NTCTHAI40	SaamSip
NTCTHAI41	SiiSip
NTCTHAI42	HaaSip
NTCTHAI43	HokSip
NTCTHAI44	JedSip
NTCTHAI45	PaadSip
NTCTHAI46	GaoSip

Recommended phrases for Thai NTC announcements

Phrase name	Announcement
NTCTHAI1	Thii nii IDC than dai chai boorikan thoorasap rawaang prathet pen weelaa
NTCTHAI5	pen ngen

Recommended phrases for Thai NTC announcements

Phrase name	Announcement
NTCTHAI7	Yam than daai chai boorikan thoorasap rawaang prathet
NTCTHAI8	pai yang
NTCTHAI9	maalieek thoorasap
NTCTHAI10	pen weelaa
NTCTHAI11	khoo khoobphrakhun thii chai boorikan khoong IDC le niikhuu tapebanthuksiang

Silence phrases for NTC

Phrase name	Time duration
NTCSLNC250MS	250 ms
NTCSLNC500MS	500 ms
NTCSLNC1SEC	1 s

The NTCSLNC500MS is the only compound phrase. A phrase assignment is not a requirement.

Station Programmable PIN (SPP)

This feature allows subscribers to change the PIN from the telephone through a feature access code. The SPP assignment can occur for each customer group. Possible SPP announcements that the operating company can custom record, appear in the following examples. Northern Telecom (Nortel) recommends announcement 1 for phrase SPPANNC1. Refer to section 7 of the *DRAM and EDRAM Guide* for additional information about how to create customized recordings.

DRMUSERS (continued)

The phrase names and announcements for this feature appear in the following table.

SPP announcements

Phrase name	Phrase
SPPANNC1	Please enter the feature access code for the PIN you wish to change.
SPPANNC2	Please enter your PIN number.
SPPANNC3	Please enter a NEW PIN number.
SPPANNC4	Please re-enter the NEW PIN number.
SPPANNC5	The NEW PIN number has been updated.
SPPANNC6	You have entered an incorrect PIN number.
SPPANNC7	You have exceeded the number of retries. Please hang up and try again.
SPPANNC8	Call Forwarding Remote Access
CFRAFRST	Access to this feature is prohibited until you change your PIN number. The PIN number change must be made from your own phone.

Subscriber Activated Call Blocking (SACB)

This feature allows a subscriber to control originations from the line of the subscriber. To control originations, the subscribers can identify Call Classes that restrict completion to specified dialed numbers. Enter Call Classes in Table SACB. Specify the Call Classes to restrict when you add the SACB option to the line of a subscriber during a SERVORD session.

Use an access code to activate and deactivate the SACB option. To override active SACB blocking, provide a PIN in response to the SACB blocking announcement.

Examples of possible SACB announcements, that the operating company can custom record, appear in the following table. Refer to section 7 of the *DRAM and EDRAM Guide* for additional information about how to create customized recordings.

The phrase names and recommended announcements for this feature appear in the following table.

SACB announcements

Phrase name	Phrase
SACBANNC1	Please enter your PIN number.
SACBANNC2	The subscriber call blocking feature is activated. To override this restriction, please enter your PIN number.
SACBANNC3	The subscriber call blocking feature has been activated.
SACBANNC4	The subscriber call blocking feature has been deactivated.
SACBANNC5	You have entered an incorrect PIN number.
SACBANNC6	Please re-enter your PIN number.
SACBANNC7	You have exceeded the number of retries. Please hang up and try again.
SPPANNC9	Subscriber Activated Call Blocking

CS-1R announcements

The Capability Set 1 Revised (CS-1R) announcements are Intelligent Network (IN) custom announcements. Table DRMUSERS defines the phrases that are part of CS-1R announcements. Each CS-1R announcement can contain fixed phrases, or fixed and variable phrases.

Fixed phrases

Fixed phrases are pre-recorded announcement phrases. Refer to *Digital Recorded Announcement Machine DRAM and EDRAM Guide* for information on pre-recorded announcements.

Variable phrases

Variable phrase identifiers announce variable digits and variable integers in English or Mandarin. The following variable phrase identifiers are place containers in CS-1R announcements:

- ENGLISHVARDIG
- ENGLISHVARINT

DRMUSERS (continued)

- MANDARINVARDIG
- MANDARINVARINT

The service control point (SCP) supplies digits or integer data. This data maps to the phrase identifiers. Each announcement in table DRMUSERS can contain zero to five variable phrases.

These digits or integer data map to one of these phrase identifiers. Each announcement in table DRMUSERS can contain a maximum of five variable phrases. Each variable digit, ENGLISHVARDIG or MANDARINVARDIG, supports a maximum of 32 digits. Each integer digit, ENGLISHVARINT or MANDARINVARINT, supports an integer value of zero to 2 147 483 647.

The DRAMREC utility fills variable digit phrases with a group of variable phrases during call processing. The DRAMREC uses the digits the SCP supplies as input. The DRAMREC provides a list of phrases as output. Refer to *Digital Recorded Announcement Machine DRAM and EDRAM Guide* for information of DRAMREC.

INDIGIT Phrases

Before GL04, INDIGIT phrases were in use. These phrases must now change to common phrases. The common phrases appear in the following table.

Change INDIGIT Phrases to Common Phrases

Change from	Change to	
INDIGIT Phrase	*ENGLISH Phrases*	*MANDARIN Phrases*
INDIGIT	ENGLISHVARDIG	MANDARINVARDIG
INDIG0	CMNENG	CMNMDN
INDIG1	CMNENG	CMNMDN
INDIG2	CMNENG	CMNMDN
INDIG3	CMNENG	CMNMDN
INDIG4	CMNENG	CMNMDN
INDIG5	CMNENG	CMNMDN
INDIG6	CMNENG	CMNMDN
INDIG7	CMNENG	CMNMDN

Change INDIGIT Phrases to Common Phrases

Change from	Change to	
INDIG8	CMNENG	CMNMDN
INDIG9	CMNENG	CMNMDN

Provisioning requirements

Table ANNS defines the characteristics of each CS-1R announcement. The ANTYPE field in table ANNS must be IN for the CS-1R announcement software to function. The CS-1R announcements are visible if CS-1R software is active in the load.

Separate DRAMs are a requirement if more than one language is in use to record variable announcements. Refer to *Digital Recorded Announcement Machine DRAM and EDRAM Guide* for additional information.

The system must record the following announcement phrase identifiers.

Required phrases for English CS-1R announcements

Phrase name	Announcement
CMNENG0	zero
CMNENG1	one
CMNENG2	two
CMNENG3	three
CMNENG4	four
CMNENG5	five
CMNENG6	six
CMNENG7	seven
CMNENG8	eight
CMNENG9	nine
CMNENG10	ten
CMNENG11	eleven
CMNENG12	twelve

DRMUSERS (continued)

Required phrases for English CS-1R announcements

Phrase name	Announcement
CMNENG13	thirteen
CMNENG14	fourteen
CMNENG15	fifteen
CMNENG16	sixteen
CMNENG17	seventeen
CMNENG18	eighteen
CMNENG19	nineteen
CMNENG20	twenty
CMNENG21	thirty
CMNENG22	forty
CMNENG23	fifty
CMNENG24	sixty
CMNENG25	seventy
CMNENG26	eighty
CMNENG27	ninety
CMNENG28	hundred
CMNENG29	thousand
CMNENG30	million
CMNENG31	billion

Recommended phrases for Mandarin CS-1R announcements

Phrase name	Announcement
CMNMDN0	ling
CMNMDN1	yi
CMNMDN2	er

Recommended phrases for Mandarin CS-1R announcements

Phrase name	Announcement
CMNMDN3	san
CMNMDN4	si
CMNMDN5	wu
CMNMDN6	liu
CMNMDN7	qi
CMNMDN8	ba
CMNMDN9	jiu
CMNMDN10	shi
CMNMDN11	shiyi
CMNMDN12	shi’er
CMNMDN13	shisan
CMNMDN14	shishi
CMNMDN15	shiwu
CMNMDN16	shiliu
CMNMDN17	shiqi
CMNMDN18	shiba
CMNMDN19	shijiu
CMNMDN20	er-shi
CMNMDN21	san-shi
CMNMDN22	si-shi
CMNMDN23	wu-shi
CMNMDN24	liu-shi
CMNMDN25	qi-shi
CMNMDN26	ba-shi

DRMUSERS (continued)

Recommended phrases for Mandarin CS-1R announcements

Phrase name	Announcement
CMNMDN27	jiu-shi
CMNMDN28	bai
CMNMDN29	quain
CMNMDN30	wan
CMNMDN31	yi
CMNMDN32	liang

CS-1R Pre-Paid Services

This feature is currently restricted to Succession networks, which use the CS2K platform and the Universal Audio Server (UAS) peripheral.

An Intelligent Network Application Part (INAP) operation may include numerical data to be formatted into an announcement on the receiving switch. This feature provides a means for INAP to play a variable announcement of service charge, in specified language(s) and currency, on a per-service basis.

Refer to the end of the DRMUSERS table description for a detailed discussion of this feature.

Datafill

Datafill for table DRMUSERS appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
USERANN		see subfields	*User announcement*. This field contains subfields common language location identifier (CLLI) and ANNUM.
	CLLI	alphanumeric a maximum of 16 characters	*Common language location identifier*. Enter the name associated with the announcement group as table ANNS provides.
	ANNUM	1 to 63	*Announcement number*. Enter the number of the announcement.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
PHSLIST		see subfield	*Phrases list*. This field contains subfield PHRASES.
	PHRASES	alphanumeric	*Phrases*. Enter vector of a maximum of 32 phrases associated with an announcement. If the requirement is less than 32 phrases, end the list with a $.

Datafill examples

Sample datafill for table DRMUSERS appears in the following MAP displays.

An example of the standard announcements for MCCS appears in the following figure. The MCCSTOPS18 to 23 are available in switching units with the TOPS alternate announcement software package.

DRMUSERS (continued)

```
USERANN
             PHSLIST
_____________________________________________________________________
MCCSTOPS 1
MCCSENG 1 $
MCCSTOPS 2
 MCCSENG2 $
MCCSTOPS 3
 MCCSENG3 $
MCCSTOPS 4
 MCCSENG4
MCCSTOPS 5
 MCCSENG5 $
MCCSTOPS 6
 MCCSENG6 $
MCCSTOPS 7
 MCCSENG7 $
MCCSTOPS 8
 MCCSENG8 $
MCCSTOPS 9
 MCCSENG9 $
MCCSTOPS 10
 MCCSENG10 $
MCCSTOPS 11
 MCCSENG11 $
MCCSTOPS 12
 MCCSENG12 $
MCCSTOPS 13
 MCCSENG13 $
MCCSTOPS 14
 MCCSENG14 $
MCCSTOPS 15
 MCCSENG15 $
MCCSTOPS 16
 MCCSENG16 $
MCCSTOPS 17
 MCCSENG17 $
MCCSTOPS 18
 MCCSENG18 $
MCCSTOPS 19
 MCCSENG19 $
MCCSTOPS 20
 MCCSENG20 $
MCCSTOPS 21
 MCCSENG21 $
MCCSTOPS 22
 MCCSENG22 $
MCCSTOPS 23
 MCCSENG23 $
```

An example of the standard announcements for ACTS appears in the following figure. The ACTSTOPS14 to 19 are available in switching units with the TOPS alternate announcement software package.

```
USERANN
                                                              PHSLIST
_____________________________________________________________________

ACTSTOPS 1
(ACTS_VAR_CHARGE) (ACTS_PLEASE) (ACTS_PAUSE) (ACTS_PLS_DEPOSIT)
(ACTS_VAR_CHARGE) (ACTS_FOR_FIRST)(ACTS_VAR_PERIOD) $
ACTSTOPS 2
(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) $
ACTSTOPS 3
(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)(ACTS_MORE) $
ACTSTOPS 4
(ACTS_THANK_YOU) $
ACTSTOPS 5
(ACTS_THANK_HAVE) (ACTS_VAR_CREDIT) (ACTS_CR_OVERTIME) $
ACTSTOPS 6
(ACTS_ALERT) (ACTS_VAR_PERIOD) (ACTS_END_SIGNAL) $
ACTSTOPS 7
(ACTS_ALERT_ (ACTS_VAR_CHARGE) (ACTS_PLEASE) (ACTS_PAUSE)
(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) (ACTS_FOR_PAST) (ACTS_VAR_PERIOD)$
ACTSTOPS 8
(ACTS_ALERT) (ACTS_VAR_CHARGE) (ACTS_PLEASE) (ACTS_PAUSE)
(ACTS_YOU_HAVE) (ACTS_VAR_CREDIT) (ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE)
(ACTS_PLUS_MORE) (ACTS_FOR_PAST) (ACTS_VAR_PERIOD) $
ACTSTOPS 9
(ACTS_ALERT) (ACTS_CHARGES_ARE) (ACTS_VAR_CHARGE) (ACTS_PLUS_TAX)
(ACTS_VAR_PERIOD) $
ACTSTOPS 10
(ACTS_ALERT) (ACTS_VAR_PERIOD) (ACTS_HAS_ENDED) $
ACTSTOPS 11
(ACTS_TST_DEPOSIT) (ACTS_VAR_COIN) $
ACTSTOPS 12
(ACTS_VAR_COIN) $
ACTSTOPS 13
(ACTS_TST_ENDED) $
ACTSTOPS 14
(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) $
ACTSTOPS 15
(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) $
ACTSTOPS 16
(ACTS_PLS_DEPOSIT) (ACTS_VAR_CHARGE) (ACTS_MORE) $
ACTSTOPS 17
(ACTS_THANK_YOU) $
ACTSTOPS 18
(ACTS_THANK_HAVE) (ACTS_VAR_CREDIT) (ACTS_CR_OVERTIME) $
ACTSTOPS 19
(ACTS_ALERT) (ACTS_CHARGES_ARE) (ACTS_VAR_CHARGES) (ACTS_PLUS_TAXES)
(ACTS_VAR_PERIOD) $
```

An example of the standard bilingual announcements for ACCS appears in the following figure. The English version of the announcements appears first.

DRMUSERS (continued)

```
USERANN
                                                                PHSLIST
_____________________________________________________________________

ACCSTOPS 1
 ACCSEMG1 ACCSFRE1 $
ACCSTOPS 2
 ACCSEMG2 ACCSFRE2 $
ACCSTOPS 3
 ACCSEMG3 ACCSFRE3 $
ACCSTOPS 4
 ACCSEMG4 ACCSFRE4 $
ACCSTOPS 5
 ACCSEMG5 ACCSFRE5 $
ACCSTOPS 6
 ACCSEMG6 ACCSFRE6 $
ACCSTOPS 7
 ACCSEMG7 ACCSFRE7 $
ACCSTOPS 8
 ACCSEMG8 ACCSFRE8 $
ACCSTOPS 9
 ACCSEMG9 ACCSFRE9 $
ACCSTOPS 10
 ACCSENG10 ROAENG ACCSFRE10 RAOFRE $
ACCSTOPS 11
 ACCSENG11 ROAENG ACCSFRE11 RAOFRE $
ACCSTOPS 12
 ACCSEMG12 ACCSFRE12 $
ACCSTOPS 13
 ACCSEMG13 ACCSFRE13 $
ACCSTOPS 14
 ACCSEMG14 ACCSFRE14 $
ACCSTOPS 15
 ACCSEMG15 ACCSFRE15 $
ACCSTOPS 16
 ACCSEMG16 ACCSFRE16 $
ACCSTOPS 17
 ACCSEMG17 ACCSFRE17 $
```

An example of customized bilingual announcements for ACCS appears in the following figure. The French version of the announcements appears first.

```
USERANN
                                                                    PHSLIST
_____________________________________________________________________________

ACCSTOPS 17
 ACCSTONE $
ACCSTOPS 18
 ACCSTONE $
ACCSTOPS 19
 ACCSTONE $
ACCSTOPS 20
 ACCSFRE9 ACCSENG9 $
ACCSTOPS 21
 ACCSFRE9 ACCSENG9 $
ACCSTOPS 22
 ACCSFRE16 ACCSENG16 $
ACCSTOPS 23
 ACCSFRE5 ACCSENG5 $
ACCSTOPS 24
 ACCSTONE $
ACCSTOPS 25
 ACCSTONE $
```

An example of customized bilingual announcements for the CFRA feature appears in the following figure. The English version of the announcements appears first.

```
USERANN
                                                                    PHSLIST
_____________________________________________________________________________

CFRAANN 1
 LANGUAGE1 CFRAEDNPIN1 CFRAEDIGITS CFRAEDNPIN2 LANGUAGE2
CFRAFDNPIN1 CFRAFDIGITS CFRAFDNPIN2 $
CFRAANN 2
 LANGUAGE1 CFRAEFAC LANGUAGE2 CFRAFFAC $
CFRAANN 3
 LANGUAGE1 CFRAEFWDN LANGUAGE2 CFRAFFWDN $
CFRAANN 4
 LANGUAGE1 CFRAEFDW1 ENGVARDNF CFRAEFWD2 LANGUAGE2 CFRAFFDW1
FREVARDNF CFRAFFWD2 $
CFRAANN 5
 LANGUAGE1 CFRAEERR1 ENGVARDNF CFRAEERR2 LANGUAGE2 CRRAFERR1
FREVARDNF CFRAFERR2 $
CFRAANN 6
LANGUAGE1 CFRAEERR1 ENGVARDNF LANGUAGE2 CFRAFERR1 FREVARDNF $
```

An example of customized bilingual announcements for the CLASS feature appears in the following figure. The English version of the announcements appears first.

DRMUSERS (end)

```
USERANN
                                                                PHSLIST
_____________________________________________________________________

CLASSANN 1
 LANGUAGE1 CNDEINF CNDEACT LANGUAGE2 CNDFINF CNDFACT $
CLASSANN 2
 LANGUAGE1 CNDEINF CNDEDACT LANGUAGE2 CNDFINF CNDFDACT $
```

An example of CS-1R announcements appears in the following figure.

```
USERANN                                                          PHSLIST
_____________________________________________________________________

CS1ANN 1
(ENGLISHVARDIG) $
CS1ANN 2
(PHRASE1) (MANDARINVARINT) $
CS1ANN 3
(ENGLISHVARDIG) (ENGLISHVARINT) $
CS1ANN 4
(CMNMDN7) (MANDARINVARDIG) (PHRASE2) $
CS1ANN 5
(PHRASE3) (MANDARINVARDIG) (PHRASE2) (MANDARINVARDIG) (CMNMDN3) $
```

CS-1R Pre-Paid Services

This feature is currently restricted to Succession networks, which use the CS2K platform and the Universal Audio Server (UAS) peripheral.

An Intelligent Network Application Part (INAP) operation may include numerical data to be formatted into an announcement on the receiving switch. This feature provides a means for INAP to play a variable announcement of service charge, in specified language(s) and currency, on a per-service basis.

Functionality and datafill: languages

This feature changes the way in which language is specified for Intelligent Network (IN) variable announcements. The feature introduces ISO 639-2 codes as language discriminators, and also introduces INAP support for Chinese, Japanese, German, Turkish and Italian languages.

In MMP, there is a separate IN variable component for each supported language. For example, the variable ENG_IN_VAR specifies an announcement in English. The mapping to a specific announcement is achieved through datafill in table AINANNS.

The new functionality separates the language specification from the declaration of the IN variable. Thus ‘ENG_IN_VAR’, for example, is replaced by the language discriminator ‘ENG’ and the INAP variable part placeholder ‘IN_VAR’.

Datafill example

Typical datafill in tables AINANNS and DRMUSERS for an announcement in English is shown below.

```
TABLE AINANNS

7005 IN_VAR_ANNC 5

TABLE DRMUSERS

IN_VAR_ANNC 5 (ENG) (IN_VAR)$
```

Supported UAS languages

The table below identifies the languages and the corresponding ISO 639-2 language code that the UAS can support.

The ‘INAP Support - CS2K’ column indicates whether the language is supported for INAP variable announcements in the SN05 release. Languages that are not currently supported can be datafilled, but will have no effect.

For reference the ‘INAP Support - MMP’ column identifies whether the language is available on the MMP platform (through the use of the original ‘ENG_IN_VAR’ style datafill).

Supported UAS ISO 639-2 Announcement Languages

Language	ISO 639-2 Terminology Code	Implemented in UAS Rel. #	INAP Support	
			MMP	CS2K
Czech	CES	UAS 06	No	No
German	DEU	UAS 03	No	Yes
Greek	ELL	UAS 06	No	No
English	ENG	UAS 2.1	Yes	Yes
French	FRA	UAS 03	Yes	Yes
Hebrew	HEB	UAS 06	No	No
Italian	ITA	UAS 03	No	Yes
Japanese	JPN	UAS 05	No	Yes

Supported UAS ISO 639-2 Announcement Languages

Language	ISO 639-2 Terminology Code	Implemented in UAS Rel. #	INAP Support	
			MMP	CS2K
Korean	KOR	UAS 05	No	No
Malay	MAY	UAS 05	No	No
Netherlands Dutch	NLD	UAS 03	No	No
Portugese	POR	UAS 04	Yes	Yes
Spanish	SPA	UAS 2.1	Yes	Yes
Tagalog	TGL	UAS 05	No	No
Thai	THA	UAS 05	No	No
Turkish	TUR	UAS 06	No	Yes
Vietnamese	VIE	UAS 06	No	No
Chinese	ZHO	UAS 05	No	Yes

Functionality and datafill: currencies

This feature introduces ISO 4217 currency identifiers to table DRMUSERS. Currencies are datafilled as a three letter ASCII identifier. For example, the ISO 4217 identifier for GB Pounds is ‘GBP’.

The identifier specifies the currency to be used for all subsequent variable phrase(s), until either the end of the announcement, or until another currency identifier is specified.

Datafill example: single-language, single-currency announcement

Typical datafill in tables AINANNS and DRMUSERS for an announcement in English, and a currency of GB Pounds, is shown below. The announcement resulting from this datafill is “Twelve pounds and fifty pence”.

```
TABLE AINANNS

7006 IN_VAR_ANNC 6

TABLE DRMUSERS

IN_VAR_ANNC 6 (ENG) (GBP) (IN_VAR)$
```

Datafill example: two-language, two-currency announcement

Typical datafill in tables AINANNS and DRMUSERS is shown below for:

- an announcement in English, with currency GB Pounds, followed by
- the equivalent announcement in French, with currency Euros

The combined announcement resulting from this datafill is “Twelve pounds and fifty pence, vingt euros et cinquante quatre cents”.

```
TABLE AINANNS

7007 IN_VAR_ANNC 7

TABLE DRMUSERS

IN_VAR_ANNC 6 (ENG) (GBP) (IN_VAR) (FRE) (EUR) (IN_VAR)$
```

Supported currency codes

The table below lists the ISO 4217 currency codes that are added to DRMUSERS to support the feature.

Supported Currency Codes

Country	Currency	ISO Code
Austria	Schilling	ATS
Australia	Australian Dollar	AUD
Brazil	Brazilian Real	BRL
Chile	Chilean Peso	CLP
China	Yuan Renminbi	CNY
Germany	Deutsche Mark	DEM
Spain	Spanish Peseta	ESP
European Monetary Union	EU Euro	EUR
France	French Franc	FRF
United Kingdom	UK Sterling	GBP
Guyana	Guyana Dollar	GYD
Hong Kong	Hong Kong Dollar	HKD
Haiti	Haitian Gourde	HTG
Hungary	Hungarian Forint	HUF
Ireland	Irish Pound	IEP

Supported Currency Codes

Country	Currency	ISO Code
Japan	Japanese Yen	JPY
Morocco	Moroccan Dirham	MAD
Mexico	Mexican Peso	MXN
Mexico MTX	Mexican Peso	MXN
Peru	Nuevo Sol	PEN
Poland	Polish Zloty	PLN
CIS	Russian Ruble	RUR
Turkey	Turkish Lira	TRL
North America	US Dollar	USD
Caribbean Exp. Proj.	East Caribbean Dollar	XCD

Table history

CSP18/SN05

New variable data phrase IN_VAR introduced by feature CS-1R Pre-Paid Services (19012479). This allows use of ISO 639-2 language codes, and ISO 4217 currency codes in announcement definitions. Currently valid for CS2K/UAS platform only.

CSP17/SN04

DMS-100 SSP customized announcments are datafilled in tables ANNS and DRMUSERS an are mapped to the system announcement ID int able AINANNS as a result of feature 59037140.

MMP14

Phrase “X digit” for phrase name CFRAANN 1, phrase CFRAEDIGITS, announcement CFRAANN 1 has been enhanced to allow announcements of up to 15 digits by feature E.164 Compliance for Redirection Services (REDIRSRV ARCHID).

MMP13

Announcement phrase CLASSENG65 is introduced in MMP13.

GL04

The CS-1R announcement variable phrases were modified in GL04.

NA008

Suggested SACB announcement phrases were not documented. These phrases are added to the document in NA008.

GL03

Capability Set 1 (CS1) announcements was added in GL03.

APC06

Information for the 16 min enhanced DRAM (EDRAM), NT1X80BA, was added in APC06.

Information for multilingual NTC service was added in APC06.

APC05

Additional phrase names and announcements added for NTC feature. Mapping of Japanese phrase names and announcements was updated in APC05.

APC04

Description of NTC feature was added in APC04.

TOPS03

The ACTSTOPS20-23 for each feature AN0408 in Pre-paid Coin, ENSV0007, was added in TOPS03.

DS

Table name

Data Store Assignment Table

Functional description

The following assignment data for each data store shelf appears in table DS:

- the oor , row, frame position, and base mounting position for each data store shelf
- the type and number of the frame that contains the data store shelf
- the highest numbered memory card on the data store shelf
- the product engineering code (PEC) of the data store shelf

The data store PEC descriptions with the appropriate references in *DMS-100 Provisioning Manual*, 297-1001-450 appear in the following table.

Data store PEC descriptions (Sheet 1 of 2)

PEC	Description	Reference
MX4501	DS memory/CMC/clock shelf assy	EMA10-18-000
3X31AB	data store	EMR4-01-000
3X31AC	connectorized data store shelf	EMR4-02-000
3X31AE	1-megaword data store	EMR4-03-000
3X31AF	1-megaword conn data store shelf	EMR4-04-000
3X32AB	1-megaword data store	EMR4-05-000
3X32AC	1-megaword conn data store shelf	EMR4-06-000
3X32BB	1-megaword data store	EMR4-07-000
3X32BC	1-megaword conn data store shelf	EMR4-08-000
3X32DB	4-megaword data store	EMR4-07-000
3X32EA	data store	not available
7X28AA	special DMS-100 projects	not available
7X3201	special DMS-100 projects	not available

Data store PEC descriptions (Sheet 2 of 2)

PEC	Description	Reference
7X3202	special DMS-100 projects	not available
9X99ZZ	dummy PEC	not available

Data ll sequence and meaning

You do not need to enter data in other tables before you enter data in table DS.

Table size

This table contains 2 to 8 tuples.

The DMS must have a minimum of one DS shelf for each central control (CC) side. Each CC side can have a maximum of four DS shelves.

Data ll

The data ll for table DS appears in the follo wing table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DSNM		see subfields	*Data store number* This field contains subfields DSSHNO and PLANE.
	DSSHNO	0 to 7	*Data store shelf number* Enter the number assigned to the data store shelf.
	PLANE	0 or 1	*Plane* Enter the plane of the data store shelf.
NOMEMCDS		0 to 15	*Highest numbered memory card* Enter the highest numbered memory card mounted on the data store shelf.
FRTYPE		CCC MEX MCMM or MCOR	*Frame type* Enter the type of frame that contains the data store shelf as follows: • CCC for central control complex • MEX for memory extension frame • MCMM for Meridian cabinet memory module • MCOR for Meridian core module

DS (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FRNO		0 or 1	*Frame number* Enter the number of the CCC or MEX frame that contains the data store shelf. The system does not accept entries out of the range for this field.
SHPOS		18, 32, 51, or 65	*Shelf position* Enter the base mounting position of the data store shelf on the CCC or MEX frame. The system does not accept entry out of the range for this field.
FLOOR		0 to 99	*Floor* Enter the number of the floor that the frame is on.
ROW		A to H J to N P to Z AA to HH JJ to NN or PP to ZZ	*Row* Enter the row that the frame is on.
FRPOS		0 to 99	*Frame position* Enter the bay position of the frame.
EQPEC		MX4501 3X31AB 3X31AC 3X31AE 3X31AF 3X32AB 3X32AC 3X32BB 3X32BC 3X32DB 3X32EA 7X28AA 7X3201 or 7X3202	*Equipment product engineering code* Enter the PEC of the data store shelf.

Data ll e xample

Sample data ll for table DS appears in the follo wing example.

The assignments associated with data store shelf 0, planes 0 and 1 appear in this example. Each plane has one record.

MAP display example for table DS

```
 DSNM    NOMEMCDS    FRTYPE    FRNO    SHPOS    FLOOR    ROW    FRPOS    EQPEC
_____________________________________________________________________________

00 0          15       MEX       0       65       05      B       02   3X31AC
00 1          15       MEX       0       65       05      B       05   3X31AC
```

Table history

BCS36

Value 9X99ZZ in eld EQPEC w as deleted in BCS36.

DSCWDTYP

Table name

Deluxe Spontaneous Call Waiting Identi cation T ypes

Functional description

Table DSCWDTYP is used by Deluxe Spontaneous Call Waiting Identi cation (DSCWID) to de ne separate DSCWID types. T able DSCWDTYP can have up to 20 tuples de ned for DSCWID types. Six DSCWID types are already de ned in this table as follo ws:

- The PROPRITY tuple indicates proprietary DSCWID. This tuple is only used when an of ce with proprietary DSCWID subscribers is ha ving a software upgrade. The PROPRITY tuple identi es e xisting proprietary DSCWID subscribers and allows them to keep the existing functionality of DSCWID during an overnight process (ONP) upgrade. The PROPRITY tuple is blocked from being added to a line through SERVORD.

  Note: The PROPRITY tuple cannot be changed or deleted. The other ve tuples can be changed but not deleted.

- The ADSITIME tuple indicates that only time data is transmitted and only standard Call Waiting (CWT) is available to sets without Analog Display Services Interface (ADSI) capability.
- The ADSICID tuple indicates that both calling information delivery (CID) and time data are transmitted, based on the CID features present on the line, and only standard CWT is available to non-ADSI sets.
- The NODATA tuple indicates that CID and time data are not transmitted, and both ADSI and non-ADSI sets have all DSCWID options.
- The NOCIDCW tuple indicates that only time data is transmitted, and both ADSI and non-ADSI sets have all DSCWID options.
- The COMPLETE tuple indicates both CID call waiting (CIDCW) and time data are transmitted, and both ADSI and non-ADSI sets have all DSCWID options.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DSCWDTYP . However, table DSCWDTYP must be data lled prior to de ning the DSCWID type (DTYPE) in table RESOFC .

Table size

0 to 20 tuples

Data ll

The following table lists data ll for table DSCWDTYP .

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NAME		PROPRITY, ADSITIME, ADSICID, NODATA, NOCIDCW, COMPLETE or others as defined	Name. This field is the key to table DSCWDTYP. Up to 20 tuples can be defined, which can consist of up to 8 characters. Enter the name of the DSCWID type being defined. PROPRITY indicates the proprietary DSCWID type. ADSITIME indicates that only time data is transmitted. ADSICID indicates that both CID and time data are transmitted. NODATA indicates that CID and time data are not transmitted. NOCIDCW indicates that only time data is transmitted. COMPLETE indicates both CIDCW and time data are transmitted.
ALERT		SASONLY, SASCAS	Alerting type. This field indicates the type of alerting call waiting tones to be applied. Enter SASONLY if the ADSI-compliant CPE is not to be alerted to display DSCWID options. Enter SASCAS if the ADSI-compliant CPE is to be alerted to display DSCWID options.
CID		NOCID, ALLCID, TIMECID	Calling information delivery. This field indicates the type of CID during a DSCWID session. NOCID means no data is delivered. ALLCID means data is delivered according to the CID feature on the line, and TIMECID means only the date and time are delivered.
NON ADSI		N or Y	Non-ADSI. Enter N (no) to disallow the DSCWID options to a non-ADSI set. Enter Y (yes) to allow DSCWID options to a non-ADSI set.
Note: A tuple in table DSCWDTYP can only be removed or deleted when the COUNT field is zero. The COUNT field cannot be changed by the operating company.			

DSCWDTYP (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
COUNT		0 to 99,999	Count. This field is the number of lines assigned to this DSCWID type. The default for this field is 0.
KEY OPTS		ALL, ANSWER, RETURN, FWD, BUSY, HOLD, DROP, CONF, DROPFRST, DROPLAST	Softkey options. This field is a vector of up to 10 softkey options. Enter the specific options allowed on this DSCWID type. If not specified, the option is not available on this DSCWID type. The default for this field, ALL, indicates that all options are available.
Note: A tuple in table DSCWDTYP can only be removed or deleted when the COUNT field is zero. The COUNT field cannot be changed by the operating company.			

Data ll e xample

The following example shows sample data ll for table DSCWDTYP .

MAP display example for table DSCWDTYP

```
NAME       ALERT     CID      NON ADSI      COUNT
                                                KEY OPTS
_____________________________________________________________
PROPRITY   SASCAS    ALLCID      N            0
   (ANSWER)   (FWD)   (BUSY)   (HOLD)   (DROP)   (RETRN) $
ADSITIME   SASCAS    TIMECID     N            0
                                                (ALL)    $
ADSICID    SASCAS    ALLCID      N            0
                                                (ALL)    $
NODATA     SASONLY   NOCID       Y            0
                                                (ALL)    $
NOCIDCW    SASCAS    TIMECID     Y            0
                                                (ALL)    $
COMPLETE   SASCAS    ALLCID      Y            0
                                                (ALL)    $
```

Table history

NA004

Table DSCWDTYP was created in NA004.

DSLIMIT

Table name

Data Store Limit (DSLIMIT) Table

Functional description

Table DSLIMIT limits the amount of data store a module can use. The recommendation is that Nortel personnel perform modifications to this table.

Table DSLIMIT contains three fields:

- DSOWNR (Data Store Owner)
- DSMAX (Data Store Maximum)
- DSUSED (Data Store Used)

Field DSOWNR stores the module names STOREFS, NPOFIMP, and NTDEVS. These three modules have the following functions:

- STOREFS contains data store for store file device (SFDEV)
- NPOFIMP contains data store for pending order file (POF)
- NTDEVS contain data store for files that Nortel personnel use

Field DSMAX defines the maximum data store for each module. The default value is 45 000 bytes for STOREFS, 45 000 words for NPOFIMP. and 3 000 000 bytes for NTDEVS.

Field DSUSED defines the amount of data store in use for the specified module. For modules STOREFS and NTDEVS, allocate the size of the data store as the modules require. For module NPOFIMP, the size of the data store increases to reflect the increase in the number of entries in table NPENDING. The value of field DSUSED does not decrease when you delete tuples from table NPENDING. The POF system reserves the data storage area that is not in use for later use.

Use the following calculation to determine the amount of protected data store (DSPROT) that NPOFIMP uses. Multiply the number of tuples in table NPENDING by 29 words. Addition of protected storage to NPOFIMP occurs in blocks of 1856 words (64 · 29 words). The addition of one block occurs for every 65th POF.

Datafill sequence and meaning

You do not have to enter data in other tables before you enter data in table DSLIMIT.

DSLIMIT (continued)

Table size

This table size is 0 to 255 tuples.

Datafill

WARNING
Do not use field DSMAX to allocate data store.
Do not allocate data store in field DSMAX. A verification of resources does not occur when you change this field. Refer to the *DMS-100 Family Commands Reference Manual*.

The datafill for table DSLIMIT appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DSOWNR		STOREFS, NPOFIMP, NTDEVS	*Data Store Owner.* Enter the module name.
DSMAX		0 to 1073741824	*Data Store Maximum*. Enter the maximum data store for the module. The default value for this field for mdoule STOREFS is 45 000 bytes. For module NPOFIMP it is 45 000 words. The default value for module NTDEVS is 3 000 000 bytes. The system does not accept entries out of the range for this field.
DSUSED		No entry, display only	*Data Store Used*. This field indicates the amount of data store the module uses.

Datafill example

Sample datafill for table DSLIMIT appears in the following example.

MAP example for table DSLIMIT

```
          DSOWNER        DSMAX       DSUSED
_____________________________________________________

          STOREFS       230076        65602
          NPOFIMP        45000         2528
          NTDEVS       3000000         4112
```

Table history

CSP17

Corrected the data type of the DSMAX value for module STOREFS. The type was changed from words to bytes.

CSP09

Module NTDEVS was added to the table DSLIMIT in CSP09.

BCS36

Table DSLIMIT was documented in BCS36.

DSTTABLE

Table name

Automated Time-of-day Change table

Functional description

Table DSTTABLE automates the time change required for the change from standard time to daylight saving time and the reverse operation. To perform this action, this table stores the associated time change requests.

The data ll in this table controls the follo wing:

- when time changes to and from daylight savings occur
- how time changes to and from daylight savings occur

The system activates Automated Time-of-day Change feature when you enter one or more tuples in table DSTTABLE.

Data ll sequence and meaning

You do not have to enter data in other tables before you enter data in table DSTTABLE.

Table size

The table contains a maximum of ten entries. Each entry represents one automated change to daylight savings time or from daylight savings time.

Data ll

The data ll for table DSTT ABLE appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
REQNUM		0 to 9	*Request number*. Enter the request number.
DATE		yyyymmdd	*Date*. Enter the date (year, month, and day) to change the clock. ***Note:*** Enter the year as a four-digit number. Enter the month and day as two-digit numbers. For example, you can enter 1996 10 30.
TIME		hh:mm	*Time*. Enter the time (hours and minutes) to change the clock. For example, 01:00.

DSTTABLE (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
AMOUNT		hh:mm	*Time change magnitude*. Enter the magnitude of the time change (hours and minutes). For example, 01:00.
FWDBCK		F or B	*Time change direction*. Enter F for forward or B for backward. The value you enter indicates the direction of the time change.
NEWTZ		a maximum of five characters	*New time zone name*. Enter the new time zone name to use after the change. For example, EDST (Eastern Daylight Saving Time).
EXPIRED		Y or N	*Status*. The system changes this field from N (no) to Y (yes) when an automated time change completes.

Data ll e xample

Sample data ll for table DSTT ABLE appears in the following example.

MAP example for table DSTTABLE

```
REQNUM DATE        TIME  AMOUNT   FWDBCK  NEWTZ  EXPIRED
_____________________________________________________________
     0 1995 10 30 01:00   01:00        B    EST        Y

     1 1996 04 30 00:01   01:00        F   EDST        N

     2 1996 10 30 01:00   01:00        B    EST        N
```

Table history

CSP06

Table DSTTABLE was introduced in CSP06.

DTUPRO

Table name

Data Terminal Unit Protocol Name De nition T able

Functional description

Table DTUPRO de nes the data terminal unit (DTU) protocol names used in table BCDEF.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DTUPR O.

Table BCDEF must be data lled after table DTUPR O.

Table size

3 to 64 tuples

Table size is set by the maximum number of DTU protocols available. This table is automatically extended if the number of protocols increases.

Data ll

The following table lists data ll for table DTUPR O.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VALUE		see subfield	*Value* This field consists of subfield UNINT.
	UNINT	0 to 63	*Integer value* Enter an integer value associated with the string. Any entry outside the range indicated for this field is invalid.
SYMBOL		alphanumeric (up to 32 characters)	*Symbol* Enter the name of the data terminal unit (DTU) protocol.

Data ll e xample

The following example shows sample data ll for table DTUPR O.

DTUPRO (end)

MAP display example for table DTUPRO

```
VALUE                                SYMBOL
_____________________________________________________________

    0                                 NONE
    1                                TLINK
    2                                  X25
```

Table history

BCS36

Sub eld UNINT w as added.

Supplementary information

This section provides information on load-build defaults when data lling table DTUPRO.

Load-build defaults

The following default tuples must be entered at load-build time along with the symbolic range command (SRCOM). Use of an EXT (external) le is the preferred method of data entry.

>SRCOM 'DTUPRO' ON 'DTU_PROTOCOL_NAME'
>TAB DTUPRO
>INP
>0 NONE
>1 TLINK
>2 X25
QUI

DUAQOPT

Table name

Dial-up Autoquote Of ce P arameter Table

Functional description

Table DUAQOPT stores of ce parameters for feature package NTX140AA (Traf c Operator Position System [T OPS] Dial-up Autoquote).

For related information, refer to table HOBICDEV.

Data ll sequence and implications

There is no requirement to data ll other tables prior to table DU AQOPT.

Each tuple in the table represents an of ce parameter .

Table size

0 to 6 tuples

DUAQOPT (continued)

Data ll

The following table lists data ll for table DU AQOPT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTION		DUAQ_ACK_ WAIT	Office parameter option. Enter the correct office parameter option.
		DUAQ_ANS_ WAIT	DUAQ_ACK_WAIT (maximum wait time for receiving acknowledge from the dial-up autoquote [DUAQ] device)
		DUAQ_ CARR_WAIT	DUAQ_ANS_WAIT (maximum wait time for receiving answer from the DUAQ device)
		DUAQ_MAX_ RETRIES	DUAQ_CARR_WAIT (maximum wait time for receiving carrier from the DUAQ device)
		DUAQ_REC_ WAIT	DUAQ_MAX_RETRIES (maximum number of accumulated failures allowed for connection to the DUAQ device)
		DUAQ_ RETRY_ WAIT	DUAQ_REC_WAIT (maximum wait time for receiving acknowledgement of receipt after DUAQ record is transmitted)
			DUAQ_RETRY_WAIT (maximum wait time before retrying connection)
VALUE		see subfields	Value. This field consists of subfield VALTYPE.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	VALTYPE		Value type. Enter the value type as shown below, depending on the entry in field OPTION. If the entry in field OPTION is DUAQ_ACK_WAIT, enter CARR_ACK_WAIT_TYPE. If the entry in field OPTION is DUAQ_ANS_WAIT, enter ANS_WAIT_TYPE. If the entry in field OPTION is DUAQ_CARR_WAIT, enter CARR_ACK_WAIT_TYPE If the entry in field OPTION is DUAQ_MAX_RETRIES, enter MAX_RETRIES_TYPE. If the entry in field OPTION is DUAQ_REC_WAIT, enter CARR_ACK_WAIT_TYPE. If the entry in field OPTION is DUAQ_RETRY_WAIT, enter RETRY_WAIT_TYPE.
	VALUE	1 to 60	Value. Enter the value of the parameter as shown in the Range column of the below. The range in refinement VALUE depends on the entry in field OPTION. All entries are in seconds, except parameter DUAQ_MAX_RETRIES, which is the number of retries, and parameter DUAQ_RETRY_WAIT, which is in minutes. Field OPTION — Range — Default DUAQ_ACK_WAIT — 2 to 20 — 15 DUAQ_ANS_WAIT — 12 to 60 — 60 DUAQ_CARR_WAIT — 2 to 20 — 10 DUAQ_MAX_RETRIES — 1 to 6 — 6 DUAQ_REC_WAIT — 2 to 20 — 10 DUAQ_RETRY_WAIT — 1 to 5 — 1

DUAQOPT (end)

Data ll e xample

The following example shows sample data ll for table DU AQOPT.

In the example, of ce parameter DU AQ_ANS_WAIT has a value type of ANS_WAIT_TYPE and a value of 30 s.

MAP display example for table DUAQOPT

```
OPTION                  VALUE
_____________________________________________

DUAQ_ANS_WAIT       ANS_WAIT_TYPE 30
```

Table history

BCS36

Field name for eld V ALTYPE was corrected.

E911ALI

Table name

Enhanced 911 Direct Access to ALI Controller

Functional description

Table E911ALI contains one entry for each public safety answering point (PSAP) in the tandem that requires the automatic location identi cation (ALI) interface. The key to this table is the PSAP name (eld PSAPN AME), as de ned in table E911PSAP .

This table implements an interface between a DMS-100 switch that serves as an E911 tandem with external 911 equipment, and a previous connection to an automatic number identi cation (ANI) concentrator . This interface is asynchronous, with ASCII data links located between the multiprotocol controller (MPC) card on the DMS switch and ALI data links connected to an ALI controller. This interface was originally designed speci cally for the AT&T ALI controller, which is typically connected to the AT&T Data Management System. The “E911 Direct Access to ALI Database” and “E911 Wireless Interface” features have expanded the interface to support other ALI controllers.

Data ll sequence and implications

The following tables must be data lled after table E911ALI:

- E911PSAP
- MPCLSET

Table size

0 to 7000 tuples

The number of entries in table E911ALI is the number of PSAPs that require ALI service.

E911ALI (continued)

Data ll

The following table lists data ll for table E911ALI.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
PSAPNAME		see subfield	*Public safety answering point name key* This field consists of subfield PSAPNAME. This is the key to the table.
	PSAPNAME	alphanumeric (1 to 16 characters)	*Public safety answering point name* Enter the public safey answering point (PSAP) name. This entry must correspond to an entry in table E911PSAP.
PSAPNUM		0 to 999	*Public safety answering point number* Enter the number of the PSAP receiving automatic location identification (ALI) service. Individual positions are numbered within the PSAP. This value must be consistent with datafill in the ALI system computer, and with the values entered when assigning the ALI option to individual lines.
IFTYPE		ATT911AS OPN911AS ENH911AS WLS911	*Interface type* Enter the type of interface to the ALI system computer. This value must correspond to the multiprotocol controller (MPC) application name entered in table MPCFASTA.
LSETIDX		0 to 15	*Link set index* This number corresponds to the number of the MPC linkset defined in table MPCLSET for use by the data links serving this PSAP. Each unique index specifies a unique instance of an ALI interface between the AT&T database and the ALI controller.

Data ll e xample

The following example shows sample data ll for table E911ALI.

MAP display example for table E911ALI

```
PSAPNAME PSAPNUM   IFTYPE LSETIDX
_____________________________________________________________

    POLICE     3 ATT911AS       0
    FIRE      22 WLS911         1
```

Supplementary information

This section provides information concerning the dump and restore procedure that applies to table E911ALI.

Dump and restore

No dump and restore is required.

E911ESN

Table name

Enhanced 911 Emergency Service Number Table

Functional description

All E911 tables (except E911SRDB which is optional) are required for Enhanced 911 (E911) Emergency Service.

E911 trunks can be dedicated for incoming 911 calls (data lled in table TRKGRP with trunk group type E911). E911 type trunks support both multifrequency (MF) and dial pulse (DP) signaling formats in accordance with the following conditions:

- E911 trunks can be speci ed as either MF or DP in table TRKSGRP, eld IPULSTYP.
- MF and DP signaling formats are valid only for CALLED digit collection. Automatic number identi cation (ANI) digits are always collected as MF signals.
- If direct seizure is desired, MF signaling can recognize a direct seize several seconds earlier than DP signaling. Since there is no functional difference, MF direct seizure is recommended.

Any outgoing (wink-start) trunk from the end of ce that is capable of spilling ANI and conforms to feature group C signaling can interface with an incoming E911 trunk at the E911 Tandem.

Table E911ESN associates an emergency service number (ESN) with a ash control eld, a primary public safety answering point (PSAP) name, and up to six secondary PSAP names. Secondary PSAPs are used in call transfers made by a primary PSAP attendant.

This table stores all the PSAPs (maximum of seven) for each of the ESNs. The information for each ESN also contains a ash eld.

The order of the secondary PSAPs at all E911 of ces need not be the same. However, within each of ce, all the PSAPs in a table column must correspond to the same type of agency (for example, re department). It is the responsibility of the operating company to confer with the PSAP agencies and reach a common agreement as to the location of the types of agencies in this table. Values of elds PRIMPSAP , PSAP1..PSAP6 are names of PSAPs already data lled in table E911PSAP and are intended to indicate the type of service provided, for example, RALEIGHFIRE. All secondary PSAPs providing a particular service, for example a re department, must be data lled as the same eld, PSAP1. If a particular emergency service zone does not offer

a particular emergency service, that eld must be data lled as NONE. Selective transfer codes *11 through *16 dialed by the PSAP operator correspond to PSAP1 through PSAP6.

A PSAP name can be data lled in this table only if it already e xists in table E911PSAP. Of the seven PSAPs, PRIMPSAP is always the primary PSAP. For example, Police might be the primary PSAP and the other six are secondary PSAPs (Fire, Ambulance, Poison Control, Rescue, and so on).

If for any reason a particular emergency service other than the primary PSAP is not being provided by the ESZ, then the value NONE must be entered as the PSAP name for that eld. The value NONE can be entered as a default PSAP name for any secondary PSAP, but not for a primary PSAP.

Regenerated ANI format

The E911 feature requires ANI information from an end of ce. The E911 tandem uses ANI information to facilitate selective routing which is regenerated to the PSAP. The sequence for transmitting ANI information is as follows:

1. The end of ce transmits ANI information to the E911 tandem.
2. The E911 tandem regenerates ANI data and outpulses the data, along with information digits to the PSAP. The E911 tandem transmits the data by standard multifrequency (MF) pulses.

ANI information is outpulsed to the PSAP in the form of Key Pulse (KP) + information digit + NXX-XXXX + start (ST), where NXX-XXXX is the ANI directory number (DN) of the calling station.

E911 offers single-digit and three-digit information digit formats for transmitting ANI data, as well as substitute ANI codes that can be used in the event of ANI failure or in cases where an end of ce is not equipped for ANI operation. The choice of ANI format is left to the operating company and is determined on a per-of ce basis.

Single-digit information digit

In the single-digit information digit format, the single digit is encoded so that it represents both the calling party's NPD and a ash control signal. The E911 tandem outpulses the ANI information to the PSAP in the form of standard MF pulses. These pulses are sent in the following order:

1. KP digit
2. encoded single-digit information digit representing the calling party's NPD and a ash control signal

E911ESN (continued)

3. ANI DN (normally the billing DN of the originating station)
4. ST signal

A single information digit is encoded according to a combination of the following values:

- The value of the ash control eld setting: 0 for no ash, 1 for ash. This ash control value is assigned for each ESN and is operative only on ANI consoles equipped with ash display .
- The value of the NPD that represents the calling party's numbering plan area (NPA): 0, 1, 2, or 3. Because there are four NPDs to represent NPAs, four NPAs are supported with the single-digit information digit format.

The value of the ash control eld combined with the v alue of the NPD constitute the encoded information digit. For example, an E911 tandem serves four NPAs, the PSAPs are equipped with ashing ANI display units, and the telephone operating company has assigned one PSAP as the primary PSAP for all foreign exchange (FX) lines terminated outside the E911 service area. FX lines are used in this example because additional call handling by the PSAP attendant may be required.

If the ash control eld for the FX caller's ESN is data lled as ON (1), the information digit shown in the ANI format causes a ashing display of the calling party's DN, complete with an encoded digit representing the caller's NPA.

The following table gives the determination of the single-digit information digit.

Single-digit information digit determination (Sheet 1 of 2)

NPA	NPD	Flash control	Information digit
919	0	0	0
518	1	0	1
201	2	0	2
312	3	0	3
919	0	1	4
518	1	1	5

Single-digit information digit determination (Sheet 2 of 2)

NPA	NPD	Flash control	Information digit
201	2	1	6
312	3	1	7
			8 (test call)
			9 (not used)

The information digit is used at the PSAP in the following manner:

- 0 0 plus ANI DN displayed steady
- 1 1 plus ANI DN displayed steady
- 2 2 plus ANI DN displayed steady
- 3 3 plus ANI DN displayed steady
- 0 4 plus ANI DN displayed ashing
- 1 5 plus ANI DN displayed ashing
- 2 6 plus ANI DN displayed ashing
- 3 7 plus ANI DN displayed ashing
- 8 8 for maintenance test call

The following conditions apply to the use of the single-digit information digit:

- An E911 tandem must serve an area with four or fewer NPAs.
- The PSAPs connected to the E911 tandem must be equipped with appropriate ANI consoles to display ash.

Information digit format (NPA)

Feature AN0930 enhances the E911 tandem by allowing the support of up to 16 NPAs.

For the NPA, the three digits are not encoded and no ash signal is provided. Instead, the three digits correlate directly to the calling party NPA.

The format for sending ANI data is the same for three-digit and one-digit information digits: ANI information outpulsed to the PSAP in the form KP + information digit (NPA) + NXX-XXXX + ST, where NXX-XXXX is the ANI DN of the calling station. With the three-digit format, however, the information digits are normally the calling station's NPA. Because the three

E911ESN (continued)

digits bear a one-to-one correlation to the calling party's NPA, no encoding is required and no ash is provided. The pulses are sent in the following order:

1. KP digit
2. information digit representing the calling party's NPA
3. ANI DN (normally the billing DN of the originating station)
4. ST signal

Substitute ANI formats

An end of ce can still be part of the E911 system, even if it is not equipped for ANI operation or cannot outpulse the digits 911. In this case, an emergency call is recognized by being routed over a dedicated E911 trunk group.

If a 911 call without ANI information is received or if ANI failure has occurred, the E911 tandem generates a substitute ANI DN code. This substitute code can take one of the following two forms:

- Substitute NPD-911-0TTT format (ANI failure)—This format is sent in the case of ANI failure (ANIF). The code TTT indicates the of ce from which the telephone call originates.
- Substitute 0-911-0000 format (Anonymous Call)—This format is sent when an anonymous call is made to a PSAP. An anonymous call is a seven-digit call (non-911) to the directory number of PSAP. However, this substitute code is unnecessary if subscribers are denied directory number access to PSAPs. PSAP attendants and toll operators may be granted directory number access to PSAPs.

When incoming calls to the E911 tandem are in either the Bellcore standard ANI format or the North Electric AMR 4/5 format, the tandem deletes the existing information digits and replaces them with an encoded information digit NPD.

Selective transfer

Selective transfer is initiated when the PSAP operator uses the speed calling code format *11 to *16 to designate call transfer to PSAP1 through PSAP6 from Table E911ESN. Similar emergency services should be data lled vertacally in table E911ESN. Every ESN designated PSAP1 would, for example, be for a re DN data lled in table E911PSAP .

Speed calling code *10 designates a selective transfer to the primary PSAP when dialed from any secondary PSAP. Speed call code *10 can also be used to transfer the call from a member of the primary PSAP to other members of the primary PSAP or over o w routing for the primary PSAP.

Data ll sequence and implications

Table E911PSAP must be data lled before table E911ESN:

Table size

1000 tuples

The size of this table is 1000 entries since an E911 of ce serv es a maximum of 1000 ESZs.

Data ll

The following table lists data ll for table E911ESN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ESN		0 to 15999	*Emergency service number* Enter a number up to five digits representing an emergency service zone (ESZ).
FLASH		Y or N	*Flash* Enter Y (yes) to alert the public safety answering point (PSAP) attendant that the calling party using this emergency service number (ESN) needs special attention or the call is incoming on a message or FX trunk. Otherwise, enter N (no).
PRIMPSAP		alphanumeric (1 to 16 characters)	*Primary public safety answering point* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided. NONE is not a valid entry.
PSAP1		alphanumeric (1 to 16 characters)	*Secondary public safety answering point 1* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided.
Note: All secondary PSAPs providing a particular service must be datafilled as the same field, for example, fire as PSAP1. If a particular emergency service zone does not offer a particular emergency service, that field must be datafilled as NONE.			

E911ESN (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PSAP2		alphanumeric (1 to 16 characters)	*Secondary public safety answering point 2* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided.
PSAP3		alphanumeric (1 to 16 characters)	*Secondary public safety answering point 3* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided.
PSAP4		alphanumeric (1 to 16 characters)	*Secondary public safety answering point 4* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided.
PSAP5		alphanumeric (1 to 16 characters)	*Secondary public safety answering point 5* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided.
PSAP6		alphanumeric (1 to 16 characters)	*Secondary public safety answering point 6* Enter a PSAP name already datafilled in table E911PSAP and intended to indicate the type of service provided.
Note: All secondary PSAPs providing a particular service must be datafilled as the same field, for example, fire as PSAP1. If a particular emergency service zone does not offer a particular emergency service, that field must be datafilled as NONE.			

Data ll e xample

The following example shows sample data ll for table E911ESN.

MAP display example for table E911ESN

```
ESN  FLASH    PRIMPSAP
_____________________________________________________________________

123   N       CARYPOLICE CARYFIRE CARYAMBULANCE NONE NONE NONE NONE
```

Table history

NA005

Increased the value of eld ESN to 15,999.

BCS36

A note that NONE is an invalid entry in eld PRIMPSAP w as added.

E911NPD

Table name

Enhanced 911 (E911) Numbering Plan Digit (NPD) Table

Functional description

Table E911NPD associates an NPD with the serving numbering plan area (SNPA) of the E911 tandem previously data lled in table HNP ACONT.

An SNPA cannot be data lled ag ainst two NPDs. That is, no two tuples in table E911NPD can have the same SNPA.

The NPD is used for single information digit automatic number identi cation (ANI) format if ANI is forwarded to the public safety answering point (PSAP).

Note: Table E911NPD is not used if there are no PSAPs served by the E911 tandem that use single information digit ANI format This format applies when of ce parameter E911_PSAPS_USING_1_INFO_DIGIT has v alue N.

For related information, refer to E911 Emergency Service Number (ESN) Table E911ESN.

Regenerated ANI format

The E911 feature requires ANI information from an end of ce. The E911 tandem uses ANI information to facilitate selective routing which is regenerated to the PSAP. The sequence for transmitting ANI information is as follows:

1. The end of ce transmits ANI information to the E911 tandem.
2. The E911 tandem regenerates ANI data and outpulses the data, along with information digits to the PSAP. The E911 tandem transmits the data by standard multifrequency (MF) pulses.

ANI information is outpulsed to the PSAP in the form of Key Pulse (KP) + information digit + NXX-XXXX + start (ST), where NXX-XXXX is the ANI directory number (DN) of the calling station.

E911 offers single-digit and three-digit information digit formats for transmitting ANI data, as well as substitute ANI codes that can be used in the event of ANI failure or in cases where an end of ce is not equipped for ANI operation. The choice of ANI format is left to the operating company and is determined on a per-of ce basis.

Single-digit information digit

In the single-digit information digit format, the single digit is encoded so that it represents both the calling party's NPD and a ash control signal. The E911 tandem outpulses the ANI information to the PSAP in the form of standard MF pulses. These pulses are sent in the following order:

1. KP digit
2. encoded single-digit information digit representing the calling party's NPD and a ash control signal
3. ANI DN (normally the billing DN of the originating station)
4. ST signal

A single information digit is encoded according to a combination of the following values:

- The value of the ash control eld setting: 0 for no ash, 1 for ash. This ash control value is assigned for each ESN and is operative only on ANI consoles equipped with ash display .
- The value of the NPD that represents the calling party's numbering plan area (NPA): 0, 1, 2, or 3. Because there are four NPDs to represent NPAs, four NPAs are supported with the single-digit information digit format.

The value of the ash control eld combined with the v alue of the NPD constitute the encoded information digit. For example, an E911 tandem serves four NPAs, the PSAPs are equipped with ashing ANI display units, and the telephone operating company has assigned one PSAP as the primary PSAP for all foreign exchange (FX) lines terminated outside the E911 service area. FX lines are used in this example because additional call handling by the PSAP attendant may be required.

If the ash control eld for the FX caller's ESN is data lled as ON (1), the information digit shown in the ANI format causes a ashing display of the calling party's DN, complete with an encoded digit representing the caller's NPA.

The following table gives the determination of the single-digit information digit.

Single-digit information digit determination (Sheet 1 of 2)

NPA	NPD	Flash control	Information digit
919	0	0	0
518	1	0	1

E911NPD (continued)

Single-digit information digit determination (Sheet 2 of 2)

NPA	NPD	Flash control	Information digit
201	2	0	2
312	3	0	3
919	0	1	4
518	1	1	5
201	2	1	6
312	3	1	7
			8 (test call)
			9 (not used)

The information digit is used at the PSAP in the following manner:

- 0 0 plus ANI DN displayed steady
- 1 1 plus ANI DN displayed steady
- 2 2 plus ANI DN displayed steady
- 3 3 plus ANI DN displayed steady
- 0 4 plus ANI DN displayed ashing
- 1 5 plus ANI DN displayed ashing
- 2 6 plus ANI DN displayed ashing
- 3 7 plus ANI DN displayed ashing
- 8 8 for maintenance test call

The following conditions apply to the use of the single-digit information digit:

- An E911 tandem must serve an area with four or fewer NPAs.
- The PSAPs connected to the E911 tandem must be equipped with appropriate ANI consoles to display ash.

Three-digit information digit

For the three-digit information digit format, the digits are not encoded and no ash signal is pro vided. Instead, the three digits correlate directly to the calling party NPA.

The format for sending ANI data is the same for three-digit and one-digit information digits: ANI information outpulsed to the PSAP in the form KP + information digit + NXX-XXXX + ST, where NXX-XXXX is the ANI DN of the calling station. With the three-digit format, however, the information digits are normally the calling station's NPA. Because the three digits bear a one-to-one correlation to the calling party's NPA, no encoding is required, and no ash is pro vided.

Substitute ANI formats

An end of ce can still be part of the E911 system, even if it is not equipped for ANI operation or cannot outpulse the digits 911. In this case, an emergency call is recognized by being routed over a dedicated E911 trunk group.

If a 911 call without ANI information is received or if ANI failure has occurred, the E911 tandem generates a substitute ANI DN code. This substitute code can take one of the following two forms:

- Substitute NPD-911-0TTT format (ANI failure)—This format is sent in the case of ANI failure (ANIF). The code TTT indicates the office from which the telephone call originates.
- Substitute 0-911-0000 format (Anonymous Call)—This format is sent when an anonymous call is made to a PSAP. An anonymous call is a seven-digit call (non-911) to the directory number of PSAP. However, this substitute code is unnecessary if subscribers are denied directory number access to PSAPs. PSAP attendants and toll operators may be granted directory number access to PSAPs.

When incoming calls to the E911 tandem are in either the Bellcore standard ANI format or the North Electric AMR 4/5 format, the tandem deletes the existing information digits and replaces them with an encoded information digit (NPD).

Data ll sequence and implications

Table HNPACONT must be datafilled before table E911NPD:

Note: Table E911NPD must be datafilled before the SNPA can be used in the E911 trunk group data in table TRKGRP. The SNPA used must already exist in table HNPACONT.

Table size

0 to 4 tuples

E911NPD (end)

Data ll

The following table lists datafill for table E911NPD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPD		0 to 3 (1 digits)	*Numbering plan digit* Enter a digit representing single information digit automatic number identification (ANI).
SNPA		0 to 9(1 to 7 digits)	*Serving numbering plan area* Enter the serving numbering plan area (SNPA), already datafilled in table HNPACONT, of the E911 trunk group incoming from the end office to the E911 office assigned to that numbering plan digit (NPD).

Data ll e xample

The following example shows sample datafill for table E911NPD.

MAP display example for table E911NPD

```
NPD SNPA
_____________________________________________________________

  0  919
  1  704
```

E911OFC

Table name

Enhanced 911 Office

Functional description

Table E911OFC provides the table control for the E911-specific office options.

This table includes the following options:

- suppress error code 0
- bypass the numbering plan digit (NPD) checks
- use the facility serving numbering plan area (SNPA) on Integrated Services Digital Network User Part (ISUP) trunks
- keep the Advanced Intelligent Network (AIN) charge as the pseudo automatic number identifier (pANI)
- deny flash features on 911 calls over operator (OP) and ISUP trunks and expand flash denial on emergency service (ES) trunks
- use the Off-Board Selective Routing (OFBSR) Interface to translate E911 calls
- use the On-Board Database (E911SRDB) for routing calls if the OFBSR fails a query.

(Sheet 1 of 2)

E911OPTN	Enhanced 911 option
SUPPRESS_SRDBUPD_ERR_0	Suppress selective route database update error zero messages
BYPASS_NPD_CHECKS	Bypass numbering plan digits checks
USE_FAC_SNPA_ON_ISUP	Use facility serving numbering plan area on Integrated Services Digital Network User Part
KEEP_AIN_CHG_AS_PANI	Keep Advanced Intelligent Network charge as pseudo automatic number identifier
DENY_FLASH	Deny all flash feature capabilities on 911 calls over OP and ISUP trunks and expand flash denial on ES trunks

E911OFC (continued)

(Sheet 2 of 2)

E911OPTN	Enhanced 911 option
USE_OFBSR_INTERFACE	Use the Off-Board Selective Routing (OFBSR) Interface to translate E911 calls
USE_ONBOARD_SRDB	If the OFBSR fails a query, use the On-Board Selective Routing Database (E911SRDB) to translate E911 calls

SUPPRESS_SRDBUPD_ERR_0

Option SUPPRESS_SRDBUPD_ERR_0 controls the optional output of error code 0 messages during the SRDBUPD command.

BYPASS_NPD_CHECKS

Option BYPASS_NPD_CHECKS controls the SNPA to NPD mapping checks. Use caution when changing the value of this tuple.

USE_FAC_SNPA_ON_ISUP

Option USE_FAC_SNPA_ON_ISUP allows offices that use ISUP trunks to carry incoming E911 calls to the tandem.

KEEP_AIN_CHG_AS_PANI

Option KEEP_AIN_CHG_AS_PANI allows a call in progress to store both the automatic number identifier (ANI) and pANI.

DENY_FLASH

Option DENY_FLASH prevents an E911 call originator from using flash features that would place a public safety answering Point (PSAP) operator on hold.

USE_OFBSR_INTERFACE

Option USE_OFBSR_INTERFACE allows offices to use the Off-Board Selective Routing (OFBSR) Interface.

USE_ONBOARD_SRDB

Option USE_ONBOARD_SRDB allows use of the On-Board Selective Routing Database (E911SRDB) to translate E911 calls if the OFBSR fails a query.

Data II sequence and implications

There is no requirement to datafill other tables prior to table E911OFC.

Table size

A maximum of four tuples are in table E911OFC.

Data ll

The following table lists datafill for table E911OFC.

Data lling tab le E911OFC (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
E911OPTN			E911 options. This field specifies the E911 options active for an office.
		SUPPRESS_SRDBUPD_ERR_0	This option suppresses error code 0 messages during the SRDBUPD command. Error code 0 messages during the SRDBUPD command are output without this option.
		BYPASS_NPD_CHECKS	This option allows the user to turn off the SNPA to NPD mapping checks. ***Note:*** If the checks are turned off: Table E911NPD does not check whether the SNPA is in use when the user tries to delete the NPD. This situation remains in effect even if the user removes the BYPASS_NPD_CHECKS tuple. To restore this protection, remove the BYPASS_NPD_CHECKS tuple, and perform an overnight process (ONP) on the current or a later load.
		USE_FAC_SNPA_ON_ISUP	This option allows the NPA of the ANI and pANI of the caller to be replaced by the SNPA of the facility used to route the call. This SNPA comes from either the ISUP trunk group datafill or the E911 virtual facility group (VFG).

E911OFC (continued)

Data lling tab le E911OFC (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
		KEEP_AIN_CHG_AS_PANI	This option allows the user to store both ANI and pANI for a call in progress.
		DENY_FLASH	This option prevents an E911 call originator from using flash features.
		USE_OFBSR_INTERFACE	This option allows offices to use the Off-Board Selective Routing (OFBSR) Interface.
		USE_ONBOARD_SRDB	This option allows use of the On-Board Selective Routing Database (E911SRDB) to translate E911 calls if the OFBSR fails a query.

Data ll e xample

The following example shows sample datafill for table E911OFC.

MAP display example for table E911OFC

```
                E911OPTN
------------------------------------------------------------
SUPPRESS_SRDBUPD_ERR_0
BYPASS_NPD_CHECKS
USE_FAC_SNPA_ON_ISUP
KEEP_AIN_CHG_AS_PANI
DENY_FLASH
USE_OFBSR_INTERFACE
USE_ONBOARD_SRDB
```

MAP display example of OFBSR options 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 and USE_OFBSR_DATABASE is set
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 routed to be default routed based
on the facility's ESN index.
TUPLE TO BE DELETED
   USE_ONBOARD_SRDB
```

Table history

NA015

Added the USE_OFBSR_INTERFACE and USE_ONBOARD_SRDB options to table E911OFC.

E911OFC (end)

NA014

Added the DENY_FLASH option to table E911OFC.

NA009

The following changes were made to table E911OFC:

- Option SPILL_SPB_ON_E911_VFGS was deleted.
- Option BYPASS_NPD_CHECKS was added.
- Option USE_FAC_SNPA_ON_ISUP was added.
- Option KEEP_AIN_CHG_AS_PANI was added.

NA007

Table E911OFC was added in NA007.

E911PSAP

Table name

Enhanced 911 Public Safety Answering Point

Functional description

Table E911PSAP associates a public safety answering point (PSAP) name with a local directory number (DN) or an emergency directory number route (EDNR). EDNRs are used for call transfers or routes to emergency agencies that are not E911 line or line appearance on a digital trunk (LDT) PSAPs, or are not served directly by the E911 tandem switch.

In order to selectively route or transfer an E911 call to an EDNR, the agency name and number to be dialed for the agency must be datafilled in table E911PSAP. The PSAP name assigned to the EDNR must then be datafilled in table E911ESN. An EDNR can be datafilled as a primary or secondary PSAP.

Entries in table E911PSAP are datafilled automatically by table HUNTGRP when either the LDTPSAP or LINEPSAP option is assigned to a hunt group through the Service Order (SERVORD) system to create a PSAP.

The field EDNR (Y or N) appears in table E911PSAP to distinguish EDNR entries that are datafilled directly in table E911PSAP from PSAPDN entries that are datafilled automatically through SERVORD. EDNR tuples are entered using the table editor.

This table contains a default tuple, NONE $, that is always present and is used in table E911ESN if no secondary PSAP exists. The $ (dollar sign) entry indicates that there is no DN associated with this PSAP.

An entry in this table can be deleted only if the name of the PSAP to be deleted is not referenced by table E911ESN.

For related information, refer to table E911ESN in the data schema section of this document.

Emergency directory number routes

Every PSAP, primary or secondary, that terminates on an E911 tandem must be datafilled in table E911PSAP. An entry in this table must contain the exact digits necessary for a PSAP to “dial" to transfer a caller to the proper destination. This is especially important for E911 tandems that serve more than one numbering plan area (NPA). It may be necessary for a PSAP in one NPA to transfer a caller to a PSAP in another NPA.

E911PSAP (continued)

An EDNR must be added to table E911PSAP to handle the above situation. PSAP DNs can be stored as seven or ten digits. The tuple required for this may include a digit string such as 1 + 7-digit DN or 1 + 10-digit DN of the destination PSAP. A similar situation may occur if PSAPs are datafilled as part of an IBN group that requires an access code (that is, a “9") to be dialed before transferring a call outside the IBN group.

Note: When one of these options (LINEPSAP, LDTPSAP, ACDPSAP, or PRIPSAP) is assigned or modified, a prompt for a ‘Y’ (yes) or ‘N’ (no) to a field named NATLXLA appears. When the value of NATLXLA is ‘Y’, PSAPDN in this table is ten-digit. When the value is ‘N’, PSAPDN in this table is seven-digit. If your office does not support the appropriate seven- or ten-digit translations, the change of value of NATLXLA field when modifying an existing PSAP can cause problems in completing 911 calls to that PSAP.

An EDNR can be any valid DN within a DMS switch. For example, it could be a 1FR, a MADN, or an ISDN line. An EDNR can also be a special translations DN that points to some type of office route or trunk group.

Table DNROUTE is used in conjunction with EDNRs when it is necessary to use a PSAP to route an E911 call out of the office (tandem-to-tandem routing). A DN may be datafilled in this table that points to a tuple in a routing table that will take the 911 call out of the office to either another E911 tandem or an agency that resides outside of the first E911 tandem.

Data II sequence and implications

The following tables must be datafilled before table E911PSAP:

- HUNTGRP
- DNROUTE

Table E911ESN must be datafilled after table E911PSAP.

Table size

0 to 7 000 tuples

There can be a maximum of seven PSAPs serving an emergency service zone (ESZ). An E911 tandem can serve a maximum of 15 999 ESZs.

Data fill

The following table lists datafill for table E911PSAP.

Field descriptions

Field	Subfield	Entry	Explanation and action
PSAPNAME		alphanumeric (1 to 16 characters)	*Public safety answering point name* Enter the name of the public safety answering point (PSAP) offering services.
PSAPDN		numeric (18 digits)	*Public safety answering point directory number* Enter the directory number (DN) of a line PSAP, line appearance on a digital trunk (LDT) PSAP, or emergency directory number route (EDNR). The default is $. When one of these options (LINEPSAP, LDTPSAP, ACDPSAP, PRIPSAP) is assigned or modified, a prompt for a 'Y' (yes) or 'N' (no) to a field named NATLXLA appears. When the value of NATLXLA is 'Y', this field is 10-digit. When the value is 'N', this field is 7-digit.
EDNR		Y	*Emergency directory number route* Enter Y (yes) if an EDNR is used. If table E911PSAP is datafilled through table HUNTGRP, this field automatically is set to N. If set to N, tuples cannot be changed or deleted.

Data fill example

The following example shows sample datafill for table E911PSAP.

E911PSAP (end)

MAP display example for table E911PSAP

```
      PSAPNAME              PSAPDN    EDNR
________________________________________________________

          NONE                   $     N
    CARYPOLICE             4691235     N
      NRESCUE          19195585219     Y
```

Table history

NA012

The following addition and update apply to feature 59006893, Provisioning for Enhanced Multi-NPA:

- updated information on field PSAPDN with information on new field NATLXLA
- added information on new field, NATLXLA, which appears when one of the options LINEPSAP, LDTPSAP, ACDPSAP, or PRIPSAP is assigned or modified

NA006

Additional information about EDNRs was added.

NA005

The maximum number of emergency service zones that an E911 tandem can serve was increased from 1 000 to 15 999.

NA004

The “Emergency directory number routes" section was added.

E911RCER

Table name

Enhanced 911 Remote Call Event Record Table

Functional description

Table E911RCER associates a public safety answering point (PSAP) with a multiprotocol controller (MPC) linkset (datafilled in table MPCLSET) over which remote call event records (RCER) are transmitted. The format of the log is specified either as BRIEF or LONG. If a PSAP is not datafilled here, then no RCERs are transmitted for that PSAP. The RCERs have no correlation to the log system, which generates E911 212 logs for Automatic Call Distribution (ACD) and line PSAPs, except that they look similar and contain the same data. This data includes the call events and times involved in an E911 call such as time answered, transferred, and disconnected.

Data II sequence and implications

The following tables must be datafilled before table E911RCER:

- MPC (must be datafilled with valid MPCNOs)
- MPCLINK (must be datafilled with valid MPCLINKs)
- MPCFASTA (must be datafilled with valid RCERAPPL)
- MPCLSET (must be datafilled with valid MPCLSETS)
- E911PSAP (must contain a valid PSAPNAME)

Table size

0 to 7000 tuples

The number of entries in table E911RCER is equal to the number of different PSAPs that require remote call event records.

E911RCER (end)

Data fill

The following table lists datafill for table E911RCER.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
PSAPNAME		alphanumeric (up to 16 characters)	Public safety answering point name Enter the PSAP name. This field is the key to the table and corresponds to an entry in table E911PSAP.
FORMAT		BRIEF or LONG	FormatEnter BRIEF if the RCER is to contain only the data. Enter LONG if the RCER is to contain a header, the data, and a blank line.
APPLID		911RCER1, 911RCER2, 911RCER3, 911RCER4, 911RCER5, 911RCER6	Application identificationEnter the appropriate linkset identification to which field LINKSET applies.
LINKSET		0-15	Multiprotocol controller linkset numberEnter linkset number (defined in table MPCLSET) of the MPC over which the RCERs are transmitted.

Data fill example

The following example shows sample datafill for table E911RCER.

MAP display example for table E911RCER

```
PSAPNAME FORMAT   APPLID     LINKSET
_____________________________________________________

 CARY02  BRIEF    911RCER1      4
```

E911SRDB

Table name

Enhanced 911 Selective Routing Database Table

Functional description

Table E911SRDB is an optional table and provides the database for enhanced 911 (E911) service to associate the Emergency Service Number (ESN) to a directory number (DN) served by the E911 tandem.

This database allows E911 to selectively route 911 calls to the primary public service access point (PSAP) serving a subscribers ESN. This provides the calling party in an E911 call with emergency services from the location serving them.

An ESN cannot be datafilled in table E911SRDB unless it is already defined in table E911ESN. Table E911ESN associates the names of primary and secondary PSAPs to the ESN they serve.

For related information, refer to table E911ESN.

Data II sequence and implications

Table E911ESN must be datafilled before table E911SRDB.

Table size

0 to 32 million tuples

Table E911SRDB has a maximum of 32 million tuples. The maximum number of DNs that the table will represent is dependent on how the table is datafilled.

Table E911SRDB stores a small number of tuples inefficiently, but becomes more efficient for a large number or tuples, depending on the distribution of DNs. Space for four number plan areas (NPA) is pre-allocated at 78 words of store. Space for two office exchanges (NXX) is allocated at 1150 words each. Space for each thousand group (THGP) is allocated at 29 words each and space for each DN level is allocated at 879 words each.

The maximum data store requirement for a selective routing database (SRDB) for four NPAs is:

NPA
(78) = 78

NXX
$(4 \times 2 \times 1150)$ = 9 207

E911SRDB (continued)

THGP
$(4 \times 2 \times 400 \times 29) =$ 92 807

XXX
$(4 \times 2 \times 400 \times 10 \times 879) =$28 128 000

Total:
(32 000 000 tuples) 28 230 092 words

Data II

The following table lists datafill for table E911SRDB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
E911DN		see subfields	*E911 directory number* This field describes a range of DNs in four significant parts: NPA, NXX, THGP, and XXX.
	NPA	000 to 999	*Number plan area* Represents the DNs in a specific NPA.
	NXX	200 to 999	*Office code* Represents the NXXs.
	THGP	0 to 9	*Thousands group* Represents a range of DNs.
	XXX	000 to 999	*3 digit combination* Represents a single DN.
ESN		000 to 15,999	*Emergency service number* This field is the ESN assigned to the DN or group of DNs represented by the E911DN field. This number describes the set of PSAPs serving the calling party. The 911 call will be routed to the primary PSAP within this ESN.

Data ll e xample

The following example shows sample datafill for table E911SRDB.

MAP display example for table E911SRDB

```
        E911DN ESN
_____________________________________________________________

919 991 7 000   3
919 991 7 123   3
919 266 N NNN  26
613 621 1 NNN  56
613 621 5 NNN  34
919 NNN N NNN   4
507 NNN N NNN 200
612 770 N NNN 231
612 543 2 NNN 112
612 770 3 495 111
```

Table history

NA006

Added table control messages.

NA005

E911 Non-CallP Enhancements supplements E911 tandem by allowing five-digit ESNs and supporting up to 16 NPAs.

E911TDRT

Table name

E911 Tandem Routing table

Functional description

Table E911TDRT routes E911 transfer calls for super dual tandem networks. Calls are routed based on the datafill in the E911TDRT table using the dialed number in E911TRDN (tandem routing DN) and the tandem prefix value (TDMPRFX) from the TRKGRP table,

Data II sequence and meaning

There is no requirement to enter datafill into other tables before table E911TDRT.

Table size

Table E911TDRT can contain a minimum of zero tuples. The maximum number of tuples depends on the digit range of E911TRDN; using only 18-digit E911TRDN entries, the maximum is 1500 tuples.

The size of this table changes dynamically.

Data II

The table that follows lists datafill for table E911TDRT.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
E911TRDN	NA	Up to 18 characters (N,1,2,3,4,5,6,7,8, 9,0,B,C,D,E,F)	E911 Tandem Routing Directory Number. This is the directory number associated with the PSAP transfer.
Note: TDMPRFX only applies to ISUP IT trunks.			

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
TDMPRFX	NA	0 to 15	Tandem prefix value from the TRKGRP table for IT ISUP trunk types under option E911, suboption TDMPRFX. If datafilled in TRKGRP, a new Generic Digits Parameter (GDP) is built in the IAM for E911 calls and transported to the E911TDRT table. The default is 0.
ROUTE	NA	Combination of tabid multiple with integers from 0 to 1023 e.g., OFRT0, OFRT102	The final route is an external_route_id type like EXTRTEID for the T selector in the STDRTCT.STDPRT table. This route is selected from the tabid and the number indicated, such as OFRT 0 or OFRT 1023. For each route, the corresponding table is datafilled accordingly.
Note: TDMPRFX only applies to ISUP IT trunks.			

Data ll e xample

The figure that follows shows sample datafill for table E911TDRT.

MAP display example for 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
```

Table history

NA015

Table E911TDRT was introduced by feature A59022437.

EAACTSAN

Table name

Equal Access Automated Coin Toll Service Announcement Table

Functional description

In offices that provide operator services for inter-LATA (local access and transport area) carriers, “Thank you" announcements for the first Automatic Coin Toll Service (ACTS) coin request can only be customized by the carrier. These are the only announcements that can be customized by the carrier. To determine which indices into table DRMUSERS correspond to an inter-LATA carrier for ACTS “Thank you" announcements, table EEACTSAN is introduced. It contains the carrier number and two indexes: one for the acknowledgement of a correct deposit and one for the acknowledgement of an over-deposit. The indexes pertain to “Thank you" and “Thank you. You have . . ." announcements after the initial coin request only. If the carrier is not datafilled in table EAACTSAN, the default overtime “Thank you" announcements datafilled in table DRMUSERS for the operating company (ACTSTOPS 17 and 18) are used.

To customize a “Thank you" announcement for an inter-LATA carrier, an external phrase list is created and is datafilled against an index in table DRMUSERS. The carrier number and the indexes in table EAACTSAN are datafilled. The common language location identifier (CLLI) must first be datafilled in table ANNS and the indexes datafilled in table DRMUSERS before datafilling table EAACTSAN.

Field OVERDEP is the alternative to field CORRCTDP and has the same subfields (with different entries).

For related information, refer to table EAMCCSAN.

Data II sequence and implications

The following tables must be datafilled after table EAACTSAN.

- ANNS
- DRMUSERS

Table size

A total of 123 words of memory is required for table EAACTSAN.

Data fill

The following table lists datafill for table EAACTSAN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
EACARNUM		0000- 9999	Equal access carrier number. Enter the carrier number.
CORRCTDP		see subfields	User announcement. This field consists of subfields CLLI and ANNUM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the name associated with the announcement group for Automated Coin Toll Service (ACTS) as given in table ANNS.
	ANNUM	1 to 255	Announcement number. Enter the number assigned to the ACTS announcement in table DRMUSERS.
OVERDEP		see subfields	User announcement. This field consists of subfields CLLI and ANNUM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the name associated with the announcement group for ACTS as given in table ANNS.
	ANNUM	1 to 255	Announcement number. Enter the number assigned to the ACTS announcement in table DRMUSERS.

Data fill example

The following example shows sample datafill for table EAACTSAN.

MAP display example for table EAACTSAN

```
EACARNUM              CORRCTDP
                                        OVERDEP
_____________________________________________________

0222                ACTSTOPS 20
                                      ACTSTOPS 21
```

EAACTSAN (end)

Table history

BCS36

Tables ANNS and DRMUSERS were added to the datafill sequence.

TOPS03

The range of field EACARNUM was expanded from 3 to 4 digits per feature AN0883 in EA Carrier Code Expansion, OSEA0001.

EAANIID

Table name

TOPS Equal Access ANI Idenitification Digits Table

Functional description

Table EAANIID is required in a Traffic Operator Position System (TOPS) Access Tandem switch (AT) interposed between an end office (EO), whether conforming or non-conforming, and the inter-LATA (local access and transport area) carrier (IC) during processing of an inter-LATA call.

Table EAANIID allows the operating company to define the single and the double automatic number identificaton (ANI) information digits associated with the ANI information being passed to the carrier.

Data ll sequence and implications

There is no requirement to datafill other tables prior to table EAANIID.

Table size

0 to 9 tuples

EAANIID (continued)

Data II

The following table lists datafill for table EAANIID.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ANIINFO		see subfield	Automatic number identification information key.. This field is the key to the table and consists of subfield ANIINFO.
	ANIINFO	ALARM ANIFAIL ANISUCC FGDCOIN HANIFAIL HANISUCC ILRSHOT ILRSREG ILRSSPEC INTCPT MOBILE ONI OPRHNDL or SPECIAL	Automatic number identification information Enter one of the values listed below to define the automatic number identification (ANI) information that is sent to the carrier by means of one or two ANI digits specified in the fields below. Otherwise, if the standard ANI digit is to be sent to the carrier for a specific ANIINFO value, leave this field blank. The correct digit is sent by default. • ALARM (alarm) • ANIFAIL (ANI failure) • ANISUCC (ANI successful) • FGDCOIN (feature group D coin) • HANIFAIL (hotel ANI failure) • HANISUCC (hotel ANI successful) • ILRSHOT (inter-LATA [local access and transport area] restricted hotel) • ILRSREG (inter-LATA restricted regular) • ILRSSPEC (inter-LATA restricted special) • INTCPT (intercept) • MOBILE (mobile) • ONI (operator number identification) • OPRHNDL (operator handled) • SPECIAL (special)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ONEDIG		0 to 9 or DC	Single automatic number identification digit. Enter a number to define the single ANI digit that is sent to the carrier for the given ANIINFO entry. Enter DC to indicate that for the given ANIINFO entry, the single digit is not sent.
TWODIG		0 to 99 or DC	Double automatic number identification digits. Enter a number to define the double ANI digits that are sent to the carrier for the given ANIINFO entry. Enter DC to indicate that for the given ANIINFO entry, the double digits are not be sent.

Data ll e xample

The following example shows sample datafill for table EAANIID.

MAP display example for table EAANIID

```
ANIINFO ONEDIG TWODIG
_____________________________________

ANISUCC       0       0
```

EADAS

Engineering and Administrative Acquisition

Table Engineering and Administrative Data Acquisition System (EADAS) stores site-unique Engineering and Administrative Data Acquisition System (EADAS) data to allow this data to be preserved over a one-night process (ONP). During the ONP, table EADAS transfers the operating company defined EADAS collection definitions from the old software load to the new software load. The collection definitions include all EADAS class, section, register, and key/info information.

The primary function of table EADAS is to transfer EADAS collection definitions from the old load to the new load during an ONP. Operating companies can also use this table to provide the same functionality as the EADSECTS, EADASKEY, and EADASFMT commands.

Note: Table EADAS is datafilled automatically during an ONP; however, initial jobs and sites that receive EADAS software for the first time must add their EADAS collection definitions manually.

Datafill sequence and meaning

There is no requirement to datafill other tables prior to table EADAS. During an ONP, table EADAS is restored as the last CNA table.

Table size

The three EADAS OM classes are sized by the following office parameters in table OFCENG:

- EADAS24H_BUFFER_SIZE (EADAS24H class)
- EADAS30M_BUFFER_SIZE (EADAS30M class)
- EADAS60M_BUFFER_SIZE (EADAS60M class)

Table EADAS can range from 0 to 192,000 tuples. The size is calculated as follows. Note that 192,000 tuples is the theoretical size, but this table is expected to have only up to 8,000 tuples.

3 (number of buffers) $\times$ 2 (could be double precision) $\times$ 32,000 (maximum per buffer size) = 192,000

Note: If the office uses SOC OAM0007, the maximum per buffer size can be as high as 256000.

Datafill

The following table lists the datafill for table AUTHCDE.

Field, subfield, and refinement descriptions for table AUTHCDE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
EADASKEY			EADAS Key. This field consists of subfields CLASS, SECTION, and ITEM.
	CLASS	EADAS30M, EADAS60M, EADAS24H	OM Class. This subfield specifies the OM class. Enter EADAS30M (30-minute OM class), EADAS60M (60-minute OM class), or EADAS24H (24-hour OM class).
	SECTION_ID	0-998	Section Number. This subfield specifies the EADAS section number. The maximum value (0-254) for 30-minute class is extended to (0-998) when SOC OAM00013 is activated.
	ITEM	PRECISION, REG, KEY	Item. This subfield specifies the OM tuple type. Enter one of the following: • PRECISION (in this case, no further datafill is required for subfield ITEM) • REG followed by one space and the register number (a value from 0 to 127) • KEY followed by one space and the OM tuple

Field, subfield, and refinement descriptions for table AUTHCDE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
EADASDATA			EADAS Data. This field contains the EADAS data. Enter one of the following: • If subfield ITEM of field EADASKEY is set to PRECISION, enter the following: — either SINGLE (single precision, specifying a count of up to 32,768) or DOUBLE (double precision, specifying a count of up to 65,536) — the OM group name and OM field (register) name, separated by spaces • If subfield ITEM of field EADASKEY is set to REG, enter the OM group name and OM field (register) name, separated by spaces. • If subfield ITEM of field EADASKEY is set to KEY, enter either PRESENT or DELETED.

Table history

(I)SN08

The maximum value of 1024 trunk groups for EADAS/DC interface was added for feature A00006657 for the North American market.

(I)SN05

The maximum value of the field SECTION_ID was extended from 255 (0-254) to 999 (0-998), with SOC OAM00013 activated.

NA008

The upper bound of buffer size range was increased to 256 000 words. The need for a new start when EADAS/DC buffer sizes are changed was eliminated. Clarification for SOC option OAM00007 was added.

NA005

This table was introduced.

EADNMPK

Table name

EADAS/NM Interface Packet Schedule Table

Functional description

Table EADNMPK identifies which DMS operational measurements (OM) data are transmitted to the network management portion of the Engineering and Administrative Data Acquisition System (EADAS/NM) in response to a poll or request. OM data is updated by the stored program control switch (SPCS) every 5 min. The data is arranged into packets of related registers, numbered 1 to 25.

EADAS/NM packets are defined in the following table. Those not supported by EADAS/NM interface phase 1 are indicated.

EADAS/NMpackets

Packet	Contents
1	delayed readiness
2	overload not supported
3	call direction
4	fail match / no circuits
5	critical service circuits
6	additional inefficient machine attempts
7	network management center (NMC) not supported
8	Common Channel Interoffice Signaling (CCIS) and 800 Service not supported
9	30-s discretes not supported
	reserved
11-15	unused

Each EADNMPK tuple contains a packet index number (field PKNUM) and the maximum number of register data allowed in the packet (field MAXLEN).

Twenty-five default tuples, one for each possible data packet, are prefilled for table EADNMPK in field PKNUM.

EADNMPK (continued)

The size of a packet sent to EADAS/NM is not necessarily equal to that specified in field MAXLEN. If the packet is larger than that specified in field MAXLEN, the packet is truncated before transmission to EADAS/NM. If the packet is smaller than that specified in field MAXLEN, the packet is sent as it is, without padding, to EADAS/NM.

Packets beyond number 25 cannot be added to table EADNMPK. Likewise, no packet can be deleted from table EADNMPK.

To schedule a packet for transmission, field MAXLEN for the packet must be set to an integer greater than 0 (zero).

To prevent the transmission of a packet to EADNM/NM, set the value of field MAXLEN for the packet to 0 (zero). Each default tuple in table EADNMPK has value 0 (zero) in field MAXLEN.

The command interpreter (CI) command EADASHOW EADNM5M displays current values for each of the 25 packets.

For more information on Engineering and Administrative Data Acquisition System (EADAS) network management (NM) interface support tables, see table EADNMTG.

Table support

Table EADNMPK can be either queried or changed.

Table EADNMPK is engineering-protected and is datafilled by default at loadbuild.

Requests to query or change table EADNMPK is made by EADAS/NM through the EADAS data link. DMS operating personnel do not need to modify this table. In exceptional cases, operating personnel or NT field support need to query or change the table if it is not possible to do so through the EADAS data link.

As no engineering is required for this table, no data schema form is associated with this section.

Trunk group names can be added or deleted in table EADNMTGP whose contents are copied into table EADNMTG.

Data II sequence and implications

Table EADNMPK is an engineering-protected table that is datafilled by default during loadbuild.

Table size

See table EADNMTG.

Data fill

The following table lists datafill for table EADNMPK.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
PKNUM		1 to 25	*Packet number* Enter a number, from 1 to 25, to represent the OM data packet that activates or deactivates transmission or adjusts truncation size.
MAXLEN		0 to 32767	*Maximum length* Enter the maximum number of 5-min register data blocks collected before truncation occurs. Enter 0 (zero) to disable or prevent transmission of the packet. The default value for this field is 0 (zero).

Data fill example

An example of datafill for table EADNMPK is shown below.

In this example the user enables transmission and assigns maximum packet sizes to the EADAS/NM data packets three through six. Activation is accomplished through the following command sequence:

```
>TABLE EADNMPK

>CHANGE 3 6

>CHANGE 4 4

>CHANGE 5 8

>CHANGE 6 4

>QUIT
```

EADNMPK (end)

The default value of 0 (zero) applies to the remaining packets. Those supported by EADAS/NM interface cannot be transmitted to EADAS/NM until their value in field MAXLEN is changed to a nonzero value.

EADNMTG

Table name

EADAS/NM Interface Current Trunk Group Schedule Table

Overview of related tables

The following table lists the Engineering and Administrative Data Acquisition System (EADAS) network management (NM) interface support tables.

EADAS network management interface tables

Title of table	Table name
EADAS/NM Interface Current Trunk Group Schedule	EADNMTG
EADAS/NM Interface Packet Schedule	EADNMPK
EADAS/NM Interface Pending Trunk Group Schedule	EADNMTGP

These tables are provided in feature package NTX455AA (EADAS Network Management Interface, Phase 1). They are not vital to the function of the EADAS/NM interface.

In addition to NTX455AA, EADAS/NM interface requires the feature packages listed in the following table.

Feature packages required by EADAS/NM interface

Number	Table name
NTX056AA	Enhanced Administration
NTX218AA	1A/1B EADAS Interface
NTX273AA	Multiprotocol Controller 3X.25

Feature package NTX455AA implements phase 1 of the DMS-100 interface to the Engineering and Administrative Data Acquisition System (EADAS) network management (NM) computer. EADAS/NM is an operation support system (OSS) that provides an operating company with traffic measurement

EADNMTG (continued)

and management information for the company's telephone switch or network of switches.

Operational measurements (OM) data collected every five minutes assist the EADAS/NM system with the following tasks:

- keeping the telephone switch or network of switches operating near maximum efficiency
- maintaining switch or network performance during overloads or facility failures

For more information on OMs, refer to the *Operational Measurements Reference Manual*.

Table support

The EADAS/NM interface is supported by tables EADNMPK, EADNMTG, and EADNMTGP. Tables EADNMPK and EADNMTGP can be either queried or changed. Table EADNMTG contains current data and can only be queried.

Tables EADNMPK, EADNMTG, and EADNMTGP are engineering-protected and are datafilled by default at loadbuild.

Requests to query or change tables EADNMPK or EADNMTGP are made by EADAS/NM through the EADAS data link. DMS operating personnel do not need to modify these tables. In exceptional cases, operating personnel or NT field support need to query or change these tables if it is not possible to do so through the EADAS data link.

Functional description

Table EADNMTG is a list that determines which trunk groups in the DMS report their OM data to EADAS/NM in packet 17 of the 5-min data.

It contains current data and cannot be changed; it can only be viewed. Trunk group names can be added or deleted in table EADNMTGP whose contents are copied into table EADNMTG each time the pending schedule is updated.

As no engineering is required for this table, no data schema form is associated with this section.

For related information, refer to table EADNMPK and table EADNMTGP.

Data II sequence and implications

The following tables must be datafilled before table EADNMTG:

- CLLI
- TRKGRP

Table size

The maximum number of entries for table EADNMTG is 250 (250 trunk or group names. One tuple is required for each trunk group name.

Data II

The following table lists datafill for table EADNMTG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Table EADNMTG is a read-only list of trunk groups being reported to table EADNMTG by their common language location identifier (CLLI) codes. See table EADNMTGP for information on updating the trunk group schedule.

Data II e xample

Refer to the example for table EADNMTGP.

Datafill of table EADNMTG is not required. Values from identical but dynamic table EADNMTGP are transferred to table EADNMTG at each update.

See the *Basic Translations Tools Guide*, 297-1001-360, for information on locating and viewing tuple entries for table EADNMTG or any other table.

EADNMTGP

Table name

EADAS/NM Interface Pending Trunk Group Schedule Table

Functional description

Table EADNMTGP contains a schedule of trunk groups that report operational measurement (OM) data to EADAS/NM. This schedule, unlike table EADNMTG, can be modified without interfering with EADAS/NM reporting in process.

If a trunk group name is added or deleted in table EADNMTGP, a signal is sent to alert EADAS/NM. EADAS/NM responds with a trunk group reference data audit. When DMS table control receives this audit, the contents of table EADNMTGP are copied into table EADNMTG, replacing the old list.

Table EADNMTGP can be either queried or changed. The table is engineering-protected and is datafilled by default at loadbuild.

Requests to query or change tables EADNMTGP are made by EADAS/NM through the EADAS data link. DMS operating personnel do not need to modify the table. In exceptional cases, operating personnel or NT field support need to query or change the table if it is not possible to do so through the EADAS data link.

For more information on the Engineering and Administrative Data Acquisition System (EADAS) network management (NM) interface support tables, refer to table EADNMTG.

Data ll sequence and implications

Table EADNMTGP is engineering-protected and is datafilled by default at loadbuild.

Table size

0 to 250 tuples

Table EADNMTGP stores a maximum of 250 trunk group names. These names can be added, deleted, or changed. New names are added at the end of the table. A maximum of 250 trunk group names can be in table EADNMTG and table EADNMTGP at any one time.

Note: All trunk groups in the office must have exactly one subgroup.

Data fill

The following table lists datafill for table EADNMTGP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the 16-character CLLI name for the trunk group added to, deleted from, or changed in the trunk group schedule. The CLLI must be a valid trunk group name.

Data fill example

An example of datafill for table EADNMTGP is shown below.

This example shows four trunk groups. After these trunk groups have been added to table EADNMTGP, the OM data for these trunk groups is reported to the EADAS/NM facility when the next 5-min audit is performed. If the trunk group names identified are not duplicates of those already in current schedule in table EADNMTG, the trunk groups are added at the end of table EADNMTGP and subsequently copied into table EADNMTG.

MAP display example for table EADNMTGP

```
CLLI
_____________________________________________________________

DRHMNC01ITO0
RALHNC12ITI2
RALHNC10IT22
CHHLNC02ITO0
```

EAMCCSAN

Table name

Equal Access Mechanized Calling Card Service Announcement Table

Overview

Offices that provide operator services for inter-LATA (local access and transport area) carriers can customize “Thank you" announcements. For a mechanized calling card service (MCCS) call, table EAMCCSAN contains the carrier number and the index into table DRMUSERS corresponding to that carrier's “Thank you" announcement for the initial call only.

For an Automated Coin Toll Service (ACTS) call, table EAACTSAN contains the carrier number and two indexes, one for the acknowledgement of a correct deposit and one for the acknowledgement of an over-deposit. These two fields provide input into table DRMUSERS for customized “Thank you" announcements.

Functional description

In offices that provide operator services for inter-LATA carriers, “Thank you" announcements for the first MCCS call can only be customized by the carrier. This is the only announcement that can be customized by the carrier. To determine which index into table DRMUSERS corresponds to an inter-LATA carrier for an MCCS “Thank you" announcement, table EAMCCSAN is introduced. It contains the carrier number and the index into table DRMUSERS that correspond to that carrier's “Thank you" announcement (for the initial call only). If the carrier is not datafilled in table EAMCCSAN, the default sequence “Thank you" datafilled in table DRMUSERS for the operating company (MCCSTOPS 22) is used.

To customize a “Thank you" announcement for an inter-LATA carrier, an external phrase name is created and datafilled against an index in table DRMUSERS. The carrier number and the created index into table EAMCCSAN are datafilled. The common language location identifier (CLLI) must first be datafilled in table ANNS and the index datafilled in table DRMUSERS before datafilling table EAMCCSAN.

Data II sequence and implications

The following tables must be datafilled before table EAMCCSAN.

- ANNS
- DRMUSERS

Table size

A total of 83 words of memory is required for table EAMCCSAN.

Data fill

The following table lists datafill for table EAMCCSAN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
EACARNUM		0000- 9999	Equal access carrier number. Enter the carrier number.
INITINDX		subfields	User announcement. This field consists of subfields CLLI and ANNUM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the name associated with the announcement group for the mechanized calling card service (MCCS) as given in table ANNS.
	ANNUM	1 to 255	Announcement number. Enter the number assigned to the MCCS announcement in table DRMUSERS.

Data fill example

The following example shows sample datafill for table EAMCCSAN.

MAP display example for table EAMCCSAN

```
EACARNUM              INITINDX
_____________________________________

0222           MCCSTOPS 26
```

Table history

BCS36

Tables ANNS and DRMUSERS were added to the datafill sequence.

TOPS03

The range of field EACARNUM was expanded from 3 to 4 digits per feature AN0883 in EA Carrier Code Expansion, OSEA0001.

EAREGN

Table name

Equal Access Region table

Functional description

Table EAREGN contains the list of names that indicate the relationship between the calling and called regions. This table is used for zone screening. A region correlates to a state in LATA screening.

Data ll sequence and meaning

Enter datafill into table EAREGN before you enter datafill into table EASCRN.

Table size

0 to 2000 tuples

Data fill

The table that follows lists datafill for table EAREGN.

Field descriptions

Field	Subfield	Entry	Explanation and action
REGION		Up to 32 characters; default tuples are INTRA, INTER, and OVERSEAS	Region. This field indicates the relationship between the calling and called regions. The values are as follows: • INTRA - The call is withing the region. This value is a default tuple. • INTER - The call is between different regions. This value is a default tuple. • OVERSEAS - The call is overseas. This value is a default tuple. • Operating company defined. If the new EA translations (Unbundling OPRTRANS, UNBN0001) are not used, an operating company defined region defaults to INTRA. The new EA translations are selected by table TOPEATRK field XLASCHEM = Y.

Data fill example

The figure that follows shows sample datafill for table EAREGN.

MAP display example for table EAREGN

```
REGION

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

INTRA
INTER
OVERSEAS
BURLXWASH
```

EAREGN (end)

Table history

TOPS12

The feature LATA Screening Alternative (59006827) introduces table EAREGN in functionality OSB Table LATANAME Expansion, OSB00001.

Additional information

On initial program load (IPL), the three default tuples (INTRA, INTER, and OVERSEAS) are added to this table.

EASAC

Table name

Equal Access Service Access Codes Table

Functional description

Table EASAC allows the operating company to specify the NXX code that is to be treated as a service access code (SAC) in field SAC. Every code that is designated as a SAC must be entered. Codes can be added to or deleted from table EASAC, but no tuples can be changed in table EASAC.

Data II sequence and implications

There is no requirement to datafill other tables prior to table EASAC.

Table size

0 to 1000 tuples

Data II

The following table lists datafill for table EASAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SAC		see subfield	*Service access code* This field consists of subfield CODE.
	CODE	numeric (3 digits)	*Service access code* Enter the NXX code, where N has the range 2 through 9, and X has the range 0 through 9.

Data II e xample

The following example shows sample datafill for table EASAC.

EASAC (end)

MAP display example for table EASAC

```
SAC
_____________________________________________________________

212
800
888
```

Table history

NA005

Verification rules changed to allow SACs with NXX values.

BCS36

Added table size and note explaining codes N0X and N1X.

EASCRN

Table name

Equal Access Screening

Functional description

Table EASCRN provides zone screening. Selection of zone or LATA screening is made in table TOPEATRK field SCRNTYPE. Table EASCRN uses the zones of the originating and terminating numbers to determine whether a call is a carrier call. Presence of an entry in the table means that a call is a carrier call and that an inter-zone carrier handles the call. If an entry is not in the table, the zone is considered intra-zone, the region defaults to intra-region, and the call is marked as a local exchange carrier (LEC) call. If a call is signaled as a carrier call and an entry fails to appear in table EASCRN, then the call remains a carrier call.

For EA calls, the region designation allows different routes to be selected for class of service screening.

If the new EA translations (Unbundling OPRTRANS, UNBN0001) are not used, the region must be INTRA or INTER, not Operating Company defined. Otherwise, an Operating Company defined region defaults to INTRA. The new EA translations are selected by table TOPEATRK field XLASCHEM = Y.

Table EASCRN is not used to screen overseas regular calls nor overseas country direct (CDIR) calls since they are automatically marked as inter-zone and with a region of overseas.

For non-overseas CDIR calls, the calling number zone can only be given on a trunk group basis in table TOPEATRK. The DN basis in table ZONENAT is not possible. So, if the zone is not given in TOPEATRK, the call is automatically marked as intra-zone and intra-region. But, if the zone is given in TOPEATRK, table EASCRN is used to mark the call as inter-zone and to indicate the region.

Data II sequence and meaning

Enter datafill into the tables that follow after you enter datafill into table EASCRN:

- TOPSZONE
- EAREGN

Table size

0 to (2000 x 2000 = 4,000,000) tuples.

EASCRN (continued)

Data fill

The table that follows lists datafill for table EASCRN.

Field descriptions

Field	Subfield	Entry	Explanation and action
CALLINFO		see subfield	Calling information. This field consists of subfields ORIGZONE and TERMZONE.
	ORIGZONE	name from TOPSZONE	Originating zone. This field provides the zone assigned to the originating number. The name must be defined in table TOPSZONE.
	TERMZONE	name from TOPSZONE	Terminating zone. This field provides the zone assigned to the terminating number. The name must be defined in table TOPSZONE.
REGION		name from EAREGN	Region. This field indicates the region designation. The name must be defined in table EAREGN.

Data fill example

The figure that follows shows sample datafill for table EASCRN.

MAP display example for table EASCRN

```
CALLINFO                          REGION
_____________________________________________________

BURLINGT    RALEIGH               INTRA
BURLINGT    WASHINGT              BURLXWASH
RALEIGH     BURLINGT              INTRA
RALEIGH     WASHINGT              INTER
WASHINGT    RALEIGH               INTER
WASHINGT    BURLINGT              INTER
```

Table history

TOPS12

The feature LATA Screening Alternative (59006827) introduced this table for functionality OSB Table LATANAME Expansion, 0SB00001.

ECHCONF

Table name

Echo Canceler Module Configuration Table

Functional description

Table ECHCONF contains information on the setup of echo canceler (EC) modules and the associated maintenance configurations. The table contains the following information:

- EC module configuration key
- EC module manufacturer
- type of EC
- presence of high level compensation unit
- end path delay
- nonlinear processor operational mode
- manual operation

Table ECHCONF can contain a maximum of 32 different EC module configurations. You can use different types of EC modules and optional cards in the DMS switch. Table ECHCONF can contain fields EPD and HLC. When the table contains these fields, the system verifies the information against the type of EC module and optional card entered. The end path delay entered must not exceed the maximum that the EC module allows.

Data II sequence and meaning

You do not have to enter data in other tables before you enter data in table ECHCONF.

Table ECHINV uses table ECHCONF.

Table size

This table size is 0 to 32 tuples.

Data II

The datafill for table ECHCONF appears in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ECHCONF		alphanumeric (a maximum of eight characters)	*Echo canceler module configuration key*. Enter the echo canceler (EC) module configuration. You can enter a maximum of 32 different EC module configurations.
ECDATA	all subfields		This entry contains all the refinements for table ECHCONF.
	CONTROL	RS232 or TS16	If package NTXY73AA is present, enter TS16. If this package is not present, enter RS232. If the refinement is TS16, enter refinements CTRLBIT and POLARITY. If the refinement is RS232, enter all other refinements. Default is RS232.
	CTRLBIT	A,B,C or D	If CONTROL is TS16, enter A, B, C or D to indicate which bit in timeslot 16 to use for control.
	POLARITY	HIGH or LOW	If CONTROL is TS16, enter HIGH or LOW to indicate the polarity to use.
	ECHCRIT	3 to 31	*Critical faulty channel number*. Enter the critical faulty channel number of the echo canceler module. The default value for this field is 24.
	ECMANUF	TELLAB or COHERENT	*Echo canceler module manufacturer*. Enter TELLAB.
	ECHMAJ		*Major faulty channel number*. Enter the major faulty channel number of the echo canceler module. The default value for this field is 16. *Minimum faulty channel number*. Enter the minimum faulty channel number of the echo canceler module. The default value for this field is 8.

ECHCONF (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	EDP254	16MS, 32MS, 48MS or 64MS	
	EDP256	32MS, 64MS, 96MS or 128MS	
	EDP6000	8MS, 32MS 64MS or 128MS	
	MANOP	ON or OFF	*Manual operation*. Enter ON to allow manual operation of the EC module. If you do not require this action, enter OFF.
	MODEL	If TELLAB: T2541, T2541A, T2542, T2542A, T2561 or T2561A If COHERENT: C6000	If the entry to refinement ECMANUF Is TELLAB, enter the model number of the echo canceller card installed. If the entry to refinement ECMANUF is COHERENT, enter the model number of the echo canceller card installed.
	NLP	CCH, CCS, DDH, DDS, or OFF	*Non-linear processor operational mode*. The purpose of a non-linear processor (NLP) is to attenuate low level echoes that remain after an incorrect cancelation. The NLP operates in the following modes: • CCH (NLP on—CCITT recommendation hard mode operation) • CCS (NLP on—CCITT recommendation soft mode operation) • DDH (NLP on during double talk hard mode operation) • DDS (NLP on during double talk soft mode operation) • OFF (disable the nonlinear processor)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	OPTCARD	HLC or NONE	*Optional card*. Enter HLC for the high level compensation card. Enter data in refinement HLC. The HLC card performs different levels of attenuation on signals at the receive-in port of the EC module. The different levels of attenuation are from 4 dB to 13 dB. This card allows the EC module to perform more accurate echo cancelation. To alter the level of attenuation, set dual inline package (DIP) switches on the HLC card. Enter NONE to indicate that an optional card is not present.
	HLC	ON or OFF	*High level compensation*. If the entry in field OPTCARD is HLC, enter data in this refinement. Enter ON to indicate that high level compensation is required. If you do not require high level compensation, enter OFF.

Data ll e xample

Sample datafill for table ECHCONF appears in the following example.

MAP display example for table ECHCONF

```
ECHCONF                                                ECDATA
_____________________________________________________________
CONFIG1
RS232  TELLAB  OFF  OFF  1 2 3  T2542A  NONE  32MS
CONFIF2  TS16  B  HIGH
```

Table history

TL06

This feature was added to DMS 100 release TL06.

BCS36

The explanation of field EPD was improved in BCS36.

ECHINV

Table name

Echo Canceler Module Inventory Table

Functional description

Table ECHINV contains an inventory of the echo canceler (EC) modules present on the DMS switch. Table ECHINV uses table ECHCONF. Table ECHCONF contains information on the setup conditions and maintenance configuration of echo canceler modules.

Echo canceler modules allow the DMS switch to perform echo cancellation on international trunks. EC modules are external units that connect in series with the pulse code modulation 30 (PCM30) digital trunk controllers (PDTC) carriers. Control of these modules occurs through the echo canceler control (ECC) card. The ECC card is an optional card for the PDTC.

Note: The Austrian digital trunk controller (ADTC) is the Austrian version of a PDTC. When PDTC appears in this document, substitute ADTC if this change is appropriate for the telephone operating company office.

You cannot enter data in table ECHINV for an EC module on a PDTC carrier when the following conditions occur:

- The PDTC does not have an ECC card entered in table LTCINV.
- The carrier is not equipped.
- The switch cannot find the EC module configuration key in table ECHCONF.

Data II sequence and meaning

- You must enter data in the following tables before you enter data in table ECHINV:
- LTCINV
- ECHCONF

The PDTC must have an ECC optional card. Table LTCINV contains an ECC optional card for the PDTC.

Table ECHCONF must contain the EC module configuration key (field ECHCONF).

Table size

The table size is 0 to 255 tuples.

Data II

The datafill for table ECHINV appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ECNUM		see subfield	*Echo canceler number* This field contains subfield ECKEY.
	ECKEY	0 to 32767	*Echo canceler module key*. Enter the number assigned to the echo canceler (EC) module.
ECLOC		see subfields	*Echo canceler module location*. This field contains subfields XPMTYPE, XPMNO, and PSLINK.
	XPMTYPE	ADTC or PDTC	*Peripheral module type*. Enter the peripheral module (PM) type as follows: • Enter PDTC for a PCM30 digital trunk controller. • Enter ADTC for an Austrian PDTC.
	XPMNO	0 to 255	*Peripheral module number*. Enter the number of the PDTC that controls the EC module. Enter a number between 0 and 127 for a NT40 switch. Enter a number between 0 and 255 for a DMS SuperNode switch with MC68000 series target processors.
	PSLINK	0 to 15	*Port or carrier number link*. Enter the PDTC port or carrier number that the EC module is on. You can only enter a value from 0 (zero) to 15 because a PDTC only contains 16 peripheral (P)-side carriers. The system does not accept entries out of the range of values for this field.

ECHINV (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MODADR		1 to 32	*Module address*. Enter the address of the EC module. Each port on a PDTC requires one EC module. Each PDTC has a maximum of 16 ports. You can use a maximum of 16 ECs. A shelf can contain a maximum of six modules. Each shelf of EC modules in a PDTC has a different address. A PDTC only controls EC modules that connect to the carriers of the PDTC.
FRTYP		alphabetical	*Frame type*. Enter the name of the frame type that contains the EC module.
FRNO		0 to 511	*Frame number*. Enter the frame number that contains the EC module.
SHFPOS		0 to 77	*Shelf position*. Enter the shelf position that contains the EC module.
FLOOR		0 to 99	*Floor*. Enter the floor number that contains the EC module.
ROW		A to Z, AA to ZZ except for I, O, II, OO	*Row*. Enter the row of the frame that contains the EC module.
FRPOS		0 to 99	*Frame position*. Enter the frame position that contains the EC module.
ECHCONF		alphanumeric (a maximum of eight characters)	*Echo canceler module configuration key*. Enter the EC key configuration. You can enter a maximum of 32 different EC module configurations. Table ECHCONF must contain the key configuration.

Data Il e xample

Sample datafill for table ECHINV appears in the following example.

MAP display example for table ECHINV

```
ECNUM  ECLOC  MODARD  FRTYP F RNO  SHFPOS  FLOOR  ROW
FRPOS   ECHCONF
_____________________________________________________
102   PDTC    4 1 2    ECH    2     18       1     A
 7       ECH1
```

Table history

TL06

This feature was added to DMS100 release TL06.

BCS36

The following improvements were added in BCS36:

- an explanation for the data entry sequence
- the corrected table size
- an improved explanation of field ECHCONF

ECHOSUP

Table name

Digital Echo Suppressor Member List Table

Functional description

The maximum number of circuits is 5120 or 10 420 ports. The system assigns each 1024 circuits or 2048 ports a different fixed pseudo code in table common language location identifier (CLLI). The five fixed pseudo codes are ESUP1, ESUP2, ESUP3, ESUP4, and ESUP5.

If two or more pseudo codes are available, the system must assign echo suppressors equally to all the pseudo codes. For example, if 2000 circuits and 2 pseudo codes are present, the system assigns 1000 circuits to each pseudo code.

The system assigns member numbers in the range 0 to 2047, to the 1024 circuits assigned to a fixed pseudo code. Gaps can appear in the number sequence.

Table ECHOSUP lists the following information for each echo suppressor:

- the fixed pseudo code ESUP1, ESUP2, ESUP3, ESUP4, or ESUP5, to which the system assigns the echo suppressor
- echo suppressor number
- incoming and outgoing external trunk number
- echo suppression type
- location

Complete echo suppression does not occur on the NT3X65, echo suppression card.

Data II sequence and meaning

You do not need to enter data in other tables before you enter data in table ECHOSUP.

Table size

The system allocates memory for table ECHOSUP in table CLLI, field TRKGRSIZ, for CLLI codes ESUP1 to ESUP5.

Data II

Datafill for table ECHOSUP appears in the following table:

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DESGRP		ESUP1 ESUP2 ESUP3 ESUP4 or ESUP5	Indicates *Digital echo suppressor group*. Enter the code that the group of echo suppressors receives in table CLLI.
DESMEM		0 to 2047	Indicates *Digital echo suppressor number*. Enter the number assigned to the echo suppressor.
INPORT		0 to 9998 even numbers only	Indicates *Incoming external trunk number*. Enter the incoming external trunk number that the operating company assigns to the digital echo suppressor.
OUTPORT		1 to 9999 odd numbers only	Indicates *Outgoing external trunk number*. Enter the outgoing external trunk number that the operating company assigns to the digital echo suppressor. The value must be equal to the value in field INPORT + 1.
ESUPTYP		H or N	Indicates *Echo suppressor type*. Enter H (half). H is the correct entry. ***Note:*** Complete echo suppression, entry F, does not occur on the NT3X65 card. You can enter N for No echo suppression. The digital multiplex system (DMS) call processing software ignores this command. When you enter N the system enables only half or entry H, echo suppression by default.

ECHOSUP (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MODULENO		0 to 511	Indicates *Module number*. Enter the number that the system assigns to the digital carrier module (DCM) on which the digital echo suppressor mounts.
CKTNO		0 to 63 does not include 15, 31, 47, and 63	Indicates *Circuit number*. Enter the circuit number that the system assigned to which the echo suppressor.

Data ll e xample

Sample datafill for table ECHOSUP appears in the following example.

MAP display example for table ECHOSUP

```
DESGRP   DESMEM   INPORT   OUTPORT ESUPTYP MODULENO CKTNO
_____________________________________________________

ESUP1    0        5        6       N       500      60
```

EDRAMINV

Table name

Enhanced Digital Recorded Announcement Machine Inventory

Functional description

Table Enhanced Digital Recorded Announcement Machine Inventory (EDRAMINV) includes voice file information for each enhanced digital recording announcement machine (EDRAM). Each 4-minute EDRAM can have a maximum of eight voice files. Each 16-minute EDRAM can have a maximum of 32 voice files. Each voice file represents a different set of announcements.

The EDRAM is on the maintenance trunk module (MTM) or integrated services module (ISM) shelf. The EDRAM has a direct connection to the network through a DS30 link. The EDRAM appears on the MAP display as both a peripheral module (PM) and a trunk.

For BCS34 and earlier releases, when you enter data for an EDRAM add the control (CTRL) tuple first. You can add a maximum of eight announcement (ANN) tuples in any order for each EDRAM. When you delete tuples, first delete the ANN tuples. Delete the CTRL tuple last.

For BCS35 and later releases, table EDRAMINV only holds ANN file information for DRAM trunk modules (DTM). Table Digital Recorded Announcement Machines (DRAMS) stores the CTRL information.

Each ANN tuple in table EDRAMINV that has a related voice file is equal to the NT1X76 programmable read-only memory function (PROM) card function. For each tuple there must be related datafill in table DRAMS. For a single-density voice file, the value in field EDRAMNO - 1 corresponds to a single block number in the BLKLIST vector. For double-density voice files, the system requires two block numbers in the same BLKLIST vector. The first block number is the same number as EDRAMNO - 1. The second block number is the same number as EDRAMNO. For both single- and double-density prerecorded voice files, the corresponding entry in table DRAMS must be PROM CARDTYPE. A mismatch between table DRAMS and table EDRAMINV can result in a diagnostic test failure for the EDRAM at the trunk test position (TTP) MAP level.

See the description of table DRAMS for additional information.

EDRAMINV (continued)

Data II sequence and meaning

You must enter data for the related DTMs in table TMINV before you enter data in table EDRAMINV. Delete DTM data from table EDRAMINV before you delete the DTM data from table TMINV.

Enter the PMLOAD file name in table PMLOADS before you enter data in the EDRAM in table TMINV.

Check field TRKGRPSIZ for the EDRAM CLLI in table CLLI before you enter data in table EDRAMINV.

Enter data in table EDRAMINV before you enter data in table DRAMS.

If you change the EDRAM card type from PROM to RAM after you load the EDRAM with voice files, do the following:

- Remove from table EDRAMINV the datafill that assigns voice files to the related DTM.
- Reload the EDRAM firmware load for the related DTM.

Note: A reload of the EDRAM firmware for the related DTM removes the loaded voice files from the EDRAM. The reload replaces the loaded voice files with the voice files entered in table EDRAMINV.

Table size

The table size is 0 to 2048 tuples. This table size represents a maximum of 64 EDRAMs. Each EDRAM has a maximum of 32 ANN tuples.

Data II

Datafill for table EDRAMINV appears in the following table.

Field descriptions (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
EDRAMNM		see subfields	Indicates *EDRAM number key*. This field contains subfields TMNAME and EDRAMNO.
	TMNAME	see subfields	Indicates *Trunk module name*. This field contains subfields DTMTYPE and DTMNO.
	DTMTYPE	DTM	Indicates *DRAM trunk module type*. Enter DTM.
	DTMNO	0 to 63	Indicates *DRAM trunk module number*. Enter the DTM number.

Field descriptions (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
	EDRAMNO	0 to 8, 1 to 8, or 1 to 32	Indicates *EDRAM number*. Enter the EDRAM number. For BCS34 and earlier releases, enter 0 for the CTRL tuple. For BCS35 and later releases, do not enter 0. For NT1X80AA, enter a value from 1 to 8 for ANN tuples. For NT1X80BA, enter a value from 1 to 32. ***Note:*** You cannot repeat EDRAM numbers for the same EDRAM. Two types of voice files are present: • single density — Single density voice files occupy one EDRAM number. Single-density voice files must correspond to a single block number in a BLKLIST vector in table DRAMS. • double density — Double density voice files occupy two EDRAM numbers. Double-density voice files must correspond to two block numbers in a single BLKLIST vector in table DRAMS. For prerecorded announcement files, enter the related tuples in table DRAMS as CARDTYPE PROM.

EDRAMINV (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
			For custom recorded announcement files, enter related tuples in table DRAMS as CARDTYPE RAM For custom recorded announcements, use the UPLOAD command at the PM MAP level to create single density voice files. Enter the data for the uploaded voice file in table EDRAMINV after the file is ready to reload to the EDRAM. ***Note:*** Refer to the *Digital Recorded Announcement Machine DRAM and EDRAM Guide*, 297-1001-527 for additional information on voice files.
TUPINFO		see subfield	Indicates *Tuple information*. This field contains subfield EDRAMSEL.
	EDRAMSEL	ANN or CTRL	Indicates *EDRAM selector*For BCS35 and later releases, enter ANN. For BCS34 and earlier releases, enter ANN to indicate that the tuple is the ANN tuple. Enter data in subfield FILENAME. Enter CTRL to indicate that the tuple is the control tuple. Enter data in subfields TM, TMNO, and TMCKT.
	FILENAME	alphanumeric a maximum of eight characters	Indicates *File name*. If the entry in subfield EDRAMSEL is ANN, datafill this subfield. Enter the announcement voice file name. Datafill is complete for this table.
	TM (up to BCS35)	a maximum of eight characters	Indicates *Trunk module type*. If the entry in subfield EDRAMSEL is CTRL, datafill this subfield. Enter the trunk module (TM) type, for example, MTM or STM to indicate the location of the DTM.

Field descriptions (Sheet 4 of 4)

Field	Subfield	Entry	Explanation and action
	TMNO (up to BCS35)	0 to 2047	Indicates *Trunk module number*. If the entry in subfield EDRAMSEL is CTRL, datafill this subfield. Enter the TM number of the TM type.
	TMCKT (up to BCS35)	0 to 29	Indicates *Trunk module circuit number*. If the entry in subfield EDRAMSEL is CTRL, datafill this subfield. Enter the circuit number of the TM that the DTM occupies.

Table history

APC06

Information on the 16 min EDRAM (NT1X80BA) was added.

Data ll e xample

An example of datafill in table EDRAMINV for BCS35 and later releases appears in the following example.

The first and third tuples contain data for EDRAM voice file ESTD0AA. The second tuple contains data for EDRAM voice file FSTD0AA. The next two tuples contain data for EDRAM voice files for CLASS/CMS Phase I announcements in English. The last two tuples contain data for EDRAM voice files for CLASS/CMS Phase 2 announcements in English. Refer to *DRAM and EDRAM Guide*, 297-1001-527 for additional information.

MAP example for table EDRAMINV

```
    EDRAMNM                 TUPINFO
 ________________________________________________________

  DTM  1  1            ANN   ESTD0AA
  DTM  1  3            ANN   FSTD0AA
  DTM  2  1            ANN   ESTD0AA
  DTM  4  1            ANN  ECLS10AJ
  DTM  4  5            ANN  ECLS10AK
  DTM  5  1            ANN  ECLS20AP
  DTM  5  3            ANN  ECLS20AQ
```

EDRAMINV (end)

The examples that follow contain normal datafill for 16-minute EDRAM in tables EDRAMINV and DRAMS. The examples show the correlation between datafill in the two tables.

Example of data ll f or 16-min EDRAM in table EDRAMINV

EDRAMNM	TUPINFO
DTM 5 1	ANN ECLS20AJ
DTM 5 3	ANN ECLS20AK
DTM 5 5	ANN ECLS20AL
DTM 5 7	ANN ECLS20AM
DTM 5 9	ANN ECLS10AN
DTM 5 11	ANN ECLS20AO
DTM 5 13	ANN ECLS20AP

Example of data ll f or 16-min EDRAM in table DRAMS

DRAMCARD	TMTYPE	TMNO	TMCKT	CARDCODE	CARDINFO
5 0	DTM	5	0	1X80BA	CTLR EDRAM5
5 1	DTM	5	0	1X80BA	PROM (0) (1) $
5 3	DTM	5	0	1X80BA	PROM (2) (3) $
5 5	DTM	5	0	1X80BA	PROM (4) (5) $
5 7	DTM	5	0	1X80BA	PROM (6) (7) $
5 9	DTM	5	0	1X80BA	PROM (8) (9) $
5 11	DTM	5	0	1X80BA	PROM (10) (11) $
5 13	DTM	5	0	1X80BA	PROM (12) (13) $

ENCDINV

Table name

Enhanced Network Card Inventory Table

Functional description

Table ENCDINV contains the data tuples for each card the system provisions on each enhanced network (ENET) in the office. The table provides the location, the equipment type, and design change document information.

Table ENCDINV is modified to accomodate datafill for an ENET paddleboard required for Spectrum Peripheral Module (SPM) nodes. The SPM paddleboard is the same type of paddleboard as the existing ENET paddleboards, but it has a different product engineering code (PEC).

When you add tuples in one plane, the system automatically generates a duplicate tuple for the opposite plane. For example, the addition of tuple 0 1 14 automatically generates one for 1 1 14. This process occurs for the deletion of tuples.

Data II sequence and meaning

You must enter data in table ENINV before you enter data in table ENCDINV.

See table ENINV for datafill sequence.

Table size

0 to 592 tuples

A tuple requires 48 words of protected store. The allocation of the protected store occurs when an additional tuple is in the table.

The SPM paddleboard PEC is added to the end of the existing symbolic range and does not increase the bit size of the field. A special dump and restore reformat is not required.

ENCDINV (continued)

Data II

Datafill for table ENCDINV appears in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ENCDKEY		see subfields	*Enhanced network card key*. This field contains subfields PLANE, SHELF and SLOT. These fields are the keys to the table.
	PLANE	0 or 1	*Enhanced network plane*. Enter the enhanced network (ENET) plane number. An addition of a card tuple for plane 0 or 1 causes an automatic addition of a tuple. The system adds a tuple which is for the same card on the other plane.
	SHELF	0 to 3	*ENET shelf*. Enter the ENET shelf number. On the first ENET shelf (ENET 0), you must enter the crosspoints in pairs. Enter the crosspoints in the following increments: (9, 10), (31, 32), (29, 30), (11, 12), (27, 28), (13, 14), (25, 26), and (15, 16). For example, if data entries are for card 27, enter cards 9, 10, 31, 32, 29, 30, 11, and 12 first. For all other ENET shelf, enter slots 9, 11, 13, 15, 25, 27, 29, 31 first. After these data entries, enter slots 10, 12, 14, 16, 26, 28, 30, 32. Only FA crosspoints can be present on a PRI16K shelf. Only CA and BA crosspoints can be present on a PRI or EXT shelf. Shelf numbers greater than 0 cannot be present for ENCLASS equal to PRI16K.
	SLOT	1 to 36	*Slot*. Enter the slot number.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CPTYPE		CROSSPOIT PROCESSOR CLOCK_ MESSAGE POS_PWR_ CONVERTER NEG_PWR_ CONVERTER or NIL_CP	*Circuit pack (card) type*. Enter the circuit pack (card) type. ***Note:*** You can add card type CROSSPOINT. The other card types are system card types. The system adds the card types to table ENINV when you add a tuple to table ENINV.
CPPEC		NT9X35BA NT9X35CA NT9X35FA NT9X13CA NT9X13KA NT9X36BA NT9X30AA NT9X31AA or NIL_PEC	*Circuit pack (card) product engineering code*. Enter the circuit pack (card) product engineering code (PEC). Note that only you can add NT9X35BA and NT9X35CA. The system adds other PECs to ENCDINV when you add a tuple to table ENINV. An entry outside the range for this field is not correct. A combination of the FA version crosspoint with BAs and CAs cannot occur for an ENCLASS.
CPDCD		0 to 99	*Circuit pack (card) design change document number*. Enter a number between 0 and 99 to represent the circuit card DCD number.
PBTYPE		DS_512 - INTERFACE DS_30_ INTERFACE DS_30_DS_5 12_ INTERFACE REMOTE_ TERMINAL MESSAGE_ LINK or NIL_PB	*Paddleboard type*. Enter the paddleboard (PB) type. ***Note:*** Only you can add DS_512 and DS_30 interfaces and NIL_PB. The other interfaces are system paddleboards. The system adds these interfaces to table ENCDINV.

ENCDINV (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PBPEC		NT9X40BA NT9X40BB NT9X40DA NT9X41BA NT9X41BB NT9X45BA NT9X26AA NT9X26AB or NIL_PEC	*Paddleboard product engineering code*. Enter the paddleboard PEC. Only you can add the NT9X40, NT9X41, and NT9X45 PECs. The other PECs are system PBs. The system adds these PECs to ENCDINV when you add a tuple to ENIN receives an additional tuple. Enter NT9X40DA for SPM. An entry outside the range for this field is not correct.
PBDCD		0 to 99	*Paddleboard design change document*. Enter a number between 0 and 99 to represent the paddleboard design change document number.

Data ll e xample

Sample datafill for table ENCDINV appears in the following example.

MAP display example for table ENCDINV

```
ENCDKEY            CPTYPE     CPPEC  CPDCD                  PBTYPE     PBPEC
PBDCD
_____________________________________________________________________________
 0 0  1 NEG_PWR_CONVERTER NT9X31AA    0                    NIL_PB  NIL_PEC
    0
 0 0  4 POS_PWR_CONVERTER NT9X30AA    0                    NIL_PB  NIL_PEC
    0
 1 0  7          PROCESSOR NT9X13KA    0           REMOTE TERMINAL NT9X26AA
    0
 0 0  8      CLOCK_MESSAGE NT9X36BA    0              MESSAGE LINK NT9X40BA
    0
 0 0  9         CROSSPOINT NT9X35CA    0                    NIL_PB  NIL_PEC
    0
 0 0 10         CROSSPOINT NT9X35CA    0            DS30_INTERFACE NT9X41BA
    0
 0 0 11         CROSSPOINT NT9X35BA    0    DS30_DS_512_INTERFACE NT9X45BA
    0
 0 0 12         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 13         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 14         CROSSPOINT NT9X35BA    0           DS_30_INTERFACE NT9X41BA
    0
 0 0 15         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 16         CROSSPOINT NT9X35BA    0           DS_30_INTERFACE NT9X41BA
    0
 0 0 25         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 26         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 27         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 28         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 29         CROSSPOINT NT9X35BA    0           DS_30_INTERFACE NT9X41BA
    0
 0 0 30         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 31         CROSSPOINT NT9X35BA    0          DS_512_INTERFACE NT9X40BA
    0
 0 0 32         CROSSPOINT NT9X35CA    0          DS_512_INTERFACE NT9X40DA
    0
```

Table history

CSP08

The SPM system was introduced. Table ENCDINV was modified to add datafill for ENET paddleboard NT9X40DA for SPM systems.

ENCDINV (end)

Additional information

Quantity, order and location limits for the crosspoint cards apply. The crosspoint cards are in predefined logical groups called increments. Members of the particular increments of that card must have data entries before a crosspoint card can go in service. The ENET shelf number determines the limits and increment groups.

The system enters the associated system cards in table ENCDINV when you enter a tuple in table ENINV.

For ENET in a SuperNode switch, changes do not occur to the system card tuples that you add to table ENCDINV.

The system card tuple list is different on each plane for ENET in a SuperNode SE switch 16K ENET.

The 16K ENET card datafill increments and order appear in table 2.

SNSE card data II

Increment	ENET16K slot numbers
1st	12, 13 (22, 23)
2nd	14, 15 (24, 25)
3rd	16, 17 (26, 27)
4th	18, 19 (28, 29)
Note: Plane 1 increments are in brackets.	

ENIMLAST

Table name

Enhanced Network Inter Message-switch Link Assignment Table

Functional description

Table ENIMLAST handles NORESTART WARMSWACT when the BCSn+ side channels must be allocated identically to the BCSn side. Table ENIMLAST, a read only table, is for dump and restore use only. It cannot be accessed through table control and has hooks to prevent writing by casual users.

Data ll sequence and implications

Datafill tables in the following order:

- MSINV
- MSCDINV
- MSPTINV
- ENINV
- ENCDINV
- ENIMLAST

Table size

The size of the table is determined by the number of peripheral units assigned to the enhanced network (ENET) nodes. For each integrated link maintenance (ILM) maintained peripheral module that is added, store is allocated for all possible P-side messaging links (384) for the ENET. They are all internally marked as unassigned so that only provisioned links are seen by table control.

ENIMLAST (continued)

Field descriptions

The following table describes field names, subfield names, and valid data ranges for table ENIMLAST.

(Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ENIMLKEY		See subfields	ENET MESSAGE LINK KEY. This field consists of subfields enpair, enxpt_link, and mchidx. This is the key field to table ENIMLAST.
	ENPAIR	0 to 3	ENET SHELF NUMBER. Enter the ENET shelf number.
	ENXPT_LINK	0-95	ENET CROSSPOINT LINK NUMBER
	MCHIDX	0-3	MESSAGE CHANNEL INDEX
PCHNLS		See subfields	P-SIDE CHANNELS. Field PCHNLS contains the group of P-side messaging channels and consists of subfields START, BANDWIDTH, and DISTANCE.
	START	1-511	STARTING CHANNEL. This field indicates the P-side starting messaging channel.
	BANDWIDTH	1-511	BANDWIDTH. This field indicates the total number of P-side messaging channels.
	DISTANCE	1-511	DISTANCE. This field indicates the distance between two consecutive channels within the channel group.
ENCMLS		See subfields	ENET C-SIDE MESSAGE LINKS. Field ENCMLS contains a group of assigned C-side message link (CML) numbers. The subfields are START, BANDWIDTH, and DISTANCE.
	START	2-1023	STARTING CML. This field indicates the starting CML number. Any entry outside the range indicated for this field is invalid.

(Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	BANDWIDTH	1-511	BANDWIDTH. This field indicates the total number of assigned CML numbers. Any entry outside the range indicated for this field is invalid.
	DISTANCE	1-511	DISTANCE. This field indicates the distance between 2 consecutive CML numbers in the CML number group. Any entry outside the range indicated for this field is invalid.
CCHNLS		See subfields	C-SIDE CHANNELS. Field CCHNLS contains the group of assigned C-side messaging channels and consists of subfields are START, BANDWIDTH, and DISTANCE.
	start	1-511	START. This field indicates the C-side starting messaging channel.
	bandwidth	1-511	START. This field indicates the total number of C-side messaging channels.
	distance	1-511	DISTANCE. This field indicates the distance between 2 consecutive channels within the channel group.

Data ll e xample

The following shows sample datafill for table ENIMLAST.

```
ENIMLKEY          PCHNLS          ENCMLS          CCHNLS
_____________________________________________________________
0  4  0           1  7  1          2  7  1        2  7  1
```

Table history

SPM01 (CSP09)

Table ENIMLAST was created.

ENINV

Table name

Enhanced Network Node Inventory Table

Functional description

Table ENINV gives a location, equipment type information and C-side connection information for the equipped enhanced network (ENET). The ENET is different from the present networks. The ENET adds both planes in a single tuple. The first seven fields are common to both planes. The other fields indicate the different locations and the message switch (MS) card of the two planes.

Data II sequence and meaning

Enter data in table ENINV after tables MSINV and MSCDINV and before you enter data in table ENCDINV.

You must use the following sequence when you enter an ENET pair and optional cards:

- Use table ENINV to enter data in the ENET pair. Enter pairs in numeric order from lower number pairs to higher number pairs. The entry of an ENET pair means the entry of the system cards and paddleboards associated with an ENET pair occurs.
- The system can add or delete ENET system card tuples from table ENCDINV. The addition or deletion of these tuples occurs when the user adds or deletes an EDET node tuple in table ENINV. The user can add or delete the optional cards from table ENCDINV.
- When an NT9X40 paddleboard is in slot 8 for the 128K ENET, the system considers the NT9X40 to be a paddleboard. The system considers the NT9X40 paddleboard as a paddleboard because the NT9X40 handles the ENET-to-MS messaging. When the NT9X40 is a paddleboard on crosspoint cards, the system considers the NT9X40 to be an optional card.
- The slots for crosspoint cards are in the range 9 to 32. Slots 17 to 24 are expansion slots. The 128K-sized ENET does not require these slots.
- Use table ENCDINV to enter the optional cards. There are quantity, order and location restrictions for the crosspoint cards. The crosspoint cards are in different set logical groups. The groups are increments. Before a crosspoint card can be in service, data entries for all members of the increments of that card must occur. The ENET pair number determines the restrictions and increment groups. The datafill order and increments for each ENET pair are in the following tables.

ENET pair 0

Slots	Increment
9, 10, 31, 32	1
29, 30	2
11, 12	3
27, 28	4
13, 14	5
25, 26	6
15, 16	7

ENET pair 1

Slots	Increment
9, 11, 13, 15, 25, 27, 29, 31	1
10, 12, 14, 16, 26, 28, 30, 32	2

For example, when you enter crosspoint cards on ENET pair 0, enter card at slot 9 first. The slots appear in the preceding tables in correct entry order. Before the crosspoint at slot 9, pair 0 can go in service, you must enter the crosspoints. Enter the crosspoints at slots 10, 31 and 32. You must perform this action because the slots belong to the same increment.

Interaction with of ce parameter s

The ENET software must be active to allow the user to add data entries to table ENINV. Set parameter ENET_AVAILABLE parameter in table OFCOPT to Y (yes) to activate Enet software.

Table size

The table size is 0 to 8 tuples

Each tuple requires 32 words of protected store. The system allocates the protected store when a tuple appears in the table for the first time.

ENINV (continued)

Data II

Datafill for table ENINV appears in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ENKEY		see subfield	*Enhanced network shelf number*. This field contains subfield SHELF.
	SHELF	0 to 3	*Shelf*. Enter the ENET shelf number. This number is the key for table ENINV. An entry outside of this range is not correct.
ENCLASS		PRI, PRI16K or PRI64K	*Enhanced network class*. Enter PRI for a 128K ENET shelf, PRI16K for a 16K ENET shelf or PRI64K for a 64K ENET shelf.
FRTYPE		ENC, DPCC, NWDC, NWSC or SCC	*Frame type*. Enter the frame type that contains the ENET. The correct entries are ENC, DPCC, NWDC, NWSC and SCC.
FRNO		0 to 511	*Frame number*. Enter the frame number.
FRPEC		NT9X05AB, NT9X0101 NT9X01MB or NT9X05AA	*Frame product engineering code*. Enter the frame product engineering code (PEC). The correct entries are NT9X05AA, NT9X05BA, NT9X0101 and NT9X01MB.
SHPEC		NT9X0801 NT9X0810	*Shelf product engineering code*. Enter the PEC for the shelf. The correct entries are NT9X0801 and NT9X0810.
MSCARD0		1 to 26	*Message switch card number*. Enter the message switch card number for plane 0.
MSLINK0		0 to 3	*Message switch interface paddleboard link number 0*. Enter a number between 0 and 3 to indicate the interface paddleboard on MSCARD0 that serves network plane 0. The MS interface paddleboard that serves ENET16K supports from 0 to 3 physical fiber links. The MS interface paddleboard that serves ENET supports 1 link. The default value is 0.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
MSPORT0		0 to 127	*Message switch port number*. Enter a number between 0 and 127 to indicate the port on MSLINK0 dedicated to network plane 0. In ENET, the same MS port number serves both network planes. In ENET16K each plane has a different MS port number. The default value is MSPORT.
FLOOR0		0 to 99	*Frame floor*. Enter the floor location of the frame.
ROW0		A to Z, AA to ZZ (does not include I, O, II and OO)	*Frame row*. Enter the row on the floor where the frame is present. The correct entries are A-Z and AA-ZZ. The correct entries do not include I, O, II and OO.
FRPOS0		0 to 99	*Frame position*. Enter the frame position for plane 0.
SHELF0		0, 00, 13, 26 or 39	*Shelf position*. Enter the shelf position for plane 0. The correct entries are 0, 00, 13, 26 or 39.
LOAD0		alphanumeric (one to eight characters)	*Load file name*. Enter the loadfile name for plane 0. This name must appear in table PMLOADS and must be 1 to 8 characters long.
MSCARD1		1 to 26	*Message switch card number*. Enter the MS card number for plane 1.
MSLINK1		0 to 3	*Message switch interface paddleboard link number 1*. Enter a number between 0 and 3 to indicate the interface paddleboard on MSCARD1 that serves network plane 1. The MS interface paddleboard that serves ENET16K supports from 0 to 3 physical fiber links. The MS interface paddleboard that serves ENET supports 1 link. The default value is 0.

ENINV (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
MSPORT1		0 to 127	*Message switch port number*. Enter a number between 0 and 127 to indicate the port on MSLINK1 dedicated to network plane 1. In ENET the same MS port number serves both network planes. In ENET16K each plane has a different MS port number. The default value is MSPORT.
FLOOR1		0 to 99	*Frame floor*. Enter the floor number of the frame.
ROW1		A to Z, AA to ZZ (does not include I, O, II and OO)	*Frame row*. Enter the location of the row on the floor of the frame. The correct entries are A-Z and AA-ZZ. The correct entries do not include I, O, II and OO.
FRPOS1		0 to 99	*Frame position*. Enter the frame position for plane 1.
SHELF1		0, 00, 13, 26, or 39	*Shelf position*. Enter the shelf position for plane 1. The correct entries are 0, 00, 13, 26 or 39.
LOAD1		alphanumeric (one to eight characters)	*Load name*. Enter the loadfile name for plane 1. This name must appear in table PMLOADS and must be 1 to 8 characters.

Data II e xample

Sample datafill for table ENINV appears in the following example.

MAP example for table ENINV

```
ENKEY ENCLASS FRTYPE FRNO    FRPEC    SHPEC    MSCARD0
MSLINK0
MSPORT0 FLOOR0 ROW0 FRPOS0 SHELF0
LOAD0    MSCARD1 MSLINK1 MSPORT1 FLOOR1 ROW1 FRPOS1
SHELF1
LOAD1
_____________________________________________________________

0   PRI   ENC   0    NT9X05AB  NT9X0801  6       0
0    1     F   4   39
ENX37AO  10   0    0      1     F    6    39
ENX37AO
```

ENSITES

Table name

External Node Sites Table

Functional description

Table ENSITES contains a complete list of all sites referenced in table EXNDINV.

Data II sequence and meaning

You must enter data in table ENSITES before you enter data in table EXNDINV.

Table size

0 to 64 tuples

The system statically allocates store for table ENSITES.

Data II

Datafill for table ENSITES appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ENSITE		alphanumeric (1 to 12 characters)	*External node site*. Enter the name of the node site.

Data II e xample

Sample datafill for table ENSITES appears in the following example.

MAP display example for table ENSITES

```
ENSITE
_____________________________________________________________

 MER_5
```

Table history

BCS36

Table ENSITE was renamed to table ENSITES in BCS36. The size of the table was increased to a maximum of 96 tuples in BCS36.

ENTYPES

Table name

External Node Types Table

Functional description

Table ENTYPES contains a complete list of all external node types that table EXNDINV refers.

Data II sequence and meaning

You do not have to enter data in other tables before you enter data in table ENTYPES.

You must enter data in table EXNDINV after you enter data in table ENTYPES.

Table size

0 to 64 tuples

The system statically allocates store for table ENTYPES.

Data II

Datafill for table ENTYPES appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ENTYPE		alphanumeric (1 to 12 characters)	*External node type*. Enter the type of external node. For example, SUN or HP.

Data II e xample

Sample datafill for table ENTYPES appears in the following example

MAP display example for table ENTYPES

```
ENTYPE
_____________________________________________________________

SUN_3_60
```

Table history

BCS36

The table size maximum was increased to 96 tuples in BCS36.

EOCDB

Table name

Embedded Operations Channel Database Table

Functional description

Table EOCDB is used by the DMS software system to support the dump and restore process for the FiberWorld Products (FWP) database.

The FWP database cannot be changed by a craftsperson. The database is directly maintained by processes that exchange messages with a remote digital terminal (RDT).

The data maintained in the FWP database is indirectly related to data in other DMS tables. The FWP database information must be transferred to the inactive central processing unit (CPU) during the application of a new BCS software load at the point where the BCS switch of activity (SWACT) is performed. Table EOCDB provides the mechanism to allow this data transfer to take place.

Table EOCDB is a read-only table.

Data II sequence and implications

Table EOCDB cannot be datafilled by a craftsperson. Table EOCDB is automatically datafilled when the FWP database is in use.

There is no requirement to datafill other tables prior to table EOCDB.

Table size

0 to 4000 tuples

Memory is dynamically allocated for each tuple entry in table EOCDB.

Data fill

The following table lists datafill for table EOCDB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
RECKEY		see subfields	*Data record key* This field consists of subfields ESNAME and RECID.
	ESNAME	alphanumeric (up to 10 characters)	*Entity set name* This entry describes a FibreWorld Products (FWP) database entity set. It is a translation of the internal object representation of the database entity.
	RECID	0 to 15999	*Record identifier* This entry is a unique numeric representation of the internal database object. Any entry outside the range indicated for this field is invalid.
RECDATA		0 to 65536	*Record data* This entry is a list of 0 (zero) to 128 elements. Each element represents the contents of one word of the FWP database record identified by field RECKEY. The entire element list is used to describe the contents of a record of up to 128 words in length. If less than 128 elements are required, end the list with a $ (dollar sign).

Data fill example

The following example shows sample datafill for table EOCDB.

MAP display example for table EOCDB

```
          RECKEY
                                                                RECDATA
_____________________________________________________________________________

  FWDB_ES0      0
(22342) (16964) (17759) (12371) (8224) (128) (1) (0) (10) (10) $
```

EOCDB (end)

Supplementary information

This section provides information on possible error messages when attempting to datafill table EOCDB.

Error message

Table EOCDB is a read-only table. If an attempt is made to manually change the data in a tuple, the following message is displayed:

```
Tuples in EOCDB may not be changed
```

ESA

Table name

Emergency Stand-alone Table

Functional description

Table ESA is required for switching units equipped for remote operation with the Emergency Stand-alone feature.

The Emergency Stand-alone feature enables a remote line module (RLM) to perform limited call processing when it is unable to communicate with the switching unit.

The RLM contains, in its own memory, edited copies of the switching unit's directory number table, line table, and hunt group tables. These tables are produced automatically by the switching unit and are transmitted to the RLM periodically.

Table ESA can contain up to 16 entries for each RLM. Each entry provides, for selected dialing codes, routing specifications that take effect when the Emergency Stand Alone feature is activated. Examples of dialing codes that can be selected are 911, 0- and 1+, or seven-digit emergency numbers designated by the operating company. These calls can be routed to operating company defined directory numbers on the same RLM, to line equipment numbers on the same RLM, or to reorder tone.

For RLMs referenced in this table, the table LMINV field ESA must be set to Y.

Data ll sequence and implications

Table LMINV must be datafilled before table ESA.

Table size

0 to 8192 tuples

If no RLM frames have the ESA option, the size of table ESA is 0 tuples.

ESA (continued)

Data II

The following table lists datafill for table ESA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEYFIELD		see subfields	*Key field* This field consists of refinements FRAME and ENTRYNO.
	FRAME	see refinements	*Frame* This field consists of subfields SITE and FRAME.
	SITE	alphanumeric (up to 4 characters)	*Site* Enter the name assigned to the remote site where the RLM is located.
	FRAME	0 to 511	*Frame number* Enter the frame number assigned to the RLM.
	ENTRYNO	0 to 15	*Entry number* Enter the number assigned to the entry for the RLM.
DIGITS		numeric (up to 18 digits)	*Digits* Enter the number that requires special routing when the RLM has the Emergency Stand Alone feature activated.

Fields TERMTYPE and TERM specify where a line on the RLM is routed after digits specified in DIGITS are dialed. The valid entry range for the TERM field is dependent upon selector TERMTYPE, which can take on a value of D (directory number), L (terminal), or R (reorder tone).

If the line requires routing to another directory number on the same RLM, datafill fields TERMTYPE and TERM as follows.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
TERMTYPE		D	*Terminal type* Enter D to specify that the call must be rerouted to a directory number if the Emergency Stand Alone feature is activated.
TERM		numeric(up to 11 digits)	*Terminal* Enter the directory number on the RLM to which the call must be rerouted if the Emergency Stand Alone feature is activated.

If the line requires routing to another line equipment number on the same RLM, datafill fields TERMTYPE and TERM as follows.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TERMTYPE		L	*Terminal type* Enter L to specify that the call must be rerouted to a terminal if the Emergency Stand Alone feature is activated.
TERM		1 to 1215	*Terminal* Enter the terminal number on the RLM to which the call must be rerouted if the Emergency Stand Alone feature is activated. The terminal number is equal to the (line card number) + (line drawer number x 32) + (line bay number x 640).

ESA (end)

If the line requires routing to reorder tone, datafill fields TERMTYPE and TERM as follows.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TERMTYPE		R	*Terminal type* Enter R to specify that the call must be rerouted to reorder tone if the Emergency Stand Alone feature is activated.
TERM		0	*Terminal* Enter 0 (zero) to satisfy the table editor.

Data ll e xample

An example of datafill for table ESA is shown below for RLM 0 in the Merivale remote location. In this example, if the Emergency Stand Alone feature is active, calls are routed as follows:

- All 0- (operator) calls are routed to directory number 828-1298.
- All 1+ (one plus) calls are routed to terminal 641, which corresponds to line bay 1, line drawer 0, and line card 1.
- All 411 (information) calls are routed to reorder tone.

Directory numbers and line equipment numbers to which calls are routed must be on RLM 0.

MAP display example for table ESA

```
   KEYFIELD            DIGITS TERMTYPE          TERM
_____________________________________________________________________

MERV    0  0                 0         D       8281298
MERV    0  1                 1         L           641
MERV    0  2               411         R             0
```

ESAHNPA

Table name

Emergency Stand-alone Home Numbering Plan Table

Functional description

Table ESAHNPA contains special prefix translation data used to select outgoing trunks. This table handles normal prefix translation for trunks. Exceptions are handled by table ESAPXLA.

There are two parts to table ESAHNPA: the prefix translation key (field HNPAKEY) and the translation result (field RESULT). Field HNPAKEY defines a set of prefix digits on a specific remote for all plain old telephone service (POTS) lines or for a particular Integrated Business Network (IBN) customer group. Field RESULT specifies what action to take when those digits are dialed.

One of the subfields of field HNPAKEY is the translator name (XLANAME). If the prefix translation is to be executed when those digits are dialed from any POTS line on this remote, ESAPOTS is datafilled in field XLANAME. If the prefix translation is to be executed when a certain IBN customer group dials those digits, an alphanumeric name of up to eight characters is datafilled in field XLANAME. This same name must be associated with a particular IBN customer group with an entry in table CUSTHEAD.

The only type of action that the translation can take is to connect the line to a standard route. The information needed to complete this translation is the number of digits that require collecting, the name of the route, and whether the code is ambiguous.

For related information, refer to table ESAPXLA.

Data II sequence and implications

The following tables must be datafilled before table ESAHNPA:

- ESARTE
- RCCINV
- LCMINV
- DLMINV

Table size

The minimum tuples allowed in table ESAHNPA is 0 and the maximum number of tuples is based on the following formula:

ESAHNPA (continued)

$$Max = [32 + (16 \times c)] \times t$$

where

Max
is the maximum number of tuples allowed

32
is the number of POTS tuples

c
is the number of customer groups

t
is the number of RCC node tuples in table RCCINV

Data II

The following table lists datafill for table ESAHNPA.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
HNPAKEY		see subfields	*ESAHNPA key* This key identifies a set of prefix digits on a certain site for a particular set of customers. It consists of subfields XLANAME, NODE, and PREFIX.
	XLANAME	alphanumeric (up to 8 characters)	*Prefix translator name* If this translation is required for any plain ordinary telephone service (POTS) line on the remote, enter ESAPOTS. If it is required for a particular Integrated Business Network (IBN) customer group, enter a translator name and relate this name to a customer group in table CUSTHEAD.
	NODE	see subfields	*Node* This field consists of subfields PMTYPE, SITE, and RCCNO.
	PMTYPE	RCC2 RCC RCCI or RCO2	*Peripheral module type* Enter the module type that identifies the type of peripheral node. Subfields SITE and RCCNO must be datafilled. NIL is not a valid entry for this field.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SITE	alphanumeric (up to 4 characters)	*Site* Enter the name assigned to the location of the peripheral node.
	RCCNO	0 to 255	*Remote cluster controller number* Enter the remote cluster controller (RCC) number. This number corresponds to an entry in the key field for table RCCINV.
	PREFIX	numeric (up to 15 digits)	*Prefix digits* Enter a vector of up to 15 prefix digits that are to be associated with the translation.
RESULT		see subfield	*Translation result* This field defines the action taken when the previously defined prefix digits are dialed on the remote. It consists of subfield SEL.
	SEL	R	*Selector* Enter R to indicate that the prefix digits entered in field PREFIX specify a standard route, and datafill refinements RR, NUMDIG, and AMBIG.
	RR	0 to 255	*Route reference index* Specify the index of the route described in table ESARTE to which translation is required to proceed.
	NUMDIG	0 to 15	*Collect digits* Specify the number of digits to collect before outpulsing.
	AMBIG	Y or N	*Ambiguous* If the prefix digits are completely unique, enter N (no). If the same digits can be dialed as the first digits of another number, enter Y (yes) (for example, digits 123 are ambiguous if another acceptable number is 12356). If an N is entered, the switching process begins immediately after the prefix digits are dialed. If a Y is entered, the remote waits for further digits. If none are entered within a specific time-out period, the switching process begins.

ESAHNPA (end)

Data ll e xample

An example of datafill for table ESAHNPA is shown below. This example consist of two tuples for which connections are required for POTS lines.

For the first tuple, a POTS user connected to RCC 1 on site REM3 dials 722. Since this is an ambiguous prefix, the number of digits collected must be the same as the number of digits in the prefix. A connection is made to the route referenced by index 1 in table ESARTE.

For the second tuple, a POTS user connected to RCC 1 on site REM3 dials 726. A connection is made to the standard route referenced by index 3 in table ESARTE. Seven digits are collected.

MAP display example for table ESAHNPA

```
                                    HNPAKEY      RESULT
_____________________________________________________________________

ESAPOTS RCC  REM3   1              722  R  1  3 Y
ESAPOTS RCC  REM3   1              726  R  3  7 N
```

Table history

BCS36

Value RCO2 was added to field PMTYPE.

ESAPXLA

Table name

Emergency Stand-alone Prefix Translation Table

Functional description

The table below lists all the emergency stand-alone trunk translations tables.

Emergency Stand-alone Trunk Translations tables

Table name	Title
ESAPXLA	Emergency Stand-alone Trunk Translation Table
ESAHNPA	Emergency Stand-alone Home Numbering Plan Table
ESARTE	Emergency Stand-alone Routing Table

The emergency stand-alone trunk translations tables are used to support line to trunk, trunk to trunk and trunk to line call processing in the remote switching center during emergency stand-alone (ESA).

Table ESAPXLA contains special prefix translation data used for plain ordinary telephone service (POTS) and Integrated Business Network (IBN) customer groups. During regular operation of the remote cluster controller (RCC), remote line concentrating module (RLCM), or remote digital line module (RDLM), table ESAPXLA is not used. Translations are performed normally. If communication with the host is lost and the RCC, RLCM, or RDLM enters ESA mode, table ESAPXLA is used in the prefix translations.

There are two parts to table ESAPXLA: the prefix translation key (field PXLAKEY) and the translation result (field RESULT). Field PXLAKEY defines a set of prefix digits on a specific remote for all POTS lines or for a particular IBN customer group. Field RESULT specifies what action to take if a POTS user or a member of that customer group on that site dials those digits.

One of the subfields of field PXLAKEY is the translator name (XLANAME). If the prefix translation must execute when those digits are dialed from any POTS line on this remote, entry ESAPOTS is datafilled in subfield XLANAME. If the prefix translation must execute when a certain IBN customer group dials those digits, an alphanumeric name is datafilled in subfield XLANAME. This same name is then associated with a particular IBN customer group through an entry in table CUSTHEAD.

ESAPXLA (continued)

The six different types of action that the translation can take are as follows:

- access code (A)
- directed route (D)
- line (L)
- hunt group (H)
- standard route (R)
- treatment (T)

If the A option is chosen and a new prefix translator name is entered along with the required second dial tone information, the dialed digits are retranslated.

If the D option is chosen and information about the route, the number of digits to collect, and the second dial tone is datafilled, required connections are made through a trunk using directed routing.

If the H option is entered and the required hunt group information (as datafilled in table HUNTGROUP) is entered, the call is routed to a hunt group when the digits are dialed.

If the L option is entered and the information that uniquely identifies the required call destination line is datafilled, the required connection is made to the line on the remote when the digits are dialed.

If the R option is chosen and information about the route, the number of digits to collect, and the ambiguity of the code is entered, required connections are made through a trunk using standard routing.

If the T option is entered and the type of treatment is datafilled, a reorder tone is given or a strip and translate is executed when the digits are dialed.

One special case is associated with field XLANAME. If subfield XLANAME is datafilled with ESATRMT (a reserved prefix translator name), then field PREFIX must contain an N and the selector in RESULT can be one of H, L, R, or T. Selectors A and D are not valid in this case.

Data II sequence and implications

The following tables must be datafilled before table ESAPXLA:

- HUNTMEM
- LCMINV
- RCCINV

- ESARTE
- DLMINV

Table size

0 to 26 tuples

The maximum number is 17 tuples for POTS translations plus a maximum of 8 tuples for MDC (Meridian Digital Centrex) translations.

Data II

The following table lists datafill for table ESAPXLA.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PXLAKEY		see subfields	Prefix translator key. This key identifies a set of prefix digits on a certain site for a particular set of customers. It consists of subfields XLANAME, NODE, and PREFIX.
	XLANAME	alphanumeric (up to 16 characters)	Prefix translator name. If this translation is required for any POTS line on the remote, enter ESAPOTS (emergency stand-alone [ESA] plain ordinary telephone service [POTS]). If it is required for a particular Integrated Business Network (IBN) customer group, enter any name up to eight characters and relate this name to a customer group in table CUSTHEAD.
	NODE	see subfields	Node. This field consists of subfields PMTYPE, LCMNO, SITE and RCCNO.

ESAPXLA (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PMTYPE	ARCC, DLM, LCM, PRCC, RCC, RCCI, RC02, RCC2	Peripheral module type. This field identifies the peripheral node with which the translator identified in subfield XLANAME is associated. The node is either a remote LCM, a remote DCM, or one of several possible types of RCCs. • ARCC (Austrian remote cluster controller) • DLM (digital line module) • LCM (line concentrating module) • PRCC (PCM30 remote cluster controller) • RCC (remote cluster controller) • RCCI (ISDN remote cluster controller) • RCO2 (offshore remote cluster controller 2) • RCC2 (remote cluster controller 2) If LCM or DLM is entered, datafill refinement LCMNO. If ARCC, PRCC, RCC, RCCI, RCC2, or RC02 is entered, datafill refinements SITE and RCCNO.
	LCMNO	see subfields	Line concentrating module number. If the entry in subfield PMTYPE is LCM or DLM, datafill this refinement. This field specifies the RLCM or RDLM to which this translator applies and consists of subfields SITE, FRAME and UNIT.
	SITE	alphanumeric (4 characters)	Site. Enter the site name assigned to the location of the RLCM or RDLM.
	FRAME	0 to 511	Frame. Enter the frame number of the RLCM or the RDLM at the site specified in field SITE. If the RLCM or RDLM has an RMM, the range is 0 to 63. For RDLMs, the frame number refers to the logical frame number of the RDLM, not the physical frame number. Each physical frame number is divided into two logical frames.
	UNIT	0 or 1	Unit. Enter the unit number of the RLCM or the RDLM in the frame. For the LCM, the lower unit in the frame is unit 0 and the upper unit in the frame is unit 1. For the DLM, this field specifies the shelf number. There are two shelves for each logical frame. The lower shelf is 0 and the upper shelf is 1. Go to field PREFIX.

ESAPXLA (continued)

Field	Subfield or refinement	Entry	Explanation and action
	SITE	alphanumeric (4 characters)	Site. If the entry in subfield PMTYPE is ARCC,PRCC, RCC, RCCI, RCC2, or RCO2, datafill thisrefinement.Enter the name assigned to the location of the peripheral module.
	RCCNO	0 to 255	Remote cluster controller number. If the entry in subfield PMTYPE is ARCC, PRCC, RCC, RCCI,RCC2, or RCO2, datafill this refinement. Enter the peripheral module number of the peripheral module.
	PREFIX	0 to 9 (up to15 digits)	Prefixdigits. Enter the 1 to 15 digit prefix associated with the required translation.
RESULT		See subfields.	Translation result. This field defines the action that is taken when the previously defined prefix digits are dialed on the remote. It consists of subfield SEL and its refinements.
	SEL	A, D, E, L, H, R, or T	Selector. If the prefix digits specify an access code, then enter A and datafill refinements XLANAME and DIALTONE. If the prefix digits specify a directed route, then enter D and datafill refinements RR, NUMDIG, and DIALTONE. Enter the E selector if you want to provision extended treatments for lines hosted by MG 9000 in Carrier Voice over IP networks. If the prefix digits entered in the PREFIX field specify a line, then enter L and datafill refinements LEN, AMBIG, and RNGCD. If the prefix digits specify a hunt group, enter H and datafill refinements HTGRP, SEQNO, and AMBIG. If the prefix digits specify a standard route, then enter R and datafill fields RR, NUMDIG, and AMBIG. If the prefix digits specify a treatment, enter a T and datafill refinement TRMT. ***Note:*** Refinements for the selectors are shown on the following pages in alphabetical order of the selectors.

ESAPXLA (continued)

SEL = L

If the entry in subfield SEL is L, datafill refinements LEN, AMBIG, and RNGCD as described below.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LEN	see subfields	Line equipment number. This field defines the line on which the call is to terminate. It consists of subfields SITE, FRAME, UNIT, LSG, and CIRCUIT.
	SITE	alphanumeric (4 characters)	Site. Enter the name assigned to the site where the termination line is located. Since the remote is operating in ESA, there is no communication with the host. This site must match the site specified in the node subfield.
	FRAME	0 to 511	Frame. Enter the frame number at this site that contains the line card for the termination line. If the entry in subfield PMTYPE is DLM or LCM, this frame number must match the frame number specified in subfield LCMNO. This is because ESA in an RLCM or RDLM can support communications only within the same RLCM or RDLM. If the entry in subfield PMTYPE is RCC, communication is supported between all of the LCMs or the DLMs attached to the RCC.
	UNIT	0 or 1	Unit. Enter the unit number of the DLM, LCM, RDLM, or RLCM to which the line is assigned. If the entry in subfield PMTYPE is DLM or LCM, this unit number must match the unit number specified in subfield LCMNO. The lower LCM in the frame is unit 0 and the upper LCM in the frame is unit 1. For the DLM, this field specifies the shelf number. There are two shelves per logical frame. The lower shelf is 0 and the upper shelf is 1.
	LSG	0 to 19	Line subgroup. Enter the number of the line subgroup of the DLM, LCM, RDLM, or RLCM unit in which the line card for that line is assigned.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CIRCUIT	0 to 31	Line card circuit number. Enter the line card circuit number of the line subgroup where the line card is assigned.
	AMBIG	Y or N	Ambiguous. If the same digits can be dialed as the first digits of another number, enter Y (yes). For example, digits 123 are ambiguous if another acceptable number is 12356. If Y is entered, the remote waits for further digits. If none are entered within a timeout period, the switching process begins. If the prefix digits are completely unique, enter N (no). If N is entered, the switching process begins immediately after those prefix digits are dialed.
	RNGCD	0 to 5	Ring code. Enter the code for the type of ringing associated with the line specified in field LEN. This is for lines on a DLM or LCM.

SEL = A

If the entry in subfield SEL is A, datafill refinements XLANAME and DIALTONE as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	XLANAME	alphanumeric (up to 8 characters)	Prefix translator name. Enter a name that identifies the entries associated with another ESA prefix translator. This permits access to a new set of prefix translators. A table must already be associated with this XLANAME.
	DIALTONE	Y or N	Dial tone. Enter Y to give second dial tone after stripping the prefix digits. Otherwise, enter N.

ESAPXLA (continued)

SEL = D

If the entry in subfield SEL is D, datafill refinements RR, NUMDIG, and DIALTONE as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RR	0 to 255	Route reference index. Specify the index of the route described in table ESARTE to which translation is required to proceed.
	NUMDIG	0 to 15	Collect digits. Specify the number of digits to collect before outpulsing.
	DIALTONE	Y or N	Dial tone. Enter Y to give second dial tone after stripping the prefix digits. Otherwise, enter N.

SEL = E

The E selector allows provisioning of extended treatments for MG 9000.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LNRE	0 to 11 digits	If the line number is not reachable when the MG 9000 is in emergency stand-alone (ESA) mode, the digits specified will be translated.

SEL = H

If the entry in subfield SEL is H, datafill refinements HTGRP, SEQNO, and AMBIG as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	HTGRP	0 to 8191	Hunt group number. Enter the number associated with the desired hunt group. The association between this number and the hunt group is made in table HUNTGRP. Entry values outside this range are not valid.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SEQNO	0 to 255	Sequence number. Enter the number associated with one member of the hunt group. The switch attempts to connect incoming calls to this member first. The association between the number and the hunt group member is specified in table HUNTMEM.
	AMBIG	Y or N	Ambiguous. If the same digits can be dialed as the first digits of another number, enter Y. For example, digits 123 are ambiguous if another acceptable number is 12356. If Y is entered, the remote waits for further digits. If none are entered within a timeout period, the switching process begins. If the prefix digits are completely unique, enter N. If N is entered, the switching process begins immediately after those prefix digits are dialed.

SEL = R

If the entry in subfield SEL is R, datafill refinements RR, NUMDIG, and AMBIG as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	RR	0 to 255	Route reference index. Specify the index of the route described in table ESARTE to which translation is required to proceed.
	NUMDIG	0 to 15	Collect digits. Specify the number of digits to collect before outpulsing.
	AMBIG	Y or N	Ambiguous. If the same digits can be dialed as the first digits of another number, enter Y. For example, digits 123 are ambiguous if another acceptable number is 12356. If Y is entered, the remote waits for further digits. If none are entered within a timeout period, the switching process begins. If the prefix digits are completely unique, enter N. If N is entered, the switching process begins immediately after those prefix digits are dialed.

ESAPXLA (continued)

SEL = T

If the entry in subfield SEL is T, datafill refinement TRMT as described below.

Field descriptions for conditional data ll

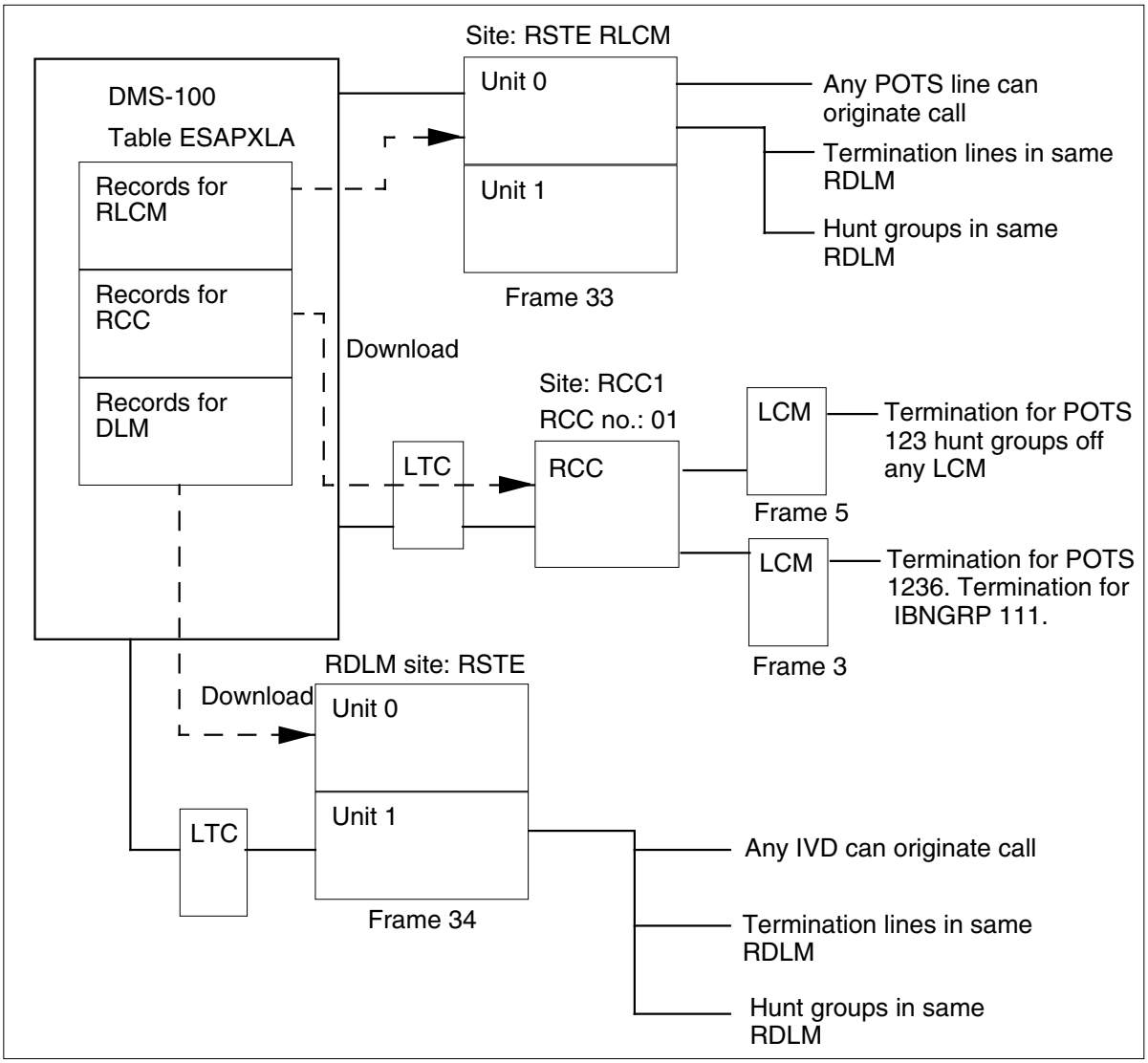
Field	Subfield or refinement	Entry	Explanation and action
	TRMT	REORDER, SRPDXLA or SRPXLA	Treatment. Enter the type of treatment required when these prefix digits are dialed. REORDER specifies the reorder tone, SRPDXLA specifies strip, second dial tone and translate, SRPXLA specifies strip and translate.

Data ll e xample

Examples of datafill for table ESAPXLA are shown below.

The following figure is an example of data input for a DMS-100 office. Three remotes are associated with the DMS-100 in this example: an RLCM, RCC, and an RDLM. Each record in table ESAPXLA applies to one of these remotes. Field NODE specifies the remote to which the translator applies. The data for table ESAPXLA is entered into the DMS host and is downloaded to the remote specified in field NODE according to table OFCENG office parameters RSC_ESASDUPD_HOUR and RSC_ESASDUPD_BOOL.

Data input for a DMS-100 of ce



Example 1: Pre x translations f or an RLCM or RLDM during ESA

Translations for the RDLM are the same as for RLCM except for the differences noted earlier.

- If any POTS user connected to frame 33, LCM unit 0 on site RSTE dials 911, a connection is made to hunt group number 3111 starting with member number 001.
- If any POTS user connected to frame 33, LCM unit 0 on site RSTE dials 123, the RLCM waits for further digits. If it does not receive one within

ESAPXLA (continued)

the allotted time period, a connection is made to the line in circuit 12, LSG 11 on the same RLCM unit.

- If any POTS user connected to frame 33, LCM unit 0 on site RSTE dials 123, the RLCM waits for further digits. If a 6 is dialed within the allotted time period, a connection is made to the line in circuit 09, LSG 13 on the same RLCM unit.
- If any POTS user connected to frame 33, LCM unit 0 on site RSTE dials 6, the caller receives another dial tone and further digits are translated.
- If any IVD user connected to frame 34, DLM unit 1 on site RSTE dials 123, the RDLM waits for further digits. If it does not receive one within the allotted time period, a connection is made to the line in circuit 12, LSG 11 on the same RDLM unit.

MAP display example for table ESAPXLA

```
                    PXLAKEY                          RESULT
-------------------------------------------------------------------

ESAPOTS LCM RSTE 33 0  911            H 3111 001 N
ESAPOTS LCM RSTE 33 0  123   L RSTE 33 0 11 12 Y 4
ESAPOTS LCM RSTE 33 0 1236   L RSTE 33 0 13 09 N 2
ESAPOTS LCM RSTE 33 0    6   T SRPDXLA
ESAPOTS DLM RSTE 34 1  123   L RSTE 33 0 11 12 Y 4
ESAPOTS RCC RCC1 01    911   H 3245 001 N
ESAPOTS RCC RCC1 01    123   L RCC1 05 0 19 31 Y 1
ESAPOTS RCC RCC1 01   1236   L RCC1 03 0 02 03 N 7
IBNGRP1 RCC RCC1 01    111   L RCC1 03 0 01 12 N 3
IBNGRP2 RCC RCC1 01    111   T REORDER
```

Example 2: Pre x translations f or the RCC during ESA

The second example shows datafill for the RCC.

- If any POTS user connected to any LCM on RCC 1 at site REM3 dials 366, a connection is made to a trunk through a standard route referenced by an index of 4 in table ESARTE. A total of seven digits are collected before outpulsing.
- If any POTS user connected to any LCM on RCC 1 at site REM3 dials 9, a connection is made to a trunk which is referenced by an index of 10 in table ESARTE. A dial tone is given and the RLCM waits for the additional seven digits required to make the total number of digits collected equal the NUMDIGS value of eight.

- The third example is a special case where a special treatment is required. This is the default treatment.
- If a member of ESAIBN connected to any LCM on RCC 1 at site REM3 dials 6, the caller receives another dial tone and further digits are translated using the ESAPOTS prefix translators.

MAP display example for table ESAPXLA

```
                                  PXLAKEY                RESULT
     ____________________________________________________________________

        ESAPOTS  RCC  REM3  01    366         R  04  P07   N
        ESAPOTS  RCC  REM3  01    009         D  10  008   Y
        ESATRMT  RCC  REM3  00      N         R  10  007   N
        ESAIBN   RCC  REM3  01    006         A  ESAPOTS  Y
```

Example 3: Use of the E selector

The following example shows the use of the E selector in the RESULT field to specify extended treatment for lines hosted by MG 9000 in a Carrier Voice over IP network.

MAP display example for table ESAPXLA

```
                                  PXLAKEY                RESULT
     ____________________________________________________________________

        ESAPOTS  LGRP REM1  00  0   N1        E LNRE  6211234
```

Table history

(I)SN09

Added information about the E selector in the RESULT field, in response to CR Q01228425-01.

ESARTE

Table name

Emergency Stand-alone Routing Table

Functional description

Table ESARTE is used to plan the various routes that a call can take when the emergency stand-alone (ESA) service is active.

The first part of the table is the routing key (field RTEKEY). Field RTEKEY defines a route reference index on a specific remote. The remaining fields specify the action to take when that index is chosen. The trunk to which the line connects must reside on the same remote cluster controller (RCC) node as specified in field RTEKEY.

For related information, refer to table ESAPXLA.

Data ll sequence and implications

The following tables must be datafilled before table ESARTE:

- DLMINV
- IRLNKINV
- LCMINV
- RCCINV
- TRKMEM

Table size

Table size ranges from 0 (zero) to the number obtained from the following equation:

$Mt = 256 \times r$

where

Mt
is the maximum number of tuples in table ESARTE

r
is the number of RCC node tuples in table RCCINV

Data II

The following table lists datafill for table ESARTE

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTEKEY		see subfields	*Emergency stand-alone routing key* This field is the key to the table. It consists of subfields RKEY and RTE. The index to this route entry is contained in table ESAPXLA or in table ESAHNPA.
	RKEY	see subfields	*Remote cluster controller node key* This field specifies the remote cluster controller (RCC) node with which these routes are associated. It consists of the subfields PMTYPE, SITE, and RCCNO.
	PMTYPE	RCC RCCI RCC2 or RCO2	*Peripheral module type* Enter peripheral module type to identify the peripheral node: • RCC (remote cluster controller) • RCCI (ISDN remote cluster controller) • RCC2 (compact remote cluster controller) • RCO2 (remote cluster controller offshore 2)
	SITE	alphanumeric	*Site* Enter the name assigned to the location of the peripheral node.
	RCCNO	0 to 255	*Remote cluster controller number* Enter the RCC number as it is identified in the key field of table RCCINV.
	RTE	0 to 255	*Route reference index* Enter the route reference index. This value is used by tables ESAPXLA and ESAHNPA.
RESULT		see subfields	*Result* This field consists of subfield RTESEL and refinements.

ESARTE (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	RTESEL	S	*Route selector* Enter S for standard routing.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the code assigned to the trunk group in table CLLI.
	DELDIGS	0 to 15	*Delete digits* Enter the number of digits to delete before outpulsing.
	PRFXDIGS	numeric (1 to 11 digits) or N	*Prefix digits* Enter a digit or digit sequence to insert as a prefix. Enter N (no) if no digit prefix is required.

Data ll e xample

An example of datafill for table ESARTE is shown below. This example consists of three instances where lines on an isolated RCC node are connected using routes defined by the table ESARTE.

In the first instance, route reference index 1 (from table ESAPXLA or table ESAHNPA) on RCC number 1 at site name REM3 is chosen. Standard routing is selected. OTPD1 is the code in table CLLI to which translations are routed. Three digits are deleted before outpulsing. The digits 726 are inserted as the new prefix.

In the second instance, index 2 on RCC 1 at site REM3 is chosen. Standard routing is selected. OTMF1 is the code in table CLLI to which translations are routed. Three digits are deleted before outpulsing. The digits 829 are inserted as the new prefix.

In the third instance, index 3 on RCC 1 at site REM3 is chosen. Standard routing is selected. 2WMF is the code in table CLLI to which translations are routed. Two digits are deleted before outpulsing. No digits are inserted as the new prefix.

MAP display example for table ESARTE

```
             RTEKEY                   RESULT
________________________________________________________

RCC  REM3   1   1       S  OTDPI  3   726
RCC  REM3   1   2       S  OTMF1  3   829
RCC  REM3   1   3       S    2WMF  2     N
```

Table history

BCS36

Added RCO2 entry value to field PMTYPE. Changed name of field RCCNODE to RKEY.

ESRVATTR

Table name

Enhanced Services Attributes Table

Functional description

Table ESRVATTR defines components required for an enhanced service. Each tuple defines a service circuit component by service name, component type, object descriptor and service data.

This table provides system components that form Automated Directory Assistance Service (ADAS). ESRVATTR datafill provides information to the Enhanced Service Resource Manager (ESRM), which manages high-level resource allocation. The datafill provides information to the ESRM that ADAS calls require a voice processing unit (VPU) and a call processing engine (CPE).

Table ESRVATTR lists the name of the ADAS service data file. The table points to a load file in table PMLOADS. Table PMLOADS provides the disk location and name of the service data file. The application processing unit (APU) requires the service data file when the peripheral returns to service or when workstation data upload occurs.

The ADAS Base Enhancements and Robustness feature (AF7811) moved the ADAS service data file to table PMLOADS. The ADAS service data file includes the file name and disk name. Thus, ESRVATTR lists the PMLOADS load name, not the disk name and file name, in its SRVDATA field. The modification takes advantage of the PMLOADS daily audit. This daily audit makes sure that all its load files are still available on the disk described in the datafill.

Data II sequence and implications

Place the service data file on the system load module (SLM) or the disk drive unit (DDU). Then enter datafill in the areas listed in the next table.

Enter datafill in table PMLOADS before update of the ADAS CPE tuple in table ESRVATTR. Correct datafill must exist in these tables before the ADAS CPE returns to service.

Table ESRVATTR only accepts datafill at IPL time by code supplied by the Enhanced Services Resource Management feature (AN0047). During production of the table at IPL time, access to table fields for datafill purposes is not available. After IPL, tuple adds and deletes are not permitted. Only field SRVDATA is available for changes.

Table size

Table size is fixed at 16 tuples.

Data fill

The following table lists datafill for table ESRVATTR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SRVCMP		see subfields	*Service and component* This field includes subfields SERVICE and COMPONENT.
	SERVICE	ADAS	*Service* This field contains the service name.
	COMPONENT	CPE or VPU	*Component* This field contains the component name. This name identifies the component in the service circuit.
OBJDESC		alphanumeric (up to 16 characters)	*Object descriptor* This field describes the name of the object descriptor, which identifies the enhanced service channel component. This field is not available for changes.
SRVDATA		alphanumeric (up to 8 characters)	*File name* This field lists the name of the component's service data file. Datafill this file first in table PMLOADS. This field is only filled for an ADAS CPE tuple.

Data fill example

The following example shows sample datafill for table ESRVATTR.

ESRVATTR (end)

MAP display example for table ESRVATTR

```
SRVCMP      OBJDESC       SRVDATA
_____________________________________________________________
ADAS VPU    ADAS.VPU:0          $
ADAS CPE    ADAS.CPE:0     ADSSRVDA
```

Table history

TOPS11

The ADAS Base Enhancements and Robustness feature (AF7811) removed the disk name and file name entries. The feature replaced them with the load name from table PMLOADS. This change provides a solution to conditions that remove service data file information.

BCS36

Table ESRVATTR was introduced.

ESRVCAP

Table name

Enhanced Services Capacities Table

Functional description

Table ESRVCAP defines enhanced services service wide configuration parameters. Only services datafilled in table ESRVATTR can be datafilled in table ESRVCAP.

Data II sequence and implications

Table ESRVATTR must be datafilled before table ESRVCAP.

Table size

Table size is fixed at 16 tuples.

Tuples cannot be added or deleted. Only fields CAPACITY and TIMEOUT can be modified after IPL.

Data II

The following table lists datafill for table ESRVCAP.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SERV		see subfield	*Service* This field consists of subfield SERVICE.
	SERVICE	ADAS	*Service* This field contains one of the SERVICE entries in table ESRVATTR.
CAPACITY		0 to 32767	*Capacity* Enter the number of service circuits that may be allocated and used at one time for the service. This entry can be updated. A maximum value for each service is enforced for this field. For ADAS, this field is set to 0 at IPL. The ADAS maximum is1000.

ESRVCAP (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TIMEOUT		0 to 32767	*Timeout* Enter the number of minutes before an allocated service circuit is deallocated by automatic cleanup. This entry may be updated. A minimum value for each service is enforced for this field. For ADAS, this field is set to 10 at IPL. The ADAS minimum is 10.
OBJDESC		alphanumeric (up to 16 characters)	*Object descriptor* This field specifies the name of the enhanced service. This entry cannot be updated.

Data ll e xample

The following example shows sample datafill for table ESRVCAP.

MAP display example for table ESRVCAP

```
SERV  CAPACITY  TIMEOUT   OBJDESC
_____________________________________________________
ADAS  20        10        ADAS
```

Table history

BCS36

Table ESRVCAP was introduced.

ETSIFEAT

Table name

ETSIFEAT

Functional description

This table holds provisioning information for the ETSI ISDN supplementary service Closed User Group (CUG).

Data II sequence and meaning

Table ETSIFEAT can be datafilled before or after table KSETFEAT. Only SERVORD checks for an entry in table ETSIFEAT.

Table size

Table ETSIFEAT is sized dynamically and has a maximum size of 2048.

Data II

The table that follows lists datafill for table ETSIFEAT.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
EFEATKEY		see subfields	This field consists of subfields DN and FTR.
	DN	0 to 18 digits	Directory number. This field, along with field FTR, forms the key to the table.
	FTR	alphanumeric (CUG)	This field specifies the data refinement. Enter CUG.
EFEATDAT		see subfields	Enter up to 35 multiples of subfields INIC, ITLK, INDEX, INC_BARRED, and OUT_BARRED. Enter up to 15 multiples of subfields BASIC_SERVICE, PREF_ECUG_INDICES, INC_ACCESS, OUT_ACCESS, and ECUG_INDICES.
	INIC	4 digits (0 to 9)	Enter the international network identification code.

ETSIFEAT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	ITLK	numeric (0 to 65 535)	Enter the CUG interlock code.
	INDEX	numeric (0 to 34)	
	INC_BARRED	Y or N	Specify whether incoming calls are barred within the CUG.
	OUT_BARRED	Y or N	Specify whether outgoing calls are barred within the CUG.
	BASIC_SERVICE	alphanumeric	Enter the basic service type for which the CUG data applies.
	PREF_ECUG_ INDICES	numeric (0 to 34)	Enter the preferred CUG index if no other is specified for the call by the user.
	INC_ACCESS	Y or N	Specify whether access is granted to calls incoming from outside the CUG.
	OUT_ACCESS	Y or N	Specify whether access is granted to calls outgoing to destinations outside the CUG.
	ECUG_INDICES	a maximum of 7 indices (0 to 34)	Specify the indices of up to seven CUGs to which the user may belong for this basic service.

Data ll e xample

The figure that follows shows sample datafill for table ETSIFEAT.

MAP display example for table ETSIFEAT

```
EFEATKEY                                          EFEATDAT
-------------------------------------------------------
222740040 CUG CUG 0430 10001 1 N N 0430 23675 2 N N $
BS_SPEECH 1 N N 1 BS_FAX_G2_3 2 Y Y 2 $
```

Table history

EUR006

Table added as part of ETSI ISDN security supplementary services.

EXNDAPPL

Table name

External Node Application Table

Functional description

Table External Node Application (EXNDAPPL) configures external nodes according to specified applications on the DMS computing module (CM). All external nodes that this table references must be entered in table EXNDINV. All applications this table references must be bound in the data link manager software. When data entry is complete in table EXNDAPPL, connections to the external nodes are setup. The system can now communicate with the application.

The only application that the system allows is the Intelligent Service Node Call Processing application (ISNCP). The system uses the ISNCP for communication with service peripheral module (SPM) nodes. With the ISNCP application you can enter data to a maximum of 20 connections.

Each Internet protocol (IP) address for each SPM in table EXNDAPPL has one connection.

Data II sequence and meaning

Enter data in the following tables before you enter data in table EXNDAPPL:

- LIUINV
- IPNETWRK
- IPROUTER
- EXNDINV

Table size

This table can include 0 or 1 tuple.

EXNDAPPL (continued)

Data ll

Datafill for table EXNDAPPL appears in the following table:

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfield	*Index*. This field contains subfield APPLN. This subfield is the key to the table.
	APPLN	alphanumeric one to eight characters	*Application name index*. Enter the name of the application required for communication with the external nodes. Each application is responsible to bind to the datalink manager software at load time. This field contains the range of all correct applications initialized with the datalink manager software.
AUDITFRQ		number 0 to 60	*Audit frequency*. Enter a number value to indicate the number of times the system sends audit messages on each link to the external nodes. This value is in minutes. An entry of 0 indicates that the system does not set audit messages.
EXNDLIST		see subfields	*External node list*. This field contains a maximum of 32 multiples of subfields NODE and NUMBER. If less than 32 nodes are required, end the list with a $ (dollar sign). Separate the subfields with a single space. Each external node entered in this vector must appear earlier in table EXNDINV. A minimum of one external node must be specified in this vector.
	NODE	EXND or SPM	*External node peripheral module type*. Enter EXND to indicate the external node module type. Enter SPM to indicate SPM type.
	NUMBER	numeric 0 to 31	*External node number*. Enter a number to identify the node number of the specified SPM type.

Data ll e xample

Sample datafill for table EXNDAPPL appears in the following example.

The entered application ISNCP is for communication with the external nodes SPM 1 and 2. The application sends an audit message on each link to communicate with each SPM. The application sends the message after 2 m of idle time on the link.

MAP example for table EXNDAPPL

```
INDEX  AUDITFRQ
                    EXNDLIST
_____________________________________________________________
INSCP  2
                    (SPM 1) (SPM 2)$
```

Table history

BCS36

Subfield APPLN was introduced in BCS36.

BCS35

Table EXNDAPPL was introduced in BCS35.

EXNDINV

Table name

External Node Inventory Table

Functional description

Table External Node Inventory Table (EXNDINV) provides the MAP operator with the ability to monitor and control nodes. These nodes connect to SuperNode switches that have Ethernet interface units (EIU), or connect to SuperNode or NT40 switches with an input/output controller (IOC) X.25 card.

Refer to each node as an external node (EXND). An EXND is a piece of hardware that has an address and responds to a standard communications protocol. For example, an Ethernet node has an internet protocol (IP) address and responds to internet control message protocol (ICMP). Other examples of EXNDs are UNIX workstations like SUN and HP, communication servers, and mainframes. Another example of a standard communications protocol that this system supports is X.25.

Table EXNDINV contains information on EXNDs. These nodes connect to the DMS SuperNode switch with an EIU. The nodes connect to the DMS SuperNode or NT40 switch with an IOC X.25 card. Each tuple in the table contains the node name, address, protocol, and other information on the EXND. The SuperNode Data Manager (SDM) simplex platform is one of the EXNDs that table EXNDINV describes. The fault-tolerant SDM is not an EXND. Table EXNDINV does not describe the SDM.

Data ll sequence and meaning

For EXNDs that communicate with ICMP, enter data in the following tables before you enter data in table EXNDINV:

- LIUINV. This table indicates EIU hardware.
- IPNETWRK. This table indicates SuperNode network addresses.
- IPROUTER. This table indicates EIUs as Ethernet routers.
- ENSITES. This table indicates EXND and service peripheral module (SPM) sites.
- ENTYPES. This table indicates EXND types.
- PMLOADS. This table indicates the load files for EXNDs and SPMs.

For EXNDs that use the X.25 communication protocol to communicate, enter data in the following tables before you enter data in table EXNDINV:

- ENSITES
- ENTYPES
- PMLOADS

This condition does not apply to SDM nodes.

Note: In the assignment of IP addresses, the LAN side and the workstation must be on different subnets from the digital multiplex system (DMS) peripheral.

Table size

This table can include 0 to 33 tuples.

Data II

Datafill for table EXNDINV appears in the following table:

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
EXNDKEY		see subfields	*External node key*. This key field contains subfields ENPMTYPE and ENNODENO.
	ENPMTYPE	EXND or SDM	*External node peripheral module type*. Enter the peripheral module (PM) type as follows: • EXND • SDM, simplex platform only ***Note:*** These nodes are defined for all products. A product can define additional types of nodes that are correct only for that product.
	ENNODENO	0 to 31	*External node number*. Enter a number to identify the EXND number of the EXND PM type. If the entry in subfield ENPMTYPE is SDM, enter 0.

EXNDINV (continued)

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
ENNAME		alphanumeric vector of a maximum of 12 characters	*External node name*. Enter an EXDN name. If the EXDN runs the UNIX operating system, a correct value for the field is the UNIX host name of the node. Use of this value is not a requirement.
ENADDR		vector of a maximum of two elements	*External node address*. This field is a vector of addresses for the EXND. Each element of the vector contains an address type and an address. The address is IPADDRESS or X25ADDRESS. The entry in field ADDRTYPE determines the address.
	ADDRTYPE	ENIP ENX25 or ENMAC	*Address type* . If one of the following conditions occurs, enter ENIP and enter refinement IPADDRESS: • the EXND can be an Ethernet node that has an IP address that responds to ICMP • the entry in subfield ENPMTYPE can be SDM If the EXND uses the X.25 communication protocol to communicate, enter ENX25 and refinement X25ADDRESS.
	IPADDRESS	0 to 255 table of 4	*Internet protocol address*. If the entry in field ADDRTYPE equals ENIP, enter the IP address of the node. An IP address contains 4 bytes. Each byte has a value in the range 0 to 255. The normal form for the IP address is 255.255.255.255.
	X25ADDRESS	0 to 9 4 to 15 digits	*X.25 protocol address*. If the entry in field ADDRTYPE equals ENX25, enter the X25 protocol address of the node. Any entry outside the range for this field is not correct.

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	MACADDRESS	table of 12 hex digits	*Machine address*. If the entry in the field ADDRTYPE equals ENMAC, enter the MAC address that associates with the Ethernet interface. This subfield contains a machine address. This subfield indicates if the DMS switch provides, boot protocol (BOOTP) capability to the node. The MAC address contains 12 bytes. Each byte has a hex digit value in the range of {0, 1, 2, 3, 4, 5, 6, 7, 8, 9, a, b, c, d, e, f}.
	DMSBOOTP	no (N), yes (Y)	*DMS boot protocol*. The DMSBOOTP supports only provides an IP address to the EXND. The DMSBOOTP does not provide complete BOOTP protocol support. This condition causes the EXND to boot from the DMS.
ENFNAME		alphanumeric vector of a maximum of eight characters	*External node load file name*. Enter the default load file name in use for the command LOADPM. Refer to table PMLOADS. Enter $ for a nil file name. If ENPMTYPE is SDM, enter $.
ENSITE		alphanumeric vector of a maximum of 12 characters	*External node site*. Enter the name of the site that includes the node. This site is normally a building. The entry of this value must first be in table ENSITES.
ENLOCN		see subfields	*External node location*. This field defines the location of the node in a building. This field contains subfields FLOOR, ROW, and POSITION.
	FLOOR	0 to 99	*Floor number*. Enter the location number of the floor that the node on.
	ROW	A to Z or AA to ZZ does not include I, O, II and OO	*Row*. Enter the location of the row on the floor that the node in.
	POSITION	0 to 99	*Bay position*. Enter the position of the bay in the row. The row is the location of the node.

EXNDINV (continued)

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
ENTYPE		alphanumeric vector of a maximum of 12 characters	*External node type*. Enter the type of the node. Examples of node types are SUN or HP, or SDM for the SDM. Enter this value in table ENTYPES first.
ENINFO		alphanumeric table of a maximum of 20 characters	*External node information*. Enter a string that contains any additional information on the node. You can enter character strings that contain blank characters. For strings that contain blank characters you must enter: • three single quotation marks at the start of the string • three single quotation marks at the end of the string
ENPROCSR		ALL CORE EIU NONE	*External node processor class*. Enter the set of SuperNode processor types that the EXND can communicate with. Table control allows you to enter ALL or NONE. If you enter ALL, table control enters values CORE and EIU. If the ENPMTYPE is SDM, enter ALL.
ENPROTCL		ALL ICMP TCP UDP NONE	*External node protocol*. Enter the set of protocols that the EXND uses to communicate with the SuperNode. Table control allows you to enter ALL or NONE. If you enter ALL, table control enters values ICMP, UDP, and TCP. If the ENPMTYPE is SDM, enter ALL.
EN0LKALM		CR MJ MN NA	*External node no-link alarm*. Enter the type of alarm to raise if links are not available to the EXND: • critical alarm (CR) • major alarm (MJ) • minor alarm (MN) • no alarm (NA)

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
EN1LKALM		CR MJ MN NA	*External node one-link alarm*. Enter the type of alarm to raise if only one link is available to the external node. For the SDM, enter NA.
ENALMSPT		Y or N	*External node alarm scan points*. This field is a vector of a maximum of two multiples. Enter Y to assign scan points to the node for alarm purposes. Enter refinements: • SCTMTYPE • SCTMNO • SCTMCTNO • CRITSCPT • MAJSCPT • MINSCPT • SCCARDCD. For any other condition, enter N. Additional entries are not required.
	SCTMTYPE	MTM or OAU	*Scan circuit trunk module type*. Enter MTM if the scan circuit is on the maintenance trunk module (MTM). Enter OAU if the scan circuit resides on the office alarm unit (OAU).
	SCTMNO	0 to 2047	*Scan circuit trunk module number*. Enter the trunk module (TM) of the MTM that the scan circuit is on.
	SCTMCTNO	0 to 29	*Scan circuit trunk module circuit number*. Enter the circuit number on the MTM of the scan circuit.
	CRITSCPT	0 to 6	*Critical alarm scan point*. Enter the scan point associated with the critical alarm for the node.
	MAJSCPT	0 to 6	*Major alarm scan point*. Enter the scan point associated with the major alarm for the node.

EXNDINV (continued)

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	MINSCPT	0 to 6	*Minor alarm scan point*. Enter the scan point associated with the minor alarm for the node.
	SCCARDCD	0X10XX	*Scan circuit card code*. Enter the card code of the scan circuit, 0X10XX. The XX is the latest version of the 0X10 card.

Data ll e xample

Sample datafill for table EXNDINV appears in the following example.

```
EXNDKEY        ENNAME                                                ENADDR
 ENFNAME        ENSITE    ENLOCN        ENTYPE                    ENINFO
                              ENPROCSR                          ENPROTCL
EN0LKALM EN1LKALM                          ENALMSPT
-------------------------------------------------------------------------
 SDM  0         COSDM                           ( ENIP  47  35   2  21)  $
       $           MER  1  A  1            SDM 'FCC1'
                                    ALL                          TCP ICMP
UDP $
      NA        NA                                 N
```

Table history

Telecom09

Information on the datafill for the SDM in fields EN0LKALM and EN1LKALM changed in Telecom09.

Telecom08

The explanation was added to enter CR in Telecom08. This explanation raises a PM SDM critical alarm. The alarm was raised when the SDM node state is system busy (SysB) for field EN0KALM is added in Telecom08.

Telecom07

Value OSNM was removed from subfield ENPMTYPE in Telecom07. The requirement that entries to table EXNDINV occur before table OANODINV was removed in Telecom07.

Telecom06

Added Information on how to enter data in table EXNDINV for the simplex platform SDM as added in Telecom06.

Telecom05

Field EXNDKEY was modified in Telecom05 to allow ENPMTYPE of SPX.

Note on the requirement to assign different subnets for the LAN and the workstation was added in Telecom05.

Value OSNM was added to subfield ENPMTYPE in Telecom05.

NA002

Information to fields EN0LKALM and EN1LKALM were added in NA002. The information specified the datafill required to generate PM SDM alarms for the SDM.

Telecom02

The following changes were made to table EXNDINV in Telecom02:

- changed entry value SOPC in subfield ENPMTYPE to SDM
- revised subfield ENNODENO to identify the node number associated with entry value SDM in subfield ENPMTYPE
- added phrase to field ADDRTYPE, to state that an entry of SDM in subfield ENPMTYPE requires an entry of ENIP
- changed datafill example to reflect new option SDM

BCS36

The following changes were made to table EXNDINV in BCS36:

- added table ENTYPES to datafill sequence
- changed maximum table size
- added SOPC to subfield ENPMTYPE
- clarified field ENALMSPT for two multiples
- corrected the entry range for field X25ADDRESS
- clarified correct entry range for field SCCARDCD

FACODE

Table name

Foreign Area Code Table

Functional description

Table FACODE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table FACODE translates the foreign area code digit segment, together with tables FAHEAD and FACRTE.

For related information, refer to table ACCODE. For a description of the universal translation tables, see table ACHEAD.

Data ll sequence and implications

Table FAHEAD must be datafilled before tables FACODE and FARTE.

Table size

Refer to table ACCODE.

Data ll

Refer to table ACCODE.

Data ll e xample

Refer to table ACCODE.

Table history

Refer to table ACCODE.

FAHEAD

Table name

Foreign Area Code Head Table

Functional description

Table FAHEAD is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table FAHEAD translates the foreign area code digit segment, together with tables FACODE and FARTE.

For related information, refer to tables ACCODE and ACRTE. For a description of the universal translation tables, refer to table ACHEAD.

Data ll sequence and implications

Refer to table ACHEAD.

Table size

Memory is automatically allocated to a maximum of 2047 tuples. The size is initially set to 64 and the table extends itself automatically.

Data ll

Field names, subfield names, and valid data ranges for table FAHEAD are described in table ACHEAD.

Data ll e xample

The following example shows sample datafill for table FAHEAD.

MAP display example for table FAHEAD

```
XLANAME
                                                    DFLT
                                                    DFOP
  CON     MAXIDX
_____________________________________________________________

OFCBCNTL
                                                   SDFLT
                        DFOP (MM 4 13) (CLASS CNTL) $
NOCON       STD
```

Refer to table ACHEAD.

FAHEAD (end)

Table history

Refer to table ACHEAD.

FAILMSG

Table name

Mapping Fail Messages Between Protocols Table

Functional description

Table FAILMSG defines the failure message mapping between various protocols. The valid keys within the table are predefined. New tuples cannot be added and existing tuples cannot be deleted. Tuples can only be updated.

Software packaging determines which protocols can be datafilled in table FAILMSG.

Table FAILMSG applies only to calls that are interworked (the incoming trunk does not use the same signaling as the outgoing trunk).

The table key consists of:

- the protocol reporting the failure message
- the failure message and if applicable, a cause value
- the protocol the failure is mapped to

No tuples have identical values in the first and third parts of the key. Because table FAILMSG controls only interworkings between protocols, none of the tuples can have the map-from protocol equal to the map-to protocol.

The two fields following the key fields are LOG and RESULT.

Field LOG, when set to Y (yes), generates a C7UP118 log report each time call processing handles the interworked message datafilled in the key. If the key is BTUP CNA 18 TUPPLUS, the LOG field in that tuple generates a C7UP118 report only if a telephone user part plus (TUPPLUS) to interconnect user part (IUP) call receives the IUP message and the connection not admitted (CNA) reason parameter is 18.

The RESULT field can have two formats:

- TREAT—A treatment is flagged and the subsequent progress of the call depends on how the incoming trunk processes the treatment. If the incoming call uses a Common Channel Signaling 7 (CCS7) or PRI protocol, it accesses table TMTMAP first and then table TMTCNTL. Otherwise, only table TMTCNTL is accessed.
- SEND—If field RESULT gives a message to be sent, the format of the message must match the map-to protocol in the key. The message form of

FAILMSG (continued)

RESULT cannot be used if the map-to protocol is non-CCS7 (for example, call configurations such as R1-to-CCS7).

Map-to protocols include non-CCS7 protocols for TS14-PRI and ETSI-PRI calls.

Message to Treatment Mapping feature

In DMS-300 offices with the Message to Treatment Mapping feature, table FAILMSG provides a mapping of IUP failure messages to TUPPLUS failure messages or DMS treatment, a mapping of TUPPLUS failure messages to IUP failure messages, or to treatment.

Table FAILMSG applies only to calls on the DMS-300 switch for which the trunk group in table TRKGRP is outgoing Gateway (GW) and field SIGDATA in table TRKSGRP is equal to C7UP, and field PROTOCOL is equal to BTUP or TUPPLUS.

In offices with the Message to Treatment Mapping feature, the scope is limited to the following:

- BTUP (as incoming trunk) to TUPPLUS (as outgoing trunk)
- TUPPLUS (as incoming trunk) to BTUP (as outgoing trunk)

TUP(E) for DMS-300 ISSU feature

In DMS-300 offices with the telephone user part enhanced (TUPE) for DMS-300 Integrated Services Switching Unit (ISSU) feature, TUPE is a valid protocol in table FAILMSG. Because table FAILMSG applies only to interworked calls in offices with the Message to Treatment Mapping feature and the TUP(E) for DMS-300 ISSU feature, the table includes the following call types:

- BTUP (as incoming trunk) to TUPPLUS (as outgoing trunk)
- TUPPLUS (as incoming trunk) to BTUP (as outgoing trunk)
- TUPE (as incoming trunk) to TUPPLUS (as outgoing trunk)
- TUPPLUS (as incoming trunk) to TUPE (as outgoing trunk)

- TUPE (as incoming trunk) to BTUP (as outgoing trunk)
- BTUP (as incoming trunk) to TUPE (as outgoing trunk)
  - — If the RESULT field is datafilled for tuples mapping to the TUPE protocol, a treatment or a message to be sent can apply.
  - — If a treatment is to be sent, the incoming TUPE trunk accesses table TMTMAP, then table TMTCNTL to determine the progress of the call.
  - — If a message is to be sent, this message is generated at the incoming TUPE trunk.

BTUP to DPNSS Basic Call Interworking feature

In DMS-100 offices with the BTUP to Digital Private Network Signaling System (DPNSS) Basic Call Interworking feature, table FAILMSG provides a datafillable mapping between DMS-100 trunks using CCS7 BTUP signaling and trunks using DPNSS signaling.

AISUP, ATUP, and Q764 call interworking

In DMS-100 switching offices, the following interworkings are also available:

- AISUP (as incoming trunk) to ATUP (as outgoing trunk)
- ATUP (as incoming trunk) to AISUP (as outgoing trunk)
- ATUP (as incoming trunk) to ANSI-ISUP (as outgoing trunk)
- ANSI-ISUP (as incoming trunk) to ATUP (as outgoing trunk)

TS14-PRI and ETSI-PRI to AISUP and Q764 call interworking

In APC DMS-100 switching offices, the following interworkings are available:

- TS14-PRI (as incoming trunk) to ANSI-ISUP (as outgoing trunk)
- TS14-PRI (as incoming trunk) to AISUP and I-ISUP (as outgoing trunk)
- ETSI-PRI (as incoming trunk) to ANSI-ISUP (as outgoing trunk)
- ETSI-PRI (as incoming trunk) to AISUP and I-ISUP (as outgoing trunk)
- AISUP and I-ISUP (as incoming trunk) to TS14-PRI (as outgoing trunk)
- ANSI-ISUP (as incoming trunk) to TS14-PRI (as outgoing trunk)
- AISUP and I-ISUP (as incoming trunk) to ETSI-PRI (as outgoing trunk)
- ANSI-ISUP (as incoming trunk) to ETSI-PRI (as outgoing trunk)

Note: I-ISUP calls use AISUP protocol tuples for this interworking.

FAILMSG (continued)

DPNSS-ANSI ISUP Interworking (Basic Call CLID) feature

The ANSI number 7 ISDN user part (ISUP) protocol allows flexible mapping of failure reasons. This takes place between ISUP and other protocols supported in table FAILMSG in DMS-100 offices.

ETSI PRI to BTUP e xible release cause mapping

In DMS-100MMP offices (from MMP14) the existing BTUP to ETSI PRI and ETSI PRI to BTUP release cause mappings are enhanced. The DMS-100MMP previously provided a default release cause mapping for these interworkings. The mapping is now datafillable using table FAILMSG.

Data ll sequence and implications

There is no requirement to datafill other tables prior to table FAILMSG.

Table size

13 to 5656 tuples

Table size depends on the feature package codes present in the software load.

- If TUPE is present in the load, the table size must be a minimum of 13 tuples (MAPTO OTHERWISE).
- TUPPLUS requires 264 tuples and BTUP (IUP) requires 515 tuples. The maximum table size of the various protocols are present in the load as follows:
  - — If only ISDN user part (ISUP) is included in the load, the table size is 128 tuples.
  - — If Digital Private Network Signaling System (DPNSS) and ISUP are present, the table size is 768 tuples.
  - — If BTUP and ISUP are present, the table size is 1286 tuples.
  - — If DPNSS, BTUP, and ISUP are present, the table size is 2697 tuples.
  - — If Q767 protocol is present, the table size is increased by the number of ISUP causes available on the DMS-100 switch, (currently 127), multiplied by the number of other FAILMSG clients, which is two, (because the entries are bi-directional.)
  - — If TS14-PRI and ETSI-PRI have AISUP and Q764 protocols, the table size is increased by 1024 tuples.
  - — As a new subscriber is added, 808 tuples are automatically added to the table (in the CEU load only). This is because all the existing protocols are potentially mapped to FDCP.

Data II

The following table lists datafill for table FAILMSG.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
INPUTMSG		see subfields	*Key to table FAILMSG* This field consists of subfield MSGFROM and refinements CAUSE, MSGCODE, ATUPMSG, CNACAUSE, RELCAUSE, and EUMCAUSE. This field and field MAPTO form the key to table FAILMSG.
	MSGFROM	AISUP, ANY, ATUP, BTUP, DPNSS, ISUP, Q764, Q767, TUPE, TUPPLUS, TS14PRI, ETSIPRI, FDCP	*Outgoing trunk protocol selector* Enter the first part of the key with one of the following outgoing trunk protocol selectors. AISUP In a DMS-100 office with the ATUP to AISUP or Q764 to AISUP Basic Call Interworking feature, enter AISUP and datafill subfield CAUSE. In a DMS-100 office with PRI to AISUP or Q764 interworking, enter AISUP and datafill subfield CAUSE. ANY In a DMS-100 office, enter ANY in this field and datafill field MAPTO with ETSIPRI to generate cause-to-treatment mappings for any ETSI PRI to Agent interworkings. ATUP In a DMS-100 office with the AISUP to ATUP or Q764 to ATUP Basic Call Interworking feature, enter ATUP and datafill refinement ATUPMSG.

FAILMSG (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
			BTUP In a DMS-300 office with the Message to Treatment Mapping feature, enter BTUP and datafill field BTUPMSG, to indicate that the tuple applies to calls with outgoing gateway (GW) trunk group type and table TRKSGRP fields SIGDATA = C7UP and PROTOCOL = BTUP. In a DMS-100 office with the BTUP to DPNSS Basic Call Interworking feature, or ETSI PRI to BTUP flexible release cause mapping feature, enter BTUP and datafill field BTUPMSG. FDCP This entry allows incoming failure messages on the outgoing interworked agents to be mapped to a treatment for the FDCP to 'other agent' interworkings. In EUR009, the only supported other agent is ETSI ISUP (Q767). DPNSS In a DMS-100 office with the BTUP to DPNSS Basic Call Interworking feature, enter DPNSS and datafill subfield CAUSE. ISUP In a DMS-100 office with the DPNSS-ANSI ISUP Interworking (basic call CLID) feature, enter ISUP and datafill subfield CAUSE. Q764 In a DMS-100 office with the ATUP to Q764 or AISUP to Q764 Basic Call Interworking feature, enter Q764 and datafill subfield CAUSE. In a DMS-100 office with PRI to AISUP or Q764 interworking, enter Q764 and datafill subfield PRI_CAUSE. Q767

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
			In a DMS-100 office with the Q767 protocol, enter Q767 for ETSI ISUP V1, ETSI ISUP V2, or World Trade. TUPE In a DMS-300 office with the TUP(E) for DMS-300 ISSU feature, enter TUPE and datafill field MSGCODE, to indicate that the tuple applies to calls with outgoing gateway (GW) trunk group type and table TRKSGRP fields SIGDATA = C7UP and PROTOCOL = TUPE. TUPPLUS In a DMS-300 office with the Message to Treatment Mapping feature, enter TUPPLUS and datafill field TUPPMSG, to indicate that the tuple applies to calls with outgoing gateway (GW) trunk group type and table TRKSGRP fields SIGDATA = C7UP and PROTOCOL = TUPPLUS. TS14PRI In a DMS-100 office with TS14 PRI to Q764 or AISUP interworking, enter TS14PRI and datafill subfield CAUSE. ETSIPRI In a DMS-100 office with ETSI PRI to Q764 or AISUP interworking, enter ETSIPRI and datafill subfield CAUSE.

MSGFROM = AISUP

If the entry in subfield MSGFROM is AISUP, datafill subfield CAUSE as explained in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

FAILMSG (continued)

MSGFROM = ANY

If the entry in subfield MSGFROM is ANY, datafill field CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	CSE_n (refer to following table for possible values of n)	*Cause value* Enter the ETSI PRI Q.931 cause value of the cause-to-treatment mapping.

Refer to the following table for a list of cause values.

ETSI PRI Q.931 cause values (Sheet 1 of 3)

Q.931 Cause number and name	ETSI PRI Cause Name
1 Unassigned Number	CSE_1
2 No Route to Specified Transit Network	CSE_2
3 No Route to Destination	CSE_3
6 Channel Unacceptable	CSE_6
7 Call Awarded and Being Delivered in an Established State	CSE_7
17 User Busy	CSE_17
18 No User Responding	CSE_18
19 User Alerting, No Answer	CSE_19
21 Call Rejected	CSE_21
22 Number Changed	CSE_22
26 Non-Selected User Clearing	CSE_26
27 Destination Out of Order	CSE_27
28 Invalid Number Format (incomplete number)	CSE_28
29 Facility Rejected	CSE_29
30 Response to STATUS ENQUIRY	CSE_30
31 Normal, Unspecified	CSE_31

ETSI PRI Q.931 cause values (Sheet 2 of 3)

Q.931 Cause number and name	ETSI PRI Cause Name
34 No circuit / Channel Available	CSE_34
38 Network Out of Order	CSE_38
41 Temporary Failure	CSE_41
42 Switching Equipment Congestion	CSE_42
43 Access Information Discarded	CSE_43
44 Requested Circuit / Channel Not Available	CSE_44
47 Resource Unavailable, Unspecified	CSE_47
49 Quality of Service Unavailable	CSE_49
50 Requested Facility Not Subscribed	CSE_50
57 Bearer Capability Not Authorized	CSE_57
58 Bearer Capability Not Presently Available	CSE_58
63 Service or Option Not Available, Unspecified	CSE_63
65 Bearer Capability Not Implemented	CSE_65
66 Channel Type Not Implemented	CSE_66
69 Requested Facility Not Implemented	CSE_69
70 Only Restricted Digital Information Bearer Capability is Available	CSE_70
79 Service or Option Not Implemented, Unspecified	CSE_79
81 Invalid Call Reference Value	CSE_81
82 Identified Channel Does Not Exist	CSE_82
83 Suspended Call Exists	CSE_83
84 Call Identity in Use	CSE_84
85 No Call Suspended	CSE_85
86 Call Having the Requested Call Identity Cleared	CSE_86
88 Incomplete Destination	CSE_88

FAILMSG (continued)

ETSI PRI Q.931 cause values (Sheet 3 of 3)

Q.931 Cause number and name	ETSI PRI Cause Name
91 Invalid Transit Network Selection	CSE_91
95 Invalid Message, Unspecified	CSE_95
96 Mandatory Information Element is Missing	CSE_96
97 Message Type Non-Existent or Not Implemented	CSE_97
98 Message Not Compatible with Call State or Message Type Non-existent or not implemented	CSE_98
99 Information Element Non-Existent or Not Implemented	CSE_99
100 Invalid Information Element Contents	CSE_100
101 Message not Compatible with Call State	CSE_101
102 Recovery on Timer Expiry	CSE_102
111 Protocol Error, Unspecified	CSE_111
127 Interworking, Unspecified	CSE_127

MSGFROM = ATUP

If the entry in subfield MSGFROM is ATUP, enter datafill for field ATUPMSG as explained in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	ATUPMSG	alphanumeric character string	*ATUP failure message* Enter one of the ATUP failure messages.

MSGFROM = BTUP

If the entry in subfield MSGFROM is BTUP, enter datafill for fields BTUPMSG, MSGCODE and subfields CNACAUSE and RELCAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	BTUPMSG	see subfield	*BTUP outgoing trunk message* This field consists of subfield MSGCODE and refinements CNACAUSE and RELCAUSE.
	MSGCODE	CNA, CONG, REA, REL, SEN, SOOO, STR, or TCON	*BTUP outgoing trunk message selector* Enter the outgoing message selector. Enter CNA for connection not admitted message and datafill refinement CNACAUSE. CONG Enter CONG to indicate congestion. This message is datafilled by default. Upon receipt, the DMS-100 attempts to select an alternate route for the call. Enter REA for a repeat attempt message. This message is datafilled by default. Upon receipt, the DMS-100 selects a different circuit on the same route or, if none is available, selects the call on an alternate route. Enter REL for release message and datafill refinement RELCAUSE. Enter SEN for subscriber engaged message. Enter SOOO for subscriber out of order message. Enter STR for subscriber transferred message. Enter TCON for terminal congestion message.

FAILMSG (continued)

MSGCODE = CNA

If the entry in subfield MSGCODE is CNA, enter datafill for field CNACAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CNACAUSE	0 to 255	*BTUP outgoing trunk CNA reason* Enter the outgoing trunk connection not admitted (CNA) reason parameter. ***Note:*** Apart from checking the range, the DMS-100 switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2).

MSGCODE = REL

If the entry in subfield MSGCODE is REL, enter datafill for field RECAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	RELCAUSE	0 to 47 or 49 to 255	*BTUP outgoing trunk release reason* Enter the outgoing trunk release reason parameter. ***Note:*** The value 48 (indicating subscriber call termination), is not a valid entry because it is predefined within the DMS-100 switch.

MSGFROM = DPNSS

If the entry in subfield MSGFROM is DPNSS, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	CAUSE	AB, ACK, AI, BY, CHOS, CNR, CONG, CT, FNR, ICB, INC, MNU, NT, NU, PFR, REJ, ROS, SI, SNU, SOS, SNV, SSI, STU, SU, TRFD, or UNR	*DPNSS cause* Enter the DPNSS CAUSE. Enter AB for access barred. Enter ACK for acknowledgement. Enter AI for address incomplete. Enter BY for busy. Enter CHOS for channel out of service. Enter CT for call termination. Enter CNR for DTE controlled not ready. Enter CONG for congestion. Enter FNR for facility not registered. Enter ICB for incoming calls barred. Enter INC for service incompatible. Enter MNU for message not understood. Enter NT for network termination. Enter NU for number unobtainable. Enter PFR for priority forced release. Enter REJ for reject. Enter ROS for route out of service. Enter SI for subscriber incompatible. Enter SNU for signal not understood.

FAILMSG (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			Enter SOS for subscriber out of service. Enter SNV for signal not valid. Enter SSI for signaling system incompatible. Enter STU for service temporarily unavailable. Enter SU for service unavailable. Enter TRFD for transferred. Enter UNR for DTE uncontrolled not ready.

MSGFROM = ISUP

If the entry in subfield MSGFROM is ISUP, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

MSGFROM = Q764

If the entry for subfield MSGFROM is Q764, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

MSGFROM = Q767

If the entry for subfield MSGFROM is Q767, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

MSGFROM = SSUTR2

If the entry in subfield MSGFROM is SSUTR2, datafill subfield CAUSE as explained in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

MSGFROM = TUPE

If the entry for subfield MSGFROM is TUPE, enter datafill for field MSGCODE as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	MSGCODE	AB, ADI, CFL, CGC, EUM, LOS, NNC, NRU, SEC, SSB, SST, or UNN	*TUPE message code* Enter the TUPE message code, as follows: Enter AB for access barred (heading code H1 1010). Enter ADI for address incomplete (heading code H1 0100). Enter CFL for call failure (heading code H1 0101). Enter CGC for circuit group congestion (heading code H1 0010).

FAILMSG (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			Enter EUM for extended unsuccessful backward set-up information message (heading code H1 1111). This defines a unique message in which the octet indicator is coded as 1 (one) to indicate subscriber busy failure reason. Enter LOS for line out of service (heading code H1 1000). Enter NNC for national network congestion (heading code H1 0011). Enter NRU for network resource unavailable (heading code H1 1101). Enter SEC for switching equipment congestion (heading code H1 0001). Enter SSB for subscriber busy (heading code H1 0110). Enter SST for send special information tone (heading code H1 1001). Enter UNN for unallocated number (heading code H1 0111).

MSGFROM = TUPPLUS

If the entry in subfield MSGFROM is TUPPLUS, enter datafill for fields TUPPMSG and MSGCODE as shown below.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	TUPPMSG	see subfield	*TUPPLUS outgoing trunk message* This field consists of subfield MSGCODE and refinement field EUMCAUSE.
	MSGCODE	AB, ADI, CFL, CGC, EUM, LOS, NNC, NRU, SEC, SSB, SST, or UNN	*TUPPLUS outgoing trunk message selector* Enter one of the TUPPLUS outgoing message selectors. Enter AB for access barred (heading code H1 1010).

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			Enter ADI for address incomplete (heading code H1 0100). Enter CFL for call failure (heading code H1 0101). Enter CGC for circuit group congestion (heading code H1 0010). Enter EUM for extended unsuccessful backward set-up information message (heading code H1 1111) and datafill refinement field EUMCAUSE. Enter LOS for line out of service (heading code H1 1000). Enter NNC for national network congestion (heading code H1 0011). Enter NRU for network resource unavailable (heading code H1 1101). Enter SEC for switching equipment congestion (heading code H1 0001). Enter SSB for subscriber busy (heading code H1 0110). Enter SST for send special information tone (heading code H1 1001). Enter UNN for unallocated number (heading code H1 0111).

FAILMSG (continued)

MSGCODE = EUM

If the entry in subfield MSGCODE is EUM, enter datafill for field EUMACAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	EUMCAUSE	0 to 41 or 43 to 255	*TUPPLUS outgoing trunk EUM reason* Enter the reason parameter. ***Note:*** The value 42 (indicating switching congestion) is not a valid entry because the handling of EUM(42) within the DMS-100 switch is predefined. Apart from the check for value 42, the DMS-100 switch does not validate the integer against the values defined in the TUPPLUS specification (T/SPS-43-02 Q723+).

MSGFROM = TS14PRI or ETSIPRI

If the entry in subfield MSGFROM is TS14PRI or ETSIPRI, enter datafill for subfield CAUSE as shown below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*PRI cause* Enter one of the PRI causes.

MSGFROM = all entries

For all entries in subfield MSGFROM, continue to enter datafill as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
MAPTO		AISUP, BTUP, DPNSS, ISUP, TUPPLUS, Q764, Q767, TS14PRI, ETSIPRI, or FDCP	*Incoming trunk protocol* This field, together with field INPUTMSG, forms the key into table FAILMSG. This field identifies the protocol that the failure message is to be converted into. AISUP The tuple applies to incoming calls on trunk groups in which the protocol in field MSGFROM = TS14PRI or ETSIPRI. BTUP The tuple applies to calls incoming on GW trunk groups that are datafilled in table TRKSGRP with fields SIGDATA = C7UP and PROTOCOL = BTUP. **BTUP also applies on the DMS-100 MMP switch, where the incoming trunks are (a) DPNSS or (b) ETSI PRI if (a) the DPNSS basic call interworking feature or (b) the ETSI PRI to BTUP flexible release cause mapping feature is present.** DPNSS The tuple applies to calls incoming on trunk groups that are datafilled in table TRKSGRP with field SIGDATA = DPNSS. ISUP The tuple applies to calls incoming on trunk groups that are datafilled in table TRKSGRP with fields SIGDATA = C7UP and PROTOCOL = ISUP.

FAILMSG (continued)

Field descriptions for conditional data II (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
			TUPPLUS The tuple applies to calls incoming on GW trunk groups that are datafilled in table TRKSGRP with fields SIGDATA = C7UP and PROTOCOL = TUPPLUS. Q767 The tuple applies to calls incoming on a DMS-100 switch and trunk groups that are datafilled in table TRKSGRP with fields SIGDATA = C7UP and PROTOCOL = Q767. TS14PRI The tuple applies to calls incoming on a DMS-100 switch and trunk groups mapping to a PRI line. ETSIPRI The tuple applies to calls incoming on a DMS-100 switch and trunk groups mapping to a PRI line. If ANY was entered in the MSGFROM field, enter ETSIPRI in the MAPTO field to generate cause-to-treatment mappings for any ETSI PRI to agent interworkings. FDCP FDCP allows incoming failure messages on the outgoing interworked agents to be mapped to a treatment for the FDCP to `other agent' interworkings. In EUR009, the only supported other agent is ETSI ISUP (Q767). Q764 The tuple applies to incoming calls on trunk groups, in which the protocol in field MSGFROM = TS14PRI or ETSIPRI.

Field descriptions for conditional data II (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
			OTHERWISE The tuple applies to calls incoming on trunks other than the call types listed previously, for example, R1 trunks and test line trunks.
LOG		Y or N	*Generate C7UP118 report* Enter Y (yes) to generate a C7UP118 report if the tuple is referenced during the processing of a call. Otherwise, enter N (no). ***Note:*** Enter N in this field if ANY is entered in the MSGFROM field. Log generation is not possible for cause-to-treatment mappings.
RESULT		see subfield	*Incoming trunk message* This field consists of subfield ACTION.
	ACTION	SEND or TREAT	*Incoming trunk message selector* Enter the incoming trunk message selector. Enter SEND and datafill subfield FORMAT. The received message is handled by sending an equivalent message (as datafilled) to the preceding exchange. Enter TREAT and datafill refinement TRTMT to indicate that treatment TRMT is applied to the incoming trunk. ***Note:*** For cause-to-treatment mappings (ANY entered in the MSGFROM field), TREAT is the only action possible. An error message is given if SEND is entered in the ACTION field.

FAILMSG (continued)

ACTION = SEND

If the entry in subfield ACTION is SEND, enter datafill for field FORMAT as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	FORMAT	AISUP, ATUP, BTUP, DPNSS, ISUP, Q764, TUPE, TUPPLUS, TS14PRI, or ETSIPRI	*Incoming trunk protocol selector* Enter the last part of the key with one of the following incoming trunk protocol selectors. AISUP In a DMS-100 office with the ATUP to AISUP or Q764 to AISUP Basic Call Interworking feature, enter AISUP and datafill subfield CAUSE. In a DMS-100 office with TS14-PRI or ETSI-PRI to AISUP interworking, enter AISUP and datafill subfield CAUSE. ATUP In a DMS-100 office with the AISUP to ATUP or Q764 to ATUP Basic Call Interworking feature, enter ATUP, and datafill refinement ATUPMSG. BTUP Enter BTUP and datafill refinements BTUPMSG and AFTERACM.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			DPNSS In a DMS-100 office with the BTUP to DPNSS Basic Call Interworking feature, enter DPNSS, and datafill subfield CAUSE. ISUP In a DMS-100 office with the DPNSS-ANSI ISUP Interworking (basic call CLID) feature, enter ISUP, and datafill subfield CAUSE. Q764 In a DMS-100 office with the ATUP to Q764 or AISUP to Q764 Basic Call Interworking feature, enter Q764, and datafill subfield CAUSE. In a DMS-100 office with TS14-PRI or ETSI-PRI to Q764 interworking, enter Q764 and datafill subfield CAUSE. TUPE In a DMS-300 office with the TUP(E) for DMS-300 ISSU feature, enter TUPE and datafill field MSGCODE. TUPPLUS Enter TUPPLUS and datafill refinements MSG and Q931. TS14PRI In a DMS-100 office with AISUP or Q764 to TS14-PRI interworking, enter TS14PRI and datafill subfield CAUSE. ETSIPRI In a DMS-100 office with AISUP or Q764 to ETSI-PRI interworking, enter ETSIPRI and datafill subfield CAUSE.

FAILMSG (continued)

FORMAT = AISUP

If the entry in subfield FORMAT is AISUP, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

FORMAT = ATUP

If the entry in subfield FORMAT is ATUP, enter datafill for field ATUPMSG as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	ATUPMSG	alphanumeric character string	*ATUP failure message* Enter one of the ATUP cause indicators.

FORMAT = BTUP

If the entry in subfield FORMAT is BTUP, enter datafill for field BTUPMSG as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	BTUPMSG	see subfields	*BTUP PREACM incoming trunk message* This field consists of refinements PREACM, CNACAUSE, and RELCAUSE. This field specifies which BTUP failure message is sent, before the DMS-100 switch generates a BTUP address complete message (ACM). If ACM has already been sent, field AFTERACM is used instead.
	PREACM	CNA, CONG, REL, SEN, SOOO, STR, or TCON	*BTUP PREACM incoming trunk message selector* Enter the incoming trunk message selector. Enter CNA for connection not admitted message and datafill refinement CNACAUSE. Enter CONG for congestion message. Enter REL for release message and datafill refinement RELCAUSE. Enter SEN for subscriber engaged message. Enter SOOO for subscriber out of order message. Enter STR for subscriber transferred message. Enter TCON for terminal congestion message.
	CNACAUSE	0 to 255	*BTUP incoming trunk CNA reason* Enter the incoming trunk connection not admitted (CNA) reason parameter. Apart from checking the range, the DMS-100 switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2).

FAILMSG (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	RELCAUSE	0 to 255	*BTUP incoming trunk release reason* Enter the incoming trunk release reason parameter. Apart from the check for value 48, the DMS-100 switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2).
	AFTERACM	see subfield	*BTUP AFTERACM incoming trunk message* This field consists of subfields AFTERACM and RELCAUSE. This field specifies which BTUP failure message is sent, if the sending of a BTUP failure message occurs after the DMS-100 switch has generated a BTUP address complete message (ACM). If ACM has already been sent, the AFTERACM field is used instead.
	AFTERACM	REL	*BTUP AFTERACM incoming trunk message selector* Enter REL and datafill the release reason field RELCAUSE.
	RELCAUSE	0 to 255	*BTUP AFTERACM Incoming Trunk Release Reason* Enter the outgoing trunk release reason parameter. ***Note:*** The DMS-100 switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2).

FORMAT = DPNSS

If the entry subfield FORMAT is DPNSS, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	AB, ACK, AI, BY, CHOS, CNR, CONG, CT, FNR, ICB, INC, MNU, NT, NU, PFR, REJ, ROS, SI, SNU, SOS, SNV, SSI, STU, SU, TRFD, or UNR	*DPNSS cause* Enter the DPNSS cause. Refer to section field MSGFROM = DPNSS for a description of the values.

FORMAT = ISUP

If the entry in subfield FORMAT is ISUP, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

FORMAT = Q764

If the entry in subfield FORMAT is Q764, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*ISUP cause* Enter one of the ISUP cause indicators.

FAILMSG (continued)

FORMAT = TUPE

If the entry in subfield FORMAT is TUPE, enter datafill for subfield MSGCODE as shown below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	MSGCODE	ACB, ADI, CFL, CGC, EUM, LOS, NNC, NRU, SEC, SSB, SST, or UNN	*TUPE message code* Enter the TUPE message code. Refer to subfield MSGFROM = TUPE for a description of the values.

FORMAT = TUPPLUS

If the entry in subfield FORMAT is TUPPLUS, enter datafill for subfields MSG, MSGCODE, EUMCAUSE, and Q931 as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	MSG	see refinements	*TUPPLUS incoming trunk message* This field consists of refinements MSGCODE and EUMCAUSE. This field specifies which TUPPLUS failure message is sent. ***Note:*** Optionally, the Q931 field can be datafilled to define a different failure message for calls originated from ISDN Q931 access. The distinction, if needed, operates from information in the initial address message (IAM) with additional information (IAI).
	MSGCODE	AB, ADI, CFL, CGC, EUM, LOS, NNC, NRU, SEC, SSB, SST, or UNN	*TUPPLUS incoming trunk message selector* Enter the TUPPLUS incoming trunk message selector. Enter AB for access barred (heading code H1 1010). Enter ADI for address incomplete (heading code H1 0100). Enter CFL for call failure (heading code H1 0101). Enter CGC for circuit group congestion (heading code H1 0010). Enter EUM for extended unsuccessful backward set-up information message (heading code H1 1111) and datafill refinement field EUMCAUSE. Enter LOS for line out of service (heading code H1 1000).

FAILMSG (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			Enter NNC for national network congestion (heading code H1 0011). Enter NRU for network resource unavailable (heading code H1 1101). Enter SEC for switching equipment congestion (heading code H1 0001). Enter SSB for subscriber busy (heading code H1 0110). Enter SST for send special information tone (heading code H1 1001). Enter UNN for unallocated number (heading code H1 0111).

MSGCODE = EUM

If the entry in subfield MSGCODE is EUM, enter datafill for subfield EUMCAUSE as shown in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
	EUMCAUSE	0 to 41 or 43 to 255	*TUPPLUS outgoing trunk EUM reason* Enter the reason parameter. ***Note:*** The DMS-100 switch does not validate the integer against the values defined in the TUPPLUS specification (T/SPS-43-02 Q723+).
	Q931	see subfields	*Optional TUPPLUS incoming trunk message* This field consists of refinements Q931 and EUMCAUSE. This field allows, optionally, a different TUPPLUS failure message to be specified for use with calls identified as Q931 access from information in the IAI.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
		AB, ADI, CFL, CGC, EUM, LOS, NNC, NRU, SEC, SSB, SST, UNN, or $	*Optional TUPPLUS incoming trunk message selector* Enter the TUPPLUS incoming trunk message selector. Enter AB for access barred (heading code H1 1010). Enter ADI for address incomplete (heading code H1 0100). Enter CFL for call failure (heading code H1 0101). Enter CGC for circuit group congestion (heading code H1 0010). Enter EUM for extended unsuccessful backward set-up information message (heading code H1 1111) and datafill refinement field EUMCAUSE. Enter LOS for line out of service (heading code H1 1000). Enter NNC for national network congestion (heading code H1 0011). Enter NRU for network resource unavailable (heading code H1 1101). Enter SEC for switching equipment congestion (heading code H1 0001). Enter SSB for subscriber busy (heading code H1 0110). Enter SST for send special information tone (heading code H1 1001). Enter UNN for unallocated number (heading code H1 0111). Enter $ to indicate that no Q931 distinction is necessary.

FAILMSG (continued)

Q931 = EUM

If the entry in subfield Q931 is EUM, enter datafill for subfield EUMCAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	EUMCAUSE	0 to 41 or 43 to 255	*TUPPLUS outgoing trunk EUM reason* Enter the reason parameter. ***Note:*** The DMS-100 switch does not validate the integer against the values defined in the TUPPLUS specification (T/SPS-43-02 Q723+).

FORMAT = TS14PRI or ETSIPRI

If the entry in subfield FORMAT is TS14PRI or ETSIPRI, enter datafill for subfield CAUSE as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	CAUSE	alphanumeric character string	*PRI incoming trunk message* This subfield consists of subfield CAUSE. This subfield specifies which PRI failure message is sent.

Data II e xamples

The following example shows sample datafill for table FAILMSG.

Example data II f or BTUP to TUPPLUS

The example shows the default datafill for BTUP to TUPPLUS. BTUP failure messages not shown, default to

```
protocol  message  N  TREAT SYFL
```

MAP display example for table FAILMSG

```
INPUTMSG            MAPTO    LOG RESULT
-------------------------------------------------------------------------------

BTUP    TCON        TUPPLUS N   SEND TUPPLUS NNC $
BTUP    CNA 0       TUPPLUS N   SEND TUPPLUS UNN $
BTUP    CNA 1       TUPPLUS N   SEND TUPPLUS ADI $
BTUP    CNA 2       TUPPLUS N   SEND TUPPLUS SST $
BTUP    CNA 3       TUPPLUS N   SEND TUPPLUS EUM 63 $
BTUP    CNA 4       TUPPLUS N   SEND TUPPLUS EUM 88 $
BTUP    CNA 5       TUPPLUS N   SEND TUPPLUS EUM 22 S
BTUP    CNA 7       TUPPLUS N   SEND TUPPLUS NNC $
BTUP    CNA 8       TUPPLUS N   SEND TUPPLUS SSB $
BTUP    CNA 9       TUPPLUS N   SEND TUPPLUS LOS $
BTUP    CNA 10      TUPPLUS N   SEND TUPPLUS LOS $
BTUP    CNA 18      TUPPLUS N   SEND TUPPLUS EUM 111 $
BTUP    CNA 19      TUPPLUS N   SEND TUPPLUS EUM 88 $
BTUP    CNA 30      TUPPLUS N   SEND TUPPLUS EUM 21 $
BTUP    CNA 41      TUPPLUS N   SEND TUPPLUS ACB $
BTUP    CNA 45      TUPPLUS N   SEND TUPPLUS EUM 21 $
BTUP    CNA 46      TUPPLUS N   SEND TUPPLUS EUM 21 $
BTUP    SEN         TUPPLUS N   SEND TUPPLUS SSB $
BTUP    SOOO        TUPPLUS N   SEND TUPPLUS LOS $
BTUP    STR         TUPPLUS N   SEND TUPPLUS SST $
BTUP    REL 2       TUPPLUS N   SEND TUPPLUS CFL $
BTUP    REL 31      TUPPLUS N   SEND TUPPLUS EUM 18 $
BTUP    REL 32      TUPPLUS N   SEND TUPPLUS CFL $
BTUP    REL 34      TUPPLUS N   SEND TUPPLUS EUM 95 $
BTUP    REL 47      TUPPLUS N   SEND TUPPLUS CFL $
```

Default data ll f or TUPPLUS

TUPPLUS failure messages not shown default to

```
protocol  message  N  TREAT SYFL
```

The following example shows sample datafill for table FAILMSG.

Example data ll f or TUPPLUS to BTUP

FAILMSG (continued)

MAP display example for table FAILMSG

```
INPUTMSG          MAPTO        LOG RESULT
_____________________________________________________________________________

TUPPLUS ACB       BTUP         N   SEND BTUP CNA 41 REL 47 $
TUPPLUS ADI       BTUP         N   SEND BTUP CNA 1 REL 47 $
TUPPLUS CFL       BTUP         N   SEND BTUP CNA 1 REL 47 $
TUPPLUS LOS       BTUP         N   SEND BTUP CNA 9 REL 47 $
TUPPLUS NNC       BTUP         N   SEND BTUP CNA 7 REL 47 $
TUPPLUS NRU       BTUP         N   SEND BTUP CNA 3 REL 47 $
TUPPLUS SST       BTUP         N   SEND BTUP CNA 0 REL 47 $
TUPPLUS UNN       BTUP         N   SEND BTUP CNA 0 REL 47 $
TUPPLUS SSB       BTUP         N   SEND BTUP CNA 8 REL 47 $
TUPPLUS EUM 0     BTUP         N   SEND BTUP CNA 2 REL 47 $
TUPPLUS EUM 1     BTUP         N   SEND BTUP CNA 0 REL 47 $
TUPPLUS EUM 2     BTUP         N   SEND BTUP CNA 2 REL 47 $
TUPPLUS EUM 3     BTUP         N   SEND BTUP CNA 2 REL 47 $
TUPPLUS EUM 4     BTUP         N   SEND BTUP CNA 2 REL 47 $
TUPPLUS EUM 5     BTUP         N   SEND BTUP CNA 2 REL 47 $
TUPPLUS EUM 6     BTUP         N   SEND BTUP CNA 2 REL 47 $
```

Example data ll f or TUPE, BTUP, and TUPPLUS

MAP display example for table FAILMSG

```
INPUTMSG              MAPTO        LOG          RESULT
_____________________________________________________________________________

TUPE          LOS     BTUP         N            SEND BTUP CNA 9 REL 47 $
TUPE          CFL     BTUP         Y            SEND BTUP CNA 1 REL 47 $
BTUP          CNA 0   TUPE         N            SEND TUPE UNN $
BTUP          SEN     TUPE         N            SEND TUPE SSB $
TUPPLUS       CFL     TUPE         Y            SEND TUPE CFL $
```

Example data ll f or DPNSS and ISUP

MAP display example for table FAILMSG

```
INPUTMSG                MAPTO       LOG         RESULT
_____________________________________________________________________

DPNSS       BY          ISUP        N           SEND ISUP USERBUSY $
ISUP        USERBUSY    DPNSS       Y           SEND DPNSS BY $
```

Example data ll f or ETSI PRI and BTUP

MAP display example for table FAILMSG

```
INPUTMSG                MAPTO       LOG         RESULT
_____________________________________________________________________

ETSIPRI     USERBUSY    BTUP        N           TREAT BUSY $
BTUP        SEN         ETSIPRI     N           TREAT BUSY $
```

Example data ll f or DPNSS and BTUP

MAP display example for table FAILMSG

```
INPUTMSG        MAPTO   LOG     ACTION TREATMENT OR MESSAGE DETAILS
_____________________________________________________________________

DPNSS   BY      BTUP    N       SEND        BTUP CNA 2 REL 47
BTUP    SEND    DPNSS   Y       SEND        DPNSS BY $
```

Example data ll f or AISUP, ATUP, and Q764

MAP display example for table FAILMSG

```
INPUTMSG            MAPTO       LOG         RESULT
_____________________________________________________________________

AISUP   UNALLOC     ATUP        N           SEND UNN $
ATUP    CGC         Q764        Y           SEND NOCIRCAV $
Q764    INTWUNSP    ATUP        Y           SEND CFL $
```

Example data ll f or Q767

FAILMSG (continued)

MAP display example for table FAILMSG

```
INPUTMSG              MAPTO        LOG          RESULT
_____________________________________________________________________

Q767    USERNCUG      Q767         N            TREAT UNMC
Q767    FACREJ        Q767         N            TREAT FACJ
```

Example data ll f or TS14PRI or ETSIPRI

MAP display example for table FAILMSG

```
INPUTMSG              MAPTO        LOG          RESULT
_____________________________________________________________________
Q764    CSE_0         OTHERWISE    N            TREAT RODR
Q764    CSE_0         ATUP         N            TREAT SYFL
Q764    CSE_0         AISUP        N            TREAT SYFL
```

Example data ll f or FDCP

MAP display example for table FAILMSG

```
INPUTMSG              MAPTO        LOG          RESULT
_____________________________________________________________________
Q767 USERBUSY         FDCP         N            TREAT RODR
```

Table history

MMP14

Flexible (datafillable) release cause mapping is now possible bi-directionally between BTUP and ETSI PRI.

EUR009

The following changes were made to support the ETSI PRI Cause Value enhancements feature AU2791:

- Added ANY option to MSGFROM field
- Added CAUSE subfield for use with MSGFROM=ANY
- Added MAPTO option ETSIPRI

- Added FDCP index (currently not used) to the MSGFROM field
- Added FDCP index to the MAPTO field

APC010

Added entries to support activity ETSI ISUP V2, AU2928.

APC009

Added entries to support TS14 PRI and ETSI PRI to AISUP/I-ISUP/ANSI ISUP interworking.

EUR006

Added cause values UNMC and FACJ for Q767 (ETSI ISDN ISUP V2).

EUR004

Added entries to support ETSI ISUP V1.

SHR05

Cause value string CSE_25 replaced with XLAFAIL to map the cause value of exchange routing error to relevant treatment in accordance with ISUP Hop Counter.

UK002

These changes were made:

- corrected all access barred messages to read as AB and all congestion messages to read as CONG
- added DPNSS and ISUP entries and explanations to field MAPTO
- added DPNSS and BTUP MAP display example

FARTE

Table name

Foreign Area Code Route Table

Functional description

Table FARTE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table FARTE translates the foreign area code digit segment, together with tables FAHEAD and FACODE.

For related information, refer to table ACRTE. For a description of the universal translation tables, see table ACHEAD.

Datafill sequence and implications

Table FAHEAD must be datafilled before tables FARTE and FACODE.

Table size

Refer to table ACRTE.

Datafill

Field names, subfield names, and valid data ranges for table FARTE are described in table ACRTE.

Datafill example

Refer to table ACRTE.

Table history

Refer to table ACRTE.

FEATCNTL

Table name

Feature Control (FEATCNTL)

Functional description

Table FEATCNTL controls feature digit collection on the DMS-Spectrum Peripheral Module (SPM) ISUP trunks. It provides datafill for corresponding supervision control of the type of DTMF digit detection times used for reorigination (or similar type features such as conference calling or call redirection) on trunks that are hosted on SPM.

For SPM, the digit detection times are datafilled in table FEATCNTL. The table can be accessed by call processing by office parameter control, through an index stored in table TRKSGRP (or TRKGRP), or other means.

The data from table FEATCNTL is transferred in advance to SPM by way of the distributed data manager (DDM). An index to the appropriate tuple in table FEATCNTL is passed to SPM in supervision from the computing module (CM) call processing on a per call basis. Alternatively, the universal tone receiver (UTR)/special tone receiver (STR) supervision can be used to drive SPM in the way the digital trunk controller (DTC) receivers are used, or alternate supervision can be provided to download the FEATCNTL data.

Data II sequence and implications

The planned order to one night process (ONP) table FEATCNTL is to have it one night processed and datafilled prior to table TRKGRP and table TRKSGRP. Thus, the potential table TRKSGRP index method could be used for accessing table FEATCNTL tuple information.

Data II rules

In order to properly datafill table FEATCNTL, consider the following rules:

- Tuple 0 can not be added, deleted, or changed. Tuple 0 represents the default tuple for short duration. The following shows the default tuple for short duration.

```
0 (OCT) $ MS50 MS0 $
```

- Tuple 1 cannot be added, deleted, or changed. Tuple 1 represents the default tuple for long duration. The following shows the default tuples for long duration.

FEATCNTL (continued)

```
1 (OCT) $ MS500 MS0 $
```

- If the ALL value is entered in the FDTMFDIG vector, it must be the first and only value.
- The NONE value can not be entered in the FDTMFDIG vector.
- The INTDTVAL can be datafilled only if FDTMFDIG and FDIGTVAL are already datafilled.
- If INTDTVAL is equal to MS0, the SDTMFDIG vector can not be datafilled.
- If the ALL value is entered in SECONDDG vector, it must be the first and only value.
- If the NONE value is entered in SDTMFDIG vector, it must be the first and only value.

Error messages

The following error messages generate when the datafill rules for table FEATCNTL, as previously defined, are violated.

(Sheet 1 of 2)

Error message	Explanation and action
TUPLE 0 ALREADY EXISTS	An attempt was made to add tuple index 0.
TUPLE 0 CAN NOT BE DELETED	An attempt was made to delete tuple index 0.
TUPLE 0 CAN NOT BE CHANGED	An attempt was made to change tuple index 0.
TUPLE 1 ALREADY EXISTS	An attempt was made to add tuple index 1.
TUPLE 1 CAN NOT BE DELETED	An attempt was made to delete tuple index 1.
TUPLE 1 CAN NOT BE CHANGED	An attempt was made to change tuple index 1.

(Sheet 2 of 2)

Error message	Explanation and action
THE ALL VALUE CAN ONLY BE USED WHEN ADDING/CHANGING A TUPLE. IT MUST BE THE FIRST AND ONLY ENTRY INTO THE FDTMFDIG FIELD	An attempt was made to add the value ALL to the FDTMFDIG field, but this value is not the first and only value in this vector.
THE NONE VALUE CAN ONLY BE USED WHEN ADDING/CHANGING A TUPLE. IT MUST BE THE FIRST AND ONLY ENTRY INTO THE FDTMFDIG FIELD	An attempt was made to add the value NONE to the FDTMFDIG field, but this value is not the first and only value in this vector.
YOU CAN NOT ADD OR CHANGE A SECOND DIGIT VECTOR IF THE FIRST DIGIT VECTOR IS NOT DATAFILLED	An attempt was made to datafill the second digit vector while the first digit vector was not datafilled.
YOU CAN NOT DATAFILL “NONE" IN THE FDTMFDIG FIELD	An attempt was made to datafill the value NONE in the first digit vector.
THE ALL VALUE CAN ONLY BE USED WHEN ADDING/CHANGING A TUPLE. IT MUST BE THE FIRST AND ONLY ENTRY INTO THE SDTMFDIG FIELD	An attempt was made to add the value ALL to SDTMFDIG field, but this value is not the first and only value in this vector.
THE NONE VALUE CAN ONLY BE USED WHEN ADDING/CHANGING A TUPLE. IT MUST BE THE FIRST AND ONLY ENTRY INTO THE SDTMFDIG FIELD	An attempt was made to add the value NONE to SDTMFDIG field, but this value is not the first and only value in this vector.
YOU CAN NOT ADD A SECOND DIGIT VECTOR WHEN THE INTERDIGIT TIMER VALUE IS 0	An attempt was made to datafill the SDTMFDIG field, but INTDTVAL is datafilled with the value ms0.
YOU CAN NOT ADD AN INTERDIGIT TIMER VALUE WITH NO SECOND DIGIT SCAN PATTERN ASSOCIATED WITH IT	An attempt was made to datafill INTDTVAL as a none value $ when the SDTMFDIG was datafilled with a value other than ms0.

Table size

2 to 256 tuples

FEATCNTL (continued)

Field descriptions

The following table describes field names, subfield names, and valid data ranges for table FEATCNTL.

(Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FEATKEY		0 to 255	FEATURE CONTROL KEY. Enter a feature control key value. This is the key field to table FEATCNTL.
FDTMFDIG		D1, D2, D3, A, D4, D5, D6, B, D7, D8, D9, C, AST, D0, OCT, D, ALL, NONE	The FDTMFDIG field consists of a vector of digit identifications. Each element in the vector represents a possible first DTMF digit for which SPM could be scanning. Note the following: • Entering ALL causes the entire range of 0 to 9, A to D, and * to # to be initialized as the possible first digits for which SPM could scan. • NONE is treated like $ and indicates an empty vector. The NONE value is not visible when a tuple is added. However, NONE is not allowed in FDTMFDIG. • The default value is OCT.
Note: The default values apply on tuple index 0 and 1 only.			

FEATCNTL (continued)

(Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FDIGTVAL		ms40, ms50, ms60, ms70, ms80, ms90, ms100, ms200, ms300, ms400, ms500, ms600, ms700, ms800, ms900, ms1000, ms1100, ms1200, ms1300, ms1400, ms1500, ms1600, ms1700, ms1800, ms1900, ms2000, ms2100, ms2200, ms2300, ms2400, ms2500, ms2600, ms2700, ms2800, ms2900, ms3000	The FDIGTVAL field is entered as a character value representing the time in milliseconds. The default values are ms50 for tuple 0 and ms500 for tuple 1. There are no default values for the remaining tuples.
Note: The default values apply on tuple index 0 and 1 only.			

FEATCNTL (continued)

(Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
INTDTVAL		ms0, ms40, ms50, ms60, ms70, ms80, ms90, ms100, ms200, ms300, ms400, ms500, ms600, ms700, ms800, ms900, ms1000, ms2000, ms3000, ms4000, ms5000, ms6000, ms7000, ms8000, ms9000, ms10000, ms11000, ms12000, ms13000, ms14000, ms15000, ms16000, ms17000, ms18000, ms19000, ms20000, ms21000, ms22000, ms23000, ms24000, ms25000, ms26000, ms27000, ms28000, ms29000, ms30000	The INTDTVAL field is entered as a character value representing the time in milliseconds. If FDTMFDIG is not datafilled, the FDIGTVAL datafill will not be allowed. The default value is ms0.
SDTMFDIG		D1, D2, D3, A, D4, D5, D6, B, D7, D8, D9, C, AST, D0, OCT, D, ALL, NONE	The SDTMFDIG field consists of a vector of digit identifications. Each element in the vector represents a possible second DTMF digit for which SPM could be scanning. Note the following: • Entering ALL causes the entire range of 0 to 9, A to D, and * to # to be initialized as possible second digits for which SPM could scan. • NONE (the default value) is treated like $ and indicates an empty vector. The NONE value is not visible a when tuple is added.
Note: The default values apply on tuple index 0 and 1 only.			

Data II e xample

The following shows an example tuple entry for table FEATCNTL. In this example, the FDTMFDIG indicates either the asterisk or octothorpe can be received as a valid first digit. There is a feature-digit duration value of 500 ms and an inter-digit duration value of 100 ms. Since the INTDTVAL value is greater than 0, this tuple indicates more than one digit is expected. For this reason, the SDTMFDIG field should have a digit pattern entered. The SDTMFDIG field is set to look for only an octothorpe. In terms of a digit pattern for which to scan, this tuple indicates to collect two digits—either *# or ##. If a single digit is required, a different tuple in FEATCNTL must be used.

```
9  (AST)  (OCT)  $  MS500  MS100  (OCT)  $
```

Supplementary information

Dump and restore

If the FEATCNTL table is not present on the dump side, but is present on the restore side, this table comes up empty on the restore side after ONP. If table FEATCNTL is present on both the dump and restore sides prior to ONP, all the tuples in the dump side are present on the restore side after the ONP.

If the TRKSGRP index method is the method chosen for accessing table FEATCNTL tuple information, table FEATCNTL needs to be restored before table TRKSGRP.

DDM registration of table FEATCNTL for SPM

DDM background

The DDM is a DMS switch mechanism used to distribute data from the CM to multiple peripherals in the office. Each peripheral has a copy of the same data registered to the DDM. The DDM on the CM updates each peripheral with its registered data on data synchronization and dynamic updates/changes to the registered data.

The term *data synchronization* means the peripherals are undergoing a state change. For example, manbusy (ManB) changes to in-service (InSv) or offline (OffL) changes to ManB, so a fresh copy of the application data needs to be sent to those peripherals. The registration of the application table indicates what state changes triggers a DDM data synchronization of the application data. For dynamic updates, the application data has been changed (for example, by table control if it is a datafillable table), and all of the peripherals registered for that table need to be updated with the changed data. Depending

FEATCNTL (continued)

on how the application table is registered to the DDM, all or some of the peripherals in the office could be updated with the changed data.

The DDM also provides services to allow the applications on the CM to audit the copies of the registered data on the peripherals off the CM. This audit mechanism allows the CM application to send copies of the registered data to the peripherals; the peripherals can send back their copy of the same data to the CM. If the application on the CM detects a difference, the application can choose to update the data on the peripherals through the DDM. The audit time is fixed in the CM software.

Historically, the DDM has been used to register the CCS7 data for the office, such as table C7LKSET or C7RTESET for the LIU7s and DTCs.

Use of DDM for table FEATCNTL on SPM

The DDM is used to register the FEATCNTL data for all SPMs in an office. Data synchronization and dynamic updating to the SPM for this data is supported. In terms of data synchronization, the FEATCNTL table is registered such that it is triggered only on a state change from ManB to InSv. A maximum of 256 tuples are managed by the DDM for this table and directly depends on the datafill in FEATCNTL. The term *dynamic updating* means that when table FEATCNTL is changed, new copies of FEATCNTL data are downloaded to all SPMs in the office. The application on the CM provides a means to audit the FEATCNTL data on the SPMs. If any discrepancies are found, the SPM is updated with new copies of the data. The audit time chosen is once every 60 minutes.

DTMF supervision to access table FEATCNTL on SPM

DTMF or feature digit collection supervision holds the appropriate index to the tuple in table FEATCNTL to control the DTMF receiver for the particular call involved. If the index is determined to be inappropriate when received by the SPM, the default of the first index in the table is used to control the DTMF receiver on the SPM. If the default tuple is in error, CallP returns an indication to the CM to treat the call.

Either UTR/STR supervision from the DTCs or DTMF supervision can be used to inform the SPM for digit collection. However, existing UTR/STR supervision cannot transfer the new data in table FEATCNTL.

Table history

SP15

Changed the FDIGTVAL value of Tuple 0 under the “Datafill Rules” section based on SR 60331195.

SPM01 (CSP09)

This table was created.

FEATDESC

Table name

Feature Description

Functional description

Table FEATDESC contains DMS feature keywords, Bellcore keywords and service descriptions. The ISDN parameter downloading uses this table to find the Bellcore feature keywords and operating company alterable service descriptions that correspond to the DMS features on a user's terminal.

Data II sequence and implications

There is no requirement to datafill other tables prior to table FEATDESC.

Table size

There is a maximum of 128 tuples or 3,840 bytes:

- 1 byte for Bellcore keyword character count
- 1 byte for service description character count
- 8 bytes for Bellcore keyword
- 20 bytes for Bellcore service description

Data II

The following table lists datafill for table FEATDESC. The addition or deletion of tuples in table FEATDESC is not allowed. This prevents the usage of the ADD and DELETE commands. Only the service description text can be changed using the table control commands CHANGE or REPLACE. For this reason, the DMOPRO commands REM and INP are not supported.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FEATKEY		feature name	This field contains the DMS name of the feature assigned to the key. This field cannot be modified.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BCRKEY		feature name and 1 - 8ASCII characters	This field specifies the Bellcore feature keyword.
SVCDESC		service description 1 - 20 ASCII characters	Service description. A user can modify this field if necessary. This is the only field that can be datafilled in this table.

Table FEATDESC default values (Sheet 1 of 2)

FEATKEY	BCRKEY	SERVDESC (MAP)	SERVDESC(ISDN terminal)
ACB	ACBT1	CALL_BACK	CALL BACK
PRV	BCEA	MAKE_CALL_PRIVATE	MAKE CALL PRIVATE
PRL	BCED	MAKE_CALL_PUBLIC	MAKE CALL PUBLIC
CIDSDLV	CIDSDLV	MAKE_ID_PUBLIC	MAKE ID PUBLIC
CIDSSUP	CIDSSUP	MAKE_ID_PRIVATE	MAKE ID PRIVATE
CPU	CPG1	CALL_PICKUP	CALL PICKUP
FC3	CFS3	CONFERENCE_SIZE_3	CONFERENCE SIZE 3
FC6	CFS6	CONFERENCE_SIZE_6	CONFERENCE SIZE 6
FC12	CFS12	CONFERENCE_SIZE_12	CONFERENCE SIZE 12
FC18	CFS18	CONFERENCE_SIZE_18	CONFERENCE SIZE 18
FC24	CFS24	CONFERENCE_SIZE_24	CONFERENCE SIZE 24
FC30	CFS30	CONFERENCE_SIZE_30	CONFERENCE SIZE 30
DROP	DROP	DROP_LAST_CALL	DROP LAST CALL
TRANSFER	TRF	CALL_TRANSFER	CALL TRANSFER

Note 1: SERVDESC (MAP) indicates table editor view at the (MAP) Maintenance Administration Position.

Note 2: SERVDESC (ISDN terminal) indicates the subscriber's view at an ISDN terminal display.

FEATDESC (continued)

Table FEATDESC default values (Sheet 2 of 2)

FEATKEY	BCRKEY	SERVDESC (MAP)	SERVDESC(ISDN terminal)
CFU	CFV	CALL_FORWARD	CALL FORWARD
PRK	CPRKR	RETRIEVE_PARKED_CALL	RETRIEVE PARKED CALL
MWT	MWI1	MESSAGE_WAITING	MESSAGE WAITING
AUD	-	AUTO_DIAL	AUTO DIAL
AUL	-	AUTO_LINE	AUTO LINE
EBO	-	E_BUSY_OVERRIDE	E BUSY OVERRIDE
MSB	-	MAKE_BUSY	MAKE BUSY
SCS	-	SPEED_CALL_SHORT	SPEED CALL SHORT
SCL	-	SPEED_CALL_LONG	SPEED CALL LONG
SCU	-	SPEED_CALL_USER	SPEED CALL USER
ICM	-	INTERCOM	INTERCOM

Note 1: SERVDESC (MAP) indicates table editor view at the (MAP) Maintenance Administration Position.

Note 2: SERVDESC (ISDN terminal) indicates the subscriber's view at an ISDN terminal display.

Data Il e xample

The following example shows sample datafill for table FEATDESC.

MAP display example for table FEATDESC

```
>FEATDESC

FEATKEY         BCRKEY              SERVDESC
_____________________________________________________
ACB             ACBT1               CALL_BACK
PRV             BCEA                MAKE_CALL_PRIVATE
```

Table history

This table is created in NA008.

Supplementary information

None

FGBCIC

Table name

Feature Group B (FGB) Carrier Identification Code Table

Functional description

Table FGBCIC stores four-digit FGB (feature group B) carrier identification codes. The two fields in the table consist of the incoming or outgoing carrier name and the carrier code.

Data II sequence and implications

Table OCCNAME must be datafilled before table FGBCIC.

Table size

0 to 1000 tuples

Data II

The following table lists datafill for table FGBCIC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CARRNAME		alphanumeric (1 to 16 characters)	*Carrier name* Enter a valid carrier name. To be valid, the carrier name must have been previously datafilled in table OCCNAME.
FGBNUM		numeric (0 to 9)	*Feature group B identification number* Enter a four-digit carrier identification code. Nil (N) digits are not allowed. Duplicate four-digit codes are not valid entries for this field; each entry must be unique.

Data II e xample

The following example shows sample datafill for table FGBCIC.

MAP display example for table FGBCIC

```
CARRNAME              FGBNUM
_____________________________________________________________

 CAR                2 3 4 5
```

Supplementary information

This section provides additional information related to table FGBCIC.

Error messages

The carrier name must be datafilled in table OCCNAME before it can be datafilled in table FGBCIC. If the carrier name is not in table OCCNAME and an attempt is made to datafill an undefined carrier name, the following error message is displayed:

```
***  ERROR  *** TYPE OF CARRNAME IS CARRIER_KEY
```

No nil (N) digits are allowed. If an attempt is made to datafill invalid digits, the following error message is displayed:

```
THE CARRIER CODE MUST BE FOUR VALID DIGITS
```

Duplication of a four-digit code already defined in table FGBCIC is not allowed. If an attempt is made to datafill a carrier with a duplicate four-digit code, the following message is displayed:

```
DUPLICATE FGB CARRIER CODES NOT ALLOWED
```

FLEXAMA

Table name

Flexible AMA Table

Functional description

Table FLEXAMA defines custom automatic message accounting (AMA) characteristics against AMA group and translation identity combinations. Table FLEXAMA can only be used if a call has both an AMA group identity (AMAGRPID), from table LINEATTR, and an AMA translation identity (AMAXLAID), from translations.

Table FLEXAMA defines a set of AMA characteristics for the call, based on the AMAGRPID and AMAXLAID assigned against it. If a particular AMAGRPID and AMAXLAID combination does not have a tuple datafilled in table FLEXAMA, then the default values specified in tables AMAGRPID and AMAXLAID apply.

If an AMAGRPID and AMAXLAID combination is defined in table FLEXAMA, the AMA characteristic update algorithm must be indicated before defining the flexible AMA characteristics.

The choices are:

- update only AMA group data (field GRPDATA)
- update only AMA translation data (field XLADATA)
- update data found in both the AMAGRPID and AMAXLAID tables (field ALLDATA)

Data II sequence and implications

The following tables must be datafilled before table FLEXAMA.

- AMAGRPID
- AMAXLAID

Table size

0 to 16 065 tuples

Data II

The following table lists datafill for table FLEXAMA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FLEXKEY		see subfields	*Flexible AMA key* This field, the key to the table, consists of subfields GRPID and XLAID.
	GRPID	alphanumeric (1 to 8 characters)	*Group identification* Enter the AMA group identification name datafilled in table AMAGRPID. This AMA group identifier is obtained from table LINEATTR and used to index into table AMAGRPID.
	XLAID	alphanumeric (1 to 8 characters)	*Translation identification* Enter the AMA translation identification name datafilled in table AMAXLAID. This AMA translation identity is obtained from translations. This functionality is under SOC control, order code PBXA0014. It is available only if tariff requirements are met.
CONTENT		GRPDATA, XLADATA or ALLDATA	*FLEXAMA content* Enter the AMA characteristics update algorithm. If a particular AMAGRPID and AMAXLAID combination is specified in table FLEXAMA, the AMA characteristic update algorithm must be specified before defining the flexible AMA characteristics. The choices are to override only AMA group data (field GRPDATA), override only AMA translation data (field XLADATA), or override data found in both the AMAGRPID and AMAXLAID tables (field ALLDATA).

FLEXAMA (continued)

Field CONTENT = GRPDATA

Enter the subfield GRPDATA as in the following table.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	GRPDATA	see refinements	*AMA group data* This subfield is a vector of up to eight values, each consisting of refinements GRPOPTN and OCI.
	GRPOPTN	FLEXOCI	*AMA group option* Enter FLEXOCI (flexible originating charge information).
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield GRPDATA.

Field CONTENT = XLADATA

The datafill for subfield XLADATA is explained in the following table.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	XLADATA	see refinements	*AMA translation data* This subfield is a vector of up to eight values, each consisting of refinement XLAOPTN and its associated subfields.
	XLAOPTN	FLEXCPNI, FLEXCTYP, FLEXSF, FLEXDBCK, FLEXCLGI, FLEXRJCT	*Translation option* Enter FLEXCPNI to capture calling or called party numbering plan information, FLEXCTYP to specify a flexible call type, FLEXSF to specify a flexible service feature, or FLEXDBCK to generate AMA records for ISUP (DFT) Dropback call diversions. Enter FLEXCLGI to extend support to Brazilian R2, Brazilain TUP and Brazilian ISUP protocols.

Re nement XLA OPTN = FLEXCPNI

If the entry in field XLAOPTN is FLEXCPNI, datafill the refinements as explained in the following table.

Note: Both tables FLEXAMA and AMAXLAID can have the option FLEXCPNI datafilled. However, preference is given to datafill in table FLEXAMA in some cases. For example, if FLEXAMA is accessed and has a content of XLADATA or ALLDATA and does not have the FLEXCPNI option, no module code 611 or module code 612 is produced, regardless of datafill in table AMAXLAID.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	IC_CGPN_INFO	Y or N	*Incoming Calling Party Number (CGPN) Information* Enter Y to capture the incoming (pre-translations) CGPN Numbering Plan Indicator (NPI) and Nature Of Address (NOA) or Type Of Number (TON) for supported protocols in AMA Module 611 (context identifier 80050). Note the AMAOPTS option IC_CGPN_INFO_REQD must be ON. The protocols supported are: ETSI ISUP IBN7 FTUP SSUTR2 PRI VN4-PRI TS14 PRI ETSI BRI VN4-BRI QSIG INAP

FLEXAMA (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	IC_CDPN_INFO	Y or N	Incoming Called Party Number (CDPN) Information Enter Y to capture the incoming (pre-translations) CDPN NPI and NOA or TON for supported protocols in AMA Module 611 (context identifier 80050). Note the AMAOPTS option IC_CDPN_INFO_REQD must be ON.
	OG_CDPN_INFO	Y or N	*Outgoing Called Party Number Information* Enter Y to capture the outgoing (outpulsed) CDPN NPI and NOA or TON for supported protocols in AMA Module 611 (context identifier 80050).
	OG_CDPN_DIGS	Y or N	*Outgoing Called Party Number Digits* Enter Y to capture the outgoing (outpulsed) CDPN digits for supported protocols in AMA Module 612 (context identifier 80051). Digits are captured only if they are different from those captured in the Terminating Open Digits field of the base AMA structure. Supported protocols are as for other FLEXCPNI options plus DPNSS and BTUP.

Re nement XLA OPTN = FLEXSF

The datafill for subfield SFEATVAL is explained in the following table.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	SFEATVAL	800 to 999	*Service feature value* Enter the service feature value.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield XLADATA.

Re nement XLA OPTN = FLEXCTYP

The datafill for subfield CTYP is explained in the following table.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	CTYPE	DA411 DA555 DATAPATH FLATRATE FREE GENERIC INVERTLT NONDA555 or STNPAID	*Call type* Enter the AMA call type that must be used to record the call.

Sub eld CTYP = NOND A555, DA555, DATAPATH, or DA411

Leave all refinements blank.

Sub eld CTYP = GENERIC

The datafill for refinement GENRCVAL is explained in the following table.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	GENRCVAL	800 to 999	*Generic call code value* Enter the generic call code value.

FLEXAMA (continued)

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	OVRDSEL	PRCDENCE or OVRDALL	*Override selector* Enter PRCDENCE to selectively enable precedence, and datafill subfield PRCDENCE. Any call type specified in subfield PRCDENCE, if selected, overrides the flexible AMA assignment. Enter OVRDALL to override all predefined DMS call types, and leave subfield PRCDENCE blank.
	PRCDENCE	LOCAL, TOLL, IC, VPN	*Precedence* This subfield is a vector of up to 8 precedence option indexes. Enter the call type that can be granted precedence within the flexible call type (FLEXCTYP) assignment.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield PRCDENCE.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield XLADATA.

Re nement XLA OPTN = FLEXDBCK

The datafill for subfield <callcode> is explained in the following table.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	<callcode>	800 to 999	*Flexible AMA selector* Enter FLEXDBCK to generate AMA records for ISUP (DFT) Dropback call diversions, where diversion routes the call back to the originating node. This selector can also be entered in table AMAXLAID.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			If FLEXDBCK is selected in both AMAXLAID and FLEXAMA, the entry in table FLEXAMA takes precedence. The <callcode> entered appears in the AMA record.

Re nement XLA OPTN = FLEXCLGI

Refinement FLEXCLGI can be entered against any key in table FLEXAMA with the XLADATA or ALLDATA selector. It triggers module code 611 for calls over incoming or two-way ETSI ISUP, SSUTR2, BTUP , Red Book TUP trunks, R2, Brazilian R2, Brazilian TUP and Brazilian ISUP protocols. The option FLEXCLGI does not trigger an AMA record. It only triggers module code 611 with a context identifier of 80027 to be appended to the AMA record if an AMA record is produced for the call. The AMA record must be triggered via an existing trigger, for example, CLASS NATL in universal translations.

The Module 611 produced has a context identifier of 80027 to indicate that it contains calling information.

Field CONTENT = ALLDATA

The datafill for subfield ALLDATA is explained in the following table.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	ALLDATA	see refinements	*All data* This subfield is a vector of up to eight values, each consisting of refinement OPTN and its associated subfields.
	OPTN	FLEXOCI, FLEXSF, FLEXCTYP FLEXDBCK, FLGXCLGI, FLEXRJCT, FLEXCPNI	*Option* Enter the flexible AMA option. Field FLEXCLGI appends Module 611 with a context ID of 80027 to an AMA record, containing calling information.

FLEXAMA (continued)

Re nement OPTN = FLEXOCI

The datatafill for subfield OCI is explained in the following table.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	OCI	1 to 255	*Originating charge information number* Enter the originating charge information number.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield ALLDATA.

Re nement OPTN = FLEXSF

The datafill for subfield SFEATVAL is explained in the following table.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	SFEATVAL	800 to 999	*Service feature value* Enter the service feature value.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield ALLDATA.

Re nement OPTN = FLEXCTYP

Datafill subfield CTYP as explained below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	CTYP	DA411 DA555 DATAPATH FLATRATE FREE GENERIC INVERTLT NONDA555 or STNPAID	*Call type* Enter the AMA call type that must be used to record the call.

Sub eld CTYP = NOND A555, DA555, DATAPATH, or DA411

Leave all refinements blank.

Sub eld CTYP = GENERIC

The datafill for refinement GENRCVAL is explained in the following table.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	GENRCVAL	800 to 999	*Generic call code value* Enter the generic call code value.

FLEXAMA (continued)

Sub eld CTYP = GENERIC, STNP AID, FLATRATE, INVERTLT, or FREE

Datafill refinement OVRDSEL as explained below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	OVRDSEL	OVRDALL or PRCDENCE	*Override selector* Enter PRCDENCE to selectively enable precedence, and datafill subfield PRCDENCE. Any call type specified in subfield PRCDENCE, if selected, overrides the flexible AMA assignment. Enter OVRDALL to override all predefined DMS call types, and leave subfield PRCDENCE blank.
	PRCDENCE	IC, LOCAL TOLL or VPN	*Precedence* This subfield is a vector of up to 8 precedence option indexes. Enter the call type that can be granted precedence within the flexible call type (FLEXCTYP) assignment.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield PRCDENCE.
	CONTMARK	$	*Continuation mark* Enter $ to indicate the end of the vector for subfield ALLDATA.

Data ll e xample

The following example shows sample datafill for table FLEXAMA.

MAP display example for table FLEXAMA

```
FLEXKEY      CONTENT
_____________________________________________________________

FR_GRP GENERIC1   ALLDATA FLEXCTYP FREE PRCDENCE TOLL +
                                                  VPN  $  $
MR_GRP FREE     GRPDATA FLEXOCI  123 (FLEXDBCK 850)$
```

MAP display example for FLEXCLGI option in table FLEXAMA

```
CLLI                          OPTIONS
_____________________________________________________________

GRP1 BZR2AMA XLADATA (FLEXCLGI) $
```

Table history

MMP15

Added Brazilian R2, Brazilian TUP and Brazilian ISUP protocols to extend support of the FLEXCLGI option.

MMP13

Added option FLEXCPNI for 59014037.

EUR010

Selector FLEXCLGI added to table for AJ5340.

EUR008

Selector FLEXDBCK added to table.

BCS34

Table FLEXAMA introduced.

FLEXRES

Flexible restoral

The Flexible Restoral feature enables a quick retrieval of translations data modification history and allows restoration of tables to a previous working state. The FLEXRES table stores this history. Table FLEXRES has a maximum of 10 000 tuples. The FLEXRES table stores information about the time, date, user, and data changes made to the supported tables.

Note: The FLEXRES table cannot be datafilled by operating company personnel.

The FLEXRES table stores the data change history of the following supported tables:

- STDPRTCT and its subtables STDPRT and AMAPRT
- HNPACONT and its subtables HNPACODE, RTEREF, RTEMAP, and ATTRIB
- LCASCRCN and its subtable LCASCR
- CLSVSCRC and its subtable CLSVSCR

The DMS switch uses this table to create a DMOPRO file. The entries in the FLERES table are written to a DMOPRO file when the CI command FLEXTAB is issued. When the operating company personnel runs the DMOPRO file, this action removes the data modifications and returns the supported tables to the state prior to the modifications.

The FLEXRES table cannot be edited using table editor commands. All changes to the FLEXRES table are internal and dependent on changes made to the supported tables.

Data II

The table that follows lists datafill for table FLEXRES.

Field descriptions (Sheet 1 of 2) (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
Key		1–10 000	Maximum number of tuples.
Userid		1–16 alphanumeric characters	User identification of the operating company personnel making the change.

Field descriptions (Sheet 2 of 2) (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
Date		DDMMMYYYY	Date of data modification DD = day MMM = month YYYY = year
Time		HH:MM:SS	Time of data modification HH = hour MM = minutes SS = seconds
Record		Table name and changes made	Name of the table followed by the tuple operation. For subtables, the entries are the name of the head table key and subtable followed by the tuple operation.

Data ll e xample

The figure that follows shows sample datafill for table FLEXRES.

MAP display example for table FLEXRES

```
 KEY   USERID  DATE      TIME      RECORD
-------------------------------------------------------------------------------------------------------

 1     USERID1 10JAN2000 13:00:00  LCASCRCN DEL 518 HULL OPTL N N
 2     USERID2 08JAN2000 08:49:00  HNPACONT 613$RTEREF ADD 1 S D OCA
 3     USERID3 08JAN2000 08:48:20  HNPACONT REP 010 Y 128 10
 4     USERID4 08JAN2000 08:47:46  HNPA DEL Y 127 1
 5     USERID5 08JAN2000 08:47:06  HNPACONT ADD 919 Y 128 10
```

FLXCMAP

Table name

Flexible ISDN User Part Cause to Treatment Mapping (ISUP CAUSEMAP)

Functional description

The Flexible CAUSEMAP (FLXCMAP) table provides a table editor interface for ISUP cause values passed from an address complete message (ACM) or release message (REL) to DMS-100 extended treatments. The FLXCMAP table contains 128 cause values that relate to four different coding standards for a total of 512 tuples. The International Telecommunication Union (ITU) Q.850 document references the cause values. The FLXCMAP table supports the following four coding standards:

- Comite consultatif Internationale de Telegraphique et Telephonique (CCITT)
- national (NATL)
- international (INTL)
- reserved for later use (RSVD)

When enabled through software optionality control (SOC) ISP70008, the FLXCMAP table allows a service provider to change ISUP extended treatment values to other available treatments based on cause value and coding standards used by the office. The FLXCMAP table supports the following table editor functions:

- change (CHA)
- replace (REP)
- put

The FLXCMAP table cause value framework contains spare values for future expansion in the Q.850 specification. The table editor does not allow additions or deletions to the FLXCMAP table. An attempt to make a table addition or deletion produces an error message.

Data II sequence and meaning

Enter data into the TMTCNTL table before entering data into the FLXCMAP table.

Table size

Memory is allocated for 512 tuples.

Data fill

The table that follows lists datafill for the FLXCMAP table.

Field descriptions

Field	Subfield	Entry	Explanation and action
CSEMAPKEY			Causemap key. The key consists of two subfields.The service provider cannot change this field.
	cause value	alphanumeric (1 to 8 characters)	A valid ISUP cause value from table TMTMAP.
	standard	CCITT, INTL, NATL, RSVD	The coding standard used by the office.
TREAT		alphanumeric (1 to 4 characters)	Treatment name. Assign a valid DMS-100 treatment from the TMTCNTL table.

Data fill example

The figure that follows shows sample datafill for the FLXCMAP table.

MAP display example for table FLXCMAP

```
TOP
     CSEMPKEY                                  TREAT
-------------------------------------------------------

     UNALLOC  CCITT_STANDARD                    RODR
     CSE_6    INTERNATIONAL_STANDARD            NOSR
     CSE_7    NATIONAL_STANDARD                 NACK
     CSE_8    RESERVED                          FNAL
```

Table history

NA014

The NA014 release introduced the FLXCMAP table into the DMS-100 software.

Additional information

The local number portability (LNP) misrouted call to a ported number (LNPM) cause value has not been registered with the ITU and appears as cause value CSE_26 NATL.

FMRESINV

Table name

Facility Maintenance Resource Inventory Table

Overview

The Facility Maintenance Resource tables provide resource management for Integrated Bit Error Rate Tests (IBERT). The IBERTs include the digital test unit (DTU) and the NT6X99AA IBERT line card (ILC). The tables provide the ability to reserve an IBERT that a specified application uses. These tables also provide the ability for many applications to share the use of an IBERT.

The following applications use IBERTs:

- bit error rate performance (BERP)
- line test position (LTP)
- trunk test position (TTP)
- automatic trunk testing (ATT)

Note 1: The LTP uses the BERT command at the LTPDATA sublevel of the line maintenance subsystem (LNS) at a MAP terminal.

Note 2: The TTP uses the BERT command at the DATA sublevel of the TRKS subsystem at a MAP terminal.

Some conditions allow a foreground IBERT user to seize an IBERT from a background user. A foreground IBERT user can be an LTP or TTP user. A background user can be a BERP user.

Many applications can compete for a limited number of IBERTs. Specified applications are not always able to obtain an IBERT because a limited number of IBERTs are available. Table FMRESINV and table FMRESUSE (Facility Maintenance Users) can reserve an IBERT for specified applications to use. These tables can share an IBERT for a subset of all applications.

An application can use a specified IBERT. This event occurs if the intersection of the class sets of the application and the IBERT is not zero. The class set of the application is in table FMRESUSE. The class set of the IBERT is in table FMRESINV.

BERP interruption

The BERP application normally uses large numbers of IBERTs for long periods of time. Without a resource allocation plan, an application like BERP can occupy all the IBERTs in an office. In this condition, other applications like the LTP or TTP do not have IBERTs. When you reserve IBERTs for

specified applications you prevent this condition. For example, when you reserve IBERTs for the LTP and TTP, BERP cannot use the IBERTs.

The operating company can desire to have all IBERTs available for BERP test. For example, a specified office can have a number of line concentrating modules (LCM), each equipped with two ILCs. This configuration is normal when an office uses BERP. The operating company wants to use all of these ILCs for BERP tests.

The operating company can require the ability to perform BERTs from the LTPDATA sublevel. To reserve ILCs for the LTP BERTs requires installation of additional ILCs in the LCMs. This installation is often not possible because of lack of line card space in the LCMs. This installation can not be possible because of other reasons. In these conditions, the BERP and the LTP must share the use of the same IBERTs.

If BERP uses and retains all available IBERTs for long periods of time, the LTP cannot obtain required IBERTs. The LTP can seize an IBERT that the BERP uses. This action prevents the use of all the IBERTs by the BERP when other applications require the IBERTs. This action only occurs if the LTP cannot obtain another IBERT from the LTP-reserved IBERTs. The BERP and LTP reserve the IBERT that the LTP uses. The user cannot control which IBERT the LTP seizes from BERP.

An optional interrupt parameter (I) for the command BERT START provides control of this interrupt ability. A description of the command BERT START appears in *Trunks Maintenance Guide* 297-1001-595. If you enter this optional parameter, LTP BERT can interrupt BERP. The LTP BERT first uses normal means to attempt to obtain a BERT. If this action fails, LTP BERT determines if the LTP BERT can obtain a BERT through an interruption of BERP. If you enter parameter I, LTP BERT attempts the interruption. If you do not enter parameter I, an interruption does not occur. In this event the system informs the operating company personnel that requests the BERT that a BERT is available for interruption.

When an interruption occurs, the system aborts the call that involves the IBERT through BERP. This action does not affect other BERP calls. The system does not include this call in the BERP statistics. The BERP records the number of interrupted calls. The methods that BERP uses to record the numbers of interrupted calls is like the method used to record call failures.

When BERP finishes the current BERP call cycle, BERP attempts to set up a new set of calls. The BERP attempts to seize the IBERT that the LTP seized. If BERP is successful, BERP uses the seized IBERT to continue testing. If the LTP continues to use the IBERT, this action does not affect the LTP BERT.

FMRESINV (continued)

When the user at the LTP sublevel finishes the run of the BERT, the LTP releases the IBERT. Any application that reserves this IBERT can seize the IBERT. If the user performs another BERT immediately, the IBERT used can be a different one.

The affect of this interrupt capability on BERP can be small. The impact is small if BERP makes a large number of calls, and interruptions do not occur often. If the BERP conditions are different, enter data for a number of IBERTS for the LTP to use.

Digital test unit for LTP BERT

The ILC and the DTU can use BERTs on the LTP datapath. The ILC and the DTU support the same functions.

Note: Enter data for the DTUs in table FMRESINV. Use command sets that allow DTU use at the LTP sublevel.

Limits

The ILCs must be in an idle (IDL) state before a test can use the ILCs. Before this version, BERT could use installation busy (INB) ILCs.

You cannot enter data for the ILCs in table KSETINV.

You can enter a maximum of 128 IBERTs in table FMRESINV. The maximum number must include the ILCs and the DTUs.

Functional description

Enter data in table FMRESINV to enter ILCs or DTUs for use as IBERTs. Use table FMRESINV to assign a class set to each IBERT for resource management. Use table FMRESUSE with table FMRESINV to complete this action.

Table FMRESINV contains the following fields:

- IBERT key: This field is the key to the table. The IBERT key contains the character string IBERT. A number in the range 0 to 127 follows the character string IBERT. This key identifies each IBERT.
- IBERT circuit: This field identifies the IBERT that receives data. This field can contain the letter L followed by the line equipment number (LEN)

of an ILC. This field also can contain the letter G followed by the common language location identifier (CLLI) of a DTU.

- Class set: The class set is a set of numbers that relate the IBERT to an application. The class set entry contains the letter C. A set of numbers in the range of 0 to 15 follows the C. If an IBERT must include all classes from 0 to 15, enter ALL. Entry ALL indicates that any application can use the IBERT. Enter NONE to indicate that none of the applications can use the empty class set. The empty class set is the IBERT.

Enter all IBERTs, DTUs and ILCs, in table FMRESINV for use as an IBERT by any application. Enter data for the IBERTs in all other required tables. For example, you must enter data for the ILCs in table LNINV, and for the DTUs in table TRKMEM.

You can delete an IBERT from table FMRESINV only if the IBERT is in the INB state. You cannot delete an IBERT from tables LNINV or TRKMEM if table FMRESINV contains the IBERT.

Data ll sequence and meaning

Enter data in the following tables before you enter data in table FMRESINV:

- TRKMEM
- LNINV

Enter data in table FMRESINV before you enter data in table KSETINV.

Table size

The size of this table is fixed at 128 tuples.

Data lling tab le FMRESINV

Datafill for table FMRESINV appears in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RESOURCE		IBERT	*Resource* Enter IBERT as the type of resource. This field is the first part of the key to this table.
NUMBER		0 to 127	*Resource number* Enter a number to identify the number of the resource. This field is the second part of the key to this table.

FMRESINV (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CKT		see subfields	*IBERT circuit* This field contains subfields CKTTYPE, LEN, CLLI and EXTRKNM.
	CCKTTYPE	L or G	*Circuit type* Enter L to indicate that the added circuit is a line. Enter data in subfield LEN for the ILC. Enter G to indicate that the added circuit is a trunk. Enter data in subfields CLLI and EXTRKNM for the DTU.
	LEN	see the reference for subfields	*Line equipment number*This field defines the location of the equipment that connects to a specific telephone line. Field LEN is common to more than 60 tables. A description of field LEN appears in a single section to avoid a copy of information that is not required. Refer to the “Common entry field LEN" section in this document for a complete description of field LEN and associated subfields. Field LEN contains subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT and CIRCUIT.
	CLLI	DTU	*Common language location identifier* Enter DTU for the CLLI of the DTU, if the entry in CKTTYPE is G.
	EXTRKNM	0 to 9999	*External trunk number* Enter the external trunk number of the DTU if the entry in CKTTYPE is G.
CLASS		see subfields	*Class* This field contains subfields OPTION and CLASSV.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	ALL, C or NONE	*Class set option* Enter ALL if the class set includes all classes. You do not need to enter data in additional subfields. Enter C if the class set is not ALL and not NONE. Enter data in field CLASSV. Enter none if the class set does not include any classes. If this entry is none, the field does not require additional subfields.
	CLASSV	0 to 15 (vector with a maximum of 16 numeric values)	*Class set vector* Enter a vector with a maximum of 16 numeric values if the entry in field OPTION is C. Each value must be in the range 0 to 15. End the vector with $.

Data ll e xample

Sample datafill for table FMRESINV appears in the following example.

FMRESINV (end)

MAP display example for table FMRESINV

```
RESOURCE
      NUMBER
                              CKT
                                                          CLASS
_____________________________________________________________

IBERT
           0
              L REM1  00 0 00 00
                                                       C (0)$
IBERT
           1
              L REM1  00 0 00 01
                                                       C (0)$
IBERT
           2
              L HOST  00 0 00 00
                                                       C (1)$
IBERT
           3
              L HOST  00 0 01 00
                                                       C (1)$
IBERT
           4
              L HOST  00 1 00 00
                                                       C (2)$
IBERT
           5
              L HOST  0 1 01 00
                                                       C (2)$
IBERT
           6
              G DTU  0
                                                       C (3)$
IBERT
           7
              L DTU  1
                                                 C (3)$
```

FMRESUSE

Table name

Facility Maintenance Resource Users Table

Functional description

Table FMRESUSE provides the ability to assign a class set to different facility maintenance users. Table FMRESUSE and table FNRESINV work together to define the relationship between users and resources. These tables determine the users that can access specified resources.

Note: Each possible application with a default class set of ALL has an entry. You cannot delete or add entries in table FMRESUSE.

An application can use a specified integrated bit error rate test (IBERT). An application can use a specified IBERT if the intersection between the class set of the application and the IBERT is not nil. The class set of the application is in table FMRESUSE. The class set of the application is in table FMRESINV.

See table FMRESINV for related information.

Data ll sequence and meaning

You do not need to enter data in other tables before you enter data for table FMRESUSE.

Table size

6 tuples

This table contains one tuple for each of the five possible users. The system automatically adds these tuples to the table. You cannot delete these tuples.

FMRESUSE (continued)

Data lling tab le FMRESUSE

Datafill for table FMRESUSE appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
USER		ATT, BERP, DCT, LTP, TTP, and ITSTL1	*User key* Enter one of the following applications that use facility maintenance resources: • automatic trunk testing (ATT) • bit error rate performance (BERP) • data call tester (DCT) • line test position (LTP) • trunk test position (TTP) • integrated testing system translation language one (ITSTLI)
CLASS		see subfield	*Class set* This field provides information for the class set. This field is like field CLASS in table FMRESINV. This field contains subfield OPTION.
	OPTION	ALL, C or NONE	*Class set option* Enter ALL if the class set must include all classes. You do not need to enter data for additional subfields. An ALL entry indicates that the application can use all IBERTs. Enter NONE, if the class set must not include any classes. enter NONE. You do not need to enter data for additional subfields. A NONE entry indicates that the application cannot use any IBERTs. Enter C if the class set is not ALL and not NONE. Enter data for subfield CLASSV.
	CLASSV	vector with a maximum of 16 numeric values (0 to 15)	*Class set vector* Enter a sequence of 1 to 16 numeric values if the entry in subfield OPTION is C. If less than 16 values are required, end the list with $.

Data ll e xample

Sample datafill for table FMRESUSE appears in the following example.

MAP display example for table FMRESUSE

```
USER
                                                CLASS
_____________________________________________________________

BERP
                                                c (0)$
LTP
                                                C (1)$
ATT
                                                C (2)$
TTP
                                                C (3)$
ITSTL1
                                                C (4)$
```

MAP display example for table FMRESUSE

```
USER
                                                CLASS
_____________________________________________________________

BERP
                                                C (0 2)$
LTP
                                                C (1)$
ATT
                                                C (3)$
TTP
                                                C (3)$
```

Table history

BCS36

Entry value DCT to field USER was added in version BCS36. Table size increased from five to six tuples in BCS36.

FMTINV

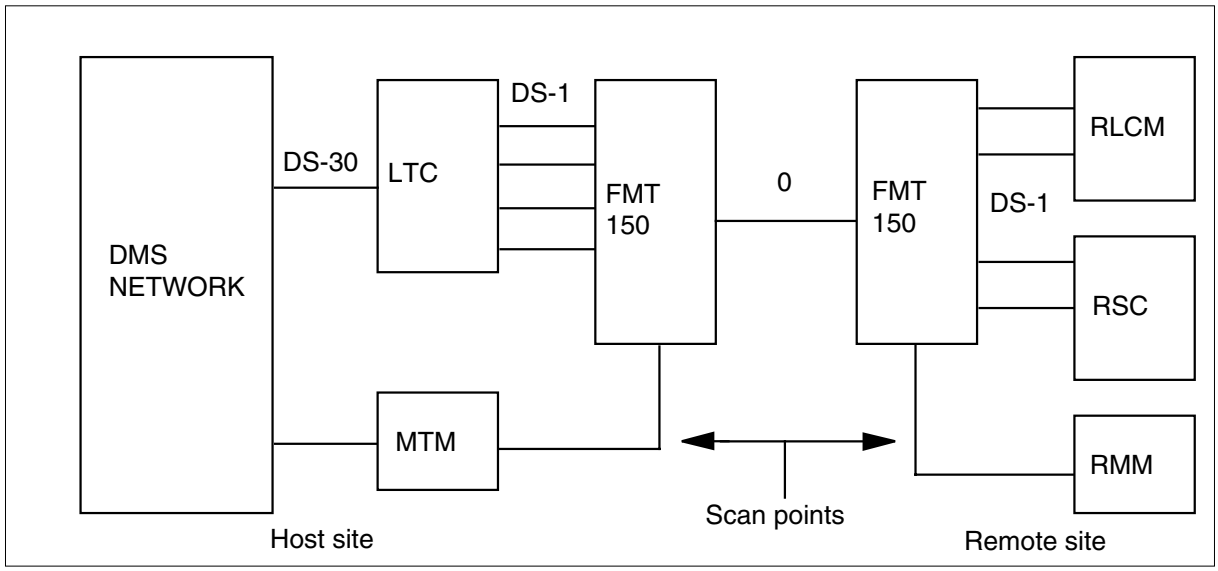
Table name

Enhanced Fiber Monitoring Inventory Table

Overview

The Enhanced Fiber Monitoring feature is used to monitor alarms in the Fiber Multiplex Terminal (FMT 150a-b) installed at both host and remote sites. This is done by using scan points in the DMS-100 switch as shown in the following figure.

DMS-100 Fiber remotes



Alarms generate relay contact closures in the FMT-150 modules. These alarms contacts (scan points) are connected to a Central Office alarm system to generate audible and visual alarms for critical and major problems. Both the host and remote ends of the fiber interface generate the alarm conditions. These critical and major alarms are detected by scan points on the maintenance trunk module (MTM) and the remote maintenance module (RMM).

In the DMS-100 switch, the information collected by the scan cards is communicated to the host office. The host office then activates the alarm signaling device and the appropriate remote MAP indications. At the host site, scan points are collected by the MTM. At the remote end, the scan points are detected by the RMM (see figure 1). Both the RMM and MTM are equipped with Scan Detector Cards (NT0X10).

Functional description

Table FMTINV contains general information for the FMT. This information includes the FMTs exact location at both ends of the fiber link, the protection switching, and the type of FMT. In this table, only the remote application is supported. The subfield REMBOOL of field REMOTE must be datafilled as Y (yes) in the tuple. For every FMT datafilled in this table, two empty tuples are automatically created in table FMTSC. These two scan tuples are datafilled to set up scan points to monitor the FMTs.

Data II sequence and implications

The following tables must be datafilled before table FMTINV.

- LTCINV
- LTCPSINV
- RCCINV
- RCCPINV (if applicable)
- LCMINV (if applicable)

Note: In order to datafill table FMTSC, table CLLI must be datafilled. This information is used for display purposes in the MAP level.

Table size

0 to 32 tuples

Table size is dynamically determined by the number of tuples added.

Data II

The following table lists datafill for table FMTINV.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FMTNAME		see subfield	*Fiber mulitplex terminal name* This field consists of subfield FMTNO.
	FMTNO	FMT 0 to FMT31	*Fiber multiplex terminal number* Enter the name assigned to the FMT. The name consists of two parts, FMT and a number. This number is unique and acts as a key range from 0 to 31. The number is preceded by FMT.

FMTINV (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FMTTYPE		FMT150A or FMT150B	*Fiber multiplex terminal type* Enter the type of Fiber Multiplex Terminal. FMT can be one of two values defined at the entry attribute.
FRNO		0 to 511	*Frame number* Enter the frame number on which the host FMT is equipped.
SHPOS		0 to 77	*Shelf position* Enter the shelf position on which the host FMT is located.
FLOOR		0 to 99	*Floor* Enter the floor on which the host FMT is located.
ROW		A to HJ to NP to ZAA to HHJJ to NNor PP to ZZ	*Row* Enter the row in which the host FMT is located.
FRPOS		0 to 99	*Frame position* Enter the bay position in which the host FMT is located.
PROTSW		Y or N	*Protection switch* Enter Y (yes) to indicate that the FMT has protection channels. Enter N (no) to indicate that the FMT has no protection channels.
REMOTE		see subfields	*Remote* This field consists of subfields REMBOOL, SITENM, REMFRMNO, REMSHPOS, REMFLOOR, REMROW, and REMFRPOS.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	REMBOOL	Y or N	*Remote boolean* Enter Y (yes) to indicate that the FMT is connected to a remote site. Enter N (no) to indicate that it is connected to other sites. If the entry in this field is Y (yes), datafill refinements SITENM, REMFRNO, REMSHPOS, REMFLOOR, REMROW, and REMFRPOS.
	SITENM	alphanumeric	*Site name* Enter the site name of the remote location. This remote site is switch dependent.
	REMFRNO	0 to 511	*Remote frame number* Enter the remote frame number on which this FMT is equipped.
	REMSHPOS	0 to 77	*Remote shelf position* Enter the remote shelf position on which this FMT is located.
	REMFLOOR	0 to 99	*Remote floor location* Enter the floor on which the remote FMT is located.
	REMROW	A to HJ to NP to ZAA to HHJJ to NNPP to ZZ	*Remote row location* Enter the row in which the FMT is located.
	REMFRPOS	0 to 99	*Remote frame position* Enter the bay position in which the remote FMT is located.

Data Il e xample

The following example shows sample datafill for table FMTINV.

FMTINV (end)

MAP display example for table FMTINV

```
FMTNAME FMTTYPE FRNO SHPOS FLOOR ROW FRPOS PROTSW              REMOTE
_____________________________________________________________________

FMT  1 FMT150A    8     2     2   A     5    Y Y  HOST 1  1  1  A  2
```

FMTMAP

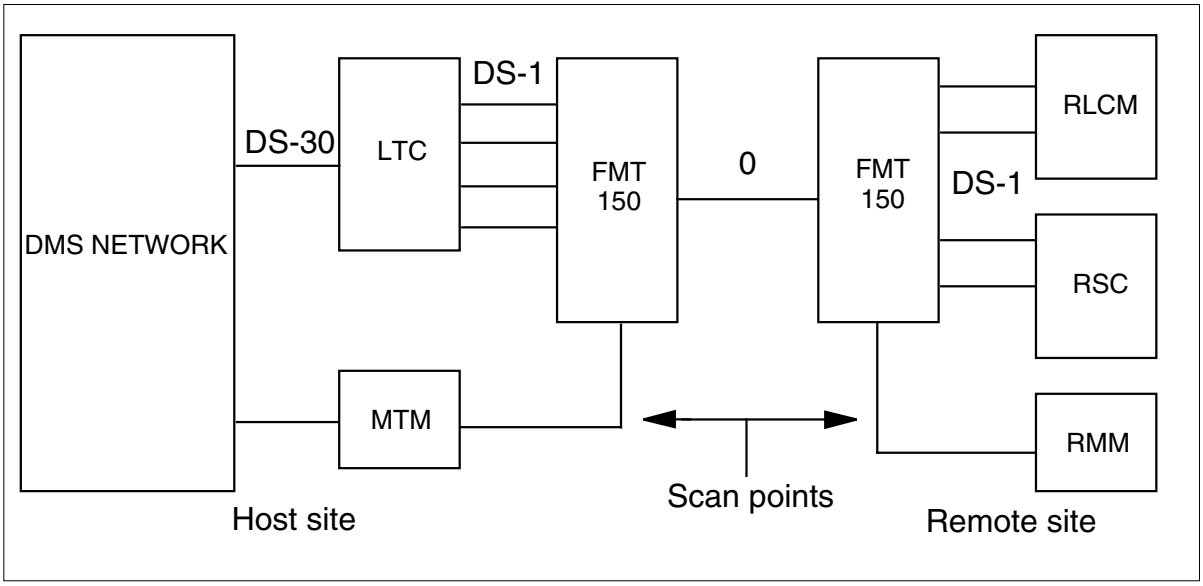
Table name

Enhanced Fiber Monitoring MAP Table

Functional description

The FMTMAP table contains the link map information between the Line Trunk Controller (LTC)/Line Group Concentrator (LGC) and the host FMT. All the links datafilled must be DS-1 circuits and connected to a LTC or LGC (as shown in the following figure). Note that these LTC/LGCs must correspond to the same datafilled values in table FMTINV. Circuit numbers cannot be repeated within a tuple, and pslink numbers of the same peripheral modules (PM) can only be datafilled once. Duplication of the pslink is not allowed.

DMS-100 Fiber remotes



Data II sequence and implications

Table FMTINV must be datafilled before table FMTMAP:

Table size

0 to 672 tuples

Table size is dynamically determined by the number of tuples added. Note that there are 32 FMTs maximum, each one can have 21 groups (that is, 32 x 21 = 672 tuples).

FMTMAP (continued)

Data II

The following table lists datafill for table FMTMAP.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MAPKEY		see subfields	*Mapkey* This field consists of subfields FMTNO, FMTSECT, and FMTGRP. This is positional information that concerns the FMT's circuitry.
	FMTNO	FMT 0toFMT 31	*Fiber multiplex terminal number* Enter the number assigned to the Fiber Multiplex Terminal. This number is preceded by FMT. This subfield is the first part of the key.
	FMTSECT	A, B, or C	*Fiber multiplex terminal section* Enter the section of the Fiber Multiplex Terminal. A section has seven groups of DS-1 circuits. The FMT150A has one section whereas the FMT150B has three. Enter A if it is an FMT150A. If it is an FMT150B, the entry may contain either A, B, or C. This subfield is the second part of the key.
	FMTGRP	1 to 7	This field consists of subfields CKTNO, PMNAME, PMNO, and PSLINKNO. This is the link information between the FMTs and the PMs.
LINKMAP		see subfields	*DS-1 circuit number* Enter the DS-1 circuit that is attached between the FMT and the PM.
	CKTNO	1 to 4	*DS-1 circuit number* Enterthe DS-1 circuit that is attached between the FMT and the PM.
	PMNAME	LTCorLGC	*Peripheral module number* Enter the PM number that is attached to the FMT.

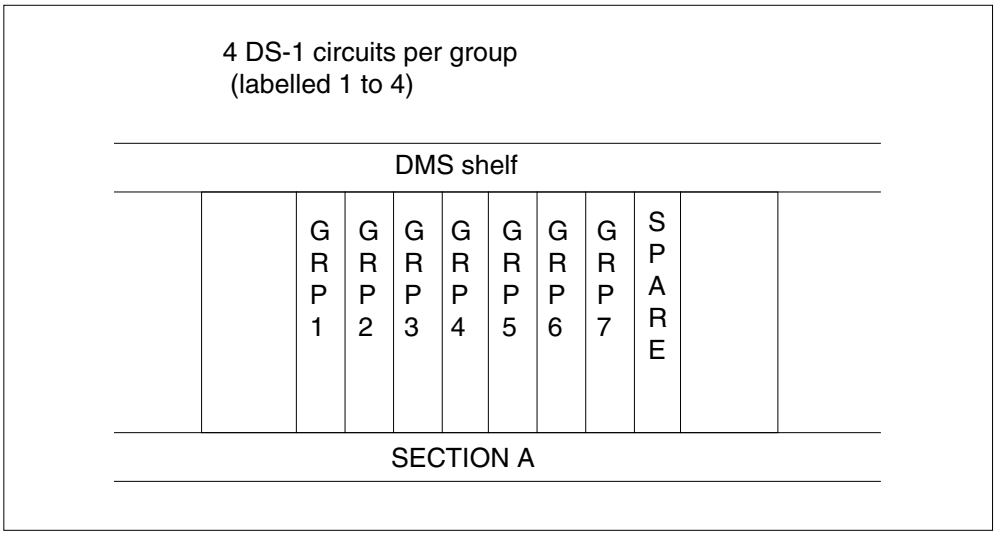
Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PMNO	0 to 255	*Peripheral module number* Enter the PM number that is attached to the FMT.
	PSLINKNO	0 to 19	*P-side link number* Enter the P-side link number that is attached to the FMT.

Data ll e xample

Before giving an example on how the FMTMAP table can be datafilled, a background of the FMT's naming convention will be given. The configuration of the FMT150A is shown in the following figure. A section is composed of 7 group cards; each group card contains 4 DS-1 circuits. The DS-1 circuits are numbered from 1 to 4. A DS-1 spare card could be provisioned in slot 8.

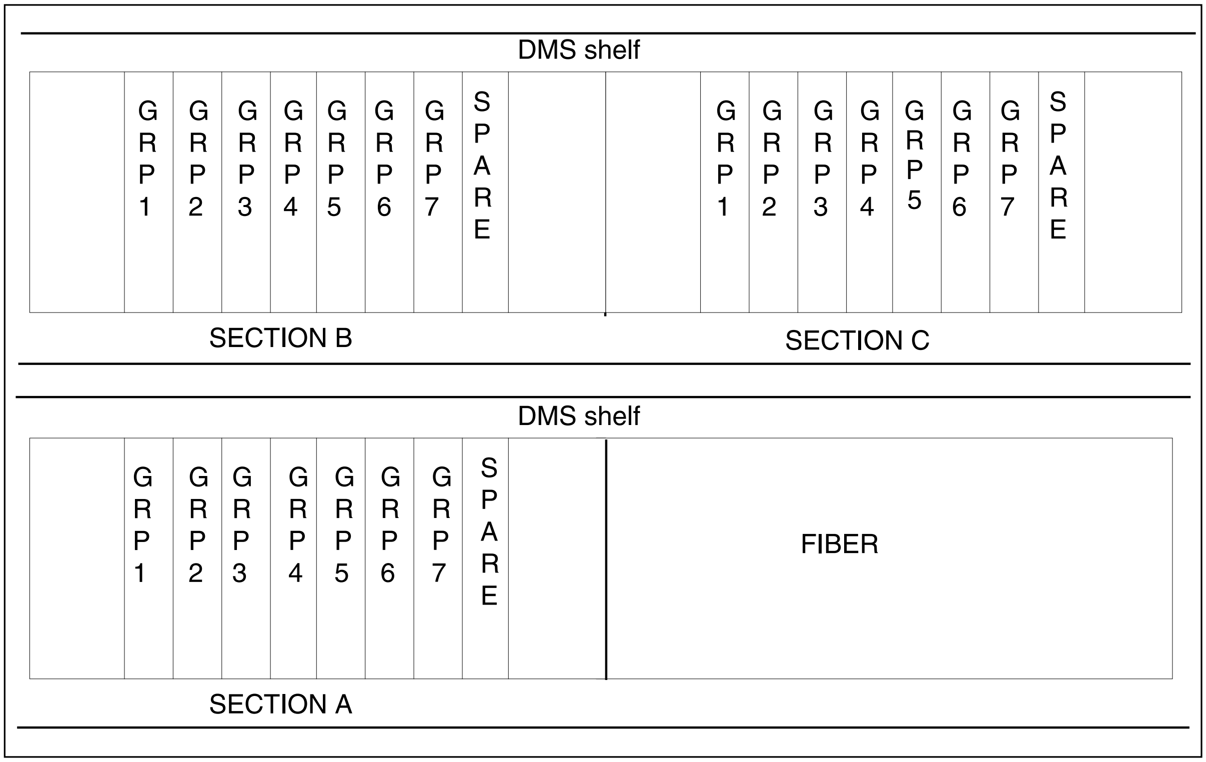
Representation of FMT150A section



There are 3 sections in a FMT150B. The labelling convention for these sections is shown in the following figure. The shelf containing sections B and C can also appear below the shelf containing section A, instead.

FMTMAP (end)

Representation of the FMT150B



MAP display example for table FMTMAP

```
  MAPKEY
                                                          LINKMAP
________________________________________________________________________
FMT   1 A 1
                      (1         LTC    0 15)  (2      LTC    0 15)$
```

FMTSC

Table name

Enhanced Fiber Monitoring Scan Table

Functional description

This table contains the scan point information of the FMTs. For every FMT datafilled in the table FMTINV, 2 related scan tuples are required to be datafill in table FMTSC. These tuples contains the trunk module, circuit number, scan point number and alarm type information. Note that no deletions or additions are allowed in this table.

Data II sequence and implications

The following tables must be datafilled before table FMTSC.

- FMTINV
- CLLI
- TMINV
- RMMINV

Table size

0 to 64 tuples

Table size is dynamically determined by the numbers of tuples added. Note that There are a maximum 32 pairs of FMTs and each FMT can have 2 scan tuples which gives a total of 64.

Data II

The following table lists datafill for table FMTSC.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FMTNAME		see subfields	*Fiber Multiplex Terminal Name* This field is comprised of subfields FMTNO and FMTSITE.
	FMTNO	FMT 0 to FMT 31	*Fiber Multiplex Terminal Number* Enter the number assigned to the Fiber Multiplex Terminal. This number is preceded by 'FMT'. This subfield is the first part of the key.

FMTSC (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	FMTSITE	0 to 1	*Fiber Multiplex Terminal Site Identifier* Enter '0' for a remote site and '1' for a host site. This subfield is the second part of the key.
TMTYPE		MTM RMM or NIL	*Trunk Module Type* When line and scan card are located at the host switching unit, enter Maintenance Trunk Module (MTM) and the trunk module type on which the scan card is mounted. When line and scan cards are located at the remote location, enter Remote Maintenance Module (RMM) as the trunk module type on which the scan card is mounted. NIL is automatically entered when table FMTINV is datafilled.
TMNO		0 to 2047	*Trunk Module Number* Enter the trunk module number assigned to the trunk module on which the scan card is mounted.
TMCKTNO		0 to 29	*Trunk Module Circuit Number* Enter the trunk module circuit number to which the scan points belongs.
SCANPT		see subfields	*Scan Point* This field is comprised of subfields SCPOINT and FUNCTION.
	SCPOINT	0 to 6	*Scan Point Number* Enter the scan point number within the trunk module circuit. There are 7 scan points in a circuit.
	FUNCTION	CR orMJ	*Alarm Type Function* Enter the type of alarm to be activated: critical alarm (CR), major alarm (MJ). A critical alarm in the DMS system represent an internal FMT major alarm. A major alarm in the DMS system represent an internal FMT minor alarm.

Data ll e xample

In this example, table FMTSC gives the information on the scan points function and location in the MTM or RMM. The keys to FMTSC are automatically created by entering a new FMT in table FMTINV. The FMT name is composed of two numbers; first number indicates the FMT number, the second indicates whether it is a host or a remote. An entry of the table is shown below.

MAP display example for table FMTSC

```
 FMTNAME   TMTYPE   TMNO TMCKTNO          SCANPT
_____________________________________________________
FMT  1 0    MTM       0        1    (2 CR) (3 MJ) $
```

FNMAP

Table name

Attendant Console Functional Key Table

Functional description

Table FNMAP is required in local switching units equipped with the integrated business network (IBN) when one or more of the customer groups is arranged for attendant consoles.

To enable attendant consoles, field CONSOLES must be set to Y in table CUSTENG.

This table assigns features to keys 2 through 43 on specific consoles. Additional information on trunk access and control features is available in *Translations Guide*.

The DMS accesses table FNMAP each time the attendant uses a console function key.

The DMS accesses table CUSTENG before table FNMAP to determine if attendant consoles have been assigned in the engineering parameters for a specific customer group.

During data processing, FNMAP provides data for the operation of function keys 2 through 43 on the attendant console.

Data II sequence and implications

The following tables must be datafilled before table FNMAP.

- CUSTENG
- CUSTHEAD
- CUSTSTN
- CUSTNTWK
- ATTCONS

Where the Partitioned Table Editor feature is present, the ownership of each tuple in this table is defined in tables DATAOWNR and OWNTAB.

The entries in table DATAOWNR, which are applicable to this table, have the entry in field TABNAME equal to CLLI and the entry in field CLLI equal to the value of field CONSCLLI in this table.

The entry in table OWNTAB which is applicable to this table has the entry in field TABNAME equal to FNMAP.

Table size

0 to 85 680 tuples

Memory is automatically allocated for 44 keys and lamps for each attendant console.

Data II

FNMAP features

Complete field descriptions are provided for each feature listed in the following table.

Keys on the attendant console can be assigned to the following features:

FNMAP features (Sheet 1 of 2)

Feature
Account Code Entry
Attendant Activate, Deactivate, and Program Call Forwarding
Attendant Autodial
Attendant Console End-to-End (DTMF) Signaling
Attendant Query Time and Date
Authorization Code
Authorization Code Validation
Busy Verification Line
Busy Verification Trunk
Conference Call
Display Queued Calls
Do Not Disturb
Flexible Console Alerting
Flexible Display Language
Global Virtual Facility Group Access Control

FNMAP (continued)

FNMAP features (Sheet 2 of 2)

Feature
Global Virtual Facility Group Busy
Group Trunk Access Control
Group Trunk Group Busy
Incoming Call Identification Code
Key and Lamp Display
Login
Message Waiting
Name Display
Night Service Programming
Parking of Calls by the Attendant
Position Busy
Private Virtual Network Authorization Code
PVN Calling Number Attendant Assistance
PVN Remote Access Call Attendant
Serial Calling
Speed Calling List
Station Origination Restrictions Controller
Trouble Code
Trunk Access Control
Trunk Group Busy
Unparking of Calls by Attendant
Virtual Facility Group Access Control
Virtual Facility Group Busy
Wild Card

Data II e xample

Datafill examples are provided for each feature listed in Table “FNMAP features.”

Table history

BCS35

Feature NRLT was removed.

BCS34

The following changes were made:

- Feature ACEES: fields SENDBFA and ADIGSEND were added.
- Feature ATAC was deleted.

BCS33

Table documentation was restructured and feature NRLT added.

Supplementary information

This section contains supplementary information about certain key selector features. The information applicable to each individual key feature is listed below in alphabetical order.

Attendant Console End-to-End (DTMF) Signaling

Prior to BCS29, it was found in the field that in some applications the attendant was given a very small amount of time by the remote system to initiate digit entry. This time was found to be as low as five seconds. With ACEES, no outpulsing was done until all digits were keyed in and the ACEES key was pressed. The five-second timeout period was not enough time to press the ACEES key, key in ten digits, and then press the ACEES key again. Because of the frequency of the problem, changes were made to the outpulsing method to reduce the chance of the far end timing out.

For ACEES from BCS29 and up, the first digit is outpulsed as soon as it is keyed in. This greatly reduces the chance of the far end timing out because no digits were received within the five-second period. In addition, once the fourth digit is entered, digits two to four are outpulsed automatically. This was done to reduce the chance of the far end timing out due to interdigital time out. Similarly, the fifth to the eleventh digits are sent automatically.

This change affects the attendant because previously, if the attendant made a keying error while entering the digits to be outpulsed, it could be corrected by pressing the loop key. This would clear the digit register and the attendant

FNMAP (continued)

could start again. Since the first digit is now sent immediately, keying errors cannot be corrected in the previous manner.

Note: This information has been revised for BCS34; see ACEES feature.

Busy Veri cation Line

The attendant is automatically removed and the original connection restored after 45 s if one or both parties disconnect while the attendant is connected and if the trunk is not seized or reserved for the attendant. If one or both parties do not disconnect while the attendant is connected, the attendant is dropped after 45 s.

Busy Veri cation T runk

When a calling station user receives the reorder tone while attempting to place an important call, the attendant may assist the user by using the busy verification trunks (if no restrictions apply to accessing toll).

With software releases BCS28 and higher, this feature allows a variable timing from 5 to 20 s between busy verification tones.

Display Queued ICI Calls

The display shows an ICI name or “ALL", the number of queued calls, and the time the oldest call has waited in seconds.

If no calls are queued for the desired input, then “NO CALLS QUEUED" is displayed.

Since a Direct Call to the attendant is a call to a particular attendant, not the attendant's subgroup, it is not displayed. Direct Calls are always assigned to ICI code 25. The number of Direct Calls queued can be displayed by pressing the Direct ICI key or by entering the ICI code number 25.

Flexible Console Alerting

The following table shows valid attendant keying sequences.

Valid attendant keying sequences (Sheet 1 of 2)

Desired state	Keying sequence
Activate Short	BUZZ + 1 + BUZZ
Activate Tone	BUZZ + 2 + BUZZ
Note 1: BUZZ = press BUZZ key. ***Note 2:*** 1, 2, 3, and 4 = single digits entered by the keypad.	

Valid attendant keying sequences (Sheet 2 of 2)

Desired state	Keying sequence
Activate Both	BUZZ + 3 + BUZZ
Activate Long	BUZZ + 4 + BUZZ
Note 1: BUZZ = press BUZZ key.	
Note 2: 1, 2, 3, and 4 = single digits entered by the keypad.	

Global Virtual Facility Group Access Control

If one key and lamp are required for each virtual facility group that requires this feature, see the assignment of special function Virtual Facility Group Access Control (VAC) to the key and lamp.

Night Service Programming

The following table shows examples of adding or changing a number in the ICIDATA table from an attendant console. The three-digit numbers 150 to 156 are Incoming Call Identification (ICI) numbers that are assigned in the ICIDATA table.

Night service programming examples

Type of number to be served	Keying sequence
Station Number	NSP + 150 + 23456 + NSP
Local Switching Unit	NSP + 151 + 9 + 7D + NSP
DDD	NSP + 152 + 9 + (1) + 7/10D + NSP
IDDD	NSP + 153 + 9 + 011 + 7 to 12 D + NSP
Local tandem	NSP + 154 + 1 + 5D + NSP
EPSCS	NSP + 155 + 28 + 7/10D + NSP
Nil Route (Reorder)	NSP + 156 + # + NSP

Private Virtual Network Authorization Code

This key is required so that the attendant can obtain the authorization code verbally for a PVN call when the code cannot be collected automatically.

The PVN authorization code is collected using the SECRECY method specified for the IBN option AUTH in table CUSTHEAD. If the AUTH option is not supported in an SSP/PVN or the AUTH option is not datafilled in table

FNMAP (end)

CUSTHEAD, then the PVN AUTH code is collected using the SECRECY = N method.

Incoming Call Identi cation Code

One key and associated lamp are assigned for each Incoming Call Identification (ICI) code that requires a key and associated lamp on the attendant console.

There are 255 ICI codes available, numbered 0 to 254.

ICI codes 0 to 25 are reserved for special functions and are shown in the following table.

ICI codes 26 to 254 are job dependant and assignable by the operating company.

If keys and lamps are required for the following features, they are assigned to the ICI codes specified.

ICI special function codes

ICI	Feature
1	Attendant
2	Don't Answer Recalls
3	Camp On Recall
4	Call Waiting Recall
5	Call Forward Attendant
6	Call Forward Don't Answer to Attendant
7	Call Forward Busy to Attendant
8	Intercept
9	Serial
12	Conference Call Recall
13	Do Not Disturb
14	Direct Inward System Access
15	Message Waiting Indirect ICI
16	Message Waiting Direct ICI
25	Direct ICI

FNMAP selector ICICODE (continued)

A direct ICI is required when each attendant console is assigned an extension number. A call is routed to a particular console by dialing its extension. Each extension number is assigned in the DNROUTE table, with selector T. The index in table OFRT specifies the CLLI code of the attendant console.

Additional data and options for each of the assigned ICI codes are assigned in table ICIDATA.

Data ll

The following table lists the datafill for table FNMAP selector ICICODE.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the incoming call identification code specified in field ICI.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and ICI.
	KEYSEL	ICICODE	*Key selector* ICICODE is the incoming call identification code selector.
	ICI	0 to 254	*Incoming call identification code* Contains the Incoming Identification number assigned to the attendant console key number defined in field ACKEY.

Data ll e xample

The following example shows sample datafill for table FNMAP selector ICICODE.

FNMAP selector ICICODE (end)

This is an example of assigning attendant console key and lamp number 10 to incoming call identification code number 26 on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector ICICODE

```
          KEY                                    RESULT
_______________________________________________________
    BNRMCCON1  10                            ICICODE  26
```

FNMAP selector SPECL ACC

Account Code Entry

This key and lamp are required if the customer group to which the console belongs has a dedicated key and lamp assigned to the Account Code Entry feature.

This feature can only be assigned if the customer group to which the attendant console belongs has the ACCT option in table CUSTHEAD.

Data II

The following table lists the datafill for table FNMAP selector SPECL ACC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Account Code Entry feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	ACC	*Special function* ACC is the special code for this feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL ACC.

This is an example of assigning key and lamp number 2 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL ACC (end)

MAP display example for table FNMAP selector SPECL ACC

```
                KEY                                          RESULT
_____________________________________________________________________

    BNRMCCON1   2                                        SPECL ACC
```

FNMAP selector SPECL ACEES

Attendant Console End-to-end (DTMF) Signaling

This key and lamp are required if the customer group to which the console belongs has a dedicated key and lamp assigned to the Attendant Console End-to-End (DTMF) Signaling feature.

This feature allows the attendant to use Dual Tone Multifrequency (DTMF) signaling when required.

Data II

The following table lists the datafill for table FNMAP selector SPECL ACEES.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned for the Attendant Console End-to-End (DTMF) Signaling feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN, and refinements SENDBFA and ADIGSEND.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	ACEES	*Special function* ACEES is the special function code for the Attendant Console End-to-End (DTMF) Signaling feature.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SENDBFA	Y or N	*Send before answer* Enter Y (yes) to enable the Send Before Answer refinement. Otherwise, enter N (no).
	ADIGSEND	Y or N	*Automatic digit sending* Enter Y (yes) to enable the Automatic Digit Sending refinement. Enter N (no) for manual digit sending. Y is the default value.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL ACEES.

This is an example of assigning key and lamp number 34 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI. The Send Before Answer option is disabled and the Automatic Digit Sending option is enabled.

MAP display example for table FNMAP selector SPECL ACEES

```
          KEY                                          RESULT
________________________________________________________________
      BNRMCCON1  34                      SPECL  ACEES   N    Y
```

FNMAP selector SPECL AUTH

Authorization Code

This key and lamp are required if the customer group to which the attendant console belongs has a key and lamp on the attendant console that are dedicated to the entry of authorization codes.

This feature can only be assigned if the customer group to which the attendant console belongs has the AUTH option assigned in table CUSTHEAD.

Data II

The following table lists the datafill for table FNMAP selector SPECL AUTH.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned for the entry of authorization codes.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	AUTH	*Special function* AUTH is the special function code for this feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL AUTH.

FNMAP selector SPECL AUTH (end)

This is an example of assigning key and lamp number 8 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL AUTH

```
          KEY                                RESULT
________________________________________________________
     BNRMCCON1  8                         SPECL  AUTH
```

FNMAP selector SPECL AUTOD

Attendant Autodial

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to Attendant Autodial.

This key permits the attendant to store a single directory number against the key on the console and also permits the attendant to reach a predetermined destination by pressing a single key.

Two subfields must also be completed. The first indicates whether the attendant can program the Autodial key from the console. The second contains the Autodial directory number stored against the key.

Data II

The following table lists the datafill for table FNMAP selector SPECL AUTOD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Attendant Autodial feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL, SPFN, PROGRAM, and NUMBER.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	AUTOD	*Special function* AUTOD is the special code for this feature.

FNMAP selector SPECL AUTOD (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PROGRAM	ATTPRG or NOATTPRG	*Attendant programming* ATTPRG indicates that the attendant is allowed to program the Autodial key at the attendant console. NOATTPRG indicates that the attendant is not allowed to program the Autodial key at the attendant console.
	NUMBER	numeric (0 to 24 digits)	*Autodial number* Contains the number, from 0 to 24 digits in length, that is dialed by the Autodial feature when the attendant is on an active loop and presses the Autodial key.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL AUTOD.

This is an example of assigning key and lamp number 24 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI. The autodial key can be programmed by the attendant, and 6137271234 is the autodial number.

MAP display example for table FNMAP selector SPECL AUTOD

```
                KEY                                          RESULT
_____________________________________________________________________
   BNRMCCON1   24          SPECL AUTOD   ATTPRG   6137271234
```

FNMAP selector SPECL AUVAL

Authorization Code Validation

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to authorization code validation.

This feature can only be assigned if the customer group to which the attendant console belongs has the AUTH option assigned in table CUSTHEAD.

Data II

The following table lists the datafill for table FNMAP selector SPECL AUVAL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to authorization code validation.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	AUVAL	*Special function* AUVAL is the special function code for the authorization code validation key.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL AUVAL.

FNMAP selector SPECL AUVAL (end)

This is an example of assigning key and lamp number 20 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL AUVAL

```
           KEY                                        RESULT
_______________________________________________________________
      BNRMCCON1 20                              SPECL  AUVAL
```

FNMAP selector SPECL BUZZ

Flexible Console Alerting

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Flexible Console Alerting feature.

Information on the operation of this feature can be found in *Translations Guide*.

Data II

The following table lists the datafill for table FNMAP selector SPECL BUZZ.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Flexible Console Alerting feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	BUZZ	*Special function* BUZZ is the special function code for the Flexible Console Alerting feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL BUZZ.

FNMAP selector SPECL BUZZ (end)

This is an example of assigning key and lamp number 30 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL BUZZ

```
                KEY                                        RESULT
_____________________________________________________________________
     BNRMCCON1   30                                SPECL   LANG
```

FNMAP selector SPECL BVL

Busy Veri cation Line

This key and lamp are required if the customer group to which the attendant console belongs requires a dedicated key and lamp for the Busy Verification Line feature.

Additional information on datafilling the Busy Line Verification table is provided in *Translations Guide*.

Data ll

The following table lists the datafill for table FNMAP selector SPECL BVL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Busy Verification Line feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL, SPFN, APREEMPT, and BVLNRVAL.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	BVL	*Special function* BVL is the special function code for this feature.
	APREEMPT	Y or N	*Attendant pre-empt* Y (yes) indicates that the attendant can pre-empt all connections to the line. N (no) indicates the attendant cannot pre-empt connections.
	BVLNRVAL	5 to 20	*Busy verification line time interval* This field specifies the time, in one-second intervals, between busy verification tones.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL BVL.

This is an example of assigning key and lamp number 3 to the Busy Verification Line feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

Attendant pre-emption is not allowed.

The time interval between busy verification tones is 15 s.

MAP display example for table FNMAP selector SPECL BVL

```
            KEY                              RESULT
______________________________________________________
     BNRMCCON1   3                  SPECL  BVL    N   15
```

FNMAP selector SPECL BVT

Busy Veri cation T runk

This key and lamp are required if the customer group to which the attendant console belongs requires a dedicated key and lamp for the Busy Verification Trunk feature.

Additional information on datafilling to implement the Busy Verification Trunk feature is located in *Translations Guide*.

Data ll

The following table lists the datafill for table FNMAP selector SPECL BVT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Busy Verification Trunk feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL, SPFN, APREEMPT, BVTAUD, and BVTNRVAL.
	KEYSEL	SPECL	KEY SELECTOR Special (SPECL) is the key selector.
	SPFN	BVT	*Special function* BVT is the special function code for this feature.
	APREEMPT	Y or N	*Attendant pre-empt* Y (yes) indicates that the attendant can pre-empt all connections to the trunk. N (no) indicates that the attendant cannot pre-empt connections to the trunk.

FNMAP selector SPECL BVT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	BVTAUD	Y or N	*Busy verification trunks audible* Y (yes) indicates that the attendant can verify the status of a trunk without immediate barge-in. N (no) is the default.
	BVTNRVAL	5 to 20	*Busy verification trunk time interval* This field specifies the time, in one-second intervals, between busy verification tones.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL BVT.

This is an example of assigning key and lamp number 4 to the Busy Verification Trunk feature on the attendant console that has the code BNRMCCON1 assigned in table CLLI.

The attendant can pre-empt all connections to the trunk.

The time interval between busy verification tones is 15 s.

> ***Note:*** The Busy Verification Trunk Feature must be datafilled for option BVTAUD to work.

MAP display example for table FNMAP selector SPECL BVT

```
           KEY                                  RESULT
_______________________________________________________
     BNRMCCON1   4              SPECL  BVT   Y   Y   15
```

FNMAP selector SPECL CFS

Attendant Activate, Deactivate, and Program Call Forwarding

This key and lamp are required if the customer group to which the attendant console belongs has a key and lamp on the attendant console that are dedicated to the activation, deactivation, and programming of call forwarding by the attendant for IBN lines with the universal (CFU) or intra-group (CFI) call forwarding.

Additional information on attendant programming of CFU and CFI are provided in *Translations Guide*.

Data ll

The following table lists the datafill for table FNMAP selector SPECL CFS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the key and lamp that are assigned to this feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	CFS	*Special function* CFS is the special function code for this feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL CFS.

FNMAP selector SPECL CFS (end)

This is an example of assigning key and lamp number 30 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL CFS

```
                KEY                                          RESULT
_____________________________________________________________________
   BNRMCCON1   30                                       SPECL CFS
```

FNMAP selector SPECL CONF

Conference Call

This key and lamp are required if the customer group to which the attendant console belongs requires a dedicated key and lamp for this feature.

Data ll

The following table lists the datafill for table FNMAP selector SPECL CONF.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Conference Call Line feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	CONF	*Special function* CONF is the special code for this feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL CONF.

The following is an example of assigning key and lamp number 5 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL CONF (end)

MAP display example for table FNMAP selector SPECL CONF

```
        KEY                                        RESULT
-----------------------------------------------------------
 BNRMCCON1  5                                 SPECL  CONF
```

FNMAP selector SPECL DND

Do Not Disturb

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console dedicated to the activation and deactivation of the Do Not Disturb feature.

This feature can only be assigned if the customer group has the DND feature assigned in table CUSTSTN.

Incoming Call Identification (ICI) 13 is also assigned a key and lamp for this feature.

Data II

The following table lists the datafill for table FNMAP selector SPECL DND.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the activation and deactivation of the Do Not Disturb feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	DND	*Special function* DND is the special function code for the Do Not Disturb feature.

FNMAP selector SPECL DND (end)

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL DND.

This is an example of assigning key and lamp number 11 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL DND

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   11                                  SPECL   DND
```

FNMAP selector SPECL DQC

Display Queued Calls

This key and lamp are required if the customer group to which the console belongs requires a dedicated key and lamp to provide the attendant with a visual indication of the number of queued calls.

Data ll

The following table lists the datafill for table FNMAP selector SPECL DQC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the display of queued calls by the attendant.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	DQC	*Special function* DQC is the special function code for this feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL DQC.

This is an example of assigning key and lamp number 33 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL DQC (end)

MAP display example for table FNMAP selector SPECL DQC

```
                KEY                                          RESULT
_____________________________________________________________________
    BNRMCCON1   33                                    SPECL   DQC
```

FNMAP selector SPECL DSPC

Key and Lamp Display

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Key and Lamp Display feature.

Data II

The following table lists the datafill for table FNMAP selector SPECL DSPC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Key and Lamp Display feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	DSPC	*Special function* DSPC is the special function code for the Key and Lamp Display feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL DSPC.

This is an example of assigning key and lamp number 14 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL DSPC (end)

MAP display example for table FNMAP selector SPECL DSPC

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   14                                  SPECL   DSPC
```

FNMAP selector SPECL GTAC

Group Trunk Access Control

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Group Trunk Access Control feature.

With this feature only one key and lamp are required for all trunk groups that require this feature.

If one key and lamp are required for each trunk group that requires this feature, see the Trunk Access Control (TAC) feature.

Data II

The following table lists the datafill for table FNMAP selector SPECL GTAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Group Trunk Access Control feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	GTAC	*Special function* GTAC is the special function code for the Group Trunk Access Control feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL GTAC.

FNMAP selector SPECL GTAC (end)

This is an example of assigning key and lamp number 12 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL GTAC

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   12                                SPECL   GTAC
```

FNMAP selector SPECL GTGB

Group Trunk Group Busy

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Group Trunk Group Busy feature.

With this feature only one lamp is required for all trunk groups that require this feature.

If one lamp is required for each trunk group with this feature, see the Trunk Group Busy (TGB) feature.

Data ll

The following table lists the datafill for table FNMAP selector SPECL GTGB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Group Trunk Group Busy feature.
RESULT		see subfield	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	GTGB	*Special function* GTGB is the special function code for the Group Trunk Group Busy feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL GTGB.

FNMAP selector SPECL GTGB (end)

This is an example of assigning key and lamp number 13 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL GTGB

```
                KEY                                        RESULT
_____________________________________________________________________
     BNRMCCON1   13                                SPECL   GTGB
```

FNMAP selector SPECL GVAC

Global Virtual Facility Group Access Control

This key and lamp are required if the customer group to which the attendant console belongs has a key and lamp on the attendant console that are dedicated to the Global Virtual Facility Group Access Control feature.

With this feature only one key and lamp are required for all Virtual Facility Groups.

Data ll

The following table lists the datafill for table FNMAP selector SPECL GVAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Global Virtual Facility Group Access Control feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	GVAC	*Special function* GVAC is the special function code for the Global Virtual Facility Group Access Control feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL GVAC.

FNMAP selector SPECL GVAC (end)

This is an example of assigning key and lamp number 25 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL GVAC

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   25                                SPECL   GVAC
```

FNMAP selector SPECL GVGB

Global Virtual Facility Group Busy

This key and lamp are required if the customer group to which the attendant console belongs has a key and lamp on the attendant console that are dedicated to the Global Virtual Facility Group Busy feature.

With this feature only one key and lamp are required for all Virtual Facility groups.

If one key and lamp are required for each Virtual Facility Group that requires this feature, see the Virtual Facility Group Busy (VGB) feature.

Data ll

The following table lists the datafill for table FNMAP selector SPECL GVGB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Global Virtual Facility Group Busy Control feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	GVGB	*Special function* GVGB is the special function code for the Global Virtual Facility Group Busy feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL GVGB.

FNMAP selector SPECL GVGB (end)

This is an example of assigning key and lamp number 26 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL GVGB

```
            KEY                                          RESULT
________________________________________________________________
    BNRMCCON1  26                                   SPECL  GVGB
```

FNMAP selector SPECL LANG

Flexible Display Language

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Flexible Display Language feature.

Information on the operation of this feature can be found in *Translations Guide*.

The available languages are specified in table ACLANG.

Data II

The following table lists the datafill for table FNMAP selector SPECL LANG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Flexible Display Language feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	LANG	*Special function* LANG is the special function code for the Flexible Display Language feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL LANG.

FNMAP selector SPECL LANG (end)

This is an example of assigning key and lamp number 30 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL LANG

```
                KEY                                        RESULT
_____________________________________________________________________

    BNRMCCON1   30                                SPECL   LANG
```

FNMAP selector SPECL LOGIN

Login

This key and lamp are required if the customer group to which the attendant console belongs has a dedicated key and lamp that are assigned for LOGIN/LOGOUT.

Attendant console login IDs are found in table ACLOGID.

Data fill

The following table lists the datafill for table FNMAP selector SPECL LOGIN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned for LOGIN/LOGOUT.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	LOGIN	*Special function* LOGIN is the special function code for the LOGIN/LOGOUT feature.

Data fill example

The following example shows sample datafill for table FNMAP selector SPECL LOGIN.

FNMAP selector SPECL LOGIN (end)

This is an example of assigning key and lamp number 38 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL LOGIN

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   38                                SPECL   LOGIN
```

FNMAP selector SPECL MSGIND

Message Waiting

This key and lamp are required if the attendant console is assigned as a message waiting center.

The attendant uses this key to activate, deactivate, and query message indication for a station.

Incoming Call Identification (ICI) codes 15 and 16 are required when this feature is assigned to an attendant console.

The Message Waiting Indirect ICI (ICI 15) specifies the lamp that lights on the console when one or more unanswered messages, which have been forwarded to the attendant console, are in the ICI queue.

The Message Waiting Direct ICI (ICI 16) specifies the lamp that lights on the console when one or more messages originated by stations, who have accessed the message center by dialing the message waiting directory number, are in the ICI queue.

The message waiting directory number is assigned in table DNROUTE.

OMGROUP:MWTCAR:MWTACT is pegged each time the message waiting lamp is activated by the message center attendant.

OMGROUP:MWTCAR:MWTDACT is pegged each time the message waiting lamp is deactivated at the message center, that is, messages are retrieved by the appropriate person.

Data II

The following table lists the datafill for table FNMAP selector SPECL MSGIND.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.

FNMAP selector SPECL MSGIND (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ACKEYA	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Message Waiting feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	MSGIND	*Special function* MSGIND is the special function code for the Message Waiting feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL MSGIND.

This is an example of assigning key and lamp number 29 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL MSGIND

```
             KEY                                    RESULT
________________________________________________________________
    BNRMCCON1   29                           SPECL   MSGIND
```

FNMAP selector SPECL NAME

Name Display

This key and lamp are required if the customer group to which the attendant console belongs has a dedicated key and lamp that are assigned to the Name Display feature, which provides the source or destination party's name information when available.

The Name Display feature is applicable only to a customer group that has the NAMEDISP option assigned in table CUSTSTN.

The Name Display option is applicable to all electronic business sets (EBS) display sets in the customer group.

The maximum length of the name is 15 characters, including spaces and special characters.

Data II

The following table lists the datafill for table FNMAP selector SPECL NAME.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Name Display feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	NAME	*Special function* NAME is the special function code for this feature.

FNMAP selector SPECL NAME (end)

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL NAME.

This is an example of assigning key and lamp number 28 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL NAME

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   28                                SPECL   NAME
```

FNMAP selector SPECL NSPRG

Night Service Programming

This key and lamp are required if the customer group to which the attendant console belongs has a key and lamp on the attendant console that are dedicated to the programming of the Night Service feature.

Data II

The following table lists the datafill for table FNMAP selector SPECL NSPRG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Night Service Programming feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	NSPRG	*Special function* NSPRG is the special function code for the Night Service Programming feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL NSPRG.

This is an example of assigning key and lamp number 15 to the Night Service Programming feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL NSPRG (end)

MAP display example for table FNMAP selector SPECL NSPRG

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   15                                SPECL   NSPRG
```

FNMAP selector SPECL PARK

Parking of Calls by the Attendant

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Parking of Calls by the Attendant feature.

This feature can only be assigned if the customer group has the CPARK feature assigned in table CUSTSTN.

Data II

The following table lists the datafill for table FNMAP selector SPECL PARK.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned for the Parking of Calls by the Attendant feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	PARK	*Special function* PARK is the special function code for the Parking of Calls by the Attendant feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL PARK.

FNMAP selector SPECL PARK (end)

This is an example of assigning key and lamp number 16 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL PARK

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   16                                SPECL   PARK
```

FNMAP selector SPECL POS

Position Busy

This key and lamp are required with multiple console operation; a dedicated key and lamp are required for this feature.

The Position Busy feature allows the attendant to make the console unavailable to incoming calls. The attendant can still originate calls and use or program the features available while the console is in the position busy state, if at least one headset or handset remains plugged into the console.

Data II

The following table lists the datafill for table FNMAP selector SPECL POS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Position Busy feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	POS	*Special function* POS is the special code for the Position Busy feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL POS.

FNMAP selector SPECL POS (end)

This is an example of assigning key and lamp number 6 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL POS

```
         KEY                                        RESULT
--------------------------------------------------------------
     BNRMCCON1   6                              SPECL  POS
```

FNMAP selector SPECL PVNAUTH

Private Virtual Network Authorization Code

This key and lamp can be assigned only in a switching unit that has the Private Virtual Network (PVN) software package.

This key and lamp are required if the customer group to which the console belongs has a dedicated key and lamp that are assigned to the attendant console for the PVN Authorization Code feature.

Data ll

The following table lists the datafill for table FNMAP selector SPECL PVNAUTH.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Private Virtual Network Authorization Code feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	PVNAUTH	*Special function* PVNAUTH is the special code for this feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL PVNAUTH.

This is an example of assigning key and lamp number 35 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL PVNAUTH

```
           KEY                                  RESULT
------------------------------------------------------------
     BNRMCCON1 35                         SPECL  PVNAUTH
```

FNMAP selector SPECL PVNRMAC

PVN Remote Access Call Attendant

This key and lamp can be assigned only in a switching unit that has the Private Virtual Network (PVN) software package.

This key and lamp are required if the customer group to which the console belongs has a dedicated key and lamp that are assigned to the attendant console for the PVN Remote Access Call Attendant Assistance feature.

This key is required so that the attendant can assist an off-net (PVN call from a remote station) caller who has difficulties entering a personal identification number (PIN) and called number.

Data II

The following table lists the datafill for table FNMAP selector SPECL PVNRMAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Remote Access Call Attendant feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	PVNRMAC	*Special function* PVNRMAC is the special code for this feature.

FNMAP selector SPECL PVNRMAC (end)

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL PVNRMAC.

This is an example of assigning key and lamp number 36 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL PVNRMAC

```
                KEY                                        RESULT
_____________________________________________________________________
      BNRMCCON1 36                              SPECL   PVNRMAC
```

FNMAP selector SPECL PVNSRCDN

PVN Calling Number Attendant Assistance

This key and lamp can be assigned only in a switching unit that has the Private Virtual Network software package.

This key and lamp are required if the customer group to which the console belongs has a dedicated key and lamp that are assigned to the attendant console for the PVN Calling Number Attendant Assistance feature.

This key is required so that the attendant can enter the caller's calling number on the caller's request. This is because the caller's identity may be lost if the call has arrived by way of a tandem route from other switches.

Data II

The following table lists the datafill for table FNMAP selector SPECL PVNSRCDN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the PVN Calling Number Attendant Assistance feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	PVNSRCDN	*Special function* PVNSRCDN is the special code for this feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL PVNSRCDN.

This is an example of assigning key and lamp number 37 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL PVNSRCDN

```
            KEY                                   RESULT
------------------------------------------------------------
     BNRMCCON1 37                        SPECL  PVNSRCDN
```

FNMAP selector SPECL SC10, SC30, SC50, SC70 or SCU

Speed Calling List

This feature permits an attendant to dial numbers that are frequently called by pressing a speed call key and dialing a one or two-digit code. The numbers may be station numbers, CO numbers, or any other number that may be used to complete an outgoing call.

An attendant console can be assigned up to three dedicated keys and lamps for this feature.

The three keys and lamps could be assigned as follows:

- Speed Calling List Short (SC10)
- Speed Calling List Long (SC30, SC50, or SC70)
  - — The attendant console can be assigned one long list for 30 (SC30), 50 (SC50), or 70 (SC70) entries.
- Speed Calling Users List (SCU)

An attendant console can be the user of a long speed calling list that belongs to another attendant console.

The code assigned in the CLLI table to the attendant who owns the long speed calling list must be entered as input.

Data II

The following table lists the datafill for table FNMAP selector SPECL SC10, SC30, SC50, SC70 or SCU.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Speed Calling List feature.

FNMAP selector SPECL SC10, SC30, SC50, SC70 or SCU (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields KEYSEL, SPFN, and CONTRLAC.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	SC10, SC30, SC50, SC70 or SCU	*Special function* Contains the special code for the speed calling short list (SC10), speed calling long list (SC30, SC50, or SC70), or speed calling user (SCU).
	CONTRLAC	alphanumeric or blank	*Controlling attendant console* If SPFN is SCU, this field contains the code that is assigned in the CLLI table to the attendant console that owns the speed calling list.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL SC10, SC30, SC50, SC70 or SCU.

This is an example of assigning key and lamp number 7 to the speed calling users feature on the attendant console that has the code BNRMCCON1 assigned in table CLLI.

The code in the CLLI table for the controlling attendant console is BNRMCCON2.

MAP display example for table FNMAP selector SPECL SC10, SC30, SC50, SC70 or SCU

```
          KEY                                      RESULT
 -----------------------------------------------------------
    BNRMCCON1   7                  SPECL   SCU   BNRMCCON2
```

FNMAP selector SPECL SERIAL

Serial Calling

This feature is used by the attendant to mark a call as a serial call. The marked call recalls to the attendant console when the extended-to party disconnects.

Data ll

The following table lists the datafill for table FNMAP selector SPECL SERIAL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Serial Calling feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	SERIAL	*Special function* SERIAL is the special code for this feature.
	SERIAL	Y or N	*Serial recall* Y indicates that the Serial Calling feature is automatically activated when a serial recall is answered.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL SERIAL.

FNMAP selector SPECL SERIAL (end)

This is an example of assigning key and lamp number 35 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL SERIAL

```
                KEY                                        RESULT
_____________________________________________________________________
     BNRMCCON1 35                          SPECL   SERIAL    Y
```

FNMAP selector SPECL SORC

Station Origination Restrictions Controller

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Station Origination Restrictions Controller (SORC) feature.

The SORC feature allows the attendant console to apply station origination restrictions against another DN or a group of DNs in the customer group.

Data ll

The following table lists the datafill for table FNMAP selector SPECL SORC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Station Origination Restrictions Controller feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	SORC	*Special function* SORC is the special function code for the Station Origination Restrictions Controller feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL SORC.

FNMAP selector SPECL SORC (end)

This is an example of assigning key and lamp number 15 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL SORC

```
          KEY                                  RESULT
------------------------------------------------------
     BNRMCCON1 15                         SPECL  SORC
```

FNMAP selector SPECL TIME

Attendant Query Time and Date

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Attendant Query Time and Date feature.

Data fill

The following table lists the datafill for table FNMAP selector SPECL TIME.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Attendant Query Time and Date feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	TIME	*Special function* TIME is the special function code for the Attendant Query Time and Date feature.

Data fill example

The following example shows sample datafill for table FNMAP selector SPECL TIME.

This is an example of assigning key and lamp number 17 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL TIME (end)

MAP display example for table FNMAP selector SPECL TIME

```
        KEY                                        RESULT
--------------------------------------------------------------
   BNRMCCON1 17                               SPECL  TIME
```

FNMAP selector SPECL TRBL

Trouble Code

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Trouble Code feature.

Each Trouble Code with its definition and alarm level is defined in table TRBLCODE.

Data ll

The following table lists the datafill for table FNMAP selector SPECL TRBL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console Common Language Location Identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Trouble Code feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	TRBL	*Special function* TRBL is the special function code for the Trouble Code feature.

Data ll e xample

The following example shows sample datafill for table FNMAP selector SPECL TRBL.

FNMAP selector SPECL TRBL (end)

This is an example of assigning key and lamp number 21 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL TRBL

```
                KEY                                        RESULT
_____________________________________________________________________
      BNRMCCON1 21                                  SPECL   TRBL
```

FNMAP selector SPECL UNPK

Unparking of Calls by the Attendant

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are dedicated to the Unparking of Calls to the Attendant feature.

This feature can only be assigned if the customer group has the CPARK feature assigned in table CUSTSTN.

See the Park feature, which allows the attendant to park calls.

Data II

The following table lists the datafill for table FNMAP selector SPECL UNPK.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Unparking of Calls by the Attendant.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	UNPK	*Special function* UNPK is the special function code for the Unparking of Calls by the Attendant feature.

Data II e xample

The following example shows sample datafill for table FNMAP selector SPECL UNPK.

FNMAP selector SPECL UNPK (end)

This is an example of assigning key and lamp number 18 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

MAP display example for table FNMAP selector SPECL UNPK

```
          KEY                                     RESULT
________________________________________________________________
    BNRMCCON1 18                              SPECL  UNPK
```

FNMAP selector SPECL WC

Wild Card

This key and lamp are required if the customer group to which the console belongs has a key and lamp on the attendant console that are assigned to the Wild Card feature.

The wild card key access codes are assigned in the WCKCODES table.

Data fill

The following table lists the datafill for table FNMAP selector SPECL WC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key and lamp number* Contains the number of the attendant console key and lamp that are assigned to the Wild Card feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and SPFN.
	KEYSEL	SPECL	*Key selector* Special (SPECL) is the key selector.
	SPFN	WC	*Special function* WC is the special function code for the Wild Card feature.

Data fill example

The following example shows sample datafill for table FNMAP selector SPECL WC.

This is an example of assigning key and lamp number 19 to this feature on the attendant console that has the code BNRMCCON1 assigned to it in table CLLI.

FNMAP selector SPECL WC (end)

MAP display example for table FNMAP selector SPECL WC

```
                KEY                                        RESULT
_____________________________________________________________________
    BNRMCCON1   19                                    SPECL   WC
```

FNMAP selector TAC

Trunk Access Control

One key is required for each physical trunk group that requires a dedicated key for this feature.

Only one console may have a Trunk Access Control key for a specific trunk group. This console is then the controlling console for that trunk group. A trunk group need not have a controlling console, in which case no Trunk Access Control key is assigned to any of the consoles in this trunk group.

If one key is provided for all trunk groups, see the Global Trunk Access Control (GTAC) feature.

If CLLI is assigned to the Trunk Access Control (TAC) feature, it cannot be assigned to the Trunk Group Busy (TGB) feature.

Data II

The following table lists the datafill for table FNMAP selector TAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Trunk Access Control feature.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and TRKCLLI.
	KEYSEL	TAC	*Key selector* TAC is the Trunk Access Control key selector.
	TRKCLLI	alphanumeric (up to 16 characters)	*Trunk common language location identifier* Contains the code of the trunk group that is assigned to the attendant console key.

Data ll e xample

The following example shows sample datafill for table FNMAP selector TAC.

This is an example of assigning key and lamp number 32 on the attendant console with CLLI code BNRMCCON1 to the Trunk Access Control feature for the trunk group with CLLI code BNRCENT.

MAP display example for table FNMAP selector TAC

```
            KEY                                          RESULT
____________________________________________________________________
     BNRMCCON1 32                                  TAC   BNRCENT
```

FNMAP selector TGB

Trunk Group Busy

One lamp is required for each physical trunk group requiring the Trunk Group Busy feature. This feature is only applicable to trunk groups that directly terminate on the switching unit. With this feature, only the lamps are functional. The associated keys, if pressed, do not affect trunk group availability or call processing.

If one lamp is provided for all the trunk groups with this feature, see the Group Trunk Group Busy (GTGB) feature.

If CLLI is assigned to the Trunk Group Busy (TGB) feature, it cannot be assigned to the Trunk Access Control (TAC) feature.

Data II

The following table lists the datafill for table FNMAP selector TGB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Trunk Group Busy feature for the trunk group specified in field TRKCLLI.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and TRKCLLI.
	KEYSEL	TGB	*Key selector* TGB is the Trunk Group Busy key selector.
	TRKCLLI	alphanumeric (up to 16 characters)	*Trunk common language location identifier* Contains the code of the trunk group that is assigned to this attendant console key.

Data ll e xample

The following example shows sample datafill for table FNMAP selector TGB.

This is an example of assigning key and lamp number 9 on the attendant console with code BNRMCCON1 to the Trunk Group Busy feature for the trunk group with code BNRRICH.

MAP display example for table FNMAP selector TGB

```
            KEY                                      RESULT
________________________________________________________________
     BNRMCCON1   9                             TGB   BNRRICH
```

FNMAP selector VAC

Virtual Facility Group Access Control

One key is required for each virtual facility group that requires a dedicated key for this feature.

Only one console may have a Virtual Facility Group Access Control key for a specific virtual facility group. This console is then the controlling console for that virtual facility group. A virtual facility group need not have a controlling console, in which case no Virtual Facility Group Access Control key for this virtual facility group is assigned to any of the consoles.

If one key is provided for all virtual facility groups, see special function Global Virtual Facility Group Access Control (GVAC).

Data II

The following table lists the datafill for table FNMAP selector VAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumerci (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Virtual Facility Group Access Control feature for the virtual facility group assigned in field VFGROUP.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and VFGROUP.
	KEYSEL	VAC	*Key selector* VAC is the Virtual Facility Group Access Control key selector.
	VFGROUP	alphanumeric	*Virtual facility group* Contains the code of the virtual facility group that is assigned to the attendant console key.

Data ll e xample

The following example shows sample datafill for table FNMAP selector VAC.

This is an example of assigning key and lamp number 39 on the attendant console that has the code BNRMCCON1 to the virtual facility group that has the code BNRCARLING.

MAP display example for table FNMAP selector VAC

```
          KEY                              RESULT
--------------------------------------------------------
   BNRMCCON1 39                        VAC  BNRCARLING
```

FNMAP selector VGB

Virtual Facility Group Busy

One lamp is required for each virtual facility group requiring the Group Busy feature. With this feature, only the lamps are functional. The associated keys, if pressed, do not affect the virtual facility group's availability or call processing.

If one lamp is provided for all virtual facility groups, see special function Global Virtual Facility Group Busy (GVGB).

Data II

The following table lists the datafill for table FNMAP selector VGB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields CONSCLLI and ACKEY.
	CONSCLLI	alphanumeric (up to 16 characters)	*Console common language location identifier* Contains the code that is assigned to the attendant console in table CLLI.
	ACKEY	2 to 43	*Attendant console key* Contains the number of the attendant console key that is assigned to the Virtual Facility Group Busy feature for the virtual facility group assigned in field VFGROUP.
RESULT		see subfields	*Result* This field consists of subfields KEYSEL and VFGROUP.
	KEYSEL	VGB	*Key selector* VGB is the Virtual Facility Group Busy key selector.
	VFGROUP	alphanumeric	*Virtual facility group* Contains the code of the virtual facility group that is assigned to the attendant console key.

Data II e xample

The following example shows sample datafill for table FNMAP selector VGB.

FNMAP selector VGB (end)

This is an example of assigning key and lamp number 29 on the attendant console that has the code BNRMCCON1 to the virtual facility group that has the code BNRRICH.

MAP display example for table FNMAP selector VGB

```
          KEY                                   RESULT
--------------------------------------------------------
   BNRMCCON1 29                            VGB  BNRRICH
```

FNPA7DIG

Table name

Foreign Numbering Plan Area for 7 digits

Functional description

Table FNPA7DIG allows the operating company to specify the NPA for a seven-digit dialing plan. This table provides an NPA to a Called Party Number, where the NPA for that Called Party Number differs from the NPA of the originating agent. The table contains datafill for the originator's STS and the dialed NXX. If there is no datafill for a particular NXX pattern, the terminating NPA is the same as the originating NPA.

When a caller uses a seven-digit dialing plan to originate a call from one NPA to another, Local Number Portability (LNP) needs the full ten digits of the directory number (DN) for translation purposes to determine whether or not the DN is resident on the switch. Table FNPA7DIG provides this information.

Field Information

Table FNPA7DIG creates the following fields:

- ORIGSTS: This field is the NPA of the originator. This part of the key must be an entry in table SNPANAME.
- FROMNXX: This field is the start of the range of dialed NXXs of the TERMNPA datafill.
- TONXX: This field is the range of dialed NXX of the TERMNPA datafill.
- TERMNPA: This field is the NPA of the dialed NXX within the specified range.

Data II sequence and implications

Datafill table HNPACONT with the ORIGSTS before table FNPA7DIG.

Datafill this table for all LNP translations, and specifically for scenarios where an originating agent, that requires LNP translations, provides only seven digits.

Table size

4000 to 8000 tuples

Data fill

The following table lists datafill for table FNPA7DIG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ORIGSTS		3-digit STS	Originating serving translations systemEnter the STS of the originator.
FROMNXX		1 - 3-digit code	From NXXEnter the start of the range of dialed NXX of the TERMNPA datafill.
TONXX		1 - 3 digit code	To NXXEnter the range of dialed NXX of the TERMNPA datafill.
TERMNPA		3-digit NPA	Terminating numbering plan areaEnter the NPA of the dialed NXX within the specified range.

Data fill example

The following example shows sample datafill for FNPA7DIG. When a seven-digit dialed call with an NXX between 762 and 764 originates from an agent with the 613 NPA, the terminating NPA is 819 instead of the defaulted value 613.

MAP display example for table FNPA7DIG

```
ORIGSTS        FROMNXX        TONXX        TERMNPA

_____________________________________________________

613              762            764           819
```

Table history

NA007

LNP introduces table FNPA7DIG.

FNPACONT

Table name

List of Foreign Numbering Plan Area Codes Subtables Table

Overview

Foreign numbering plan area table and subtables

Table name	Table title
FNPACONT	List of FNPA Codes Subtables Table
FNPACONT.FNPACODE	FNPA Codes Subtable
FNPACONT.RTEMAP	FNPA Route Map Subtable
FNPACONT.FNPASTS	List of FNPA STS Codes Subtables Subtable
FNPACONT.FNPASTS.STSCODE	FNPA STS Codes Subtable
FNPACONT.FNPASTS.RTEREF	Foreign NPA STS Route Reference Subtable

The system uses foreign numbering plan area (FNPA) translation table and subtables to route calls that require six-digit translations by office or operator. The system routes three-digit codes with an FNPA as a different option to six-digit translations in subtables STDPRTCT.STDPRT or HNPACONT.HNPACODE. The three-digit codes do not include inward wide area telephone service (INWATS) serving codes.

Six-digit translation refers to the translation of the first six post-prefix digits from the standard pretranslator table STDPRTCT. Refer to the first three digits as FNPA. Refer to the last three digits as the called XXX.

Six-digit translations that use the FNPA translation tables can require a specified FNPA. When this condition occurs, subtable HNPACONT.HNPACODE must have the called FNPA code listed with a code type of FNPA.

Table FNPACONT

The system access table FNPACONT when translations of post-prefix digits in subtable HNPACONT.HNPACODE encounter a code type of FNPA (CD = FNPA). This translating flow appears in the following Figures.

The called FNPAs, that are associated in subtable HNPACONT.HNPACODE, appear in table FNPACONT with a code type of FNPA (CD = FNPA). Table

FNPACONT (continued)

FNPACONT can indicate further translations for each called FNPA. These translations can allow different routing for each specified called FNPA and called XXX combination in subtables FNPACONT.FNPACODE or FNPACONT.FNPASTS.STSCODE. These translations can allow common routing for all correct called XXXs. This translation flow appears in the following figures.

A correct called XXX is a code that appears in subtable FNPACONT.FNPACODE.

Another name for the index in table FNPACONT field NPA is FNPA.

Subtable FNPACONT.FNPASTS

Subtable FNPACONT.FNPASTS applies to the called FNPA. The system accesses subtable FNPACONT.FNPASTS when table FNAPCONT requires six-digit translations for that called FNPA. This condition appears in the flow diagram in the following Figures.

Subtable FNPACONT.FNPASTS displays the calling serving NPA (SNPA) and the serving translation scheme (STS) for the applicable called FNPA. The SNPA and STS can require different six-digit translations from other NPAs or STSs in the subtable FNPACONT.FNPACODE.FNPASTS. Subtable FNPACONT.FNPACODE.FNPASTS applies to the called FNPA and calling SNPA or STS.

If the calling SNPA or STS is not in subtable FNPACONT.FNPASTS, or is present but with field COMMON_FNPA = Y, six-digit translation occurs. The six-digit translation is common to other SNPAs or STSs. This translation occurs in subtable FNPACONT.FNPACODE that applies to the called FNPA.

The index to subtable FNPACONT.FNPASTS field STS is the calling SNPA or STS. Subtable FNPACONT.FNPASTS field STS is at table FNPACONT position NPA = called FNPA.

Subtable FNPACONT.FNPACODE

The system uses subtable FNPACONT.FNPACODE, that applies to the called FNPA, as follows:

- If table FNPACONT selector field FRTSEL - (dash) for the called FNPA, subtable FNPACONT.FNPACODE displays the correct called XXXs the RTEREF in subtable FNPACONT.RTEREF.
- If table FNPACONT selector field FRTSEL S, SX, T, or N for the called FNPA, subtable FNPACONT.FNPACODE displays the correct called

XXXs. The routing prescriptions associated in table FNPACONT apply to the correct called XXXs.

The system accesses subtable FNPACONT.FNPACODE when table FNPACONT requires six-digit translations for that called FNPA and one of the following conditions occurs:

- the calling SNPA or STS is not in subtable FNPACONT.FNPASTS.
- the calling SNPA or STS is in subtable FNPACONT.FNPASTS with field COMMON_FNPA Y. This translation flow appears in the following Figures.

Subtable FNPACONT.FNPACODE displays the called office, the operator and other three-digit codes for the correct called FNPA. The three-digit codes do not include INWATS serving codes. The three-digit codes correspond to the last three digits of the six post-prefix digits that translates. This subtable associates, with each code, a route reference index in subtable FNPACONT.RTEREF.

If the called last three digits of the six post-prefix digits that translates are not in subtable FNPACONT.FNPACODE, the system sends the call to vacant code treatment (VCT). The VCT occurs in the correct TMTCNTL.TREAT subtable.

The index to subtable FNPACONT.FNPACODE fields FROMDIGS and TODIGS is the last three digits of the first six post-prefix digits. Subtable FNPACONT.FNPACODE is at table FNPACONT position NPA = called FNPA.

Subtable FNPACONT.RTEMAP

The system accesses subtable FNPACONT.RTEMAP each time code type (CD) FNPA is in subtable HNPACONT.HNPACODE, and the route reference index in subtable FNPACONT.RTEREF matches the RCNAME in table RTECHAR. Based on the RCNAME associated with the call and the RTEREF index obtained, a new RTEREF index is possible.

If a matching entry is found in subtable FNPACONT.RTEMAP, then the call is routed further using the new RTEREF index. If the new index is not valid, the call is routed to DFIL treatment, and a corresponding log DFIL102 is generated.

If no entry is found, then the call is routed using the existing RTEREF index datafilled in subtable FNPACONT.FNPACODE. In this case, the foreign NPA call is routed using tables OFRx/IBNRTx and OFRTMAx/IBNMAx.

FNPACONT (continued)

Subtable FNPACONT.FNPASTS.STSCODE

Subtable FNPACONT.FNPASTS.STCODE applies to the called FNPA and calling SNPA or STS. The system accesses subtable FNPACONT.FNPASTS.STSCODE when the following conditions occur:

- table FNAPCONT requires six-digit translations for that called FNPA
- calling SNPA or STS is in subtable FNPACONT.FNPASTS with field COMMON_FNPA N. This translation flow appears in the following Figures.

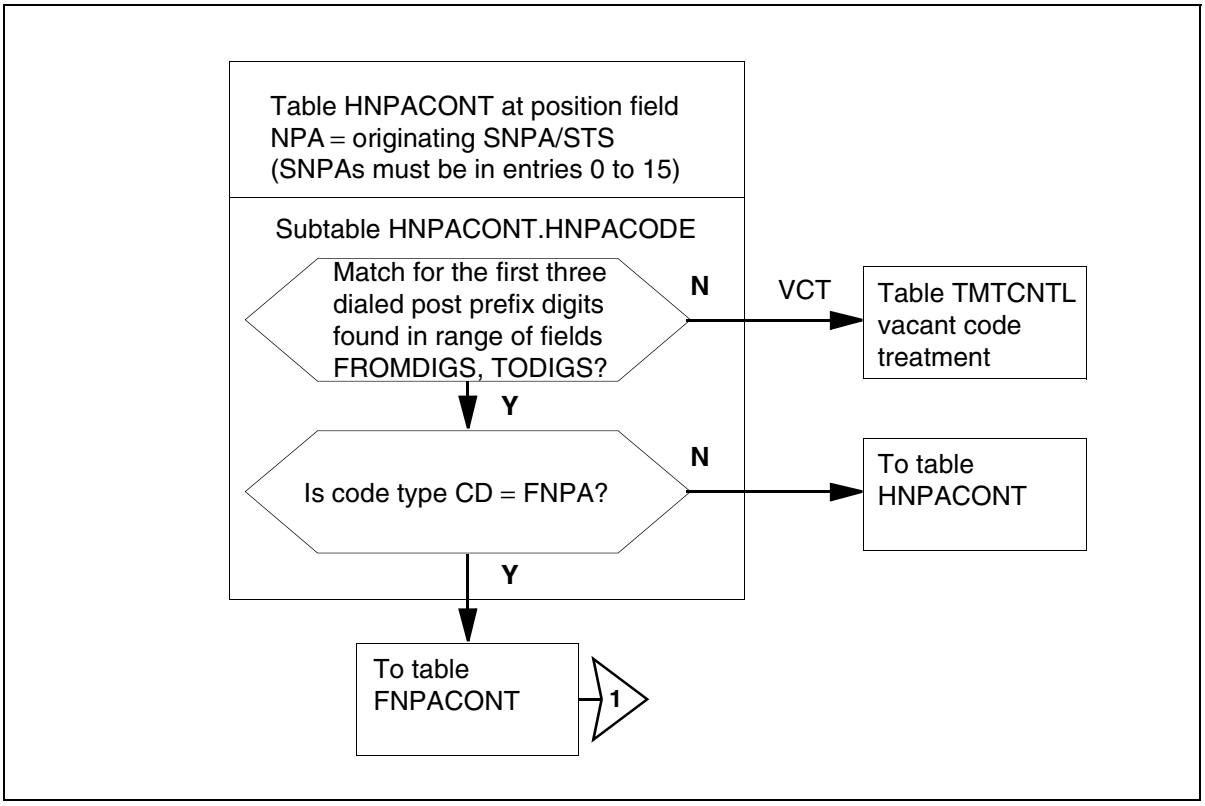
Subtable FNPACONT.FNPASTS.STSCODE displays the called office, the operator and other three-digit codes. Subtable FNPACONT.FNPASTS.STCODE displays this information for the correct called FNPA and calling SNPA or STS. The three-digit codes do not include INWATS serving codes. The three-digit codes correspond to the last three digits of the six post-prefix digits that translate. This subtable associates each code with a route reference index in subtable FNPACONT.FNPASTS.RTEREF.

If the called last three digits of the six post-prefix digits translated are not in subtable FNPACONT.FNPASTS.STSCODE, the system sends the call to VCT. The VCT occurs in the TMTCNTL.TREAT subtable that applies.

The index to subtable FNPACONT.FNPASTS.STSCODE fields FROMDIGS and TODIGS is the last three digits of the first six post-prefix digits. Subtable FNPACONT.ENPASTS.STCODE is at table FNPACONT position NPA = called FNPA and subtable FNPACONT.FNPASTS position STS = calling SNPA or STS.

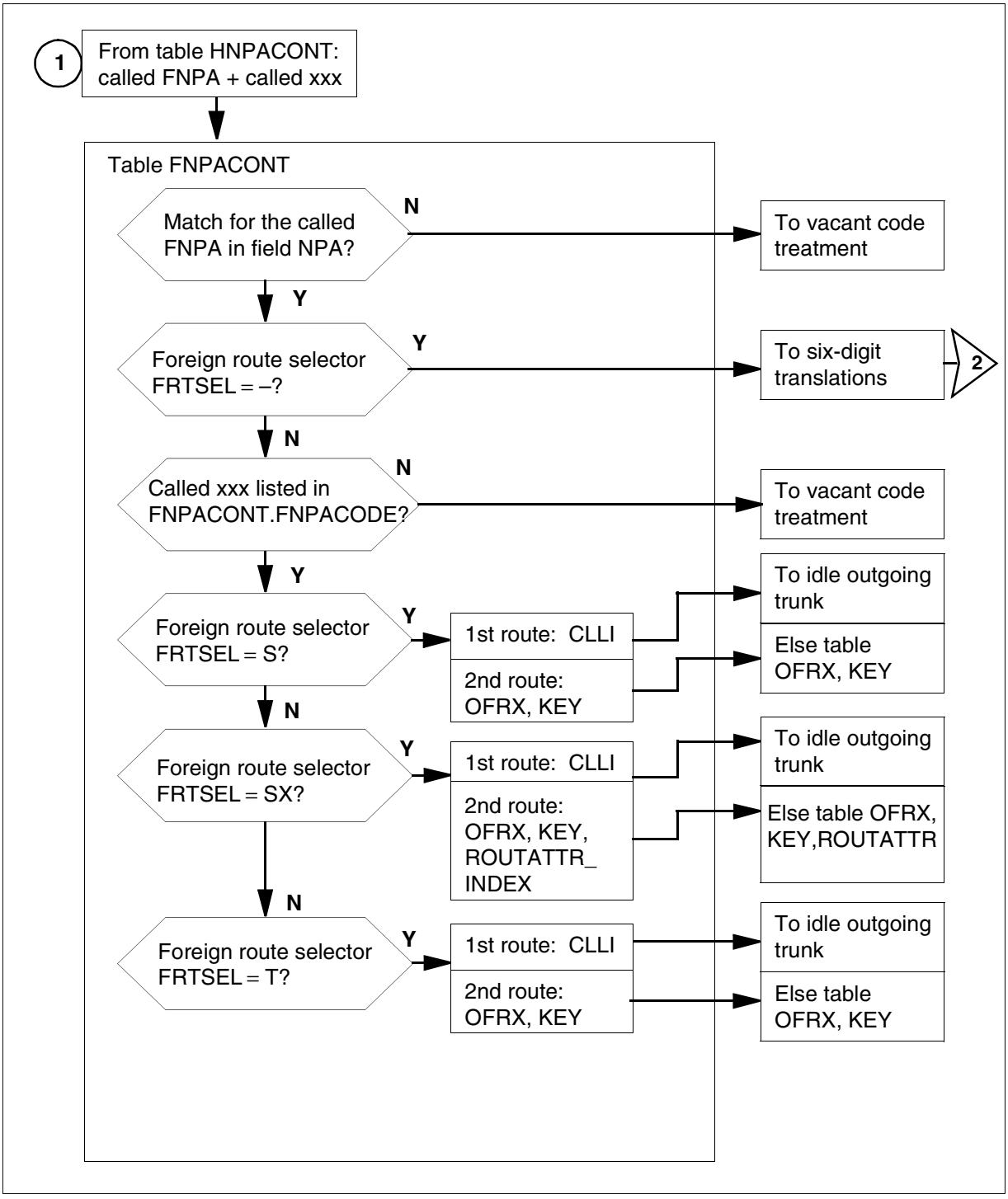
Set table OFCENG parameter MAXSTS larger than 0 for partitioned translations.

Six-digit translation flow diagram

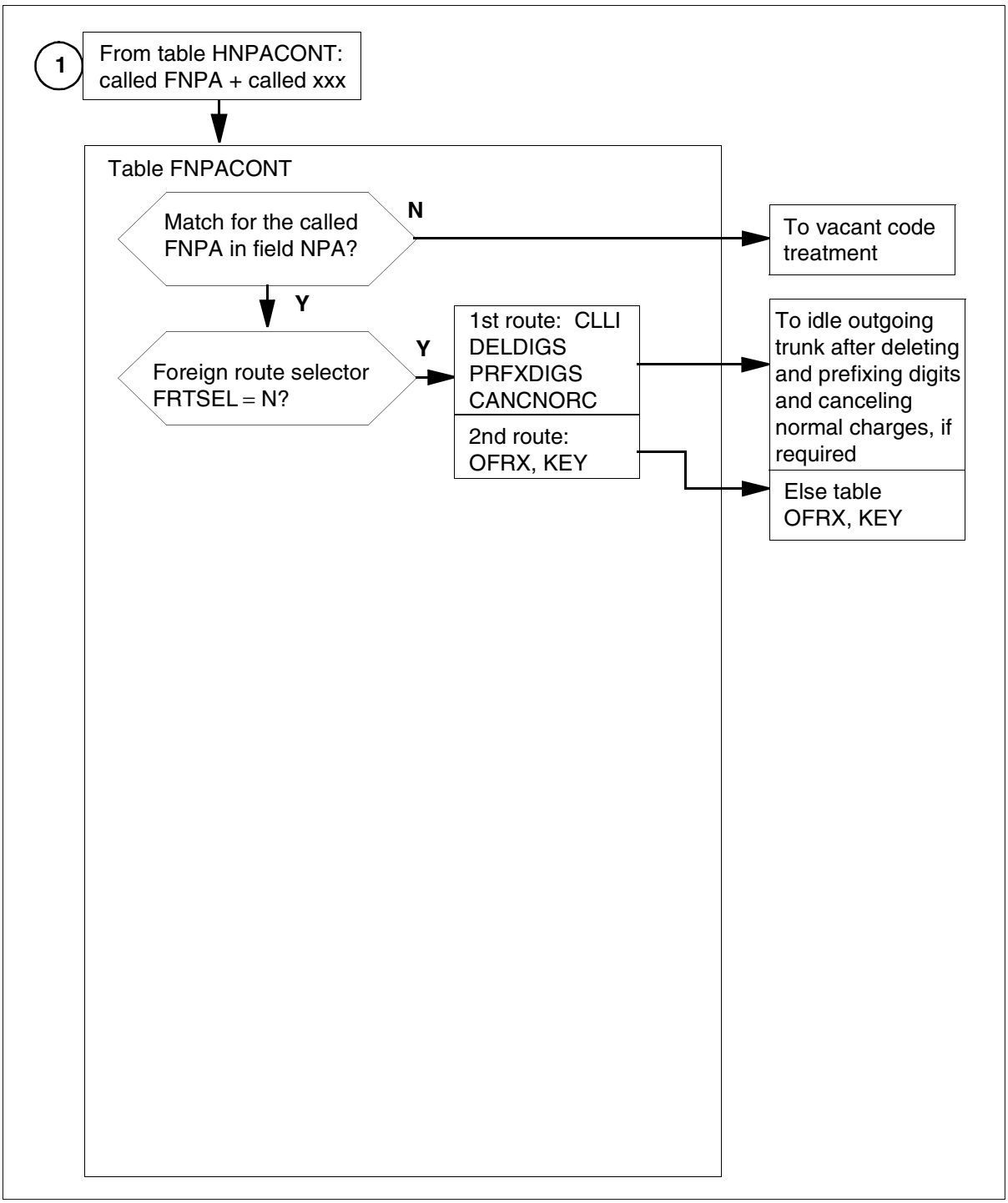


FNPACONT (continued)

Six-digit translation flow diagram: table FNPACONT

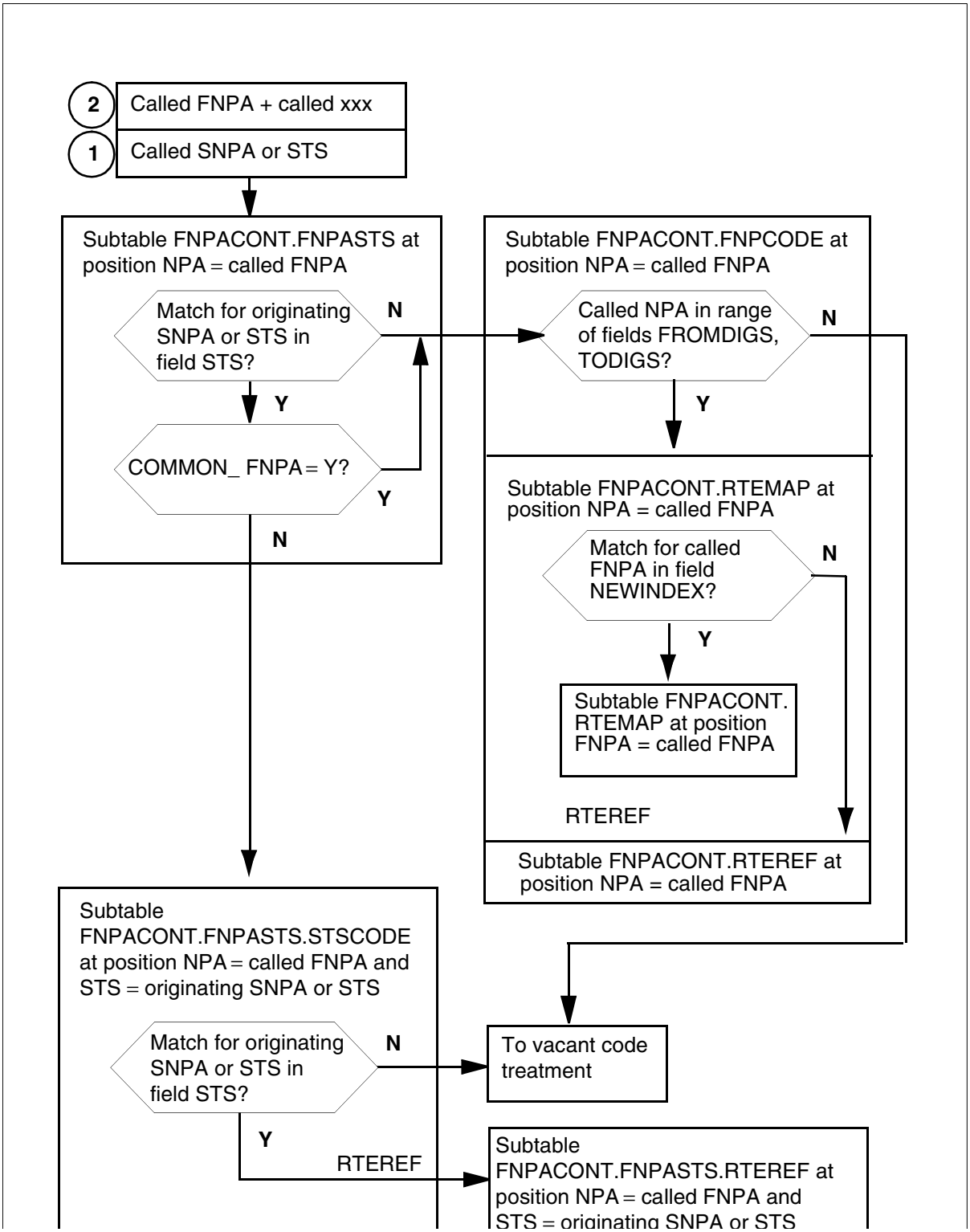


Six-digit translation flow diagram: table FNPACONT (continued)



FNPACONT (continued)

Six-digit translation flow diagram: table FNPACONT and subtables for six-digitxx



Partitioned Table Editor

In DMS offices with feature BC1459, Partitioned Table Editor (PTE), non-operating company users can use PTE. The users can use PTE to edit the tuples of table FNPACONT. The PTE allows the non-operating company user to edit the tuples of the subtables FNPACONT.FNPACODE and subtable FNPACONT.RTEREF. The users can edit authorized tuples in subtable FNPACONT.FNPASTS.

The non-operating company users have access to the tuples of subtables FNPACONT.FNPASTS.STSCODE. Non-operating users have access to the tuples of subtable FNPACONT.FNPASTS.RTEREF at the authorized positions of subtables FNPACONT.FNPASTS.

The user must own the STS to access a tuple in subtable FNPACONT.FNPASTS.

For example, datafill for table DATAOWNR is the non-operating company user CARLING that can access tuples with a key 001. User CARLING cannot view other FNPACONT.FNPASTS subtable tuples. User CARLING can view other FNPACONT.FNPASTS subtable tuples only when table OWNER classifies these tuples as public. Other users own these tuples.

MAP display example for table FNPACONT

```
      KEY     OWNER
_____________________________________________________________

 STS 001   CARLING
```

The PTE allows the operating company to limit edit access to a table for a specified user. The operating company can apply the following limits to a table:

- denied
- read-only
- change-only
- add and delete tuples

FNPACONT (continued)

Northern Telecom (Nortel) recommends that you set the PTE access for non-operating company users as follows:

- table FNPACONT: read only access
- subtable FNPACONT.FNPACODE: denied access
- subtable FNPACONT.RTEREF: denied access
- subtable FNPACONT.FNPASTS: read only access
- subtable FNPACONT.FNPASTS.STSCODE: add and delete tuples access
- subtable FNPACONT.FNPASTS.RTEREF: add and delete tuples access.

Set field COMMON_FNPA in subtable FNPACONT.FNPASTS to N. This value makes sure the creation of a separate subtable FNPACONT.FNPASTS.RTEREF occurs for each STS.

CAUTION

If the COMMON_FNPA bool is changed to Y, the associated entries in FNPACONT.FNPASTS.RTEREF will be deleted and table editor will not allow tuples to be added.

Refer to the description of table OWNER for information on the Customer Data Change feature tables.

Functional description

The system accesses table FNPACONT when translations of post-prefix digits in subtable HNPACONT.HNPACODE encounter a code type of FNPA (CD = FNPA). This condition appears in Figure 1.

- Table FNPACONT lists the three-digit codes. The three-digit codes are called FNPAs. The called FNPAs associate in subtable HNPACONT.HNPACODE with a code type of FNPA (CD = FNPA). The called FNPAs prescribe for each called FNPA the following:
- additional translations to allow different routing for each specified three-digit code in subtables FNPACONT.FNPACODE or FNPACONT.FNPASTS.STSCODE
- common routing prescription for correct three-digit codes. This use appears in Figure 2.

A correct three-digit code is a code in subtable FNPACONT.FNPACODE.

The index to table FNPACONT field NPA is the three-digit called FNPA.

Datafill sequence and meaning

Table FNPACONT depends on table HNPACONT and the subtables of HNPACONT.

Table size

0 to 1000 tuples

Datafill

Datafill for table FNPACONT appears in the following table.

Foreign NPA route selector = N

Local/Toll

The system uses table FNPACONT selector N when the system routes all correct office, operator or other three-digit codes within the FNPA. The system routes the codes to the same preferred trunk group common language location identifier (CLLI). The system also routes the codes to the same alternate route. The system uses table OFRT to route the codes. Table OFRT specifies the following actions:

- the number of digits to delete
- the digits to prefix
- if the system must cancel normal charges

Correct three-digit code is are three-digit codes in subtable FNPACONT.FNPACODE.

If the dialed three-digit code is not present in subtable FNPACONT.FNPACODE, the system routes the call. The system routes the call to the TMTCNTL subtable, that applies, at TREATMT = vacant code (VACT).

FNPACONT (continued)

If the FNPA route selector is N, enter data in the fields that appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPA		numeric	*Numbering plan area* Enter the three-digit FNPA code that requires six-digit translation.
MAXRTE		2 to 1023	*Number of route references* Enter 2 for the amount route reference numbers if selector field FRTSEL = N. Entries out of this range are not correct.
OPTIONS (Option list of SG selector.)		see subfield	
	DMI	1 to 32,766	Digit Manipulation Index (DMI). The DMI option enables the called number characteristics to be manipulated by use of table DIGMAN. This is an index into table DIGMAN.
	CALLTYPE	PUBLIC, PRIVATE	Call Type. This subfield allows for switching of routing call types on an as-needed basis. • Enter PUBLIC for public routing of calls. • Enter PRIVATE for private routing of calls.
ROUTES		see subfields	*Routes* This field contains subfields FRTSEL, FIRST_ROUTE, and SECOND_ROUTE.
	FRTSEL	N	*Foreign NPA route selector* Enter N.
	FIRST_ROUTE	see subfields	*First route* This field contains subfields CONNTYPE, CLLI, DELDIGS, PRFXDIGS, and CANCNORC.
	CONNTYPE	D, A, T, CROUTING	*Connection type* Enter D to satisfy the table editor. Entries out of this range are not correct.
	CLLI	alphanumeric (a maximum of 16 characters)	*Common language location identifier* Enter the CLLI of the trunk group the call goes out on.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DELDIGS	0 to 15	*Delete digits* Enter the number of digits to delete before outpulsing.
	PRFXDIGS	0 to 9, B, C, D, E F or N (a maximum of 11 digits)	*Prefix digits* If digits or control signals have prefixes, enter the digits or equivalent digits that have prefixes. The following are control signals and the digit equivalents: • C11 B • C12 C • KP D • KP2 E • ST3P B • STP C • STKP D • ST2P E • ST F If digits do not have prefixes, enter N.
	CANCNORC	Y or N	*Cancel normal charge* Enter Y when one of the following conditions occur: • the type of call is direct dial (DD) and the call does not require a charge • the type of call is no prefix (NP) and coin returns to Prepay or Coin Dial Tone First line If these conditions do not occur, enter N. If the system routes the call to an announcement and the system bills the call, enter Y. If this condition does not occur, enter N. Billing includes coins collected, offhook returned, message rate pegged.
	SECOND_ ROUTE	see refinement	*Second route* This subfield contains refinement EXTRTEID.

FNPACONT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	EXTRTEID	see subfields	*External route identifier* This refinement contains subfields TABID and KEY.
	TABID	OFRT, OFR2, OFR3, OFR4 TOPS, AOSS, IBNRTE, RRTE, IBNRT2, IBNRT3, IBNRT4, TOPSAMA	*Table identifier* Enter the name of the table where the call routes. Entries out of this range are not correct.
	KEY	0 to 1023	*Key* Enter the route reference index of the route list in the office route table where the translation routes. Entries out of this range are not correct.

Foreign NPA route selector = S

Local/Toll

The system uses FNPACONT selector S when the system routes correct three-digit codes in the FNPA to the same trunk group CLLI. The system also routes FNPA to the alternate route with table OFRT.

Correct three-digit code are three-digit code in subtable FNPACONT.FNPACODE.

If the dialed three-digit code is not present in subtable FNPACONT.FNPACODE, the system routes the call. The system routes the call to the TMTCNTL subtable, that applies, at TREATMT = VACT.

If the FNPA route selector is equal to S, enter data in the fields that appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPA		numeric (three digits)	*Numbering plan area* Enter the three-digit FNPA code that requires six-digit translation.
MAXRTE		2 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers if selector field FRTSEL = N. Entries out of this range are not correct.
ROUTES		see subfields	*Routes* This field contains subfields FRTSEL, FIRST_RTE, and SECOND_ROUTE.
	FRTSEL	S	*Foreign NPA route selector* Enter S.
	FIRST_ RTE	see refinements	*First route* This subfield contains refinements CONNTYPE and CLLI.
	CONNTYPE	D, A, T, CROUTING	*Connection type* Enter D. Entries out of this range are not correct.
	CLLI	alphanumeric (a maximum of 16 characters)	*Common language location identifier* Enter the CLLI of the trunk group the call goes out on.
	SECOND_ ROUTE	see refinement	*Second routes* This subfield contains refinement EXTRTEID.
	EXTRTEID	see subfields	*External route identifier* This refinement contains subfields TABID and KEY.

FNPACONT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	TABID	OFRT, OFR2 OFR3, OFR4 TOPS, AOSS, TOPSAMA, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, RRTE	*Table identifier* Enter the name of the table where the call routes.
	KEY	0 to 1023	*Key* Enter the route reference index of the route list in the office route table where translation routes.

Foreign NPA route selector = SX

Local/Toll

The system uses FNPACONT selector SX when the system routes correct three-digit codes in FNPA to the same trunk group CLLI. The system also routes FNPA to the alternate route with table OFRT.

Correct three-digit codes are three-digit code in subtable FNPACONT.FNPACODE.

If the dialed three-digit code is not present in subtable FNPACONT.FNPACODE, the system routes the call. The system routes the call to the TMTCNTL subtable, that applies, at TREATMT = VACT.

If the FNPA route selector is equal to SX, enter data in the fields that appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPA		numeric (three digits)	*Numbering plan area* Enter the three-digit FNPA code that requires six-digit translation.
MAXRTE		2 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers if selector field FRTSEL = N. Entries out of this range are not correct.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ROUTES		see subfields	*Routes* This field contains subfields FRTSEL, FIRST_RTE, and SECOND_ROUTE.
	FRTSEL	SX	*Foreign NPA extended route selector* Enter SX.
	FIRST_ RTE	see refinements	*First route* This subfield contains refinement CLLI.
	CLLI	alphanumeric (a maximum of 16 characters)	*Common language location identifier* Enter the CLLI of the trunk group the call goes out on.
	SECOND_ ROUTE	see refinement	*Second routes* This subfield contains refinement EXTRTEID.
	EXTRTEID	see subfields	*External route identifier* This refinement contains subfields TABID, KEY and INDEX.
	TABID	OFRT, OFR2 OFR3, OFR4 TOPS, AOSS, TOPSAMA, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, RRTE	*Table identifier* Enter the name of the table where the call routes.
	KEY	0 to 1023	*Key* Enter the route reference index of the route list in the office route table where the translation routes.
	ROUTATTR_ INDEX	alphanumeric (a maximum of 16 characters)	*Routeattribute index* Enter the index in table ROUTATTR that contains the expanded routing information to apply to the call.

Foreign NPA route selector = T

Local/Toll

The TOPS13 activity Operator Services Network Capability expands the use of the T-selector in the RTEREF subtable to point to an entry in the OSNCCAP table. This use of the T-selector does not cause a call to leave the route list in

FNPACONT (continued)

the RTEREF subtable as the T-selector does when it points to a route list in a routing table.

When the T-selector points to an entry in the OSNCCAP table, signaling of OSNC capabilities is controlled on outgoing IT/ATC ISUP trunks for calls with OSNC capabilities routed to TOPS or service nodes. Refer to the description of the OSNCCAP table in the North America DMS-100 Customer Data Schema, 297-8021-351, for more information on particular OSNC capabilities and about control of them.

For example, when a call with OSNC capabilities advances through a route list to establish an outgoing connection, and if the call encounters a T-selector pointing to an entry in the OSNCCAP table and if the entry is set to ON, OSNC capabilities are signalled on the any subsequent IT or ATC ISUP trunk.

However, if the call encounters a T-selector pointing to an entry in the OSNCCAP table, and if this entry is set to OFF, OSNC capabilities are not signalled on the any subsequent IT or ATC ISUP trunk.

The entry in the OSNCCAP table is not disabled when a call changes from one route list to another.

Calls which have not been to TOPS or service nodes are not be affected by the T-selector when it points to an entry in the OSNCCAP table.

The system also uses table FNPACONT selector T when the system routes correct three-digit codes in the FNPA to the same preferred route. The system also routes FNPA to the alternate route with table OFRT.

Correct three-digit codes are three-digit code in subtable FNPACONT.FNPACODE.

If the dialed three-digit code is not present in subtable FNPACONT.FNPACODE, the system routes the call routes to the TMTCNTL subtable, that applies, at TREATMT = VACT.

If the FNPA route selector is equal to T, enter data in the fields that appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPA		numeric (three digits)	*Numbering plan area* Enter the three-digit FNPA code that requires six-digit translation.
MAXRTE		1 to 1023	*Number of route reference* Enter 2 for the quantity of route reference numbers if selector field FRTSEL = T. Entries out of this range are not correct.
ROUTES		see subfields	*Routes* This field contains subfields FRTSEL, FIRST_RTE, and SECOND_ROUTE.
	FRTSEL	T	*Foreign NPA route selector* Enter T.
	FIRST_RTE	see refinement	*First route* This subfield contains refinement EXTRTEID.
	EXTRTEID	see subfields	*External route identifier* This refinement contains subfields TABID and KEY.
	TABID	OFRT, OFR2 OFR3, OFR4 TOPS, AOSS, TOPSAMA, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, RRTE	*Table identifier* Enter the office route table name where the call routes.
	KEY	0 to 1023	*Key* Enter the route reference index in the office route table where the translation routes.
	SECOND_ ROUTE	see refinement	*Second route* This subfield contains refinement EXTRTEID.
	EXTRTEID	see subfields	*External route identifie* This refinement contains subfields TABID and KEY.

FNPACONT (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	TABID	OFRT, OFR2 OFR3, OFR4 TOPS, AOSS, TOPSAMA, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, RRTE, OSNCCAP	*Table identifier* Enter the office route table name where the call routes.
	KEY	0 to 1023	*Key* Enter the route reference index in the office route table where the translation routes.

Foreign NPA route selector = - (dash)

Local/Toll

The system uses table FNPACONT selector - (dash) when you specify the route for each correct office, operator, or other three-digit code. This specification occurs in the FNPA in subtables FNPACONT.FNPACODE and FNPACONT.FNPASTS.STSCODE. In these subtables, you specify the route as a route reference to subtable FNPACONT.RTEREF or FNPACONT.FNPASTS.RTEREF. A correct three-digit code is a three-digit code that appears in subtables FNPACONT.FNPACODE and FNPACONT.FNPASTS.STSCODE.

If the dialed office code is not present in subtables FNPACONT.FNPACODE and FNPACONT.FNPASTS.STSCODE, the system routes the call. The system routes the call to the TMTCNTL subtable, that applies, at TREATMT = VACT.

If the FNPA route selector is equal to - (dash), enter data into the fields that appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPA		numeric (three digits)	*Numbering plan area* Enter the three-digit FNPA code that requires six-digit translation.
MAXRTE		1 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers when selector field FRTSEL = - (dash). The system extends field MAXRTE to the highest route index subtable FNPACONT.RTEREF uses.
ROUTES		see subfield	*Routes* This field contains subfield FRTSEL.
	FRTSEL	- (dash)	*Foreign NPA route selector* Enter - (dash).

Line migration route selector = CND MIGRATE

Local/Toll

The system uses table FNPACONT:RTEREF selector MIGRATE when you identify lines that are in the process of migrating from a collapsing office into a Call Server Complex (CS2000). The lines will be pre-datafilled on the new office but will be blocked from termination by the existence of the MIGRATE line option until the migration is complete. Terminations to the DN will be routed to the collapsing office where the DN is still in service.

This will be accomplished during the routing stage of call processing by using the conditional routing selector (CND MIGRATE) in table FNPACONT, as well as tables HNPACONT:RTEREF, OFRn and IBNRn.

FNPACONT (continued)

If the FNPA route selector is equal to MIGRATE, enter data into the fields that appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
RTELIST	CND:CNDSEL	MIGRATE	If the call is transferred to a route list or element based on the assignment of the MIGRATE line option to the terminating DN, enter MIGRATE.
	NOT:CNDSEL	MIGRATE	If the call is transferred to a route list or element based on the assignment of the MIGRATE line option to the terminating DN, enter MIGRATE.

Datafill example

The datafill for table FNPACONT when the call originates in a serving NPA appears in the following example.

Refer to the descriptions of subtable FNPACONT.FNPASTS.STCODSE for an example of datafill for table FNPACONT when the call originates from a true STS. Entries 17 and higher of table HNPACONT appear below.

The table FNPACONT example contains the following:

- Three FNPAs (412, 413, 414) that have subtables FNPACONT.FNPACODE. Nortel generates these subtables from the master vacant code file. Entry of the FNPAs occurs in table FNPACONT with selector field FRTSEL S. Field FRTSEL = S indicates that calls to correct office, operator, or other three-digit codes in these FNPAs route as specified. The associated fields CLLI and TABID, KEY of table FNPACONT specify the route. Correct three-digit codes are the codes in the subtables FNPACONT.FNPACODE.
- The FNPA 416 that requires datafill from the operating company for the associated subtables FNPACONT.FNPACODE and FNPACONT.RTEREF.

Refer to the description of subtable FNPACONT.FNPASTS.STCODE an example of datafill for table FNPACONT when the call originates from a true STS. Entries 17 and higher of table HNPACONT appears below.

MAP display example for table FNPACONT

```
NPA MAXRTE                                              ROUTES FNPACODE
FNPASTS  RTEREF

_____________________________________________________________________

412      2     S        D   MTRLPQ0201T0     OFRT    2  (    0)
(    0) (    0)
413      2     S        D   OTWAON1002T0     OFRT    1  (    0)
(    0) (    0)
414      2     S        D   MTRLPQ0201T0     OFR4    1  (    0)
(    0) (    0)
416      2                                          -   (    0)
(    0) (    0)
```

MAP display example for table FNPACONT (continued)

```
STS SNPA NORTREFS NOAMBIGC  RTEREF HNPACODE  ATTRIB  RTEMAP   OPTIONS

-------------------------------------------------------------------
001    N       20        2 (    3)  (    0) (    0) (    0) (ARS) $)$
002    N       15        2 (    3)  (    0) (    0) (    0) (ARS
                                                 (DEFAULT_RTEREF 5 N) $)$
613    Y      932       20 (  427)  (    1) (   84) (    0)          $
819    Y       81        3 (   18)  (    1) (   91) (    0)          $
```

MAP display example for table FNPACONT (continued)

```
TABLE: FNPACONT
pos 218
218    Y       955       0 (   78)  (    1) (    0) (    0)

RTEREF                                                              $
420  (CND MIGRATE SK 2) (T OFRT 644) (CND ALWAYS SK 1) (T OFRT 444) $
```

Table history

SN06 (DMS)

Added conditional routing selector MIGRATE to table HNPACONT:RTEREF for feature A00001207. Refer to description for table HNPACONT: RTEREF, as well as this section.

NA016

Feature 59029017 introduces a new subtable RTEMAP in table FNPACONT.

FNPACONT.FNPACODE

Table name

Foreign NPA codes subtable

Functional description

The system accesses subtable FNPACONT.FNPACODE each time code type (CD) FNPA is in subtable HNPACONT.HNPACODE. The system accesses the subtable during translation of a call that originates from within a serving numbering plan area (NPA) (table HNPACONT entries 0 to 15). The system also accesses subtable FNPACONT.FNPACODE each time code type (CD) FNPA is in subtable HNPACONT.HNPACODE. The system accesses the subtable during the translation of a call that originates from within a serving translation scheme (STS) (table HNPACONT entries 16 and higher). This occurs if the field COMMON-FNPA in subfield FNPACONT.FNPASTS is Y (yes).

Subtable FNPACONT.FNPACODE lists the valid office, operator, or other three-digit codes within the foreign NPA. If table FNPACONT selector field FRTSEL is - (dash), this subtable lists the RTEREF index into subtable FNPACONT.RTEREF. Table FNPACONT selector field FRTSEL can be N, S, SX, or T. The field can contain any of these entries, or valid office, operator, or other three-digit codes. In this event, the system routes to a trunk group common language location identifier (CLLI). The system also routes the said items to table OFRT. Table FNPACONT determines the CLLI. Subtable FNPACONT.FNPACODE lists the valid office, operator or other three-digit codes.

For FNPA selectors N, S, SX, or T, Northern Telecom generates subtable FNPACONT.FNPACODE from the master vacant code file. Northern Telecom generates this subtable when the operating company requests the subtable. The operating company did not provide the initial input. The operating company was responsible for keeping the data up-to-date after initial input. Northern Telecom does not generate the initial input for subtable FNPACONT.FNPACODE.

The operating company must provide input for each assigned three-digit code. The vacant three-digit codes do not require any input.

Refer to table FNPACONT for related information.

Data II sequence and meaning

Enter data in table HNPACONT before you enter data in subtable FNPACONT.FNPACODE.

FNPACONT.FNPACODE (continued)

Table size

0 to (see note)

Note: This subtable uses digilators. The maximum number of tuples despends on the datafill in the table. The datafill varies with each applicarion.

Data II

Datafill for table FNPACONT.FNPACODE appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		000 to 999	*From digits* Enter a single three-digit code, or the first number of a block of sequential three-digit code. that has the same route reference number. The codes must also have authorized centralized automatic message accounting (CAMA) indicator.
TODIGS		numeric	*To digits* If field FROMDIGS represents a single code, the entry is equal to the number in field FROMDIGS. If field FROMDIGS represents the first number of a block of sequential numbers, the entry is equal to the last number in the block.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTEREF		0 to 1023	*Route reference* Enter the route reference index for the route list in subtable FNPACONT.RTEREF where translation routes. Entries outside of this range are not correct.
CAMAAUTH		Y or N	*Authorized CAMA route* Enter N (No) if the three-digit codes are not accessible from a local originating source. Enter Y (Yes) if the three-digit codes are accessible from a local originating source. ***Note 1:*** A line, incoming CAMA/AMR5 trunk or other trunk, with a local definition (that is, non-operator) originating source can dial a three-digit code. The code must have the authorized CAMA set to N. If this condition occurs, the originator routes to a vacant code treatment in the correct treatment table. ***Note 2:*** For all vacant codes from 000 to 199, the system initializes the authorized CAMA field to N. ***Note 3:*** For all vacant codes from 200 to 999, the system initializes the authorized CAMA field to Y.

Data Il e xample

Sample datafill for table FNPACONT.FNPACODE appears in the following example.

Input for subtable FNPACONT.FNPACODE at position FNPA = 416 if the call originates from within a serving NPA. The first 16 entries of table HNPACONT appear in the example.

See the example for subtable FNPACONT.FNPASTS.STSCODE for an example of input for subtable FNPACONT.FNPACODE. See the example if the call originates from a true STS (entries 17 and higher in table HNPACONT).

FNPACONT.FNPACODE (end)

The following entries appear in this example:

- Codes 000 to 021 and 274 route to RTEREF = 1 in subtable FNPACONT.RTEREF at position FNPA = 416. Calls to codes 000 to 021 that originate from a local source. Some local sources are incoming CAMA trunk group. These local sources route to the correct TMTCNTL subtable at TREATMENT = VACT which means vacant code treatment. This condition occurs because field CAMAAUTH is N.
- Code 035 routes to RTEREF = 2 in subtable FNPACONT.RTEREF at position FNPA = 416. Calls to code 035 that originate from a local source such as an incoming CAMA trunk group, route to the correct TMTCNTL subtable at TREATMENT = VACT. This condition occurs because field CAMAAUTH is N.
- All the remaining codes, 000 to 020, 022 to 034, 036 to 273, and 275 to 999, route to vacant code treatment.

MAP example for table FNPACONT.FNPACODE

```
FROMDIGS TODIGS RTEREF CAMAAUTH
_____________________________________________________

  000      021      1        N
  035      035      2        N
  274      274      1        Y
```

FNPACONT.FNPASTS

Table name

List of Foreign NPA STS Codes Subtables Subtable

Functional description

Refer to table FNPACONT for related information.

Local/toll

The system accesses subtable FNPACONT.FNPASTS every time the code type (CD) foreign numbering area plan (FNPA) is in subtable HNPACONT.HNPACODE during translation of a call. The call originates from a serving translation scheme (STS). The STS is in table HNPACONT, entries 16 and higher.

Subtable FNPACONT.FNPASTS defines if the translation of office, operator, or other three-digit codes for the given FNPA is special to the STS. These features can be the same as other serving NPAs (SNPA) or STSs. Subtable FNPACONT.FNPASTS defines this condition for a specified combination of called FNPA and calling STS.

If translation of three-digit codes is special to the STS, field COMMON_FNPA in subtable FNPACONT.FNPASTS is N (no). Translation proceeds to subtable FNPACONT.FNPASTS.STSCODE. Translation that is special to the STS is a partitioned six-digit translation.

If translation of three-digit codes is the same as other SNPAs or STSs, field COMMON_FNPA is Y (yes). Field COMMON_FNPA is in subtable FNPA-CONT.FNDASTS. Translation proceeds to subtable FNPACONT.FNPACODE.

CAUTION

If the COMMON_FNPA bool is changed to N, entries in FNPACONT.FNPASTS.RTEREF will be deleted. RTEREF entries must be present in FNPACONT.FNPACODE or calls can fail to complete.

Office parameter MAXSTS in table OFCENG must be larger than zero before extension of subtable FNPACONT.FNPASTS.

Datafill sequence and meaning

Enter data in table HNPACONT before you enter data in subtable FNPACONT.FNPASTS.

Table size

The table contains 0 to 1000 tuples

Datafill

Foreign NPA route selector: N

Local/toll

Use table FNPACONT selector N when the system must route all correct office, operator or other three-digit codes. The system routes these codes to the same preferred trunk group common language location identifier (CLLI) and alternate route. The system uses table OFRT. Table OFRT can specify the following:

- the number of digits to delete
- the digits to prefix
- if the system must cancel normal charges

A correct three-digit code is any three-digit code that appears in subtable FNPACONT.FNPACODE.

When the dialed three-digit code is not in subtable FNPACONT.FNPACODE, the call routes to the correct TMTCNTL subtable. The TMTCNTL subtable is at TREATMT = VACT (vacant code). This subtable applies to this condition. Complete input as follows when selector is equal to N.

Field names, subfield names and correct data ranges for table FNPACONT.FNPASTS appear in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
STS		000 to 999	*Serving translation scheme* Enter the three-digit STS code from where calls that require six-digit translation originate.
COMMON_ FNPA		Y or N	*Common foreign numbering plan area* Enter Y (yes) if partitioned six-digit translation is not required. Translation proceeds to subtable FNPACONT.FNPACODE. This subtable is common to other SNPAs or STSs.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
			Enter N (no) to indicate that partitioned six-digit translation is required. Translation proceeds to subtable FNPACONT.FNPASTS.STSCODE.
MAXRTE		1 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers IF selector field FRTSEL = N. Field MAXRTE extends to the highest route index in subtable FNPACONT.FNPASTS.RTEREF.
ROUTES		see subfields	*Route selector* This field contains subfield FRTSEL.
	FRTSEL	N	*Foreign NPA route selector* Enter N.
FIRST_ROUTE		see subfields	*First route* This field contains subfields CONNTYPE, CLLI, DELDIGS, PRFXDIGS and CANCNORC. Refer to the appropriate subfield for the definition of the field.
	CONNTYPE	D	*Connection type* Enter D to meet the requirements of the table editor.
	CLLI	alphanumeric	*Common language location identifier* Enter the CLLI of the trunk group the call goes out on.
	DELDIGS	0 to 15	*Delete digits* Enter the number of digits to delete before transmission.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	PRFXDIGS	0 to 9, B, C, D, E F or N	*Prefix digits* If digits and/or control signals have a prefix, enter the digits or equivalents that have a prefix. Control signals and the digit equivalents appear in the following list: • C11 = B • C12 = C • KP = D • KP2 = E • ST3P = B • STP = C • STKP = D • ST2P = E • ST= F If digits do not have a prefix, enter N.
	CANCNORC	Y or N	*Cancel normal charge* Enter Y if the following conditions apply: • the type of call is direct dial (DD) and a charge is not necessary for the call • he type of call is no prefix (NP) and coin returns to Prepay or Coin Dial Tone First line If these conditions do not apply, enter N. If the call routes to an announcement and the system bills the call, enter Y. Examples of calls the system bills are coins collected, off-hook returned and message note pegged. If this condition does not occur, enter N.
SECOND_ ROUTE		see subfield	*Second route* This field contains subfield EXTRTEID.
	EXTRTEID	see subfields	*External route identifier* This field contains subfields TABID, and KEY.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	TABID	OFRT, OFR2, OFR3, OFR4, TOPS, RRTE, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, AOSS, AOSSAMA or TOPSAMA	*Table identifier* Enter the name of the table to which the call routes.
	KEY	1 to 1023	*Key* Enter the route reference index of the route list in the office route table in which translation routes.

Foreign NPA route selector: S

Local/toll

Use table FNPACONT selector S when the system must route correct three-digit codes in the FNPA. The system routes the codes to the same preferred trunk group CLLI and alternate route through table OFRT.

A correct three-digit code appears in subtable FNPACONT.FNPACODE.

If the dialed three-digit code is not in subtable FNPACONT.FNPACODE, the system routes the call to the subtable TMTCNTL at treatment = VACT (vacant code).

Complete input as follows when selector is equal to S.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	STS	000 to 999	*Serving translation scheme* Enter the three-digit STS code where calls that require six-digit translation originate.
	COMMON_ FNPA	Y or N	*Common foreign numbering plan area* Enter Y if partitioned six-digit translation is not required. Translation proceeds to subtable FNPACONT.FNPACODE. This subtable is common to other SNPAs or STSs. If this condition does not occur, enter N to indicate that partitioned six-digit translation is required. Translation proceeds to subtable FNPACONT.FNPASTS.STSCODE. ***Note:*** If the COMMON_FNPA bool is changed to N, entries in FNPACONT.FNPASTS.RTEREF will be deleted. RTEREF entries must be present in FNPACONT.FNPACODE or calls can fail to complete.
	MAXRTE	1 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers when selector field FRTSEL = S.
	ROUTES	see subfields	*Routes* This field contains subfield FRTSEL.
	FRTSEL	S	*Foreign NPA route selector* Enter S.
	FIRST_RTE	see subfields	*First_rte* This field contains subfields CONNTYPE and CLLI.
	CONNTYPE	D	*Connection type* Enter D to meet the requirements of the table editor.
	CLLI	alphanumeric	*Common language location identifier* Enter the CLLI of the trunk group the call goes out on.
	SECOND_ ROUTE	see subfield	*Second route* This field contains subfield EXTRTEID.
	EXTRTEID	see subfields	*External route identifier* This field contains subfields TABID, and KEY.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TABID	OFRT, OFR2, OFR3, OFR4, TOPS, RRTE, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, AOSS, AOSSAMA or TOPSAMA	*Table identifier* Enter the office route table name to which the call routes.
	KEY	1 to 1023	*Key* Enter the route reference index of the route list in the office route table to which translation routes.

Foreign NPA route selector: T

Local/toll

Use table FNPACONT selector T when the system route correct three-digit codes in the foreign NPA. The system routes these codes to the same preferred route and alternate route through table OFRT.

A correct three-digit code is any three-digit code in subtable FNPACONT.FNPACODE.

When the dialed three-digit code is not in subtable FNPACONT.FNPACODE, the system routes the call. The system routes the call to the TMTCNTL subtable at TREATMT = VACT (vacant code).

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	STS	000 to 999	*Serving translation scheme* Enter the three-digit STS code where calls that require six-digit translation originate.
	COMMON_ FNPA	Y or N	*Common foreign numbering plan area* Enter Y if partitioned six-digit translation is not required. Translation proceeds to subtable FNPACONT.FNPACODE. This subtable is common to other SNPAs or STSs. Enter N (no) to indicate that partitioned six-digit translation is required. Translation proceeds to subtable FNPACONT.FNPASTS.STSCODE.
	MAXRTE	1 to 1023	*Field/Subfield long name* Enter 2 for the quantity of route reference numbers when selector field FRTSEL = T.
	ROUTES	refer to the subfields	*Routes* This field contains subfields FRTSEL, FIRST_RTE and SECOND_ROUTE.
	FRTSEL	T	*Foreign NPA route selector* Enter T.
	FIRST_RTE	refer to the subfield	*First route* This field contains subfield EXTRTEID.
	EXTRTEID	refer to the subfields	*External route identifier* This field contains subfields TABID and KEY.
	TABID	OFRT, OFR2, OFR3, OFR4, TOPS, RRTE, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, AOSS, AOSSAMA,or TOPSAMA	*Table identifier* Enter the office route table name to which the call routes.
	KEY	1 to 1023	*Key* Enter the route reference index in the office route table to which translation routes.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SECOND_ ROUTE	refer to the subfield	*Second route*This field contains subfield EXTRTEID.
	EXTRTEID	refer to the subfields	*External route identifier* This field contains subfields TABID and KEY.
	TABID	OFRT, OFR2, OFR3, OFR4 TOPS, RRTE, IBNRTE, IBNRT2, IBNRT3, IBNRT4, TTL4, AOSS AOSSAMA or TOPSAMA	*Table identifier* Enter the office route table name to which the call routes.
	KEY	1 to 1023	*Key* Enter the route reference index in the office route table to which translation routes.

Foreign NPA route selector: - (dash)

Local/toll

Use table FNPACONT selector - (dash) when the FNPACONT.FNPACODE or subtable FNPACONT.FNPASTS.STSCODE specifies a route. This route is for each correct office, operator or other three-digit code in the FNPA. These subtables specify the route as a route reference to subtable FNPACONT.RTEREF or FNPACONT.FNPASTS.RTEREF. A correct three-digit code is any three-digit code in subtable FNPACONT.FNPACODE or subtable FNPACONT.FNPASTS.STSCODE.

When the dialed office code is not in subtable FNPACONT.FNPACODE or subtable FNPACONT.FNPASTS.STSCODE, the system routes the call. The system routes the call to the TMTCNTL subtable at TREATMT = VACT (vacant code) that applies to this condition.

Complete input as follows when selector is equal to - (dash).

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	STS	000 to 999	*Serving translation scheme* Enter the three-digit STS code where calls that require six-digit translation originate.
	COMMON_ FNPA	Y or N	*Common foreign numbering plan area* Enter Y (yes) if partitioned six-digit translation is not required. Translation proceeds to subtable FNPACONT.FNPACODE. This subtable is common to other SNPAs or STSs. Enter N (no) to indicate that partitioned six-digit translation is not required. Translation proceeds to subtable FNPACONT.FNPASTS.STSCODE.
	MAXRTE	1 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers IF selector field FRTSEL = N. The system extends field MAXRTE is extends to the highest route index in subtable FNPACONT.FNPASTS.RTEREF.
	ROUTES	refer to the subfield	*Routes* This field contains subfield FRTSEL.
	FRTSEL	- (dash)	*Foreign NPA route selector* Enter - (dash).

Datafill example

See the example in subtable FNPACONT.FNPASTS.STSCODE.

FNPACONT.FNPASTS.RTEREF

Table name

Foreign NPA STS Route Reference Subtable

Functional description

See table OFRT for a complete description.

Each combination of foreign numbering plan area (FNPA) serving translation scheme (STS) that requires special six-digit translations requires one route reference subtable FNPACONT.FNPASTS.RTEREF. This route reference subtable is necessary for each combination of FNPA for which subtable FNPACONT.FNPASTS is present and of STS in subtable FNPACONT.FNPASTS at position FNPA with field COMMON_FNPA = N.

A combination of FNPA and STS with field COMMON_FNPA = Y in subtable FNPACONT.FNPASTS does not require a subtable FNPACONT.FNPASTS.RTEREF. All routing entries, however, must be present in FNPACONT.FNPACODE.RTEREF, or calls may fail.

The system extends field MAXRTE of subtable FNPACONT.FNPASTS extends to the highest route index in field RTE. Field RTE is in subtable FNPACONT.FNPASTS.RTEREF.

See table FNPACONT.FNPASTS for related information.

Datafill sequence and meaning

Enter data in the following tables before you enter data in table FNPACONT.FNPASTS.RTEREF.

- FNPACONT
- FNPACONT.FNPASTS

Table size

The table contains 0 to 1024 tuples

Datafill

See the description of fields for table OFRT.

Datafill example

See the example in the description of subtable FNPACONT.FNPASTS.STSCODE.

FNPACONT.FNPASTS.STSCODE

Table name

Foreign NPA STS Codes Subtable

Functional description

The system accesses subtable FNPACONT.FNPASTS.STSCODE when the system encounters the code type (CD) foreign numbering plan area (FNPA) in subtable HNPACONT.HNPACODE. The system encounters the CD FNPA during translation of a call that originates in a serving translation scheme (STS). The STS is table HNPACONT entries 16 and higher. This condition occurs if field COMMON_FNPA in subtable FNPACONT.FNPASTS is N (no).

Subtable FNPACONT.FNPASTS.STSCODE lists the correct office, operator, or other three-digit codes in the FNPA. The subtable lists these codes for calls that originate in the serving STS. For each three-digit code, the subtable lists the RTEREF index in subtable FNPACONT.FNPASTS.RTEREF.

See table FNPACONT.FNPASTS for related information.

Data ll sequence and meaning

Enter data in the following tables before you enter data in table FNPACONT.FNPASTS.STSCODE.

- HNPACONT
- HNPACONT.HNPACODE
- FNPACONT
- FNPACONT.FNPASTS

Table size

0 to (see note)

Note: This subtable uses digilators. The maximum number of tuples depends on the datafill in the table. The datafill differs with each application.

Office parameter MAXSTS in table OFCENG must be larger than 0 before the extension of subtable FNPACONT.FNPASTS and subtable FNPACONT.FNPASTS.STSCODE.

FNPACONT.FNPASTS.STSCODE (continued)

The system automatically allocates memory for the 1000 three-digit codes with the addition of a tuple in subtable FNPACONT.FNPASTS. The system allocates memory automatically when the value of field COMMON_FNPA equal to N. The system initializes the 1000 three-digit codes to vacant code. The operating company must provided data for each assigned three-digit code. You do not have to enter data for the vacant three-digit codes.

Data II

Datafill for table FNPACONT.FNPASTS.STSCODE appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits* Enter a single code or the first number of a block of consecutive three-digit codes. These codes must have the same route reference number and authorized Centralized Automatic Message Accounting (CAMA) indicator.
TODIGS		numeric (three digits)	*To digits* If field FROMDIGS represents a single three-digit code, the entry is equal to the number in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, the entry is equal to the last number in the block.

Note 1: A line, incoming CAMA/AMR5 trunk, or other trunk defined as a local originating source can dial a three-digit code. The line or trunk can dial a code with the authorized CAMA set to N. A local originating source has a source that is not the operator. If this condition occurs, the originator routes to vacant code treatment in the correct treatment table.

Note 2: For all vacant codes from 000 to 199, the system sets the CAMA field that is not authorized to N.

Note 3: For all vacant codes from 200 to 999 the system sets the authorized CAMA field to Y.

FNPACONT.FNPASTS.STSCODE (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTEREF		1 to 1023	*Route reference* Enter the route reference index into subtable FNPACONT.FNPASTS.RTEREF.
CAMAAUTH		Y or N	*Authorized CAMA routeField/Subfield long name* Enter Y (yes) if a local originating source can access the three digit code.

Note 1: A line, incoming CAMA/AMR5 trunk, or other trunk defined as a local originating source can dial a three-digit code. The line or trunk can dial a code with the authorized CAMA set to N. A local originating source has a source that is not the operator. If this condition occurs, the originator routes to vacant code treatment in the correct treatment table.

Note 2: For all vacant codes from 000 to 199, the system sets the CAMA field that is not authorized to N.

Note 3: For all vacant codes from 200 to 999 the system sets the authorized CAMA field to Y.

Data ll e xample

Sample datafill for table FNPACONT.FNPASTS.STSCODE appears in the following example.

The example indicates six-digit translations for calls to office codes 368, 370, 371, and 372 in foreign NPA 201 of STS 001. The required routing can be different than the routes for these office codes in subtable FNPACONT.FNPACODE at position 201. If this condition occurs, the system can use subtable FNPACONT.FNPASTS.STSCODE for the required special translations.

To allow extension of subtable FNPACONT.FNPASTS, set parameter MAXSTS in table OFCENG to a value greater than 0 (zero).

Each calling STS is a true STS if the STS occupies position 17 or higher in table HNPACONT. The office serves three SNPAs. The three SNPAs are 302, 704, and 919. The office serves four STSs. The four STSs are 001, 002, 003, and 010. An example of datafill for table HNPACONT appears in the following table. The recognition of STSs as true STS requires the entry of 13 dummy SNPAs. The SNPAs range from 987 through 999 so that STS 001 occupies position 17.

MAP example for table HNPACONT

```
 STS   NORTREFS   NOAMBIGC   RTEREF HNPACODE   ATTRIB   RTEMAP
_____________________________________________________________

  704         2        20 (     0)   (     0) (     0) (     0)
  919         2        20 (     0)   (     0) (     0) (     0)
  302         2        20 (     0)   (     0) (     0) (     0)
  999         2         0 (     0)   (     0) (     0) (     0)
  998         2         0 (     0)   (     0) (     0) (     0)
  997         2         0 (     0)   (     0) (     0) (     0)
  996         2         0 (     0)   (     0) (     0) (     0)
  995         2         0 (     0)   (     0) (     0) (     0)
  994         2         0 (     0)   (     0) (     0) (     0)
  993         2         0 (     0)   (     0) (     0) (     0)
  992         2         0 (     0)   (     0) (     0) (     0)
  991         2         0 (     0)   (     0) (     0) (     0)
  990         2         0 (     0)   (     0) (     0) (     0)
  989         2         0 (     0)   (     0) (     0) (     0)
  988         2         0 (     0)   (     0) (     0) (     0)
  987         2         0 (     0)   (     0) (     0) (     0)
  001         2         0 (     0)   (     0) (     0) (     0)
  002         2         0 (     0)   (     0) (     0) (     0)
  003         2         0 (     0)   (     0) (     0) (     0)
  010         2         0 (     0)   (     0) (     0) (     0)
```

An entry in subtable HNPACONT.HNPACODE at position STS = 001 indicates that 201 is an FNPA. The entry requires six-digit translations in the FNPA table and subtables.

MAP example for table HNPACONT.HNPACODE

```
FROMDIGS        TODIGS
              CDRRTMT
_____________________________________________________________
201             201
               FNPA 0
```

Table FNPACONT appears in the following example. Table FNPACONT contains an entry for foreign NPA 201. Table FNPACONT has 2 route references with selector FRTSEL set to - (dash). These route references indicate that subtable FNDACONT.FNPACODE can contain the routes for

FNPACONT.FNPASTS.STSCODE (continued)

office codes in FNPA = 201. These route references can indicate that the call originates from a true STS. Subtable FNPACONT.FNPASTS.STSCODE contains the routes.

MAP example for table FNPACONT

```
NPA   MAXRTE                 ROUTES
FNPACODE FNPASTS RTEREF
_____________________________________________________________
201   2                      -
```

The call originates in a true STS. Translation proceeds to subtable FNPACONT.FNPASTS (appears below) at position FNPA = 201. Index STS = 001 where field COMMON_FNPA is N indicates that STS 001 needs special 6-digit translations for FNPA 201.

MAP example for table FNPACONT.FNPASTS

```
STS   COMMON_FNPA   MAXRTE
                      ROUTES STSCODE
RTEREF
_____________________________________________________________
001    N            2
                      -
```

If field COMMON_FNPA in subtable FNPACONT.FNPASTS is N, the subtable refers to to subtable FNPACONT.FNPASTS.STSCODE for translations. The subtable refers to subtable FNPACONT.FNPASTS.STSCODE for translation by office code in foreign NPA 201. This process is for calls that originate from STS 001.

Translation proceeds to subtable FNPACONT.FNPASTS.STSCODE.

FNPACONT.FNPASTS.STSCODE (end)

MAP example for table FNPACONT.FNPASTS.STSCODE

```
FROMDIGS    TODIGS   RTEREF   CAMAAUTH
_____________________________________________________________
369         369      1        Y
370         372      2        Y
```

Subtable FNPACONT.FNPASTS.RTEREF appears below. Subtable FNPACONT.FNPASTS.RTEREF defines the necessary special routes.

MAP example for table FNPACONT.FNPASTS.RTEREF

```
RTE              RTESEL
_____________________________________________________
1                N D CG001FX   0 N N T IBNRTE 100
2                N D CG001TIE  0 N N T IBNRTE 100
```

FNPACONT.RTEMAP

Functional description

The system accesses subtable FNPACONT.RTEMAP each time code type (CD) FNPA is in subtable HNPACONT.HNPACODE, and the route reference index in subtable FNPACONT.RTEREF matches the RCNAME index in table RTECHAR. Based on the RCNAME associated with the call and the RTEREF index obtained, a new RTEREF index is possible.

If an entry matching this index is found in subtable FNPACONT.RTEMAP, then the call is routed further using the new RTEREF index. If the new index found is not valid, the call is routed to DFIL treatment, and a corresponding log DFIL102 is generated.

If no entry is found, then the call is routed using the existing RTEREF index datafilled in subtable FNPACONT.FNPACODE. In this case, the foreign NPA call is routed using tables OFRx/IBNRTx and OFRTMAx/IBNMAx.

Refer to table FNPACONT for related information.

Table name

Foreign NPA Route Map Subtable

Datafill sequence and meaning

Enter datafill into the tables below before you enter datafill into table FNPACONT.RTEMAP:

- RCNAME
- RTECHAR
- FNPACONT.RTEREF

Note: Table OFRT describes the field names, subfield names and data ranges for its subtable, FNPACONT.RTEREF.

Table size

0 to 1023

Datafill

The table that follows lists datafill for table FNPACONT.RTEMAP.

Field descriptions

Field	Subfield	Entry	Explanation and action
KEY		see subfields	Key into table FNPACONT.RTEMAP. This field consists of subfields RCNAME and INDEX.
	RCNAME	alphanumeric (1 to 8 characters)	Routing characteristic name. Enter a routing characteristic name known to table RCNAME.
	INDEX	0 to 1023	Route reference index. Enter the route reference index of a basic routing list in table FNPACONT.RTEREF. A basic routing list is one in table FNPACONT.RTEREF that is accessed if ISDN routing characteristics are not present.
NEWINDEX		0 to 1023	New route reference index. Enter the route reference index of a nonbasic routing list in table FNPACONT.RTEREF. A nonbasic routing list is one that is accessed if ISDN routing characteristics are present. Any entry outside the range indicated for this field is invalid.

Datafill example

The figure that follows shows sample datafill for table FNPACONT.RTEMAP.

MAP display example for table FNPACONT.RTEMAP

```
                    KEY     NEWINDEX
-------------------------------------------------------------------------------
   64KDATA       10            20
```

Table history

Release NA016

Subtable FNPACONT.RTEMAP was introduced in NA016.

FNPACONT.RTEREF

Table name

Foreign NPA Route Reference Subtable

Functional description

See table OFRT for a complete description of subtable FNPACONT.RTEREF.

Each foreign numbering plan area (FNPA) in table FNPACONT with field set to - (dash) requires one route reference subtable FNPACONT.RTEREF.

Any FNPA in table FNPACONT with field FRTSEL set to N, S, SX, or T does not require a subtable.

The system automatically extends field MAXRTE of table FNPACONT to the highest route index used in field RTE of subtable FNPACONT.RTEREF.

See table FNPACONT for related information.

Datafill sequence and meaning

Enter data in tables FNPACONT and OSNCCAP before you enter data in table FNPACONT.RTEREF.

Table size

0 to 1023 tuples

The FNPA control table record allocates memory for 16 route reference indexes in subtable FNPACONT.RTEREF.

Datafill

Table OFRT describes field names, subfield names, and correct data ranges for table FNPACONT.RTEREF.

Datafill example

Sample datafill for subtable FNPACONT.RTEREF in a toll switching unit (DMS-200) appears in the following example.

This subtable belongs to FNPA 416. Subtable FNPACONT.FNPACODE indexes this subtable.

Route reference index number 1

Translation takes this route if:

- The ABC digits the user dials are equal to 416 and DEF digits are in the range of 000 to 021. Translation also takes this route if the call originates

FNPACONT.RTEREF (continued)

from a nonlocal source. An example of a nonlocal source is an incoming on an intertoll trunk. The call can originate from a local source like an incoming centralized automatic message accounting (CAMA) trunk. If this condition occurs, the call routes to a vacant code treatment.

- The ABCDEF digits dialed are equal to 416274. The call originates from a local source. A call incoming CAMA trunk is a local source. An incoming on an intertoll trunk is a nonlocal source.

If idle trunks are in the trunk group (TOROON0101TO), the system logic selects the most idle trunk and deletes the digits 416. This process is a standard digit control.

If all trunks in the trunk group (TOROON0101TO) are busy, translation proceeds to table OFRT, index number 2, to select an idle trunk.

Route reference index number 2

Translation takes this route if the user dials ABCDEF digits are equal to 416035. Translation takes this route if the call originates from a nonlocal source like a call incoming on a intertoll trunk group. If the call originates from a local source like an incoming CAMA trunk, the call routes to a vacant code treatment.

If idle trunks are in the trunk group (HMTNON1402TO), the system logic selects the least idle trunk. The system automatically deletes the digits 416035. These actions are standard digit control.

If all trunks in the trunk group are busy, translation proceeds to table OFR3, index number 2, to select an idle trunk.

Route reference index number 3

Translation uses a CND MIGRATE route selector in the RTELIST when the choice of route element is determined by the presence or absence of the MIGRATE line option on the terminating DN.

For a migration RTELIST, the CNDSEL will be MIGRATE and the typical use will have a RTETYPE of SK (skip). When MIGRATE is present on the terminating line, the routing takes the conditional route. Otherwise it takes the other datafilled route, which will be a DN selector. For the routing tables HNPACONT.RTEREF, FNPACONT.RTEREF, OFRn and IBNRTn, the CND MIGRATE conditional route selector replaces all occurrences the DN route selector only if the DNs being terminated by these translations encompass DNs which are in the state of migration.

The trunk types that are supported for the conditional route are IT MF and IT ISUP.

If there have not been adequate digits collected, then the terminator cannot be determined when the CND MIGRATE selector is encountered, the translations process stops until additional digits are collected.

MAP example for table FNPACONT.RTEREF

```
RTE                                                          RTELIST
_____________________________________________________________________

  1    (     S     D     TOROON0101T0) (     T    OFRT    2)$

  2    (     S     D    HMTONON1402T0) (     T    OFR3    2)$

  3    (CND MIGRATE SK 2)(DN 214 520 4)(CND ALWAYS SK 1)(T OFRT 770)$
```

Table history

SN06 (DMS)

Added CND and NOT conditional routes to table FNPACONT.RTEREF for feature activity A00001207.

FPDEVINV

Table name

File Processor Device Inventory Table

Functional description

The descriptions of all the devices on a DMS SuperNode file processor (FP) appear in table FPDEVINV. The descriptions identify the following:

- the FP
- the type of small computer systems interface (SCSI) device
- the location
- the hardware configuration required to identify a particular device

Table FPDEVINV dynamically adds and deletes FP SCSI devices. Table FPDEVINV interacts directly with tables APINV, APCDINV, and FPDIPINV. The information is descriptive data. The key fields are FPNO, SCSIBUS and DEVNO.

The configuration data that the resource processor (RP) MAP (maintenance and administration position) facility and the integrated node maintenance (INM) software require appears in Table APINV. The descriptions of all RP cards appear in table APCDINV. The RP cards that do not apply to mass storage devices do not appear in table APCDINV. The configuration data for the FP device interface paddle boards appears in table FPDIPINV.

The following rules apply when the user adds, deletes or changes data entries in table FPDEVINV:

- The FP file maintenance software checks each new entry to table FPDEVINV before the addition of a tuple to the table. This check confirms the following:
  - — the data entry of the processor portion of the FP is in table APINV
  - — the shelf and quadrant does not already have a device
  - — the device product engineering code (PEC) agrees with the device type. The data dictionary does not automatically check for this agreement.
  - — the MAP identifier on the specified SCSI bus is not a duplicate
  - — the associated SCSI device interface paddle boards (SDIPs) are in FPDIPINV
  - — the SCSI identifier on the specified SCSI bus is not a duplicate
- The addition of a tuple that does not meet the above rules can occur. This condition results in warning messages for each datafill error. The system

can accept a tuple that contains errors. The FP cannot operate if inventory information is missing.

- The only entry that can change is the device PEC.
- The device must be offline before the deletion of a device from the datafill can occur. If the maintenance software cannot obtain device status, the software rejects the deletion request.

Data II sequence and meaning

Enter data in the following tables before you enter data in table FPDEVINV.

- PMLOADS
- APINV
- APCDINV
- FPDIPINV

Table size

0 to 6400 tuples

To set the maximum table size, calculate the number of possible tuples with the following formula:

(max FP) ·	(max device types) ·	(max device numbers) = possible tuples
100 ·	4 ·	12 = 4800

The system dynamically allocates memory for table FPDEVINV.

FPDEVINV (continued)

Data II

Datafill for table FPDEVINV appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FPNO		0 to 99	*File processor instance number* Enter the instance number of the FP. This number is an identifier that distinguishes one FP from another. This number is the first of a three-part key.
SCSIBUS		0 to 1	*SCSI bus number* Enter the bus number on the FP with the device. This number is the second of a three-part key.
DEVNO		0 to 5	*Device instance number* Enter the instance number of the device type. This identifier distinguishes one device of the same type from another on the same FP. This number is the third of a three-part key.
DEVTYPE		DK or CT (MT and OD: future use)	*Device drive type* Enter the type of device. The DK is for disk drive. The CT is for tape drive. Entries MT (magnetic tape) and OD (optical disk) are for use in future BCSs.
DEVPEC		NT9X90AA or NT9X90BA (NT9X90AB: future use)	*Device drive PEC* Enter the PEC for the device. The PEC NT9X90AB is for introduction in a future BCS.
SCSIID		0 to 5	*SCSI identifier* Enter the SCSI bus identifier for the device. Devices can have specified priorities that start with 0 (zero).
QUADNO		0 to 3	*Quadrant number* Enter the number of the quadrant that contains the device.
SHELF		0 to 3	*Device shelf* Enter the number of the shelf that contains the device. The shelf numbers are from top to bottom. The numbers begin with 0 (zero).
SHELFPEC		NT9X83AA	*Shelf PEC* Enter the PEC for the device shelf.
FLOOR		0 to 99	*Floor position* Enter the location of the floor number of the frame.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ROW		A to H, J to N, P to Z, AA to HH, JJ to NN, or PP to ZZ	*Row position* Enter the row position of the frame that contains the device.
FRAME		0 to 99	*Frame position* Enter the frame position in the row that contains the device.

Data ll e xample

Sample datafill for table FPDEVINV appears in the following example.

MAP display example for table FPDEVINV

```
FPNO SCSIBUS  DEVNO
DEVTYPE     DEVPEC   SCSIID   QUADNO   SHELF     SHELFPEC
FLOOR   ROW   FRAME
_____________________________________________________________________

   0       1      5
     DK   NT9X90AA         3        0       0     NT9X83AA
    0     R       1
```

Table history

BCS35

The following were made to table FPDEVINV in BCS35:

- options MT and OD were added in field DEVTYPE. These options are for future use.
- option NT9X90AB was added in field DEVPEC. This option is for future use.

BCS33

Table FPDEVINV was introduced in BCS33.

FPDIPINV

Table name

File Processor Device Interface Paddle Board Inventory Table

Functional description

Table FPDIPINV contains the description of all the Small Computer Systems Interface (SCSI) Device Interface Paddle Boards (SDIPs) on a DMS SuperNode file processor (FP).

The description identifies the following:

- the FPs
- the SCSI bus to which the SDIPs attach
- the SDIP identities, locations and hardware configurations

Use of table FPDIPINV occurs to dynamically add and delete SDIPs. Table FPDIPINV interacts with tables APINV, APCDINV and FPDEVINV. The type of information is description data. The key fields are FPNO, SCSIBUS and SDIPNO.

Table APINV contains configuration data. The resource processor (RP) MAP facility and the Integrated Node Maintenance (INM) software require this configuration data. Table APCDINV contains the descriptions of all RP cards. This condition does not apply to the RP cards that apply to mass storage devices. Table FPDEVINV contains the configuration data for the SCSI devices.

Data II sequence and meaning

You must enter data in table FPDIPINV before you enter data in the following tables.

- PMLOADS
- APINV
- PACDINV

Consider the following conditions when you add, delete or change SDIP entries in table FPDIPINV:

- The FP file maintenance software checks each new entry to table FPDIPINV before the addition of a tuple to the table. The software checks each new entry to confirm the following:
  - — table APINV contains data entries for the processor section of the FP
  - — the shelf and quadrant does not have an SDIP
  - — the SDIP number of the specified SCSI bus is not a copy
  - — the SDIPs are next to each other in the slots of one quadrant
  - — the SDIPs are in specified slots in the quadrant
  - — the slot numbers are different for both SDIPs
  - — the controller (CTRL) numbers are different for both SDIPs
  - — table APCDINV does not contain entries for the SCSI Interface Paddleboard (SIP) associated with the SCSI bus of the SDIP

    Note: The SIPs in slots 11R, 16R, 23R and 28R correspond to SCSI bus 0. These slots are nearest to the central processing unit (CPU) card. When you enter FP data in table APINV, the system enters data for these slots. The optional SIPs in slots 10R, 17R, 22R and 29R correspond to SCSI bus 1. The letter R refers to the back slot positions.

- The addition of a tuple that does not meet the above rules can occur. The addition of this type of tuple causes warning messages to appear for each datafill error. A table can accept a tuple that contains errors. When a table accepts a tuple with errors, the FP device cannot operate. The FP device cannot operate because some inventory information is not present in the tuple.
- The only entry that you can change is the SDIP product engineering code (PEC).
- Check for an attached device of the SDIP before you delete an SDIP from the datafill. You must delete the attached device before you can delete the SDIP. If the maintenance software cannot obtain device status, the system rejects the deletion request.

Table size

The system dynamically allocates memory for table FPDIPINV. The maximum size of table FPDIPINV is 1600 tuples. The following formula calculates the number of possible tuples to set the maximum table size:

FPDIPINV (continued)

$$A = b \times c \times d$$

where

A
is the number of possible tuples

b
is the maximum number of file processors

c
is the maximum number of SCSI buses

A
is the maximum number of SDIPs

Data II

Datafill for table FPDIPINV appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FPNO		0 to 99	*File processor instance number* Enter the instance number of the FP. This entry is the first of a three-part key.
SCSIBUS		0 to 1	*SCSI bus number* Enter the bus number on the FP to which the SDIPs attach. This entry is the second of a three-part key.
SDIPNO		0 to 5	*SDIP number* Enter the specified SDIP pairs on the SCSI bus. This entry is the third of a three-part key.
SHELF		0 to 3	*SDIP shelf* Enter the number of the shelf that contains the SDIPs. The shelf numbers begin at zero at the top. The shelves are numbered from top to bottom.
SHELFPEC		NT9X83AA	*Shelf PEC* Enter the PEC for the SDIP shelf.
FLOOR		0 to 99	*Floor position* Enter the floor number of the frame that contains the SDIPs.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ROW		A to H, J to N, P to Z, AA to HH, JJ to NN or PP to ZZ	*Row position* Enter the row position of the frame that contains the SDIPs.
FRAME		0 to 99	*Frame position* Enter the frame position in the row that contains the SDIPs.
DIPIDS		see subfields	*SDIP identification* This field contains a table that a CTRL number indexes. The CTRL number distinguishes one SDIP from the other. This field is a vector. This field contains subfields CTRLNO, SLOTNO and DIPPEC.
CTRLNO		0 or 1	*Controller number* Enter the CTRL number of the SCSI bus to which the SDIP attaches.
SLOTNO		1 to 38	*Slot number* Enter the slot number of the SDIP. The SDIPs must be in the slot numbers next to each other.
DIPPEC		NT9X89AA or NT9X89BA	*SDIP PEC* Enter the PEC for the SDIP.

Data ll e xample

Sample datafill for table FPDIPINV appears in the following example.

MAP display example for table FPDIPINV

```
FPNO SCSIBUS  SDIPNO
SHELF     SHELFPEC   FLOOR   ROW   FRAME                  DIPIDS
_____________________________________________________________________

   0       1       2
    0     NT9X83AA        0     R       1   (0 8 NT9X89AA) (1 9
NT9X89AA) $
```

FPDIPINV (end)

Table history

BCS33

Table FPDIPINV was introduced in BCS33.

FRSACCCN

Table name

Frame Relay Service Access Point Connections Table

Functional description

Table FRSACCCN replaces subtable CONNECT of table PVDNCUST in storing all DataSPAN connections that connect an access point at both ends of the circuit. The connections specified in table FRSACCCN are those that do not involve any trunking.

No private virtual network (PVN) information is contained in this table.

Data II sequence and implications

The following tables must be datafilled before table FRSACCCN.

- PVDNAGEN
- PVDNCUST
- FRSCIR (BCS36-)

Table FRSCNEND uses table FRSACCCN, but the two tables can be datafilled independently.

Table size

0 to 100 000 tuples

Data II

The following table lists datafill for table FRSACCCN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SOURCE		see subfields	*Source* This field, which is the key of table FRSACCCN, consists of subfields SRCAGEN and SRCDLCI.
	SRCAGEN	0 to 2200	*Source agent* Enter a value to identify the source agent.

FRSACCCN (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SRCDLCI	0 to 1023	*Source data link connection identifier* Enter a value to identify the source customer premise equipment agent.
SRCCIR (BCS36-)		see subfield	*Source committed information rate* This field consists of subfield CIRSELECT.
	CIRSELECT (BCS36-)	Y or N	*Source committed information rate* Enter Y (yes) to specify the committed information rate (CIR) template on the source endpoint and datafill refinement CIRINDEX. Otherwise, enter N (no). No refinement requires datafill. Go to field DESTAGEN. The default is N.
	CIRINDEX (BCS36-)	1 to 100	*Source index* Enter the index into table FRSCIR.
DESTAGEN		0 to 2200	*Destination agent* Enter a value to identify the destination agent.
DESTDLCI		0 to 1023	*Destination data link connection identifier* Enter a value to identify the destination customer premise equipment agent.
DESTCIR (BCS36-)		see subfield	*Destination committed information rate* This field consists of subfield CIRSELECT.
	CIRSELECT (BCS36-)	Y or N	*Destination committed information rate* Enter Y to specify the CIR template on the destination endpoint and datafill refinement DESTINDEX. Otherwise, enter N. The default is N.
	CIRINDEX (BCS36-)	1 to 100	*Destination index* Enter the index into table FRSCIR.

Data ll e xample

The following example shows sample datafill for table FRSACCCN.

MAP display example for table FRSACCCN

```
SOURCE  SRCCIR DESTAGEN DESTDLCI DESTCIR
_____________________________________________________________

1  102   Y   2      103      192       N
```

Table history

BCS36

Table FRSCIR was added to the datafill sequence. Fields SRCCIR and DESTCIR with subfield CIRSELECT and refinement CIRINDEX were added.

BCS35

Table FRSACCCN was introduced.

Supplementary information

This section provides information on dump and restore procedures when datafilling table FRSACCCN.

Dump and restore

A dump and restore of subtable CONNECT of all the tuples in table PVDNCUST causes table FRSACCCN to be datafilled with the access to access connections that subtable CONNECT contains.

In BCS36, a default value of N is assigned to fields SRCCIR and DESTCIR in the new BCS side. There is no rate enforcement by default.

FRSCCTRL

Table name

Frame Relay Service Congestion Control Table

Functional description

Table FRSCCTRL allows the configuration of the congestion control parameters used for the explicit congestion notification (ECN), and for the rate enforcement through DE=1 (discard eligible) frames discard.

Congestion control deals with all aspects of both congestion avoidance and congestion recovery.

The congestion control parameters are:

- KEY
- ECNON (determines when ECN starts)
- ECNOFF (determines when ECN stops)
- DISCARD1 (determines when DE1 frames discard start)

On a frame relay network, busy traffic occasionally causes temporary congestion at egress point in the network. Congestion occurs when traffic exceeds the capacity of a part of the system. Network congestion causes performance degradation in terms of throughput, delay, and frame loss. Congestion management allows operating companies to maintain the quality of service (throughput, delay, probability of frame loss) on a permanent virtual circuit (PVC).

The DataSPAN congestion control procedures provide the network with real-time mechanisms to help prevent congestion and to recover from extreme congestion. In order to help prevent extreme congestion, the network cannot rely on implicit notification, such as reject frame or detection of frame loss. The network must provide explicit notification through signaling messages from the congested node. The explicit method of congestion control is realized through the ECN bits of the frame relay protocol. The ECN bits are the forward ECN (FECN)-bit, which is set by the congested node to indicate the situation to the destination, and the backward ECN (BECN)-bit, which is set by the congested node to indicate the overload to the source.

If ECN does not suffice to lower the congestion level, rate enforcement through DE=1 frame discard is used. Upon detection of a high level of congestion at the egress frame relay interface unit (FRIU), frames with DE=1 are discarded. Only under extreme congestion are frames with DE=0 discarded to provide fairness to all PVCs.

Congestion control strategy for egress (output at a specific FRIU) is as follows:

- Between the values set in fields ECNON and DISCARD1, FECN and BECN notification starts and no frames are discarded.
- Starting at the value set in field DISCARD1, discard of frames with the DE-bit set to 1 starts. ECN remains active.
- Once the congestion level has dropped under the value set in field ECNOFF, the risk of congestion is abated, the ECN and frames discard stop.

Congestion control strategy for ingress (input at a specific FRIU) is based on F-bus congestion. A mark is set on the FIC memory (LRAM buffers) in order to monitor the F-bus traffic. Once the mark is reached, congestion notification starts. Once the congestion level drops below the mark, congestion notification stops.

Note: DE=1 frame discard is not implemented at the ingress side of the FRIU.

It is recommended that end-users shape the volume of traffic onto the network to avoid the degradation of applications and overall throughput.

Data II sequence and implications

There is no requirement to datafill other tables prior to table FRSCCTRL.

Table PVDNAGEN must be datafilled after table FRSCCTRL.

Table size

1 to 101 tuples

FRSCCTRL (continued)

Data fill

The following table lists datafill for table FRSCCTRL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	*Table key* This field is the key to the table and consists of subfield CTRL_IDX. This field is used as a reference in table PVDNAGEN.
	CTRL_IDX	0 to 100	*Control index* Enter the control index. 0 (zero) cannot be datafilled because it contains the default values. Index 0 is also used if no index is specified in table PVDNAGEN.
ECNOFF		1 to 100	*Explicit congestion notification off* Enter the percentage of buffers capacity where the explicit congestion notification (ECN) stops. The default is 50 (50%).
ECNON		1 to 100	*Explicit congestion notification on* Enter the percentage of buffers capacity where the ECN starts. The default is 50 (50%).
DISCARD1		1 to 100	*Discard 1* Enter the percentage of buffers capacity the DE=1 (discard eligible) frame discard starts. The default is 80 (80%).

Data fill example

The following example shows sample datafill for table FRSCCTRL.

MAP display example for table FRSCCTRL

```
KEY ECNOFF ECNON DISCARD1
_____________________________________________________________

  0     50    50       80
```

Table history

BCS36

Table FRSCCTRL was introduced.

Supplementary information

This section provides information on dump and restore procedures for table FRSCCTRL.

Dump and restore

Normal dump and restore procedures apply. The default values for fields ECNOFF, ECNON, and DISCARD1 are automatically assigned on the new BCS side for existing tuples.

FRSCIR

Table name

Frame Relay Service Committed Information Rate Table

Functional description

Table FRSCIR allows the datafill of committed information rate (CIR) templates that are used to enforce the user-to-network interface (UNI) rate on permanent virtual circuits (PVC).

To provide a consistent quality of service to frame relay subscribers, an operating company can use a number of fixed subrates onto the access network. By allocated fixed bandwidth for each PVC on the access line, the operating company can easily administer and tariff the frame relay service (FRS) and also provide fairness to multiple PVCs sharing the same resources. The CIR of a PVC is the subscriber data throughput that a service provider commits to support under normal network operation.

The CIR of a PVC is the expected sustainable throughput of the PVC with rate enforcement applied at the UNI ingress to the network. Frames at the ingress within the committed burst size (Bc) are delivered from ingress to egress with best effort (defined by the operating company's network engineering). The information rate of a PVC is the payload rate (data only) of the line. It does not include the high data link control (HDLC) flags, the 2-byte data link control interface (DLCI), or the 2-byte CRC16 fields.

A CIR value is assigned to the ingress of a PVC. Different CIR values can be assigned to the two ingress points of the PVC.

The following parameters are involved in the evaluation of CIR:

- Ar (access rate) is the payload bit rate of the physical access line to the subscriber. This is the maximum bit rate at which the CPE transfers the information.
- Bc (committed burst size) is the maximum number of data bits that a service provider agrees to transfer over a measurement interval (Tc).
- Be (excess burst size) is the maximum number of uncommitted information data bits beyond Bc that the service provider attempts to deliver over the defined measurement Tc. This Be data is marked discard eligible (DE1) by the network.
- Tc (committed time) is the period over which CIR is evaluated. It is a sliding window that is triggered by the reception of data.

Parameters CIR, Bc, and Be are negotiated between Northern Telecom and the operating company at subscription time. The parameter Tc is a network

dependant value and is calculated as shown in table Table , "Definition of measurement interval Tc" on page -913 below.

De nition of measurement inter val Tc

CIR	Bc	Be	Tc
> 0	> 0	> 0	Tc = Bc/CIR
> 0	> 0	= 0	Tc = Bc/CIR
= 0	> 0	> 0	Tc is a network dependant value

Data ll sequence and implications

There is no requirement to datafill other tables prior to table FRSCIR.

Table size

0 to 20 000 tuples

Data ll

The following table lists datafill for table FRSCIR.

Field descriptions for conditional data ll (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	*Key* This field consists of subfield CIRINDEX.
	CIRINDEX	1 to 100	*Committed information rate index* Enter the table index.
CIR		0 to 1536000	*Committed information rate* Enter the committed information rate (CIR) in bits per second.
BC		0 to 1536000	*Committed burst size* Enter the maximum number of data bits that a service provide agrees to transfer over a measurement interval.

FRSCIR (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BE		0 to 1536000	*Excess burst size* Enter the maximum number of uncommitted information data bits beyond the value in field BC that the service providers attempts to deliver over the defined measurement.
USERPARM		see subfield	*User parameters* This field consists of subfield OPTION.
	OPTION	TC	*Option* Enter TC for the period over which CIR is evaluated and datafill refinement VALUE. ***Note:*** If field CIR is set to 0 (zero) and field BC is set to 0 (zero), then option TC must be datafilled. If field CIR is set to any entry other than 0 (zero), option TC cannot be datafilled.
VALUE		1 to 1000	*Value* Enter the Tc value. See table Table , "Definition of measurement interval Tc" on page -913 on page Table , "Definition of measurement interval Tc" on page -913 for an explanation.

Data II e xample

The following example shows sample datafill for table FRSCIR.

MAP display example for table FRSCIR

```
KEY      CIR       BC       BE   USERPARM
_____________________________________________________________

  1        0        0     1200 (TC    1)$
```

Table history

BCS36

Table FRSCIR was introduced.

Supplementary information

This section provides information on locating tuples for particular endpoints in table FRSCIR, as well as dump and restore procedures for the table.

Locating tuples for particular endpoints

Within table FRSCIR, no distinction is made between bidirectional connections (source point to end point). Users wishing to list a tuple that involves a particular endpoint can use one of the following table control commands on a MAP (maintenance and administrative position) terminal:

```
<pos> <group> <member> <dlci>

LIST ALL (CONTYPE EQ 'TRUNK <group> <member> <dlci> * *')

LIST ALL (CONTYPE EQ 'ACCESS <agentid> <dlci> *')
```

Dump and restore

In BCS36, a default value of N is assigned to field CIR in the new BCS side. There is no rate enforcement by default.

FRSCNEND

Table name

Frame Relay Service Connection End Table

Functional description

Table FRSCNEND is used as the provisioning mechanism for all DataSPAN frame relay connections.

Datafilling a tuple in table FRSCNEND initiates an automatic logical link connection (ALLC) mechanism, that enables a connection across the network. This automated method of establishing connections replaces the method of datafilling each office along the connection path.

Data II sequence and implications

The following tables must be datafilled before table FRSCNEND.

- PVDNAGEN
- PVDNCUST
- PVDNCHAN
- CLLI
- FRSTRKGRP
- FRSTRKS
- FRSCIR (BCS36-)

Table size

0 to 100 000 tuples

The table size is dynamically determined in accordance with the number of tuples added.

Data II

The following table lists datafill for table FRSCNEND.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SOURCE		see subfields	*Source* This field consists of subfields DN and DLCI.
	DN	vector of up to 15 digits (0 to 9)	*Directory number* Enter the directory number (DN).
	DLCI	16 to 215or16 to 1007	*Data link connection identifier* Enter a number between 16 and 215 for channelized access. Otherwise, enter a number between 16 and 1007 for unchannelized access. Any entry outside of this range is invalid.
SRCCIR (BCS36-)		see subfield	*Source committed information rate* This field consists of subfield CIR.
	CIR (BCS36-)	Y or N	*Source committed information rate* Enter Y (yes) to specify the committed information rate (CIR) template on the source endpoint and datafill refinement CIRINDEX.
CIRINDEX (BCS36-)		1 to 100	*Source index* Enter the index into table FRSCIR.
DESTDN		vector of up to 15 digits (0 to 9)	*Customer premise equipment destination directory number* Enter the destination DN.

Note 1: If the destination is a trunk, only source CIR template can be input (field DESTCIR must be set to N).

Note 2: If the connection is within the same office, both CIRS (fields SRCCIR and DESTCIR both set to Y) can be input.

FRSCNEND (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DESTDLCI		0 to 1023	*Customer premise equipment destination data link connection identifier* Enter a number to represent the data link connection identifier (DLCI) the customer premise equipment (CPE) uses to send data.
DESTCIR (BCS36-)		see subfield	*Destination committed information rate* This field consists of subfield CIR.
	CIR (BCS36-)	Y or N	*Destination committed information rate* Enter Y to specify the CIR template on the destination endpoint and datafill refinement CIRINDEX. Otherwise, enter N. The default is N.
CIRINDEX (BCS36-)		1 to 100	*Destination index* Enter the index into table FRSCIR.
ROUTING		alphanumeric (1 to 16 characters)	*Routing* Enter the name of the T1 trunk group used to establish the connection from the near-end of the call. This entry is a CLLI name found in table CLLI. ***Note:*** A CLLI name of NULFRS must be entered in table CLLI, and it is used to indicate no T1 trunk group is needed.
ORIG		Y or N	*Originate* Enter Y if this tuple is to originate the call. Otherwise, enter N.

Note 1: If the destination is a trunk, only source CIR template can be input (field DESTCIR must be set to N).

Note 2: If the connection is within the same office, both CIRS (fields SRCCIR and DESTCIR both set to Y) can be input.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
STATE		CONFIRMED or PENDING	*State* This field gives the state of a call. When a tuple is first entered it must be PENDING. When the call is asynchronously processed successfully, the field is automatically changed to CONFIRMED.
FRSAUTH			For NT use only.
FRSOPART			For NT use only.
FRSTPART			For NT use only.
Note 1: If the destination is a trunk, only source CIR template can be input (field DESTCIR must be set to N). ***Note 2:*** If the connection is within the same office, both CIRS (fields SRCCIR and DESTCIR both set to Y) can be input.			

Data ll e xample

The following example shows sample datafill for table FRSCNEND.

MAP display example for table FRSCNEND

```
      SOURCE  SRCCIR          DESTDN  DESTDLCI DESTCIR
   ROUTING ORIG     STATE
-------------------------------------------------------------

  7638523  101  Y   2          7783193      102       N
        ROH    Y   PENDING
```

Table history

BCS36

Table FRSCIR was added to the datafill sequence. Fields SRCCIR and DESTCIR with subfield CIR and refinement CIRINDEX were added.

BCS34

Table FRSCNEND was introduced.

FRSCNEND (end)

Supplementary information

This section provides information on dump and restore procedures when datafilling table FRSCNEND.

Dump and restore

Datafilling table FRSCNEND results in automatic datafill in table FRSTRKCN and subtable CONNECT of PVDNCUST, and a state change in the acceptor's FRSCNEND tuple.

Once the calls are confirmed (by accepted tuples in table FRSCNEND), tuples that affect calls in table PVDNCHAN can be deleted and added again.

In BCS36, a default value of N is assigned to fields SRCCIR and DESTCIR in the new BCS side. There is no rate enforcement by default.

FRSTRKCN

Table name

Frame Relay Service Connections for T1 Trunks Table

Functional description

Table FRSTRKCN contains a list of all the frame relay service connections in the office that involve a T1 trunk. Connections are assigned a primary trunk and data link logical identifier (DLCI), as well as a secondary trunk. This redundancy allows routing of frames to take place even in the event that one trunk (in a group of at least two trunks) is brought out of service. The DLCI used in the secondary route has the same value as the DLCI used in the primary route.

Table PVDNAGEN contains a list of all FRS connections in the office that involve a T1 trunk.

Data ll sequence and implications

The following tables must be datafilled before table FRSTRKCN.

- FRSTRKS
- FRSTRKGP
- PVDNAGEN
- FRSCIR

Note: Table FRSCNEND depends on table FRSTRKCN, but both can be datafilled independently.

Table size

0 to 20 000 tuples

FRSTRKCN (continued)

Data II

The following table lists datafill for table FRSTRKCN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PRIMCON		see subfields	*Primary connection* Field PRIMCON is the key that specifies the primary connection point to the T1 trunk. It consists of subfields GROUP, MEMBER, and DLCI.
	GROUP	alphanumeric (1 to 16 characters)	*Group* This field specifies the common language location identifier (CLLI) that identifies the trunk.
	MEMBER	0 to 5	*Member* Enter a number to indicate the trunk.
	DLCI	0 to 1023	*Data link logical identifier* Enter a number to identify the data link logical identifier (DLCI) of the trunk.
SECCON		0 to 5 or NONE	*Secondary connection* Enter the secondary choice for trunk use. If the primary trunk goes down, frames are sent using this trunk and DLCI. The secondary connection point must be on a different trunk in the trunk group. The secondary trunk must be in the same group as the primary trunk choice.
SRCCUST (-BCS34)		alphanumeric (up to 20 characters)	*Source customer* Enter the trunk end customer. For example, if local A is connected to local B, B is the end trunk customer entered in this field.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ENDPOINT		see subfield	*End point* Field ENDPOINT consists of subfield CONTYPE and its refinements.
	CONTYPE	ACCESS or TRUNK	*Connection type* Enter ACCESS if the connection terminates in the office and datafill refinements PVDNAGEN, DLCI, DNTYPE, and CIR. Enter TRUNK if the connection is tandem and datafill refinements GROUP, MEMBER, DLCI, and SECCON.

CONTYPE = ACCESS

If the entry for field CONTYPE is ACCESS, datafill refinements PVDNAGEN, DLCI, DNTYPE, and CIR as described below.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PVDNAGEN	0 to 2200	*Private virtual database network agent* Enter a number to indicate the private virtual database network (PVDN) agent number.
	DLCI	0 to 1023	*Data link logical identifier* Enter a number to indicate the DLCI.
	DESTCUST (-BCS34)	alphanumeric (up to 20 characters)	*Destination customer* Enter the destination customer.
	DNTYPE	NILor VALID	*Directory number type* Enter VALID to program the far end directory number (DN) of an access to trunk connection and datafill refinement FARENDDN. Otherwise, enter NIL. The default for this field is NIL.

FRSTRKCN (continued)

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	FARENDDN	vector of 15 digits (0 to 9)	*Far end directory number* If the entry in field DNTYPE is VALID, ter a far end directory number (DN) that allows the customer to program the far end DN of an access to trunk connection. This field allows the operating company the opportunity to coordinate the billing records downstream.
	CIR (BCS36-)	see subfield	*Committed information rate* This field consists of subfield CIR.
	CIR (BCS36-)	Y or N	*Committed information rate* Enter Y to specify the CIR template on the agent/DLCI and datafill refinement CIRINDEX. If the destination is an access, rate enforcement can be chosen and a CIR template is required to input. Otherwise, enter N. The default is N.
	CIRINDEX (BCS36-)	1 to 100	*Destination index* Enter the index into table FRSCIR.

CONTYPE = TRUNK

If the entry for field CONTYPE is TRUNK, datafill refinements GROUP, MEMBER, DLCI, and SECCON (and DESTCUST previous to BCS34) as described below.

Field descriptions for conditional data II (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	GROUP	alphanumeric (1 to 16 characters)	*Group* Enter the CLLI that identifies the trunk.
	MEMBER	0 to 5	*Member* Enter a number to indicate the trunk member.

Field descriptions for conditional data II (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DLCI	0 to 1023	*Data link logical identifier* Enter a number to indicate the DLCI.
	SECCON	0 to 5 orNONE	*Secondary connection* This field is datafilled if a secondary connection is required. Enter a number to indicate the desired secondary connection.
	DESTCUST (-BCS34)	alphanumeric (up to 20 charcters)	*Destination customer* Enter the destination customer.

Data II e xample

The following example shows sample datafill for table FRSTRKCN.

MAP display example for table FRSTRKCN

```
          PRIMCOM SECCON                              CONTYPE
_____________________________________________________________

     TEST2941 0  201     1  ACCESS   22  202    NIL  Y   2
```

Table history

BCS36

Tables FRSTRKGP and FRSCIR were added to the datafill sequence. Field CIR with subfield CIR and refinement CIRINDEX was added.

BCS34

Refinements SRCCUST and DESTCUST were removed for future BCSs.

Supplementary information

This section provides information on locating tuples for particular endpoints in table FRSTRKCN, as well as dump and restore procedures for the table.

FRSTRKCN (end)

Locating tuples for particular endpoints

Within table FRSTRKCN, no distinction is made between bidirectional connections (source point to end point). Users wishing to list a tuple that involves a particular endpoint can use one of the following table control commands on a MAP (maintenance and administrative position) terminal:

```
<pos> <group> <member> <dlci>

LIST ALL (CONTYPE EQ 'TRUNK <group> <member> <dlci> * *')

LIST ALL (CONTYPE EQ 'ACCESS <agentid> <dlci> *')
```

Dump and restore

In BCS36, a default value of N is assigned to field CIR in the new BCS side. There is no rate enforcement by default.

FRSTRKGP

Table name

Frame Relay Service for T1 Trunk Group Table

Functional description

Table FRSTRKGP contains a list of all the frame relay service T1 trunk groups in the office. A group of trunks must terminate at the same office.

Data II sequence and implications

The following tables must be datafilled before table FRSTRKGP.

- CLLI
- PVDNCUST

The following tables must be datafilled after table FRSTRKGP:

- FRSTRKS
- FRSTRKCN

Table size

0 to 400 tuples

Data II

The following table lists datafill for table FRSTRKGP.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPNAME		alphanumeric (1 to 16 characters)	*Group name* This field is the key to table FRSTRKGP. The field contains a common language location identifier (CLLI) name that identifies the group and its destination office. The name must be datafilled in table CLLI.
ENHANCED (-BCS34)		Y or N	*Enhanced* Enter Y (yes) if the trunk group contains trunks of which both ends connect to DMS SuperNode switches. Otherwise, enter N (no).

FRSTRKGP (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CUSTOMER (-BCS34)		USAGE	*Customer* Enter the USAGE value.
USAGE (-BCS34)		NON-SHARED SHARED	*Usage* To designate that only one particular customer can send data across a particular trunk group, enter NONSHARED and datafill refinement CUSTOMER. If more than one customer can send data across the hunt group, enter SHARED.
	CUSTOMER (-BCS34)	1 to 20 character string	*Customer* If the entry value in field USAGE is NONSHARED, datafill this field to identify the customer that owns the trunk group. Enter a vector of up to 20 characters in length. This customer must exist in table PVDNCUST.

Data ll e xample

The following example shows sample datafill for table FRSTRKGP.

MAP display example for table FRSTRKGP

```
GRPNAME
_____________________________________________________________

KANSAS
```

Table history

BCS35

Fields ENHANCED, CUSTOMER, USAGE, and refinement CUSTOMER were removed for BCS35 and up.

FRSTRKS

Table name

Frame Relay Service for T1 Trunks Table

Functional description

Table FRSTRKS contains a list of all the frame relay service T1 trunks in an office.

Data II sequence and implications

The following tables must be datafilled before table FRSTRKS.

- FRSTRKGP
- CLLI
- PVDNAGEN

Table FRSTRKCN must be datafilled after table FRSTRKS.

Table size

0 to 2400 tuples

Table size is increased by adding more tuples. The limit of 2400 tuples is derived from the limit on the number of trunk groups (400) multiplied by the number of members for each group (6).

Data II

The following table lists datafill for table FRSTRKS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TRUNK		see subfields	*Trunk* This field consists of subfields GROUP and MEMBER. This is the key to the table.
	GROUP	alphanumeric (1 to 16 characters)	*Common language location identifier group* Enter a common language location identifier (CLLI) name that identifies the trunk group to which the trunk member belongs. The CLLI is datafilled in table CLLI.

FRSTRKS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MEMBER	0 to 5	*Member* Enter a number to indicate the member number within the trunk group. This identifies an individual trunk within a group.
AGENTID		0 to 2200	*Agent identification* Enter a number to indicate the Private Virtual Database Network (PVDN) agent number to which the trunk is assigned. The agent essentially determines which frame relay interface unit (FRIU) to which the trunk connects on the local side.

Data ll e xample

The following example shows sample datafill for table FRSTRKS.

MAP display example for table FRSTRKS

```
            TRUNK AGENTID
_____________________________________________________________

          KANSAS 0     103
```

FTCODE

Table name

Utility Code Table

Functional description

Table FTCODE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table FTCODE translates the utility code digit segment, together with tables FTHEAD and FTRTE.

For related information, refer to table ACCODE. For a description of the universal translation tables, see table ACHEAD.

Data ll sequence and implications

Table FTHEAD must be datafilled before tables FTCODE and FTRTE.

Table size

Refer to table ACCODE.

Data ll

Field names, subfield names, and valid data ranges for table FTCODE are described in table ACCODE.

Data ll e xample

Refer to table ACCODE.

Table history

Refer to table ACCODE.

FTHEAD

Table name

Utility Code Head Table

Functional description

Table FTHEAD is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table FTHEAD translates the utility code digit segment, together with tables FTCODE and FTRTE.

For related information, refer to tables ACCODE and ACRTE. For a description of the universal translation tables, refer to table ACHEAD.

Data ll sequence and implications

Refer to table ACHEAD.

Table size

Memory is automatically allocated to a maximum of 2047 tuples. The size is initially set to 64 and the table extends itself automatically.

Data ll

Field names, subfield names, and valid data ranges for table FTHEAD are described in table ACHEAD.

Data ll e xample

Refer to table ACHEAD.

Table history

Refer to table ACHEAD.

FTRANDEV

Table name

File Transfer Device Table

Functional description

Table FTRANDEV is used by the file transfer service to download files to a DMS from a remote node (computer) using network operations protocol (NOP). The information in table FTRANDEV determines the device a particular file is downloaded to. Only tape and disk volumes can be added into the table. The file transfer service uses the key to sequentially select devices from the table until the operation is successful using the device or there are no more devices listed in the table.

The volume can become full during downloading of the file. If table FTRANDEV is datafilled, the file can be put on another volume in the list. Otherwise, an error results.

Data II sequence and implications

The following tables must be datafilled before table FTRANDEV.

- MTD
- DDU

Table size

0 to 3 tuples

Data II

The following table lists datafill for table FTRANDEV.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FTKEY		1 to 3	*File transfer key* This is the key to the table and indicates the choice of the corresponding device. That is, the tuple with a key of 1 indicates that the tuple contains the primary device used.
DEVICE		alphanumeric (7 to 12 characters)	*Device* Enter a valid device name (tape or disk volume) as previously datafilled in table MTD or table DDU. Device SFDEV (system file device) is not a valid entry.

FTRANDEV (end)

Data ll e xample

The following example shows sample datafill for table FTRANDEV.

MAP display example for table FTRANDEV

```
FTKEY        DEVICE
_____________________________________________________________

    1       D000AMA
```

FTRGDEFS

Table name

Feature Group Definitions

Functional description

Table FTRGDEFS is used by the operating company to package residential and business features into logical groupings called access feature groups (AFG). The AFGs, also called feature groups, are assigned as a single option to any number of lines using a single service order prompt. For more information on the Service Order System (SERVORD), refer to the *SERVORD Reference Manual*.

Table FTRGDEFS is used to define the group characteristics of each feature group.

Each feature group must be associated with a specific class of line terminal. The class of station to which a particular feature group applies is indicated in subfield CLASS in table FTRGDEFS. Each station class corresponds to one or more line class codes (LCC), as shown in the following table.

Station classes

Station class	Description	Line class code
DATA	Data line	DATA, MADO, MCA, MPDA
IBN	Integrated Business Network (500/2500)	IBN
ISDN	Integrated services digital network	ISDNKSET (BRAFS)
MBS	Meridian business set	PSET, M2009, M2112, M2018, M2317, M3000, M5009, M5112, M5209, M5312, M2008, M2616, M2616CT, M2016S, M2216A, M2216B
RES	Residential line	1FR, 1MR, RES

Individual feature groups can be made available either on an office-wide basis or restricted to a particular customer group. The scope of each feature group is specified in subfield OWNERSHIP in table FTRGDEFS.

Feature groups other than those associated with the RES station class can be designated as either public or private, while RES feature groups are designated

FTRGDEFS (continued)

public by default. Private feature groups are assigned to a single customer group, which is specified in subfield CUSTGRP in table FTRGDEFS.

Special group options can be assigned to individual feature groups using field OPTIONS in table FTRGDEFS. Although this field was designed to allow for a list of options to be specified, currently only two options are available: customer data change (CDC) and MAXLINE (maximum number of lines associated with a feature group).

Public feature groups can be assigned the CDC option. This option provides non-operating company users with the capability of viewing and even modifying the feature group data associated with the customer groups they own. CDC users access their feature group data through tables FTRGDEFS and FTRGOPTS, using the Partitioned Table Editor feature, BC1459.

To provide CDC users the ability to assign and modify private feature groups, the feature group must be added to table DATAOWNR (Data Owner) and associated with an owner.

Service groups

Prior to NA005, a service group was defined as any feature group specified with the scope of CUST (customer). Applicable to NA005 and up, service groups are redefined as public (used by many customer groups) or private (used by the one customer group defined). Public service groups do not have to be associated with one customer group only.

Service groups can contain only two options: Calling Line Identification (CLID) and Name Display (NAMEDSP), assignable in table FTRGOPTS. Within the CLID option users can indicate the Reason Display (REASDISP) option. Feature groups, which can be both public and private, can contain several line options.

Data II sequence and implications

Table CUSTHEAD must be datafilled before table FTRGDEFS.

Table size

0 to 8191 tuples

Data II

The following table lists datafill for table FTRGDEFS.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FTRGRP		alphanumeric (up to 16 characters)	*Feature group name* Enter the feature group name defined by the operating company.
GRPTYPE		FTRGRP, SVCGRP	*Group type* Enter FTRGRP for feature group or SVCGRP for service group.
FTRGVAR		see subfield	*Feature group variable area* This field consists of subfield CLASS.
	CLASS	DATA, IBN, ISDN, MBS, or RES	*Class of station* Enter the type of station class (or terminal class) to which the feature group can be assigned. See Table Table , "Station classes" on page -935 for an explanation of the station classes. If the entry in subfield CLASS is RES, go to field NUMLINES. If the entry in subfield CLASS is anything other than RES, datafill refinement OWNERSHIP.
	OWNERSHIP	see subfield	*Feature group ownership* This subfield consists of subfield SCOPE.

FTRGDEFS (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SCOPE	PRIV or PUB	*Feature group scope* Enter the scope of the feature group. Enter PRIV to identify a private feature group, or PUB to identify a public feature group. If the entry in subfield SCOPE is PRIV, datafill refinement CUSTGRP.
	CUSTGRP	alphanumeric (up to 16 characters)	*Customer group* Enter the customer group that owns the private feature group.
NUMLINES		0 (zero)	*Number of lines* This field indicates the number of lines that are currently associated with the feature group. This field is read-only and cannot be modified by the operating company. Enter 0 (zero) when datafilling. Any entry outside the range indicated for this field is invalid.
OPTIONS		see subfield	*Options* This field consists of subfield OPTION.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	CDC or MAXLINE (up to 2 options)	*Option list* If only one option is required, enter $ to end the tuple. Enter CDC for the customer data change option (applicable to public feature groups only). No further datafill is required. Enter MAXLINE to limit the total number of lines that can be associated with a feature group, and datafill refinement MAXLINES.
	MAXLINES	0 to 32 767	*Maximum number of lines* Enter the total number of lines that can be associated with a feature group.

Data ll e xample

The following example shows sample datafill for table FTRGDEFS.

MAP display example for table FTRGDEFS

```
TABLE: FTRGDEFS
FTRGRP      GRPTYPE     FTRGVAR     NUMLINES     OPTIONS
-------------------------------------------------------
AFGPUB      FTRGRP      MBS PUB          0        CDC $
AFGPRIV     FTRGRP      MBS PRIV    CUSTGRP1     0   $
SVCGPUB     SVCGRP      MBS PUB          0 MAXLINE  7 $
SVCGPRIV    SVCGRP      MBS PRIV    CUSTGRP2 0       $
```

Table history

NA011

Deleted station class BRAKS for ISDNKSET line class. You can no longer provision BRAKS types of ISDN BRI on the switch through table control. Obsolete BRAKS LTIDs that were present have been changed to default BRAFS LTIDs.

FTRGDEFS (end)

NA008

Added ATA and M2616CT business set LCCs.

NA005

Added field GRPTYPE, deleted the scope of CUST, and changed the MAP display example according to functionality enhancements, which created the public service group and allowed a feature group and a service group to be assigned to a line simultaneously. Added that the CDC option is applicable to public feature groups only.

FTRGMEMS

Table name

Feature Group Members

Functional description

Table FTRGMEMS is used to assign access feature groups (AFG) to individual lines. The AFGs, also called feature groups, package residential and business features into logical groupings that can be assigned as a single option to any number of lines using a single service order prompt. For more information about the Service Order System (SERVORD), refer to the *SERVORD Reference Manual*.

Service groups

Prior to NA005, a service group was defined as any feature group specified with the scope of CUST (customer). Applicable to NA005 and up, service groups are redefined as public (used by many customer groups) or private (used by the one customer group defined). Public service groups do not have to be associated with one customer group only.

Service groups can contain only two options: Calling Line Identification (CLID) and Name Display (NAMEDSP), assignable in table FTRGOPTS. Within the CLID option users can indicate the Reason Display (REASDISP) option. Feature groups, which can be both public and private, can contain several line options.

Both a feature group and a service group can be associated with a given line simultaneously. For Meridian business sets (MBS), the same AFG is automatically associated with all directory numbers (DN) appearances on the set.

Data II sequence and implications

The following tables must be datafilled before table FTRGMEMS:

- FTRGDEFS
- FTRGOPTS

A line must be datafilled in table IBNLINES or table KSETLINE before it can be specified in table FTRGMEMS.

Table size

Table size is limited to the number of integrated business network (IBN) or MBS lines in the office.

FTRGMEMS (continued)

Data II

The following table lists datafill for table FTRGMEMS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FTMEMKEY	LEN	see subfields	Line equipment number. This field defines the physical location of the equipment that is connected to a specific line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. Refer to section “Common entry field LEN" in this document for a complete description of field LEN and associated subfields. For ISDN lines, field LEN consists of subfield LTID. For non-ISDN lines, field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
	GRPTYPE	FTRGRP, SVCGRP	Group type. Enter FTRGRP for feature group or SVCGRP for service group.
FTRGRP		alphanumeric (up to 16 characters)	Feature group name. Enter the feature group name assigned to the line. Feature group names are defined by the operating company. ***Note:*** Since FTRGRPs with a scope of private may include the SVCGRP options CLID and NAMEDSP, a line may have conflicting settings for these two options. For example, a line may be assigned a private FTRGRP with CLID ONNET and a SVCGRP with CLID OFFNET. Service group settings will always override any private FTRGRP settings. If no SVCGRP is present on a line, private FTRGRP settings will function normally.

Data II e xample

The following example shows sample datafill for table FTRGMEMS.

MAP display example for table FTRGMEMS

```
TABLE: FTRGMEMS
LEN                        GRPTYPE                 FTRGRP
---------------------------------------------------------------
HOST     05  0   00  21    FTRGRP                  AFGPUB
HOST     05  0   00  21    SVCGRP                  SVCGPUB
HOST     05  0   00  22    FTRGRP                  AFGPUB
HOST     00  0   18  02    SVCGRP                  SVCGPUB
```

Table history

NA005

Added field GRPTYPE and changed MAP display according to functionality enhancements, which created the public service group and allowed a feature group and a service group to be simultaneously assigned to a line.

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual

Volume 4 of 12

Data Schema DGCODE-FTRGMEMS

Product Documentation - Dept. 3423
Nortel Networks
P.O. Box 13010
RTP, NC 27709-3010
Telephone: 1-877-662-5669
email: cits@nortelnetworks.com

Publication number: 297-8021-351
Product release: LET0015 and up
Document release: Standard 05.02
Date: May 2001
Printed in the United States of America

NORTEL NETWORKS™