Critical Release Notice

Publication number: 297-8021-351
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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

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DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual Volume 5 of 12

Data Schema FTRGOPTS-INWTMAP

LET0015 and up Standard 05.02 May 2001

NORTEL NETWORKS™

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual Volume 5 of 12

Data Schema FTRGOPTS-INWTMAP

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Data Schema FTRGOPTS-INWTMAP

NTP Summary Contents

1 Data schema tables

The following pages contain the data schema tables.

FTRGOPTS

Table name

Feature Group Options

Functional description

Table FTRGOPTS is used to assign line options to all feature groups defined in a switching unit. The characteristics of individual feature group options are also specified in this table.

The following table provides a list of the station classes and the software package needed for each class.

Class of station

Class	Software package
RES	NTXA64AA Residential Enhanced Services (RES)
IBN	NTX100AA Integrated Business Network (IBN) Basic
MBS	NTX106AA IBN - Proprietary Business Set
DAT	NTX106AA IBN - Proprietary Business Set
ISD	NTX750AB ISDN Basic Access
BRA	NTX750AB ISDN Basic Access

Options

The key to tuples in table FTRGOPTS consists of a feature group name and an option acronym. The remainder of the information specified in the tuples of table FTRGOPTS is dependent on the option being assigned.

To reduce the number of tuples required in table FTRGOPTS, several of the line options assigned to a particular feature group can be specified in a single tuple. For this purpose, the feature group options have been divided into two categories, based on whether additional information is required to define the option's characteristics: line options with no additional information and line options with additional information. These categories determine how each option is assigned in the table.

Options with no conditional datafill

All options that require no additional information can be specified in a single tuple. These options can be identified by the acronym OPTS. These tuples contain a field named OPTLIST, which is a vector in which one or more line options can be specified. A complete list of these options, along with their

compatible station classes, is provided in the following table. The datafill for these options is in the “Datafill" section of this data schema table description.

FTRGOPTS line options with no additional information (Sheet 1 of 2)

Option	Description	RES	IBN	Station MBS	class DAT	ISD	BRA
BLF	Busy Lamp Field			•			
CCV	Call Covering			•			
CCW	Cancel Call Waiting	•	•	•			
CHD	Call Hold		•				
CPU	Call Pickup for Power Feature Users			•		•	•
CTW	Call Transfer Warning		•	•			
CWD	Dial Call Waiting		•	•			
CWI	Call Waiting Intragroup		•	•			•
CWO	Call Waiting Originator		•	•			
CWR	Call Waiting Ringback	•	•	•			
CWT	Call Waiting	•	•				
CWX	Call Waiting Exempt		•	•	•		
DCBI	Direct Call Pickup Barge In		•	•			•
DCBX	DCBI Exempt		•	•			•
DCF	Denied Call Forward		•	•	•	•	•
DCPK	Directed Call Park		•	•			•
DCPU	Directed Call Pickup		•	•		•	•
DCPX	DCPU Exempt		•	•			•
EMW	Executive Message Waiting			•			
HLD	Permanent Hold		•				
INSPECT	Inspect			•			
KSMOH	Keyset Music On Hold			•			

FTRGOPTS (continued)

FTRGOPTS line options with no additional information (Sheet 2 of 2)

Option	Description	RES	IBN	Station MBS	class DAT	ISD	BRA
LNR	Last Number Redial		•	•	•	•	•
LNRA	LNR for Set (All)			•			
LVM	Leave Message			•			
MSB	Make Set Busy	•	•	•	•	•	•
MSBI	Make Set Busy Intragroup		•	•	•	•	•
PRK	Call Park		•	•		•	•
QTD	Query Time and Date			•			
RAG	Ring Again		•				
SBLF	Set Based Busy Lamp Field			•		•	
SL	Secondary Language	•	•	•	•	•	•
SMDR	Station Message Detail Recording		•	•	•	•	•
3WC	Three-way Calling	•	•				

Options with conditional datafill

The following table lists table FTRGOPTS line options that require additional information to be datafilled and their compatible station classes. The datafill for these options is in the “Conditional datafill" section of this data schema table description.

FTRGOPTS line options with additional information (Sheet 1 of 3)

Option	Description	RES	IBN	Station MBS	class DAT	ISD	BRA
ACB	Automatic Callback	•	•				
AR	Automatic Recall	•	•				
AUD	Automatic Dial			•			
AUTODISP	Automatic Display			•			
CFB	Call Forward Busy (IBN)		•	•	•	•	•

FTRGOPTS (continued)

FTRGOPTS line options with additional information (Sheet 2 of 3)

Option	Description	RES	IBN	Station MBS	class DAT	ISD	BRA
CFBL	Call Forward Busy Line	•					
CFD	Call Forward Don't Answer (IBN)		•	•	•	•	•
CFDA	Call Forward Don't Answer	•					
CFDVT	CFD Variable Timer		•	•	•	•	•
CFI	Call Forward Intragroup (IBN)		•	•	•	•	•
CFK	Call Forward per Key			•			
CFS	Call Forward Simultaneous/Screening		•	•	•		
CFU	Call Forward Universal (IBN)		•	•	•	•	•
CFW	Call Forward	•					
CLID	Calling Line Identification		•	•	•		
CLIDSP	CLI Display			•		•	•
CMCF	Control of Multiple Call Forward		•	•	•		
CNAMD	Calling Name Display			•		•	•
CND	Calling Number Display	•	•				
CNDB	CND Blocking	•	•				
CNF	Flexible Station Controlled Conference		•	•			•
COT	Customer Originated Trace	•	•				
CXR	Call Transfer	•	•				
DDN	Dialable Delivery Number	•	•				
MWT	Message Waiting		•				
NAMEDSP	Name Display		•	•	•		

FTRGOPTS (continued)

FTRGOPTS line options with additional information (Sheet 3 of 3)

Option	Description	RES	IBN	Station MBS	class DAT	ISD	BRA
OLS	Originating Line Select			•			
OPTS	Various Line Options	•	•	•	•	•	•
PF	Power Features			•			
PFCNTL	Power Features Control			•			
REASDSP	Reason Display			•			
SCL	Speed Calling Long List (IBN)		•	•	•	•	•
SCS	Speed Calling Short List (IBN)		•	•	•	•	•
SC1	Speed Calling Short List	•					
SC2	Speed Calling Long List (L30)	•					
SC3	Speed Calling Long List (residential) (L50)	•					
TLS	Terminating Line Select			•			
3WCPUB	Three-way Calling Public		•				

Datafill sequence and implications

Table FTRGDEFS must be datafilled before table FTRGOPTS.

Datafill

The following table lists datafill for table FTRGOPTS line options that do not require additional information.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FTRGRP		alphanumeric (up to 16 characters)	Feature group name. This field specifies the feature group name to which the option is assigned. Enter the feature group name defined by the operating company.
OPTION		OPTS	Feature group option. This subfield specifies that several options are to be assigned in this tuple. Enter OPTS.
OPTVAR		see subfields	Option variable area. This field consists of subfields OPTION and OPTLIST.
	OPTION	OPTS	Option. This subfield specifies that several options are to be assigned in this tuple. Enter OPTS.
	OPTLIST	alphanumeric (up to 36 entries)	Option list. This subfield specifies up to 36 options. Enter the list of options.

Conditional datafill

The following table lists datafill for table FTRGOPTS line options that require additional information.

Note: Depending on the option being assigned, enter the appropriate data in the subfields generated. Refer to the table “Option subfields for table FTRGOPTS" for a list of subfields associated with each option and the valid input for each subfield.

FTRGOPTS (continued)

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
FTRGRP		alphanumeric (up to 16 characters)	Feature group name. This field specifies the 1- to 16-character alphanumeric feature group name to which the option is assigned. Enter the feature group name defined by the operating company.
OPTION		alphanumeric	Feature group option. This field specifies the feature group option to be assigned in this tuple. Enter the feature group option. OPTS is a valid feature group option.
OPTVAR		see subfield	Option variable area. This field consists of subfield OPTION.
	OPTION	alphanumeric	Option. This subfield specifies the option to be assigned in this tuple. Enter the option.

Option subfields

The following table lists, for each option, the subfields that require datafill and the valid input for each subfield.

Option subfields for table FTRGOPTS (Sheet 1 of 4)

Option entered in subfield OPTION	Subfields generated	Valid input
ACB	BILLING	AMA, NOAMA
AR	BILLING	AMA, NOAMA
AUTODISP	CWT	Y, N
CFB	CFBOPTS	CBE, CBI, CBU, IECFB (select up to two values)
CFBL	SCRNCL	Screening class from table SCRNCLS (alphanumeric)
	NUMCALLS	1 to 1024 (calls)
	TIME	12 to 60 (seconds)
CFDVT	TIMEVAL	12 to 60 (seconds)

Option subfields for table FTRGOPTS (Sheet 2 of 4)

Option entered in subfield OPTION	Subfields generated	Valid input
CFI	None	Not applicable
CFK	None	Not applicable
CFS	SIMVAR	This subfield consists of subfield SIMULT. If SIMULT is set to Y, subfields NCFUIF, NCFB, and NCFD require datafill. The subfields and their values follow: • SIMULT: Y, N • NCFUIF: 1 to 1024 (calls) • NCFB: 1 to 1024 (calls) • NCFD: 1 to 1024 (calls)
	SCRVAR	This subfield consists of subfield SCREEN. If SCREEN is set to Y, subfield CFXNCOS requires datafill. The subfields and their values follow: • SCREEN: Y, N • CFXNCOS: 0 to 511 (NCOS number)
CFU	OVRDACR	Y, N
CFW	SCRNCL	Screening class from table SCRNCLS (alphanumeric)
	NUMCALLS	1 to 1024 (calls)
CLIDSP	DISPFMT	STD, OPT, ENH, FULL
CNAMD	BILLING	AMA, NOAMA
CND	BILLING	AMA, NOAMA
CNDB	BILLING	AMA, NOAMA
CNF	CONFTYPE	C06, C10, C14, C18, C22, C26, C30
COT	BILLING	AMA, NOAMA

FTRGOPTS (continued)

Option subfields for table FTRGOPTS (Sheet 3 of 4)

Option entered in subfield OPTION	Subfields generated	Valid input
CXR	CXFERVAR	This subfield consists of subfield CXFERTYP. If CXFERTYP is set to CUSTOM, subfields ORGINTER, ORGINTRA, TRMINTER, and TRMINTRA require datafill. The subfields and their values follow: • CXFERTYP: NCT, ATTRCLF, CTINC, CTOUT, CUSTOM • ORGINTER: AC, INTRA, INTER, TRATER, NOCXFER • ORGINTRA: AC, INTRA, INTER, TRATER, NOCXFER • TRMINTER: AC, INTRA, INTER, TRATER, NOCXFER • TRMINTRA: AC, INTRA, INTER, TRATER, NOCXFER
	CXFERRCL	This subfield consists of subfield CXRRCL. If CXRRCL is set to Y, subfield RLCTIM requires datafill. The subfields and their values follow: • CXRRCL: Y, N • RLCTIM: 12 to 120 (seconds)
	METHOD	STD, RLS, DIAL
DDN	BILLING	AMA, NOAMA
MWT	NOTICE	MWL, STD, CMWI, PRN
	CAR	Y, N (If Y, subfield CRRCFW requires datafill.)
	CRRCFW	NO, ALL, DISPLAY
	CRX	Y, N

Option subfields for table FTRGOPTS (Sheet 4 of 4)

Option entered in subfield OPTION	Subfields generated	Valid input
OLS	OLSOPT	IDLE, NOSELECT
PF	PFOPT	USER, LANG, PSWD If PFOPT is set to USER, subfield USER requires datafill. If PFOPT is set to LANG, subfield LANGUAGE requires datafill. If PFOPT is set to PSWD, subfield PASSWORD requires datafill. The subfields and their values follow: • USER: GENERAL, ADMIN • LANGUAGE: ENGLISH, FRENCH • PASSWORD: 3 to 6 digits

Datafill example

The following example shows sample datafill for table FTRGOPTS.

MAP display example for table FTRGOPTS

```
FTRGRP    OPTION     OPTION                          OPTVAR
_____________________________________________________________
BNRAFG1   NAMEDSP    NAMEDSP                         ONNET
BNRAFG1   CLID       CLID                            Y OFFNET
```

Table history

NA005

Added tables “Field descriptions for conditional datafill" and “Option subfields for table FTRGOPTS."

NA003

Option SBLF was added to the table “FTRGOPTS line options with no additional information."

BCS35

Options CLID, CMCF, CPU, and NAMEDISP were added. Entries SECLOCK and PFKEY were added to subfield PFAPPL for feature PFCNTL. Entry LOCK was added to subfield PFOPT for feature PF.

FTRGOPTS option 3WCPUB

Three-way Calling Public

See table IBNFEAT for a description of option 3WCPUB.

Datafill

The following table lists the datafill for table FTRGOPTS option 3WCPUB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement TWCPUBVAR.
	OPTION	3WCPUB	*Option* Enter the option 3WCPUB.
	TWCPUBVAR	see subfields	*Three-way Calling Public variable area* This field consists of subfields LOOPCON and SPLITKEY.
	LOOPCON	Y or N	*Loop console selector* Enter Y (yes) to indicate that the 3WCPUB option is added to a loop console such as the 50B CPS and datafill refinement SPLITKEY. Otherwise, enter N (no). No further datafill is required for this option.
	SPLITKEY	OCT or STAR	*Split key indicator* This subfield indicates which key is used to initiate a split operation from a loop console. The key can be either STAR (*) or OCT (#).

FTRGOPTS option ACB

Automatic Callback

See table IBNLINES for a description of option ACB.

Datafill

The following table lists the datafill for table FTRGOPTS option ACB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	OPTION	ACB	*Feature group option* Enter the option ACB.
	BILLING	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option AR

Automatic Recall

See table IBNLINES for a description of the AR option.

Datafill

The following table lists the datafill for table FTRGOPTS option AR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	OPTION	AR	*Option* Enter the option AR.
	BILLING	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option AUD

Automatic Dialing

This option programs an AUD.

Datafill

The following table lists the datafill for table FTRGOPTS option AUD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements PGMAUD and AUDFEAT.
	OPTION	AUD	*Feature group option* Enter the option AUD.
	PGMAUD	Y or N	*Programmed automatic dial* This field indicates whether the standard AUD function is used or if the AUD key is programmed by the operating company to access a feature or a service. Enter Y (yes) to indicate that the AUD key is programmed by the operating company. Enter N (no) to indicate that the standard AUD function is desired. The default value for this field is N.
	AUDFEAT	vector of (up to 16 characters)	*Automatic dial feature* This field indicates if the feature is accessed through single-key action. The default value for this field is STD (standard).

FTRGOPTS option AUTODISP

Automatic Display

This option specifies option Calling Name Delivery.

Datafill

The following table lists the datafill for table FTRGOPTS option AUTODISP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement CWT.
	OPTION	AUTODISP	*Automatic Display option* Enter the option AUTODISP.
	CWT	Y or N	*Call Waiting* Enter Y (yes) if Automatic Display is desired on Call Waiting calls. Otherwise, enter N (no). ***Note:*** Option CCW cannot be added to a Residential Enhanced Services (RES) feature group that does not have the CWT option assigned. The CWT option cannot be removed from a RES group unless the CCW option is also removed.

FTRGOPTS option CFB

Call Forward Busy

See table IBNFEAT or KSETFEAT for a description of option CFB.

Datafill

The following table lists the datafill for table FTRGOPTS option CFB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement CFBOPT.
	OPTION	CFB	*Option* Enter the option CFB.
	CFBOPTS	CBE, CBI, CBU, or IECFB	*Call forward busy options* Enter up to two of the following values for forwarding calls if the line is busy. If less than two options are required, end the list with a $ (dollar sign). • CBE: external (outside the customer group) calls are not forwarded. Intragroup calls are forwarded to remote station within the customer group. • CBI: intragroup calls are not forwarded. External calls are forwarded to remote station within the customer group. • CBU: all calls are forwarded to remote stations within or outside the customer group (unrestricted). • IECFB: forward internal (inside the customer group) and external (outside the customer group) calls to remote stations within the customer group.

FTRGOPTS option CFBL

Call Forward Busy Line

See the *Translations Guide* for a description of option CFBL.

Datafill

The following table lists the datafill for table FTRGOPTS option CFBL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements SCRNCL and NUMCALLS.
	OPTION	CFBL	*Option* Enter the option CFBL.
	SCRNCL	alphanumeric (up to 32 characters)	*Screening class* Enter the class of service screening required for screening the forwarded calls. The screening class must be assigned in table SCRNCLAS.
	NUMCALLS	1 to 1024	*Number of simultaneous forwarding calls* Enter the number of calls that can be forwarded simultaneously.

FTRGOPTS option CFD

Call Forward Don't Answer (IBN)

See tables IBNFEAT or KSETFEAT for a description of option CFD.

Datafill

The following table lists the datafill for table FTRGOPTS option CFD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement CFDOPT.
	OPTION	CFD	*Option* Enter the option CFD.
	CFDOPT	CDE, CDI, CDU, or IECFD	*Call Forward Don't Answer options* Enter up to two of the following options for the option CFD. If less than two options are required, end the list with a $ (dollar sign). • CDE: external calls are not forwarded. Intragroup calls are forwarded to remote station within the customer group. • CDI: intragroup calls are not forwarded. External calls are forwarded to remote station within the customer group. • CDU: forward all calls to remote station within or outside the customer group (unrestricted). • IECFD: forward internal (inside the customer group) and external (outside the customer group) calls to remote stations within the customer group.

FTRGOPTS option CFDA

Call Forward Don't Answer

See the *Translations Guide* for a description of option CFDA.

Datafill

The following table lists the datafill for table FTRGOPTS option CFDA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements SCRNCL, NUMCALLS, and TIME.
	OPTION	CFDA	*Option* Enter the option CFDA.
	SCRNCL	alphanumeric (up to 32 characters)	*Screening class* Enter the class of service screening required for screening the forwarded calls. The screening class must be assigned in table SCRNCLAS.
	NUMCALLS	1 to 1024	*Number of simultaneous forwarded calls* Enter the number of calls that can be forwarded simultaneously.
	TIME	12 to 60	*Time* Enter the CFDA timing, in 1-s intervals. Any entry outside the range indicated for this field is invalid.

FTRGOPTS option CFDVT

Call Forward Don't Answer Variable Timer

See table IBNFEAT or KSETFEAT for a description of option CFDVT.

Datafill

The following table lists the datafill for table FTRGOPTS option CFDVT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement TIMEVAL.
	OPTION	CFDVT	*Option* Enter the option CFDVT.
	TIMEVAL	12 to 60	*Time value* Enter the CFDVT timing, in 1-s intervals.

FTRGOPTS option CFI

Call Forward Intragroup

See table IBNFEAT or KSETFEAT for a description of option CFI.

Datafill

The following table lists the datafill for table FTRGOPTS option CFI.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION.
	OPTION	CFI	*Option* Enter option CFI.

FTRGOPTS option CFK

Call Forward per Key

See table KSETFEAT for a description of option CFK.

Datafill

The following table lists the datafill for table FTRGOPTS option CFK.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION.
	OPTION	CFK	*Option* Enter the option CFK.

FTRGOPTS option CFS

Call Forward Simultaneous/Screening

This option specifies the number of calls that can be forwarded simultaneously, and if network class of screening (NCOS) of forwarded calls is required.

Datafill

The following table lists the datafill for table FTRGOPTS option CFS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements SIMVAR and SCRVAR.
	OPTION	CFS	*Option* Enter option CFS.
	SIMVAR	see subfield	*Simultaneous variable area* This field consists of subfield SIMULT.
	SIMULT	Y or N	*Simultaneous* Enter Y (yes) if the number of calls that can be forwarded simultaneously needs specification and datafill refinements NCFUIF, NCFB, and NCFD. Otherwise, enter N (no). No further datafill for this option is required.
	NCFUIF	1 to 1024	*Number of simultaneous Call Forward Universal and Intragroup calls* If the entry in subfield SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for Call Forward Universal and Call Forward Intragroup.
	NCFB	1 to 1024	*Number of simultaneous Call Forward Busy calls* If the entry in subfield SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for Call Forward Busy.

FTRGOPTS option CFS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NCFD	1 to 1024	*Number of simultaneous Call Forward Don't Answer calls* If the entry in subfield SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for Call Forward Don't Answer.
	SCRVAR	see subfield	*Screening variable area* If the entry in subfield SIMULT is Y, datafill this refinement. This field consists of subfield SCREEN.
	SCREEN	Y or N	*Screening* If the entry in subfield SIMULT is Y, datafill this subfield. Enter Y if network class of screening (NCOS) of forwarded calls is required and datafill refinement CFXNCOS. Otherwise, enter N. No further datafill for this option is required.
	CFXNCOS	0 to 511	*Call Forward network class of service screening* If the entry in subfield SCREEN is Y, datafill this refinement. Enter the NCOS number required for screening the forwarded calls.

FTRGOPTS option CFU

Call Forward Universal

See table IBNFEAT or KSETFEAT for a description of option CFU.

Datafill

The following table lists the datafill for table FTRGOPTS option CFU.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement OVRDACR.
	OPTION	CFU	*Option* Enter the option CFU.
	OVRDACR	Y or N	*Override account code requirements* Enter Y (yes) to override account code requirements. Otherwise, enter N (no).

FTRGOPTS option CFW

Call Forward

See the *Translations Guide* for a description of option CFW.

Datafill

The following table lists the datafill for table FTRGOPTS option CFW.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements SCRNCL and NUMCALLS.
	OPTION	CFW	*Option* Enter the option CFW.
	SCRNCL	alphanumeric (up to 32 characters)	*Screening class* Enter the class of service screening required for screening the forwarded calls. The screening class must be assigned in table SCRNCLAS.
	NUMCALLS	1 to 1024	*Number of simultaneous forwarded calls* This field contains the number of calls that can be forwarded simultaneously.

FTRGOPTS option CLID

Calling Line Identification

This option is a feature group option that allows a customer group to display the calling line address on business sets equipped with a display from an agent within the customer group, from an agent on the same virtual network, or any agent.

Datafill

The following table lists the datafill for table FTRGOPTS option CLID.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements REASON and CLID_OPT.
	OPTION	CLID	*Option* Enter the option CLID.

FTRGOPTS option CLID (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	REASON	Y or N	*Reason display* Enter Y (yes) to activate the reason display. Otherwise, enter N (no). Enhanced network (ENET) reason display is only supported on Integrated Business Network (IBN) 7 and multibusiness group (MBG) trunks. The exception is call forward information that is carried on ISDN user part (ISUP) plain ordinary telephone service (POTS) trunk in the forward direction only. No call forward information is sent back over ISUP POTS trunks in a backward direction. Therefore, network reason display can be provided to the terminating line for a call forwarded ISUP POTS call.
	CLID_OPT	INTRAGRP OFFNET or ONNET	*Calling line identification option* Enter INTRAGRP to enable a line that is associated with a feature group to display the CLID that is available from an agent within its own customer group. The customer group must be defined with the PRIVATE domain in table CUSTENG or table CUSTFAM first. Enter OFFNET to enable a line that is associated with a feature group to display the CLID that is available from any agent. Enter ONNET to enable a line that is associated with a feature group to display CLID available from an agent who is in the same virtual network. A customer group is associated with a virtual network as defined in table CUSTNTWK. The virtual networks are defined in table NETNAMES. A customer group using access feature group (AFG) display control must be datafilled in table CUSTNTWK.

FTRGOPTS option CLIDSP

Calling Line Indentification Display

This option is a feature group option that provides flexibility in defining the format of the calling line address for display on business sets equipped with a display.

When assigning option CLISP to a feature group, the type of display formatting desired is specified in field DISPFMT.

Datafill

The following table lists the datafill for table FTRGOPTS option CLIDSP.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement DISPFMT.

FTRGOPTS option CLIDSP (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	CLIDSP	*Option* Enter the option CLIDSP.
	DISPFMT	ENH, FULL, OPT, or STD	*Display format* Enter the display format required for the display of the calling party and called party address display. • ENH: enhanced display formatting enhances either the standard display business set capability or the dial plan display capability. If this option is assigned, the digits are formatted in a more readable manner for display, by inserting a period (.) at appropriate locations in the digit string. These digits separate prefix digits and serving numbering plan area (SNPA) digits from the subscriber seven digit address. • FULL: full display formatting provides capabilities of both the OPT and the ENH options. • OPT: the optional prefix display is only used in conjunction with the dial plan display capability. If this option is assigned, the digits specified in field OPTPRFX in table DNREVXLA are prefixed to digit string resulting from the reverse translation process. These digits are ignored. For example, prefix digits such as 1 for long distance calls are displayed. • STD: standard display formatting overrides the dialing plan display format. If this option is assigned, the standard formatting rules are applied even if a reverse translator has been defined for the called party's customer group.

FTRGOPTS option CMCF

Control of Multiple Call Forward

Option CMCF allows an operating company to limit the number of multiple calls forwarded through any Centrex station.

This option is valid for private feature groups only and must be assigned to the customer group in table CUSTSTN before table FTRGOPTS.

Datafill

The following table lists the datafill for table FTRGOPTS option CMCF.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements ANCFI and ANCFE.
	OPTION	CMCF	*Feature group option* Enter the option CMCF.
	ANCFI	0 to 1023	*Additional number of Call Forward Intragroup* Enter the number of additional calls, over and above the group value, that can be forwarded simultaneously by a member of the customer group to a DN belonging to the same customer group.
	ANCFE	0 to 1023	*Additional number of Call Forward External* Enter the number of additional calls, over and above the group value, that can be forwarded simultaneously by a member of the customer group to a DN outside the customer group.

FTRGOPTS option CNAMD

Calling Name Delivery

See table IBNLINES for a description of option CNAMD.

Datafill

The following table lists the datafill for table FTRGOPTS option CNAMD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	OPTION	CNAMD	*Feature group option* Enter the option CNAMD.
	BILLING	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option CND

Calling Number Delivery

See table IBNLINES for a description of option CND.

Datafill

The following table lists the datafill for table FTRGOPTS option CND.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTION		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	BILLING	CND	*Option* Enter the option CND.
	OPTVAR	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option CNDB

Calling Number Delivery Blocking

See table IBNLINES for a description of option CNDB.

Datafill

The following table lists the datafill for table FTRGOPTS option CNDB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	OPTION	CNDB	*Option* Enter the option CNDB.
	BILLING	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option CNF

Flexible Station Controlled Conference

See table IBNFEAT for a description of option CNF.

Datafill

The following table lists the datafill for table FTRGOPTS option CNF.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement CONFTYPE.
	OPTION	CNF	*Option* Enter the option CNF.
	CONFTYPE	C06, C10, C14, C18, C22, C26, or C30	*Conference type* Enter the maximum number of conferees, either C06 (6), C10 (10), C14 (14), C18 (18), C22) 22), C26 (26), or C30 (30).

FTRGOPTS option COT

Customer Originated Trace

See table IBNLINES for a description of option COT.

Datafill

The following table lists the datafill for table FTRGOPTS option COT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	OPTION	COT	*Option* Enter the option COT.
	BILLING	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option CXR

Call Transfer

See table IBNFEAT or KSETFEAT for a description of option CXR.

Datafill

The following table lists the datafill for table FTRGOPTS option CXR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements CXFERVAR, CXFERRCL, and METHOD.
	OPTION	CXR	*Option* Enter the option CXR.

FTRGOPTS option CXR (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CXFERVAR	see subfield	*Call Transfer variable area* This field consists of subfield CXFERTYP.
	CXFERTYP	ATTRCLF CTALL CTINC CTINTRA CTOUT CUSTOM or NCT	*Call Transfer type* Enter the type of call transfer applicable to the customer group. Enter ATTRCLF if all calls are transferred to an attendant. No further datafill is required. Enter CTALL if all incoming and outgoing calls are transferred. The first and second legs of the call can be INTERGROUP or INTRAGROUP. No further datafill is required. Enter CTINC if incoming calls are transferred. The first leg of the call must be INTERGROUP and the second leg of the call must be INTRAGROUP. No further datafill is required. Enter CTINTRA if incoming and outgoing calls are transferred. The first leg of the call can be INTERGROUP or INTRAGROUP, but the second leg of the call must be INTRAGROUP. No further datafill is required. Enter CTOUT if incoming and outgoing calls are transferred. The first leg of the call must be INTERGROUP and the second leg of the call must be INTRAGROUP. No further datafill is required. Enter CUSTOM if the operating company selects what type the second leg of the call is NCT (incoming calls are transferred to an attendant if the first leg of the call is INTERGROUP). Datafill refinements ORGINTER, ORGINTRA, TRMINTER, and TRMINTRA.

FTRGOPTS option CXR (continued)

CXFERTYP = CUSTOM

If the entry in subfield CXFERTYP is CUSTOM, datafill refinements ORGINTER, ORGINTRA, TRMINTER, and TRMINTRA as explained below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ORGINTER	AC, INTER, INTRA, NOCXFER, or TRATER	*Originating intergroup* Enter the type of call transfer for originating intergroup calls: • AC if the terminator on the second leg is the attendant console • INTER if the second leg of the call is an intergroup call • INTRA if the second leg of the call is an intragroup call • NOCXFER if no call transfer is allowed • TRATER if the second leg of the call is an intragroup or intergroup call
	ORGINTRA	AC, INTER, INTRA, NOCXFER, or TRATER	*Originating intragroup* Enter the type of call transfer for originating intragroup calls.
	TRMINTER	AC, INTER, INTRA, NOCXFER, or TRATER	Enter the type of call transfer for terminating intergroup calls.
	TRMINTRA	AC, INTER, INTRA, NOCXFER, or TRATER	*Terminating intragroup* Enter the type of call transfer for terminating intragroup calls.

FTRGOPTS option CXR (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CXFERRCL	see subfield	*Call Transfer recall variable area* This field consists of subfield CXRRCL.
	CXRRCL	Y or N	*Call Transfer recall* Enter Y (yes) if call transfer recall is allowed and datafill refinement RCLTIM. Otherwise, enter N (no) and go to field METHOD.
	RCLTIM	12 to 120	*Recall timer* If the entry in subfield CXRRCL is Y, datafill this refinement. Enter the length of the recall timer between 12 and 120 s.
	METHOD	DIAL (see note), RLS, or STD	*Method* Enter DIAL to activate call completion with trunk optimization (CCTO). Enter RLS for the transfer on release method. Otherwise, enter STD (standard).
Note: Canada only			

FTRGOPTS option DDN

Dialable Delivery Number

See table IBNLINES for a description of option DDN.

Datafill

The following table lists the datafill for table FTRGOPTS option DDN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement BILLING.
	OPTION	DDN	*Option* Enter the option DDN.
	BILLING	AMA or NOAMA	*Billing option* Enter AMA if an automatic message accounting record is generated whenever the option is invoked. Otherwise, enter NOAMA.

FTRGOPTS option FXR

Fast Transfer

See table KSETFEAT for a full description of option FXR.

Datafill

The following table lists the datafill for table FTRGOPTS option FXR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTION		FXR	Feature group option. Enter the option FXR.
OPTVAR		see subfields	Option variable area. This field consists of subfields FXRRCL and TIMER.
	FXRRCL	Y or N	Fast transfer recall. Enter Y (yes) to allow the user to select the length of time, in seconds, before recall occurs and datafill refinement FXRRCL. Enter N (no) to indicate no call back to the caller. No further datafill for this option is required.
	TIMER	12 to 120	Timer. Enter the time, in 1-s intervals, before recall occurs.

Datafill example

The following example shows sample datafill for table FTRGOPTS option FXR.

MAP display example for table FTRGOPTS option FXR

```
>FTRGOPTS

FTRGRP      OPTION      OPTION      OPTVAR
_____________________________________________
DAVIS05       FXR         FXR          Y 50
```

FTRGOPTS option MWT

Message Waiting

See table IBNFEAT or KSETFEAT for a description of option MWT.

Datafill

The following table lists the datafill for table FTRGOPTS option MWT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinements NOTICE, CAR, and CRX.
	OPTION	MWT	*Option* Enter the option MWT.
	NOTICE	CMWI, MWL, PRN, or STD	*Notice* Enter CMWI for the Custom Local Area Signaling Services (CLASS) message waiting indicator. The CMWI option allows the use of option MWT on a CLASS set with a lamp or display device. Enter MWL for message waiting lamp indication. Enter PRN for periodic ring notification. PRN cannot be used as a notice for MWT within feature groups. Enter STD if the line receives stuttered dial tone if there is a message or call request for it.
	CAR	Y or N	*Call request* Enter Y (yes) if the line is allowed to make call requests to another line and to receive call requests from others and datafill refinement CRRCFW. Otherwise, enter N (no) and go to field CRX.

FTRGOPTS option MWT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CRRCFW	ALL DISPLAY or fsNO	*Call request retrieval, call forward* If the entry in field CAR is Y, datafill this refinement. Enter ALL to allow the call request retrieval to forward. Enter DISPLAY to allow the call request retrieval to forward only if the requestee has a display set. Enter NO to stop call request retrieval from forwarding. ***Note:*** If field CAR is set to N, this subfield does not display, and refinement CRRCFW is automatically datafilled as NO.
	CRX	Y or N	*Call request exempt* Enter Y if the line is exempted from call requests placed on its line by others (that is, the line does not receive any call requests). Otherwise, enter N.

FTRGOPTS option NAMEDSP

Name Display

For options NAMEDSP, field NMDSP in table NETNAMES must be datafilled SETUP or QUERY. For primary rate access (PRA) name display interaction, use the SETUP method.

Datafill

The following table lists the datafill for table FTRGOPTS option NAMEDSP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement NAME_OPT.
	OPTION	NAMEDISP	*Feature group option* Enter the option NAMEDSP.
	NAME_OPT	INTRAGRP OFFNET or ONNET	*Name Display option* Enter INTRAGRP to enable a line that is associated with a feature group to display the name of an agent within its own customer group. The customer group must be defined with the PRIVATE domain in table CUSTENG or table CUSTFAM first. Enter OFFNET to enable a line that is associated with a feature group to display the name of any agent. Enter ONNET to enable a line that is associated with a feature group to display the name of any agent who is in the same virtual network. A customer group is associated with a virtual network as defined in table CUSTNTWK. The virtual networks are defined in table NETNAMES. A customer group using access feature group (AFG) display control must be datafilled in table CUSTNTWK.

FTRGOPTS option OLS

Originating Line Select

See table KSETFEAT for a description of option OLS.

Datafill

The following table lists the datafill for table FTRGOPTS option OLS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement OLSOPT.
	OPTION	OLS	*Option* Enter the option OLS.
	OLSOPT	IDLE or NOSELECT	*Originating Line Select option* Enter IDLE if the call is automatically answered if going off hook. Enter NOSELECT if the user must manually select the desired directory number when making a call.

FTRGOPTS option OPTS

Various Line Options

Options that do not require additional data can be assigned to a feature group in a single tuple by using option OPTS.

Datafill

The following table lists the datafill for table FTRGOPTS option OPTS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement OPTLIST.
	OPTION	OPTS	*Option* Enter the option OPTS.
	OPTLIST	alphabetical (up to 6 characters)	*Option list* Enter the OPTS options. Up to 38 options can be entered. If less than 38 are required, end the list with a $ (dollar sign).

FTRGOPTS option PF

Power Features

This option specifies Power Feature.

Datafill

The following table lists the datafill for table FTRGOPTS option PF.

Note: Before assigning option PF to a new customer group, make sure that the customer group tuple exists in table CUSTNTWK.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement PFOPT.
	OPTION	PF	*Option* Enter the option PF.
	PFOPT	LANG LOCK PSWD or USER	*Power Features options* Enter up to two Power Feature options. If less than two options are required, end the list with a $ (dollar sign). Enter LANG (language) and datafill refinement LANGUAGE. Enter LOCK (lock). No further datafill is required for this option. Enter PSWD (password) and datafill refinement PASSWORD. Enter USER (user) and datafill refinement USER. Any entry outside the range indicated for this field is invalid.

FTRGOPTS option PF (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LANGUAGE	ENGLISH or FRENCH	*Language* If the entry in subfield PFOPT is LANG, datafill this refinement. Enter the language desired. The default value for this field is ENGLISH.
	PASSWORD	0 to 9	*Password* If the entry in subfield PFOPT is PSWD, datafill this refinement. Enter a three- to eight-digit password. Up to six passwords can be datafilled. If less than six are required, end the list with a $ (dollar sign).
	USER	ADMIN or GENERAL	*User level* If the entry in subfield PFOPT is USER, datafill this refinement. Enter ADMIN to indicate administration user or GENERAL to indicate general user (default).

FTRGOPTS option PFCNTL

Power Features Control

This option specifies Power Features Control.

Datafill

The following table lists the datafill for table FTRGOPTS option PFCNTL.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement PFAPPL.
	OPTION	PFCNTL	*Option* Enter the option PFCNTL.
Note: If NAME (for Name Programming) had been enabled previously under option PFCNTL, then PUBNAME and PVTNAME are enabled during dump abd restore process. If NAME had not been enabled previously, the PUBNAME and PVTNAME are not enabled.			

FTRGOPTS option PFCNTL (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PFAPPL		*Power Features applications* Enter up to nine of the following applications. If less than nine applications are required, end the list with a $ (dollar sign). • AAB (automatic answer back) • ACB (automatic call back) • ADMCTRL (administrator control) • AUTODISP (auto display) • AUD (auto dial) • BLF (busy lamp field) • CCV (call covering) • CFDADDON (configure add on) • CFGPHONE (configure phone) • CFI (call forwarding intragroup)
Note: If NAME (for Name Programming) had been enabled previously under option PFCNTL, then PUBNAME and PVTNAME are enabled during dump abd restore process. If NAME had not been enabled previously, the PUBNAME and PVTNAME are not enabled.			

FTRGOPTS option PFCNTL (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PFAPPL (continued)		*Power Features applications* (continued) • CFU (call forwarding universal) • CPU (call pickup) • CWT (call waiting) • DCPK (directed call park) • DRING (distinctive ringing) • EMW (executive message waiting) • FTRACT (feature activation) • INSPECT (inspect) • KEYDEF (key definition) • LANG (choose language) • LVM (leave message) • MSB (make set busy) • MWT (message waiting) • PFKEY (power feature key) • PRK (call park) • PSWD (alter password) • PUBNAME (public name) • PVTNAME (private name) • QLEN (query line equipment number) • QTD (query time and date) • RAG (ring again) • SLOCK (security lock) • TWC (three-way calling)
Note: If NAME (for Name Programming) had been enabled previously under option PFCNTL, then PUBNAME and PVTNAME are enabled during dump abd restore process. If NAME had not been enabled previously, the PUBNAME and PVTNAME are not enabled.			

Table history

NA005

Suboption NAME (Name Programming) under option PFCNTL was replaced by two new suboptions, PUBNAME and PVTNAME, to permit the datafill of

FTRGOPTS option PFCNTL (end)

public and private name permissions individually in accordance with PF Robustness-Public and Private Name Programming.

NA003

Field PFCNTL was enlarged to accommodate new valid inputs for Power Features.

FTRGOPTS option READSP

Reason Display

See table KSETLINE for a description of option READSP.

Datafill

The following table lists the datafill for table FTRGOPTS option READSP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement REASTYPE.
	OPTION	READSP	*Option* Enter the option READSP.
	REASTYPE	alphanumeric (1 to 16 characters)	*Reason type* Enter the name of the reason set in table REASONS that is used whenever a reason is displayed on the set.

FTRGOPTS option SC1

Speed Calling Short List

See the *Translations Guide* for a description of option SC1.

Datafill

The following table lists the datafill for table FTRGOPTS option SC1.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION.
	OPTION	SC1	*Option* Enter the option SC1. The subscriber can store up to ten frequently called numbers.

FTRGOPTS option SC2

Speed Calling Long List (L30)

See the *Translations Guide* for a description of option SC2.

Datafill

The following table lists the datafill for table FTRGOPTS option SC2.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION.
	OPTION	SC2	*Option* Enter option SC2. The subscriber can store up to 30 frequently called numbers.

FTRGOPTS option SC3

Speed Calling Long List (L50)

See the *Translations Guide* for a description of option SC3.

Datafill

The following table lists the datafill for table FTRGOPTS option SC3.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION.
	OPTION	SC3	*Option* Enter the option SC3. The subscriber can store up to 50 frequently called numbers.

FTRGOPTS option SCL

Speed Calling Long List (IBN)

See table IBNFEAT or KSETFEAT for a description of option SCL.

Datafill

The following table lists the datafill for table FTRGOPTS option SCL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement LISTTYPE.
	OPTION	SCL	*Option* Enter the option SCL.
	LISTTYPE	L30, L50, or L70	*List type* Enter the quantity of numbers that can be stored in the speed calling list: L30 (30), L50 (50), or L70 (70).

FTRGOPTS option SCS

Speed Calling Short List (IBN)

See table IBNFEAT or KSETFEAT for a description of option SCS.

Datafill

The following table lists the datafill for table FTRGOPTS option SCS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION.
	OPTION	SCS	*Option* Enter the option SCS.

FTRGOPTS option TLS

Terminating Line Select

See table KSETFEAT for a description of option TLS.

Datafill

The following table lists the datafill for table FTRGOPTS option TLS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
OPTVAR		see subfield	*Option variable area* This field consists of subfield OPTION and refinement TLSOPT.
	OPTION	TLS	*Option* Enter the TLS option.
	TLSOPT	INCOMING or NOSELECT	*Terminating line select option* Enter INCOMING if the call is automatically answered if going off hook. Enter NOSELECT if the user must manually select the desired directory number when answering a call.

FTRTE

Table name

Utility Code Route Table

Functional description

Table FTRTE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table FTRTE translates the utility code digit segment, together with tables FTHEAD and FTCODE.

For related information, refer to table ACRTE. For a description of the universal translation tables, see table ACHEAD.

Datafill sequence and implications

Table FTHEAD must be datafilled before tables FTRTE and FTCODE.

Table size

Refer to table ACRTE.

Datafill

Field names, subfield names, and valid data ranges for table FTRTE are described in table ACRTE.

Datafill example

Refer to table ACRTE.

Table history

NA017

Feature 59035336 introduces the Supergroup (SG) option.

FTSPCINV

Table name

Frame Transport System Point Code Inventory

Functional description

Table FTSPCINV stores the following information:

- the relationship between device attributes, as node maintenance specifies
- the identifiers, point codes and frame transport addresses the frame transport system (FTA) assigns

The system does not allow direct access to table FTSPCINV. Customers have read-only access. The system allows indirect access through the data entry of specified inventory tables. These inventory tables are for devices that require the FTS.

Datafill sequence and meaning

Does not apply. This section does not apply because the table is write-protected against direct datafill.

Table size

This table can contain 3 to 1024 tuples. The number of tuples dynamically determines the table size.

Datafill

Datafill for table FTSPCINV appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PTCODE		0 to 32 767	*Point code* Enter the identifier assigned to each device. Correct man-machine interface (MMI) level values are in the range 0 to 1023. The FTS reserves the values outside the MMI range, 1024 to 32 767, for internal assignment.
NAME		alphanumeric (one to eight characters)	*Device name* Enter the device name. At the MMI level, node maintenance uses the device name to identify a device.

FTSPCINV (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TYPE		alphanumeric (one to four characters)	*Device type* Enter the general type of device. The accepted values are as follows: • MS (message switch) • CM (computing module) • ENET (enhanced network) • LMS (local message switch)-LIM • LIU7 (CCS7 link interface unit)
LEVEL		0 to 3	*Device routing level* Enter a value to indicate the level in the switch topology in which the device resides. Correct MMI-level values are in the range 1 to 3. Value 0 is not in the MMI-level range. The FTS reserves this value for internal assignment. The association between LEVEL and TYPE is as follows: LEVEL TY PE 1 MS 2 CM, ENET, 3 LIU7
FTA0, FTA1, FTA2, and FTA3		0 to 32 767	*Frame transport address, instance 0 to 3* The datafill for these tuples is the list of FTAs in use to send messages to PTCODE. Correct MMI-level values are in the range of 512 to 4095. Values 0 to 511 and 4096 to 32 767 are not in the MMI-level range. The FTS reserves these values for internal assignment. Value 4095 represents a nil address. Fields FTA1, FTA2 and FTA3 must contain this nil value.

Datafill example

Sample datafill for table FTSPCINV appears in the following example.

MAP example for table FTSPCINV

```
PTCODE   NAME      TYPE   LEVEL   FTA0   FTA1   FTA2   FTA3
_____________________________________________________________

0        MS0       MS     1       512    4095   4095   4095
1        MS1       MS     1       513    4095   4095   4095
2        CM        CM     2       514    4095   4095   4095
3        LIM1U0    LMS    2       564    4095   4095   4095
4        LIM1U1    LMS    2       565    4095   4095   4095
```

Table history

BCS26

Table FTSPCINV was introduced in BCS26.

FXDNMAP

Table name

Foreign Exchange Directory Number Map Table

Functional description

The TOPS software provides substitute telephone numbers for hotel-originated or restricted-station calls served by offices such as crossbar and step-by-step that cannot provide ANI ID digit 6 or 7 in the ANI spill for those calls. The traffic from these hotel or restricted stations is trunked to an office capable of providing the proper ANI ID digits. This office then sends the traffic on to TOPS.

Foreign exchange (FX) type hotel calls are sent to TOPS on either regular TOPS combined trunks with ANI ID digit 6 or 7 or class of service lookup trunks with ANI ID digit 0. FX-type restricted calls are sent to TOPS on regular TOPS combined trunks with ANI ID digit 7, on class of service lookup trunks, or on restricted billing trunks with ANI ID digit 0. The traffic is sent between the serving office and the intermediate office on FX lines; therefore, the ANI spill received by TOPS contains the calling number of the FX line, rather than the actual directory number.

Table FXDNMAP maps the FX line numbers received to the actual directory numbers that are then used for billing purposes. The maximum size of this table is 4000 tuples.

Once it is determined that a call has originated at a hotel or restricted station, the ANI ID digit and table SPLDNID are examined, and the calling number is checked in table FXDNMAP. If there is a match, the actual number found in the table is substituted for the number received in the ANI spill.

Because any calls that arrive at TOPS with ANI ID digit 7 or 0 on class of service lookup or restricted billing trunks cause a table lookup in table SPLDNID, the FX numbers must be entered in table SPLDNID. If only the actual number is in table SPLDNID, the FX number received in the ANI spill will not match the number in table SPLDNID and the call will not be recognized as a hotel or restricted call. Consequently, table FXDNMAP is not searched to find the actual number.

The actual number must also be entered in table SPLDNID because if the call arrives as an ANI failure call, the operator receives the actual number. Therefore, the actual number must appear in table SPLDNID if it is to have the same billing restrictions as the FX number. For some applications, the actual number (ACTLNUM) does not have to appear in table SPLDNID. For example, if the HOTEL or special display is not required when the

ACTLNUM comes in as ANI, then only the FXNUM should be datafilled in SPLDNID. However, if a call comes in as ANIFAIL and the subscriber gives the ACTLNUM as the calling number, there will be no HOTEL or special display prompting the operator to ask for a room number or no billing restrictions applied since the ACTLNUM does not appear in table SPLDNID.

Also, for ANI failure calls, appropriate entries must be made in table TOPSBC to ensure that the actual NPA of the hotel or restricted station is considered valid and as having come from the intermediary office. Otherwise, the calling number flashes and is never validated.

Additional checks are made during tuple additions. For the tuple being added, table SPLDNID is checked to verify if fields FXNUM and ACTLNUM are datafilled. If either of these fields are not datafilled in table SPLDNID, the following warnings are generated:

```
WARNING: THE FX NUMBER nnnnnnnnnn IS NOT DATAFILLED IN TABLE
SPLDNID

WARNING: THE ACTUAL NUMBER nnnnnnnnnn IS NOT
DATAFILLED IN TABLE SPLDNID
```

A warning is also generated if both numbers are datafilled in table SPLDNID, but with different selectors. This warning appears as follows:

```
WARNING: THE SELECTORS FOR THE FX NUMBER nnnnnnnnnn AND THE
ACTUAL NUMBER IN TABLE SPLDNID DO NOT MATCH
```

In all cases, when a warning is generated, the tuple is added to the table.

For more information on the pseudo hotel-restricted station NXX feature, refer to the *Translations Guide*.

Datafill sequence and implications

Table SPLDNID must be datafilled before table FXDNMAP.

FXDNMAP (continued)

Datafill

The following table lists datafill for table FXDNMAP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FXNUM		numeric (10 digits)	Foreign exchange line number. Any foreign exchange line number is valid.
ACTLNUM		numeric (10 digits)	Actual number. Enter any hotel or restricted (that is, calling) number to which the call is billed.

Datafill example

The following example shows sample datafill for a hotel-originated call and it assumes the following:

- the hotel (calling) number is 613-329-0411
- the foreign exchange line number is 819-785-1416
- the hotel is connected to a step-by-step office
- the foreign exchange line terminates in a No. 1 ESS office

MAP display example for table SPLDNID

```
         SPLDN                      SPLSEL
________________________________________________________

    6133290411              AQHTL    0 Y

    8197851416              AQHTL    0 Y
```

MAP display example for table TOPSBC

```
          CLLI
           BILLCODE LCANAME SCRNCL ACTUALBC CHGCLSS
_____________________________________________________

   TOPAMR5COMBA
                329    TPOT   NSCR   613329    TOPS

   TOPAMR5COMBB
                785    TPOT   NSCR   819785    TOPS
```

MAP display example for table FXDNMAP

```
          FXNUM            ACTLNUM
_____________________________________________

       8197851416         6133290411
```

ANI success calls

The call originated at the hotel and is trunked to the step-by-step office then outpulsed through the ESS office on an FX line to the DMS with the appropriate ANI ID digit affixed.

When the call arrives at the DMS, table TOPSBC is accessed and the appropriate information on that trunk is obtained.

If the call arrives with an ANI ID digit of 7 or 0 on a class of service lookup trunk, table SPLDNID is accessed and the FX number is found and identified as a hotel call.

> ***Note:*** If the call arrives with an ANI ID digit of 6, it is automatically identified as a hotel-originated call and table SPLDNID is not accessed and searched.

Table FXDNMAP is then searched using the FX line number for a match. If a match is found, the corresponding hotel number is substituted for the FX number.

FXDNMAP (continued)

If the caller requests T&C, the actual calling number is then displayed to the operator.

ANI failure calls

For an ANI failure call, the entry corresponding to 613239 in table TOPSBC (field ACTUALBC) identifies the hotel to step-by-step trunk as a valid TOPS trunk.

The operator is connected to the calling party and requests the number of the calling party.

The calling party then gives the operator the actual hotel number, the operator enters this number, and table SPLDNID is accessed. In this table, the calling number is identified as a hotel number.

No check of table FXDNMAP is performed for ANI failure calls, because the system already has the actual hotel number once the operator enters it.

Using the following sample datafill for restricted stations, assume the following:

- the restricted (calling) number is 612-332-8364
- the foreign exchange line number is 818-632-7734
- the restricted station is connected to a step-by-step office
- the foreign exchange line terminates in a No. 1 ESS office.

MAP display example for table TOPSBC

```
           CLLI
            BILLCODE LCANAME SCRNCL ACTUALBC CHGCLSS
_____________________________________________________

      TOPCOMAMF
                332    NLCA   NSCR   612332    TOPS

      TOPCOMBMF
                632    NLCA   NSCR   818632    TOPS
```

MAP display example for table SPLDNID

```
          SPLDN                        SPLSEL
________________________________________________________

       6123328364                 RSTRCTD   0

       8186327734                 RSTRCTD   0
```

MAP display example for table RESTBIL

```
BILCLASS AMARBC SCRNDISP
                                      BILTYPES CCPDTYPS
________________________________________________________

       0      0   INMATE
                                     (   COL)$     NONE
```

MAP display example for table FXDNMAP

```
    FXNUM       ACTLNUM
________________________________________________________

 8186327734   6123328364
```

Note: For traffic from restricted coin lines, only the datafill of table SPLDNID will be different.

MAP display example for table SPLDNID

```
          SPLDN                        SPLSEL
________________________________________________________

       6123328364      COIN STD NOACTS Y   0

       8186327734      COIN STD NOACTS Y   0
```

FXDNMAP (end)

ANI success calls

The call originating at the restricted station is trunked to the step-by-step office then outpulsed through the ESS office on an FX line to the DMS with the appropriate ANI ID digit affixed.

When the call arrives at the DMS switch, table TOPSBC is accessed and the appropriate information on that trunk is obtained.

If the call arrives with an ANI ID digit of 7 or 0 on a class of service lookup trunk or on a restricted billing trunk, table SPLDNID is accessed and the FX number is found and identified as a restricted call.

Table FXDNMAP is then searched using the FX line number for a match. If a match is found, the corresponding restricted number is substituted for the FX number.

If the caller requests T&C, the actual calling number is then displayed to the operator.

ANI failure calls

For an ANI failure call, the entry corresponding to 612332 in table TOPSBC (field ACTUALBC) identifies the restricted call to the step-by-step switch as a valid TOPS trunk.

The operator is connected to the calling party and requests the number of the calling party.

The calling party then gives the operator the actual restricted number, the operator enters this number, and table SPLDNID is accessed. In this table, the calling number is identified as a restricted number.

No check of table FXDNMAP is performed for ANI failure calls, because the system already has the actual restricted number once the operator enters it.

G7MSGSET

Table name

GOSS7 Message Set Parameters

Functional description

Table G7MSGSET indicates the optional ISUP message parameters to be included in outgoing ISUP messages.

Exceptions to the above are the following:

- The Carrier Selection, and Transit Network Selection parameters are NOT sent in the outgoing IAM for the GTOP10 release.
- The Calling Party Address parameter does not have to be received in the incoming IAM to be sent in the outgoing IAM.
- The Redirecting Number, Redirection Indicator, and Original Called Number parameters are only sent in the outgoing IAM on Intercept calls when they are received in the incoming IAM.
- When the Operator outpulses to the calling (that is, back or A) party, only the mandatory IAM parameters are sent. Table G7MSGSET only contains optional IAM parameters, so no parameters in G7MSGSET are sent.
- For Delay/Booked Call Database calls where the Operator outpulses to the called (that is, forward or B) party only the Calling Party Address parameter may be sent in the outgoing message.
- On transit calls, the TOPS office has no control over what parameters are stored and forwarded.

Table G7MSGSET is applicable to ETSI GOSS7 trunks.

G7MSGSET (continued)

The following table indicates the supported parameters according to the version and variant in table TRKSGRP for C7UP signalling.

Supported optional outgoing IAM parameters for GOSS7 signalling (Sheet 1 of 2)

Parameter	ANSI	V1 Base ETSI	V1 Spain ETSI	V1 Italy ETSI	V1 France ETSI	V2 Base ETSI	V2 German ETSI	V2 Belgium ETSI
ACCESS_ TRANSPORT		X	X	X	X	X	X	X
CALLING_ PARTY_ NUMBER	X	X	X	X	X	X	X	X
CARRIER_ IDENTIFICATION _PARAMETER	X							
CCBS_ PARAMETER						X	X	
CHARGE_ NUMBER	X					X	X	
CLOSE_USER _GROUP_ INTERLOCK _CODE		X	X	X	X	X	X	X
GENERIC_ DIGITS						X	X	
GENERIC_ NOTIFICATION						X	X	X
GENERIC_ NUMBER						X	X	X
GERMAN_ SUBSCR_ PRIORITY_CLS							X	
LOCATION_ NUMBER						X	X	

Note: X = parameter is supported

Supported optional outgoing IAM parameters for GOSS7 signalling (Sheet 2 of 2)

Parameter	ANSI	V1 Base ETSI	V1 Spain ETSI	V1 Italy ETSI	V1 France ETSI	V2 Base ETSI	V2 German ETSI	V2 Belgium ETSI
OPTIONAL_ FORWARD_ CALL_ INDICATORS		X	X	X	X	X	X	X
ORIGINAL_ CALLED_ NUMBER	X		X		X	X	X	X
ORIGINATING _LINE_ INFORMATION	X	X		X	X	X	X	
PROPAGATION _DELAY_ COUNTER						X	X	X
REDIRECTING_ INFORMATION	X		X	X	X	X	X	X
REDIRECTING _NUMBER	X		X			X	X	X
SERVICE_ ACTIVATION_ ETSI_V2						X	X	
TRANSIT_ NETWORK_ SELECTION						X	X	
USER_ TELESERVICE_ INFORMATION						X	X	
USER_TO_ USER_ INDICATORS						X	X	X
USER_TO_ USER_ INFORMATION		X	X	X	X	X	X	X

Note: X = parameter is supported

G7MSGSET (continued)

Supported optional outgoing IAM parameters for GOSS7 signalling (Sheet 1 of 2)

Parameter	V1 Mexico
ACCESS_ TRANSPORT	X
CALLING_ PARTY_ NUMBER	X
CARRIER_ IDENTIFICATION_ PARAMETER	
CCBS_ PARAMETER	
CHARGE_ NUMBER	X
CLOSE_USER_ GROUP_ INTERLOCK_ CODE	X
GENERIC_DIGITS	
GENERIC_ NOTIFICATION	
GENERIC_ NUMBER	
GERMAN_ SUBSCR_ PRIORITY_CLS	
LOCATION_ NUMBER	
OPTIONAL_ FORWARD_ CALL_ INDICATORS	X
Note: X = The parameter is supported	

Supported optional outgoing IAM parameters for GOSS7 signalling (Sheet 2 of 2)

Parameter	V1 Mexico
ORIGINAL_ CALLED_ NUMBER	
ORIGINATING_ LINE_ INFORMATION	
PROPAGATION_ DELAY_ COUNTER	
REDIRECTING_ INFORMATION	
REDIRECTING_ NUMBER	
SERVICE_ ACTIVATION_ ETSI_V2	
TRANSIT_ NETWORK_ SELECTION	X
USER_ TELESERVICE_ INFORMATION	X
USER_TO_USER_ INDICATORS	
USER_TO_USER_ INFORMATION	X
Note: X = The parameter is supported	

For details on Mexico ISUP, refer to functionality document Mexico ISUP, NETK0029.

G7MSGSET (continued)

Datafill sequence and implications

There is no requirement to datafill other tables prior to table G7MSGSET.

Datafill table TRKGRP after table G7MSGSET.

Table size

1 to 64 tuples

Datafill

The following table lists datafill for table G7MSGSET.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
G7SETNO		0 to 63	GOSS7 set number. This field is the index into the table. This field is the set number assigned to the list of optional IAM parameters forwarded in the outgoing IAM message.
MSGPARMS		see subfield	Message parameters. This field consists of subfield OPTION and refinements.
	OPTION	IAM	Message type. This field indicates the ISUP message type. Currently, only IAM is supported. If optional ISUP parameters are to be sent, enter IAM, enter data the following refinements, and end with “$". Otherwise, if no parameters are to be sent, only enter “$".

G7MSGSET (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ACCESS_ TRANSPORT	Y or N	An ISUP message parameter. Enter data in this field if field OPTION = IAM. This parameter indicates if this parameter is included in the outgoing ISUP message. The values are Y and N. Enter N to not include it in the ISUP message. This parameter is included in the outgoing ISUP message if all of the following occur. • Value Y is entered. • This parameter is received in the incoming IAM. • This parameter is supported as indicated in the above table. • The operator does not outpulse to the calling party. Otherwise, only the mandatory IAM parameters are sent. Table G7MSGSET contains only optional IAM parameters. • The operator does not outpulse to the called party for a delay/booked call database. Otherwise, only the Calling Party Address parameter is sent. • The call is not a transit call, which the TOPS system has no control over what parameters are stored and forwarded.
	CALLING_ PARTY_ NUMBER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT. An exception is that this parameter does not have to be received in the incoming IAM to be sent in the outgoing IAM.
	CARRIER_ IDENTIFICATION _PARAMETER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	CCBS_ PARAMETER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	CHARGE_ NUMBER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.

G7MSGSET (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	CLOSE_USER_ GROUP_ INTERLOCK _CODE	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	GENERIC_ DIGITS	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT. An exception is an operator assisted fallback call with fallback digits, where the TOPS office does not forward this parameter which contains the fallback digits.
	GENERIC_ NOTIFICATION	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	GENERIC_ NUMBER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	GERMAN_ SUBSCR_ PRIORITY_CLS	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	LOCATION_ NUMBER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	OPTIONAL_ FORWARD_ CALL_ INDICATORS	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	ORIGINAL_ CALLED_ NUMBER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT. An exception is that this parameter is only sent for Intercept calls (if this parameter is received in the incoming IAM).
	ORIGINATING _LINE_ INFORMATION	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	PROPAGATION _DELAY_ COUNTER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	REDIRECTING_ INFORMATION	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT. An exception is that this parameter is only sent for Intercept calls (if this parameter is received in the incoming IAM).
	REDIRECTING _NUMBER	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT. An exception is that this parameter is only sent for Intercept calls (if this parameter is received in the incoming IAM).
	SERVICE_ ACTIVATION_ ETSI_V2	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	TRANSIT_ NETWORK_ SELECTION	Y or N	An ISUP message parameter. This parameter is not currently supported.
	USER_ TELESERVICE_ INFORMATION	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	USER_TO_ USER_ INDICATORS	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.
	USER_TO_ USER_ INFORMATION	Y or N	An ISUP message parameter. See parameter ACCESS_TRANSPORT.

Datafill example

The following example shows sample datafill for table G7MSGSET.

G7MSGSET (continued)

MAP display example for table G7MSGSET

```
G7SETNO  MSGPARMS
-------------------------------------------------------------------
0        (IAM N Y N N N N N N N N N N N N N N N N N N)$
1        $
10       (IAM Y Y N N N Y N N N N N Y N N N N N N N N Y)$
15       (IAM Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y)$
```

The above example shows default tuple 0, which cannot be deleted but can be changed.

Error messages for table G7MSGSET

The following error messages apply to table G7MSGSET.

Error messages for table G7MSGSET

Error message	Explanation and action
TUPLE IN USE BY TABLE TRKGRP DATA CONSISTENCY ERROR UNEXPECTED ERROR CONDITION DMO REJECTED	If a tuple in table G7MSGSET is in use by field G7SETNO in table TRKGRP, the tuple cannot be deleted. If an attempt is made to do so, this warning message is displayed.
DELETION OF DEFAULT TUPLE 0 IS NOT ALLOWED. DATA CONSISTENCY ERROR UNEXPECTED ERROR CONDITION DMO REJECTED	Tuple 0 is the default tuple and may not be deleted. If an attempt is made to delete tuple 0, this error message is displayed.

Table history

TOPS13

Mexico variant added by feature AF7434 in functionality GOS ETSI-ISUP Signalling, GOS00005. Change is patched back to TOPS10.

TOPS11

The CARRIER_SELECTION parameter is deleted and CARRIER_IDENTIFICATION_PARAMETER is added to the IAM Option of field MSGPARMS by feature AF7576 in functionality Global Competitive Access II, GOS00007.

TOPS10

This table was created by feature AF7434 in functionality GOS ETSI-ISUP Signalling, GOS00005.

G7PARM

Table name

Global Operating Signalling System Number 7 Parameters

Functional description

Table G7PARM contains office-wide parameters for GOSS7 signalling.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table G7PARM.

Table size

9 tuples

Datafill

The following table lists datafill for table G7PARM.

Field descriptions (Sheet 1 of 5)

Parameter name	Explanation and action
ANSI_REL_CAUSE_LOCN_DOM	This parameter is applicable to GOSS7 ANSI signalling. This parameter indicates the value in the location field of the Cause Indicator in the the REL message. This situation occurs when the operator terminates the call, so the call does not have a forward connection. This message is generated by the TOPS office when a connection is released by the TOPS switch before the call is floated. This parameter is used in the following situations: • Calls with a domestic called number • Operator handled calls released before a called number has been entered. • Domestic inwards calls, where the TOPS operator is providing assistance to a domestic operator. The values of this parameter are the following: • USER - user • PRIVNET - local private network • LOCLNET - local local network • TRANSNET - transit network • RLOCLNET - remote local network • RPRIVNET - remote private network • LICBS - local interface controlled by this signalling link (not supported) • INTLNET - international network, this is the default • SP1 - spare 1 (not supported) • SP2 - spare 2 (not supported) • UNKNOWN - network beyond interworking point. If an unsupported value is entered, the XPM may convert the value to UNKNOWN before transmission.

G7PARM (continued)

Field descriptions (Sheet 2 of 5)

Parameter name	Explanation and action
ANSI_REL_CAUSE_LOCN_INTL	This parameter is applicable to GOSS7 ANSI signalling. This parameter indicates the value in the location field of the Cause Indicator in the the REL message. This situation occurs when the operator terminates the call, so the call does not have a forward connection. This message is generated by the TOPS office when a connection is released by the TOPS switch before the call is floated. This parameter is used in the following situations: • Calls with an international called number • Country Direct calls • Overseas Inward calls where the TOPS operator is providing assistance to an overseas operator. The values are the same as for parameter ANSI_REL_CAUSE_LOCN_DOM.
ETSI_REL_CAUSE_LOCN_DOM	This parameter is applicable to GOSS7 ETSI signalling. For the remaining description and values of this parameter, refer to parameter ANSI_REL_CAUSE_LOCN_DOM. ETSI ISUP signalling is described in functionality GOS ETSI ISUP Signalling, GOS00005.
ETSI_REL_CAUSE_LOCN_INTL	This parameter is applicable to GOSS7 ETSI signalling. For the remaining description of this parameter, refer to parameter ANSI_REL_CAUSE_LOCN_INTL. The values are the same as for parameter ANSI_REL_CAUSE_LOCN_DOM.

G7PARM (continued)

Field descriptions (Sheet 3 of 5)

Parameter name	Explanation and action
FALSE_ANSWER_MSG_TYPE	This parameter is currently not processed by the TOPS system. This parameter may be received by the TOPS office, but it is not processed. When the system does process this parameter, it is applicable to GOSS7 ETSI (not ANSI) signalling. The following description is provided for when the parameter is processed. In a TOPS Toll Break In (TBI) call, the called party's end office may send back a False Answer message (FAN), indicating that the called party has completed the associated call. The value of the TBI FAN is not standardized and may vary from country to country. This parameter specifies either the hexadecimal value sent in the FAN or the entry NIL to not send a value. The values are NIL, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, and FF. The default is NIL. This parameter is set to NIL at initial program load (IPL). An operator keystroke attempting to connect the calling and called parties in a TBI call may be ignored until this parameter is set to a valid value from F0 to FF. The value for each of the MSG_TYPE parameters must be unique; only one parameter may be set to F0, one to F1, and so forth.

G7PARM (continued)

Field descriptions (Sheet 4 of 5)

Parameter name	Explanation and action
OPR_CPC_OVERRIDE	This parameter is applicable to GOSS7 ETSI and ANSI signalling. This parameter indicates the category of the calling party. The values are the following: • OP_FRENCH - operator (French language) • OP_ENGLISH - operator (English language) • OP_GERMAN - operator (German language) • OP_NATIONAL - operator (National call) • OP_RUSSIAN - operator (Russian language) • OP_SPANISH - operator (Spanish language) • OP_NATIONAL - operator (national language) • ORDINARY_CLG_SUBSCRIBER - ordinary calling subscriber • NIL - none. The default is NIL. This parameter is set to NIL at IPL. Although NIL is the default for this parameter, NIL is not a default language value, so NIL is not sent.
RECALL_MSG_TYPE	This parameter is applicable to GOSS7 ETSI (not ANSI) signalling. In a TOPS TBI call, the TOPS office sends a Recall message to the called party's end office to connect the calling and called parties This action occurs when the called party has completed the associated call. The value of the TBI Recall message is not standardized, and may vary from country to country. This parameter specifies either the hexadecimal value sent in the Recall message or the entry NIL to not send a value. The values are NIL, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, and FF. The default is NIL. This parameter is set to NIL at IPL. An operator keystroke attempting to connect the calling and called parties in a TBI call may be ignored until this parameter is set to a valid value from F0 to FF. The value for each of the MSG_TYPE parameters must be unique; only one parameter may be set to F0, one to F1, and so forth.

Field descriptions (Sheet 5 of 5)

Parameter name	Explanation and action
TRK_OFFER_END_MSG_TYPE	This parameter is applicable to GOSS7 ETSI (not ANSI) signalling. In a TOPS TBI call, the TOPS office sends a Trunk Offer End message (TOE), when the operator terminates TBI. The value of the TBI TOE is not standardized and may vary from country to country. This parameter specifies either the hexadecimal value sent in the TOE or the entry NIL to not send a value. The values are NIL, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, and FF. The default is NIL. This parameter is set to NIL at IPL. An operator keystroke attempting to connect the calling and called parties in a TBI call may be ignored until this parameter is set to a valid value from F0 to FF. The value for each of the MSG_TYPE parameters must be unique; only one parameter may be set to F0, one to F1, and so forth.
TRK_OFFER_START_MSG_TYPE	This parameter is applicable to GOSS7 ETSI (not ANSI) signalling. In a TOPS TBI call, the TOPS office sends a Trunk Offer Start message (TOS), when the operator initiates TBI. The value of the TBI TOS is not standardized and may vary from country to country. This parameter specifies either the hexadecimal value sent in the TOS or the entry NIL to not send a value. The values are NIL, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, and FF. This parameter is set to NIL at IPL. An operator keystroke attempting to connect the calling and called parties in a TBI call may be ignored until this parameter is set to a valid value from F0 to FF. The value for each of the MSG_TYPE parameters must be unique; only one parameter may be set to F0, one to F1, and so forth.

Datafill example

The following example shows sample datafill for table G7PARM.

G7PARM (end)

MAP display example for table G7PARM

```
PARMNAME                                              PARMVAL
-----------------------------------------------------------
ANSI_REL_CAUSE_LOCN_DOM                               LOCLNET
ANSI_REL_CAUSE_LOCN_INTL                              INTLNET
ETSI_REL_CAUSE_LOCN_DOM                               USER
ETSI_REL_CAUSE_LOCN_INTL                              USER
FALSE_ANSWER_MSG_TYPE                                 FF
OPR_CPC_OVERRIDE                                      OP_SPANISH
RECALL_MSG_TYPE                                       FE
TRK_OFFER_END_MSG_TYPE                                FD
TRK_OFFER_START_MSG_TYPE                              FC
```

Error messages for table G7PARM

The following error messages apply to table G7PARM.

Error messages for table G7PARM

Error message	Explanation and action
VALUE IN USE BY ANOTHER PARAMETER.	The value for each of the MSG_TYPE parameters must be unique; only one parameter may be set to F0, one to F1, and so forth. If an attempt is made to set a MSG_TYPE parameter to a value already in use by another MSG_TYPE parameter, this error message is displayed. Note that any number of MSG_TYPE parameters may be set to NIL. This error message is only given for F0-FF values.

Table history

TOPS13

Parameter OPR_CPC_OVERRIDE new value OP_NATIONAL is added by 50141315. Change is patched back to TOPS10.

TOPS10

This table was created by feature AF7435 in functionality GOS ETSI-ISUP Signalling, GOS00005.

GASINFO

Table name

General Automatic File Transfer System Information Table

Functional description

Table GASINFO is a look-up table that defines network connections for the automatic file transfer (AFT) system. Table GASINFO uses the network connection data in table RASLAPPL. The key field is field NETCON.

Datafill sequence and meaning

You must enter data in table RASLAPPL before you enter data in table GASINFO.

Table size

2 and 104 tuples

Datafill

Datafill for table GASINFO appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GASKEY		alphanumeric (1 to 16 characters)	General automatic file transfer system key This is the key field to table GASINFO. Enter the value from field NETCON of table RASLAPPL.
SPECS		refer to subfield	*Specifics* This field contains subfield TRANTYPE and the refinements of the subfield.
	TRANTYPE	AFT	*Transaction type* Enter AFT to indicate the automatic file transfer. Other entries are not correct.
	SSYS	alphanumeric (one to four characters)	Session Enter the name of the AF sessin
	FILENAME	alphanumeric (1 to 12 characters)	*File name* Enter the far-end file name.

GASINFO (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	WINDOW	1 to 8	*Window size* Enter the window size. *Retry* Enter the number of times the AFT system attempts to send the file again.
	RETRY	0 to 99	
	NODETYPE	CFP, CM, CP_CORE, EIOC_FP, EIOC_MP or FOREIGN	*Node type* Enter the type of the Data Access/Information Service (DAIS) node where the safe store tap (SST) resides. The default value is FOREIGN.
	NODEINST	0 to 99	*Node instance* Enter the DAIS node instance where the SST resides. The default value is 0.

Datafill example

Sample datafill for table GASINFO appears in the following example.

MAP display example for table GASINFO

```
GASKEY                                          SPECS
_____________________________________________________________________________
AFT1   AFT   SMDR                $ 2   1 CP_CORE   0
```

Table history

BCS34

Table GASINFO was introduced in BCS34.

Additional information

Information on dump and restore procedures for table GASINFO appears in this section.

Dump and restore

The order of fields NODETYPE and NODEINST can change. The deletion of the contents of fields NODETYPE and NODEINST can occur. Field NODETYPE has a default value of FOREIGN. Field NODEINST has a value of 0. You can enter these fields with the node type and node instance where the AFT safe store tap (SST) counterpart resides. You can enter this information at the time of the dump and restore if the information is available.

GCASCRN

Table name

Global competitive access screening

Functional description

Table GCASCRN determines whether a call is a GCA call and requires a carrier identification code (CIC). It is indexed by the originating and terminating zones. This table is used for calls signaled without a CIC and when the operator enters a B (called) number.

No entry in the table is considered an operating company call; thus, no GCA processing is performed.

Note: GCASCRN only exists in loads for global markets.

Datafill sequence and meaning

Enter datafill into table TOPSZONE before table GCASCRN.

Table size

0 to (2000 * 2000 = 4,000,000) tuples

Datafill

The table that follows lists datafill for table GCASCRN.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
KEY		see subfields	Key. This field is the key to the table and consists of subfields ORIGZONE and TERMZONE.
	ORIGZONE	name from ZONENAT or ZONEFOR	Originating zone. Enter the A (calling) party's zone, defined in table ZONENAT or ZONEFOR.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	TERMZONE	name from ZONENAT or ZONEFOR	Terminating zone. Enter the B party's zone, defined in table ZONENAT or ZONEFOR.
GCACALL		Y (Yes) or N (No)	Global competitive access call. Specify if the call is a GCA call and requires a CIC. The values are as follows: • Y - The call is a GCA call and requires a CIC. • N - The call is a not a GCA call and does not require a CIC.

Datafill example

The figure that follows shows sample datafill for table GCASCRN.

MAP display example for table GCASCRN

```
KEY                  GCACALL
-------------------------------------------------------
BURLNC    RALNC        Y
JAPAN     CARIBBEAN    Y
WASHDC    PARIS        Y
RALNC     JAPAN        Y
JAPAN     RALNC        Y
```

Table history

TOPS12

The feature LATA Screening Alternative (59006827) expands the table size to 2000 * 2000 in functionality OSB Table LATANAME Expansion, OSB00001. Even though this activity modified table GCASCRN, the feature LATA Screening Alternative does not use the table to function.

TOPS11

This table is created by feature AF7576 in functionality Global Competitive Access II, GOS00007.

GCASSET

Table name

Global competitive access schedule set name

Functional description

Table GCASSET is used to rate completed GCA calls by refining the SSETNAME determined by tables CLGSSET and CDRATEG with the CIC assigned to a GCA call.

This table is used to handle different rates according to the carrier. For example, a subscriber can have a special rate with a presubscribed carrier, but a different rate with dialled carrier.

This table is only accessed for GCA calls that are completed by the Operating Company where table TOPCACAR field SERVICE = COMPLETE.

Datafill sequence and meaning

There is no requirement to enter datafill into other tables before table GCASSET.

Enter datafill into tables TOPCACAR and SSETNAME before table GCASSET.

Table size

0 to 64,000 tuples

Datafill

The table that follows lists datafill for table GCASSET.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
KEY		see subfields	Key. This field is the key to the table and consists of subfields OLDSSET and CIC.
	OLDSSET	name from SSETNAME	Old schedule set name. Enter a rating schedule name to be refined by the CIC that is defined in table SSETNAME. Also, the name is set in table CLGSSET or CDRATEG. For country direct calls, the name is assigned though tables CDCTRY, CDCARR, and CDRATEG.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	CIC	value from TOPCACAR	Carrier identification code. Enter the CIC assigned to the call for the outgoing route. The CIC must be present in table TOPCACAR.
NEWSSET		name from SSETNAME	New schedule set name. Enter a rating schedule name that is refined by the CIC and defined in table SSETNAME.

Datafill example

The figure that follows shows sample datafill for table GCASSET.

MAP display example for table GCASSET

```
KEY                    NEWSSET
-------------------------------------------------------
SSETA      123         SSETA123
SSETA      444         SSETA444
SSETCDIR   123         SSETB123
```

Error messages for table GCASSET

The following error messages apply to table GCASSET.

Error messages for table GCASSET

Error message	Explanation and action
`CIC MUST BE DATAFILLED IN TABLE TOPCACAR`	The CIC must be datafilled in table TOPCACAR before it can be used in table GCASSET. If an attempt is made to add a tuple with a CIC not in table TOPCACAR, this error message is given, and the add is blocked.

Table history

TOPS11

This table is created by feature AF7576 in functionality Global Competitive Access II, GOS00007.

GDLADEV

Table name

Generic Data Link Application Device Table

Functional description

Table GDLADEV defines the data packet controller (DPC) or multiprotocol controller (MPC) used with a specified data transfer application.

Table GDLADEV contains the following information:

- the name of the data transfer application used
- the device name the data transfer application uses. The device name can be DPC or MPC.

Table GDLADEV associates data transmission devices with specified remote polling system applications for use in data transfer. The network data transfer system allows an operating company (OC) to transfer information to the operating company data processing center. The information is about the operation of a DMS-100 switch. Storage devices at the DMS switch contain this data.

The data processing center normally can request two following types of information:

- billing information
- operational measurement (OM) data

The billing information appears in the form of automatic message accounting (AMA) data. The data transfer system can handle additional types of data.

Table GDLADEV defines a communication device for use with specified system applications for network data transfer. The communication device can be a DPC or an MPC card. The system applications can be a transfer (XFER) or a network operation protocol (NOP). Table GDLADEV can associate only one application with a specified device in this table at one time. Table GDLADEV cannot associate one application with the MPC and the DPC.

Table GDLADEV works with table XFERADDR or table NOPADDR. These tables specify the communication device unit, the link numbers and the data center addresses. The data transfer from the DMS-100 switch to a data processing center uses this information.

Datafill sequence and meaning

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

Enter data in table GDLADEV before you enter data in table XFERADDR and table NOPADDR.

A change in table GDLADEV entries affects the corresponding entries in tables XFERADDR and NOPADDR. Remove the entries in table XFERADDR or NOPADDR before you make changes to table GDLADEV. Remove the entries in a table when the table contains any related entries. For example, if the entry for NOP table changes, clear only table NOPADDR. You do not need to delete entries in table XFERADDR.

The OC personnel enter data for table GDLADEV at installation. The OC personnel can use the table editor to modify the table. A description of the table editor commands appears in the *Basic Translations Tools Guide*.

Entries XFER and NOP only are correct when the required software is in the load. This condition is also correct for the transmission devices in the DEVICE field. Table GDLADEV only recognizes the devices that are in the software load.

Table size

0 to three tuples.

The system automatically allocates memory for table GDLADEV for four tuples of storage. Changes to memory cannot occur.

Datafill

Datafill for table GDLADEV appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
APPLN		see subfield	*Application name* This field contains subfield K.

GDLADEV (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	K	XFER or NOP	*Generic data link application name* Enter the data transfer application in use with an associated device that field DEVICE defines. This field is the key to table GDLADEV. A default is not available.
DEVICE		MPC or DPC	*Transmission device name* Enter the transmission device associated with a data transfer application. A default is not available. ***Note:*** Entry GDL (generic data link) is not a correct entry. The system uses the GDL entry to locate software that relates to a GDL. The system uses the GDL until a user inputs MPC or DPC at a transmission device.

Datafill example

Sample datafill for table GDLADEV appears in the following example.

In the first example, field APPLN indicates that data transfer application XFER is active on the MPC device.

MAP example for table GDLADEV

```
APPLN DEVICE
_____________________________________________________________________
XFER  MPC
```

In the second example, field APPLN indicates that data transfer application NOP is active on the DPC device.

MAP example for table GDLADEV

```
APPLN DEVICE
_____________________________________________________________________________
NOP   DPC
```

In the third example, field APPLN indicates that data transfer application NOP is active. Field DEVICE contains an MPC entry and XFER is active in field APPLN. Field DEVICE contains a DPC entry.

MAP example for table GDLADEV

```
APPLN DEVICE
_____________________________________________________________________________
NOP   MPC
XFER  DPC
```

In the fourth example, field APPLN indicates that data transfer application NOP is active. Field DEVICE contains an MPC entry and XFER is active in field APPLN. Field DEVICE contains an MPC entry.

MAP example for table GDLADEV

```
APPLN DEVICE
_____________________________________________________________________________
NOP   MPC
XFER  MPC
```

Table history

BCS36

Subfield K was added in BCS36.

HEAPTAB

Table name

Heap Table

Functional description

Table HEAPTAB displays the store allotment for each user of the heap facility or extension store allocator. Operating company personnel cannot add or delete tuples from table HEAPTAB. Operating company personnel can change tuples in table HEAPTAB. Operating company personnel add or delete tuples through software during software initialization or restart reload. This table is for information purposes only. This table does not require input or input form.

Refer to table HPWASTE for additional information.

Datafill sequence and meaning

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

Table size

0 to 127 tuples

Datafill

The datafill for table HEAPTAB appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
USERNAME		alphanumeric (1 to 16 characters)	*User name* This field is a character string that identifies the user. Operating company personnel cannot change this field.
USERTYPE		REGULAR or RESERVED	*User type* This field specifies the type of user. Operating company personnel cannot change this field.
Note: A default value of 2 is set for field maxstore for tuple GENDIG. This value is for Canada only.			

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MAXSTORE		0 to 32 767	*Maximum store* This field specifies the maximum amount of store that a user can allocate. This field specifies the amount of store in kilobytes. Operating company personnel can change this value. The system does not require a restart if this field is the only field that operating company personnel change. Refer to note.
CURSTORE		0 to 32 767	*Current store* This field specifies the current number of kilobytes that the heap user uses. This does not include any store less than 1 kbyte. Operating company personnel cannot change this field.
RESUSED		0 to 32 767	*Reserved used* This field specifies how many of the reserved heap elements the application uses. This number relates to the number of times the user requests a heap element from the reserved heap elements.
RESSTORE		see subfields	*Reserved store* This field is a vector of values that specify the store reserved at system initialization and on reload restarts. This field contains subfields BLKSIZE and NUMBLKS.
	BLKSIZE	0 to 32 767	*Block size* This field specifies the block size in bytes reserved at system initialization reload restarts. Operating company personnel cannot change this field.
	NUMBLKS	0 to 32 767	*Number of blocks* This field specifies the number of blocks of size that field BLKSIZE defines to reserve at system initialization and on reload restarts. Operating company personnel can change this field. A change takes effect at the next reload restart.
Note: A default value of 2 is set for field maxstore for tuple GENDIG. This value is for Canada only.			

Datafill example

Sample datafill for table HEAPTAB appears in the following example.

HEAPTAB (end)

MAP example for table HEAPTAB

```
USERNAME    USERTYPE   MAXSTORE   CURSTORE   RESUSED   RESSTORE
_____________________________________________________________

GENDIG    RESERVED      32767          1         0     (6 100)
                                                         (8 0)
                                                      (510 0) $
```

HIEINV

Table name

Host Interface Equipment Inventory Table

Functional description

Table HIEINV contains an inventory of the location data of the host interface equipment (HIE) shelves for convertible remote line concentrating modules (RLCM). Entries in table HIEINV are generated when a convertible RLCM is added to table LCMINV. These entries can then be modified in table HIEINV. If the convertible RLCM is deleted from table LCMINV, the entry in table HIEINV is automatically deleted.

Note: No additions or deletions can be made manually in table HIEINV. Additions and deletions can be made only in table LCMINV.

Datafill sequence and implications

Table HIEINV is datafilled automatically when table LCMINV is datafilled.

Table size

0 to 1024 tuples.

Datafill

The following table lists datafill for table HIEINV.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LCMNM		see subfield	*Line concentrating module name* This field consists of subfields SITE, FRAME, UNIT, GROUP, and SHELF.
	SITE	alphanumeric (up to 4 characters)	*Site* This field defines the location of the HIE.
	FRAME	0 to 511	*Frame* This field defines the logical frame number.
	UNIT	0 to 9	*Unit* This field defines the logical unit number of the HIE.

HIEINV (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	GROUP	0 to 3	*Group* This field defines the group number
	SHELF	0 to 3	*FShelf* This field defines the shelf number indicating the position of the HIE on the frame shelf.
FRTYPE		alphanumeric	*Frame type* This field defines the frame name of the HIE.
SHPOS		0 to 77	*Shelf position* This field defines the shelf position of the HIE.
FLOOR		0 to 99	*Floor* This field defines the floor position of the HIE.
ROW		A to H,J to N,P to Z,AA to HH,JJ to NN,or PP to ZZ	*Row* This field defines the row position of the HIE.
FRPOS		0 to 99	*Frame position* This field defines the HIE position within the row.

Datafill example

The following example shows sample datafill for table HIEINV.

HIEINV (end)

MAP display example for table HIEINV

```
LCMNM FRTYPE SHPOS FLOOR ROW FRPOS

_____________________________________________________

  HOST  00 0    LCEI    38     4   A     6
```

HNPACONT

Table name

List of Home Numbering Plan Area Code Subtables Table

Functional description

The home numbering plan area (HNPA) code subtables are as follows:

- The HNPACONT - List of home numbering plan area code subtables table record.
- The HNPACONT.HNPACODE - Home numbering plan area (NPA) code subtable record.
- The HNPACONT.ATTRIB - Home NPA long haul attribute subtable record.
- The HNPACONT.RTEREF - Home NPA route reference subtable record.
- The HNPACONT.RTEMAP - ISND home NPA route reference subtable record.

Office parameter MAXSTS in table OFCENG sets the maximum number of HNPAs or serving numbering plan areas (SNPA) and serving translation schemes (STS).

All HNPAs or SNPAs appear as the first 128 entries in the table.

Datafill sequence and meaning

Enter data in table SNPANAME before you enter data in table HNPACONT. If addition of a tuple to HNPACONT occurs when field SNPA is Y, the system updates SNPANAME with the same tuple. If SNPA is N, the system does not add the tuple to SNPANAME.

When you delete STS with field SNPA as Y from HNPACONT, the system does not delete the equivalent entry in SNPANAME.

CAUTION
Possible service degradation of DISA calls
For correct direct inward system access (DISA) operation, you must enter data in table HNPACONT. Service degradation can occur when DISA calls are attempted and table HNPACONT is empty.

Table size

0 to 1000 tuples

Datafill

Datafill for table HNPACONT appears in the following table.

Field descriptions

Field	Subfield or Refinement	Entry	Explanation and action
NPA or STS		000 to 999	*Serving translation scheme* Enter an SNPA or an STS code. Refer to the example in the description of subtable FNPACONT.FNPASTS.STSCODE if you use an STS.
SNPA		Y or N	*Serving numbering plan area* Enter Y or N to indicate if a specified STS in this table maps to an SNPA in table SNPANAME. An HNPA or SNPA appears in one of the first 128 positions. You can enter these positions at any time. Use SNPAs in: • line data • plain ordinary telephone service (POTS) • virtual facility group (VFG) data • private automatic branch exchange (PBX) trunk data • table DNINV • table DNROUTE • table TOFCNAME Enter data in table SNPANAME before table HNPACONT. If you add a tuple to HNPACONT first and SNPA is Y, the system updates the same tuple in table SNPANAME. If SNPA is N the system does not add the tuple to table SNPANAME.
NORTREFS		1 to 1023	*Number of route references* Enter 2 for the quantity of route reference numbers. The system extends field NORTREFS to the highest route index that subtable HNPACONT.RTEREF uses. An entry outside the range indicated for this field is incorrect.

Field descriptions

Field	Subfield or Refinement	Entry	Explanation and action
NOAMBIGC		0 to 1000	*Number of ambiguous codes* Enter the number of ambiguous codes required. An entry outside the range indicated for this field is incorrect.
OPTION		ARS	Enter *Option ARS* to set the automatic route selection.
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.
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.

OPTION = ARS

If the entry in field OPTION is ARS, enter data in subfields ARS_OPTION and RR.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ARS_OPTION	DEFAULT_ RTEREF	*Automatic route selection option* Enter *DEFAULT_RTEREF* to select the default that subtable HNPACONT.RTEREF defines.
	RR	0 to 1023	*Extended route reference index* Enter the extended route reference index.
	10DIG	Y or N	Enter Y if the system collects ten digits before the system sends the call to the ARS default route. The ARS default route is an enforced ten digit dialing environment. Enter N if users dial local calls are dialed as seven digits. Calls dialed as 7D do not have a prefix or an area code. Enter N if toll calls are dialled as 1+10D. Calls dialed as 1+10D have a prefix and a full ten digits. The ten digits include the area code.

Datafill example

Datafill for table HNPACONT appears in the following example. A switching unit with two NPAs, 613 and 819, and two STS codes, 001 and 002, appears in this example.

Field NORTREFS is 2. The system extends field NORTREFS to the highest route index that subtable HNPACONT.RTEREF uses. The system allocates memory for 20 ambiguous codes in HNPA 613.

Note: The system labels STS 001 as an ARS STS in the options field. Entry STS 001 does not have an ARS default route set. Entry STS 002 is also an ARS STS. Entry STS 002 has a default route. The default route is entry 5 in HNPACONT 002: RTEREF. The default route does not assume ten-digit digit collection. The 10DIG sub-option is N.

MAP display example for table HNPACONT

```
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 HNPACONT (continued)

```
TABLE: HNPACONT
pos 214
214    N       955       0 (   78)  (    1) (    0) (    0)

RTEREF                                                              $
420  (CND MIGRATE SK 2) (DN 214 420 4) (CND ALWAYS SK 1) (T OFRT 444) $
```

Table history

SN06 (DMS)

New conditional routing selector (CND MIGRATE) added to the range of possible values of RTELIST in table HNPACONT:RTEREF. Refer to the description for table HNPACONT:RTEREF, as well as to this section. Activity A00001207.

NA017

The SG selector is extended to include a CALLTYPE field that permits customers the select a PUBLIC or PRIVATE calltype per feature activity 59035336.

NA014

Options list added to the SG selector and option DMI added by feature activity 59017604.

NA012

Development activity 59007050 introduces changes to field LINEATTR of table HNPACONT, subtable HNPACODE, selector NSC. This field now accepts an alphanumeric string instead of an integer string.

NA009

This release added a new OPTION field with a single value of ARS. The ARS value associates with two subfields. These subfields are ARS_OPTION and DEFAULT_RTEREF. The operating company can use this option to define a default route for digit ranges not found in HNPACONT.HNPACODE.

CSP06

This release made the following changes:

- The first 16 positions of the table do not require dummy SNPAs with the addition of field SNPA. The release updated datafill and MAP display information. This update reflected changes that the increase in the size of table SNPANAME introduced.
- Added 1 as a route reference index entry in subtable HNPACODE type HNPA.

CSP05

Added statement about restricted length of field STS if North American is ACTIVE_DN_SYSTEM in table OFCENG.

BCS36

Added caution for service degradation of DISA calls.

The name of field MAXRTE changed to NORTREFS.

Additional information

This section provides information on how to enter data in table HNPACONT for specified applications. This section also provides product description information for table HNPACONT.

Information messages

If you delete a tuple in table HNPACONT, the system does not delete the same tuple from table SNPANAME.

Deletion of an area code from SNPANAME affects other entries. When deletion of an area code occurs, the system deletes the entry from HNPACONT. The system maintains the route and code references against the deleted tuple. These references are available when a new SNPA replaces the SNPA deleted in SNPANAME.

If you delete a tuple from SNPANAME, the system removes the same tuple from HNPACONT. The following message appears:

```
>>> WARNING:  Failure to add a new tuple to replace          >>>
=======   the SNPA just deleted                              >>>
=======   will leave table HNPACONT corrupted.            TUPLE
DELETED                                                    >>>
WARNING:  Failure to add a new tuple to replace             >>>
=======   the SNPA just deleted                              >>>
=======   will leave table TOFCNAME corrupted.            TUPLE
DELETED
```

If you attempt to replace the STS in HNPACONT after the tuple is deleted, the following message appears:

```
An SNPANAME tuple referenced by HNPACONT                    was
deleted. Please add tuples back to                      SNPANAME
before entering anything new in     NOT POSSIBLE
```

If you attempt to delete a tuple from HNPACONT and the tuple is referenced in any of the screening tables, the delete command is unavailable. The following message appears:

```
WARNING: DELETING A TUPLE FROM A HEAD TABLE WILL
DELETE ALL CORRESPONDING SUBTABLE DATA.
SUBTABLE(S) WITH DATA:                                      RTREF
HNPACODE RTEMAP                                  DO YOU REALLY
WANT TO DELETE (Y/N)              >y
SERVING_TRANSLATION_SCHEME ??? is used in other tables.     USE
TABREF TO GET POTENTIAL TABLE LIST.
INCONSISTENT DATA                                           DMO
REJECTED
```

If you delete a tuple form HNPACONT and the tuple is not referenced in any of the screening tables, the tuple will be deleted. The following warning message appears:

```
WARNING: DELETING A TUPLE FROM A HEAD TABLE WILL DELETE ALL
CORRESPONDING SUBTABLE DATA.
SUBTABLE(S) WITH DATA:                                        RTREF
HNPACODE RTEMAP                                  DO YOU REALLY
WANT TO DELETE (Y/N)              >y
All rtref indices from HNPACODE table should be deleted first
THIS TABLE ATTRIB CAN NOT BE EXTENDED                         LCA
AND CSS SCREENING TABLES DEALLOCATED
WARNING:  DELETIONS MAY CAUSE PROBLEMS IN OTHER
TABLES REFERENCING STS OR SNPA
IN PARTICULAR, IT IS IMPERATIVE THAT THE STS DELETED SHOULD NOT
BE FOUND IN ANY OF THE FNPASTS SUBTABLES. IF THIS HAPPENS TO BE
THE CASE, THEN ALL TUPLES WITH THE DELETED STS M*U*S*T ALSO BE
DELETED.                                        TUPLE DELETED
```

If you add a replacement for the deleted tuple into table SNPANAME, the following message appears:

```
REPLACEMENT OF KEY ??? IN TABLE HNPACONT WITH KEY ??? SUCCEEDED.
TUPLE ADDED
```

After this message appears, both tables correctly display the new tuple.

The STSs are necessary for IBN private networks. Table IBNXLA defines the STSs.

Each HNPA has the following subtables:

- Subtable HNPACODE: Home NPA Code subtable specifies the translation for each of the 1000 codes (000 to 999). The system initializes the 1000 codes to vacant code.
- Subtable RTEREF: Home NPA Route Reference subtable specifies the translations associated with each of the route reference indexes. The Home NPA Code table specifies these route references indexes.

The system assigns each line, incoming trunk group, and two-way trunk group to 1 of the 128 serving home NPA codes.

Table TRKGRP stores the SNPA for a normal trunk group for each incoming and two-way trunk group.

Table LINEATTR stores the SNPA for a line in the line attribute assigned to the line.

Table IBNLINES stores the SNPA for an IBN line.

Table IBNXLA stores the STS code for an IBN line.

Field NPA changes and allows between one and seven digits instead of the previous three-digit value. When the office parameter ACTIVE_DN_SYSTEM in table OFCENG is NORTH_AMERICA, expect a three-digit NPA.

For DMS-100 domestic offices, the tuple verification phase that adds to the table allows the entry of only three digits.

International coexistence

International and North American call processing can run in parallel with coexistence. Coexistence allows the international switch to interact with North American developed services like ISDN.

Partitioned Table Editor feature

In DMS offices with feature BC1459 Partitioned Table Editor (PTE), the operating company can allow a user to edit specified tuples of table HNPACONT. The user is from outside the operating company. The user edits using PTE. This feature allows an authorized user to edit the tuples of the following subtables at the authorized positions of table HNPACONT.

- subtable HNPACONT.HNPACODE
- subtable HNPACONT.ATTRIB
- subtable HNPACONT.RTEREF

The user must own the STS to access a tuple in table HNPACONT.

For example, the datafill example for table DATAOWNR can be as follows:

KEY	OWNER
STS 001	**CARLING**

In this condition, the authorized user, CARLING, can access the tuples with a key 001. User CARLING cannot view table HNPACONT tuples unless other users own these tables. Table OWNER classifies these tuples as public.

The operating company uses the PTE feature to limit edit access to a table for a specified user to the following restrictions:

- deny tuples
- read-only tuples
- change-only tuples
- add and delete tuples

Set the PTE access for users outside the operating company. Table 3 is an example of the PTE access settings.

Recommended PTE access settings

Level	Table name	Action
Table	HNPACONT	change or read-only access
Subtable	HNPACONT. HNPACODE	add or delete tuples access
Subtable	HNPACONT.ATTRIB	add or delete tuples access
Subtable	HNPACONT.RTEREF	add or delete tuples access
Subtable	HNPACONT.RTEMAP	add or delete tuples access

See the description of table OWNER for more information on the Customer Data Change feature tables.

HNPACONT.ATTRIB

Table name

Home NPA Longhaul Attribute Subtable

Functional description

Subtable HNPACONT.ATTRIB is an extension of subtable HNPACONT.HNPACODE. This subtable must have an entry for each three-digit code that appears in subtable HNPACONT.HNPACODE.

Datafill sequence and meaning

Enter data in table LINEATTR before you enter data in table HNPACONT.ATTRIB.

Table size

0 to 1000 tuples

Datafill

Datafill for table HNPACONT.ATTRIB appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
LATTIX		000 to 999	*Local access and transport area attribute index* This field corresponds to fields FROMDIGS and TODIGS in subtable HNPACONT.HNPACODE.
LONGHAUL		Y or N	*Long haul* Enter Y (yes) to indicate that the system routes the call over longhaul transmission facilities. If the system does not route the call over longhaul transmission facilites enter N (no).

Datafill example

Datafill for subtable HNPACONT.ATTRIB appears in the following example.

HNPACONT.ATTRIB (end)

MAP example for table HNPACONT.ATTRIB

LATTIX	LONGHAUL
725	N
726	N
519	N

HNPACONT.HNPACODE

Table name

Home NPA Code Subtable

Functional description

Subtable HNPACONT.HNPACODE lists the route, treatment, or table that translation routes to for each of the 1000 three-digit codes (000 to 999) within each of the serving number plan areas (SNPA) or serving translation scheme (STS) assigned in table HNPACONT.

The subtables are initialized with each of the three-digit codes routed to a vacant code.

Each of the three-digit codes can be expanded to ten or more digits, provided that the incoming call equipment is capable of sending that many digits. The number of leading digits defined as prefix digits in field NOPREDIG in subtable STDPRTCT.STDPRT are stripped from the digit string used to index into subtable HNPACONT.HNPACODE.

The number of digits entered must not exceed the maximum number of digits permitted by the associated code type (CD).

If the total number of post prefix digits received is less than the matching string in fields FROMDIGS or TODIGS, the call is automatically routed to the appropriate subtable of TMTCNTL at TREATMT set to VACT (vacant treatment).

If the value of the post prefix digits received does not fall within the range set by the matching string in fields FROMDIGS or TODIGS, the call is automatically routed to the appropriate subtable of TMTCNTL at TREATMT set to PDIL (partial dial treatment).

The translation is routed to HNPACONT.HNPACODE when a line or trunk has pretranslation and field TRANSYS in subtable STDPRTCT.STDPRT is set to NA.

Note: Field TRANSYS is a refinement field for subtable STDPRTCT.STDPRT selector field PRETRTSEL.

If pretranslation is not required for the line or trunk group, subtable HNPACONT.HNPACODE is indexed directly from the line attribute or trunk group table for all codes dialed.

HNPACONT.HNPACODE (continued)

For related information, refer to table HNPACONT.

CAUTION
Lost data
A requested change overwrites neighboring fields FROMDIGS and TODIGS ranges. This overwriting results in the inclusion of neighboring tuple ranges in the one range requested by the change. Hence, the data from the previously neighboring tuple is lost. Therefore, make certain of the tuple range of fields FROMDIGS and TODIGS before making changes to the range data.

DMSMON DBLOCKS command

The DMS monitoring system (DMSMON) command DBLOCKS displays the number of digit blocks being used, the number of digit blocks allocated, the percent of digit blocks used, and the percent of digit blocks available for each of several tables including:

- CLSVSCRC.CLSVSCR
- CODEBLK
- HNPACONT.HNPACODE
- IBNXLA
- LATAXLA
- SPLDNID
- STDPRTCT.STDPRT

Each of the three-, four- or five-digit codes are assigned to one of the following CDs.

Code type to switch type table

A Y at the intersection of the CD line and the switching unit column indicates that the CD can be used in the switching unit type. Table Table , "Code types to switch types" on page -121 lists these types. Refer to the appropriate type of subtable HNPACONT.HNPACODE, for the description of each code type.

HNPACONT.HNPACODE (continued)

For example, for the description of code type AMBI, see subtable HNPACONT.HNPACODE type AMBI.

Code types to switch types (Sheet 1 of 2)

Code	Description	Local	Toll
AMBI	Ambiguous code	Y	Y
CONT	For future use		
DN	Terminating line (replaces CD TERM)	Y	
FNPA	Foreign NPA six-digit translations	Y	Y
FRTD	Foreign NPA three-digit translations	Y	Y
FRTE	Foreign NPA three-digit translations	Y	Y
HNPA	Home NPA: dialing of home NPA code permitted	Y	Y
HRTE	Home route (non-local within the home NPA)	Y	Y
INWC	CCIS INWATS OSO (originating screen office)	Y	Y
INWO	INWATS OSO (originating screen office)	Y	Y
INWS	INWATS terminating	Y	Y
INWT	INWATS tandem	Y	Y
LRTE	Local route	Y	Y
NPOSDN	No position to DN	Y	N
NSC	Number service code	Y	Y
OPC3	Three-digit operator code	Y	Y
OPC4	Four-digit operator code	Y	Y
OPC5	Five-digit operator code	Y	Y
SACNWM	Service access code network management code		
SCD3	Three-digit service code	Y	Y
SCD4	Four-digit service code	Y	Y
SLRTE	Special local route from SC/TOPS trunks code		Y
STRG	Station ringer test (replaces CD SRNG)	Y	

HNPACONT.HNPACODE (continued)

Code types to switch types (Sheet 2 of 2)

Code	Description	Local	Toll
TTC	Terminating toll center	Y	Y
VCT	Vacant code	Y	Y

Notes on originating source

Originating source, local and non-local, is used to prevent the operating company from originating calls to destinations that are reserved for operators only. The operating company is defined as local and authorized operators are defined as non-local.

Originating source is also used to prevent non-local sources from reaching service operators.

The sources, lines or trunks are defined as local or non-local as follows:

- Lines are automatically assumed to be local.
- Trunks are divided into the following groups:
  - — Trunks that are explicitly defined by the telephone operating company as local (LCL) or non-local (NLCL) in table TRKGRP field ORIGSRCE (trunk group types MTR, OI, OPR, PX, P2, TD, TI, TPS101, and T2) or field ORIGSRC (trunk group types A5, OC, and OA).
  - — Trunks that have no originating source field and are automatically assumed to be LCL, except for the intertoll trunk group IT, which is automatically assumed to be NLCL. Calls incoming on intertoll trunk groups (field GRPTYP is set to IT) are assumed to be from a non-local originating source, even though the trunk group can carry traffic from local and non-local originating sources. Blocking of unauthorized users from dialing certain codes is done before the call is allowed to proceed on the trunk group.

An example of the application of originating source is as follows.

If field ORIGSRCE is set to LCL and the incoming digits in subtable HNPACONT.HNPACODE get a code type of OPC3, the call is automatically routed to vacant code treatment (VACT).

HNPACONT.HNPACODE (continued)

Datafill sequence and implications

There is no requirement to datafill other tables prior to table HNPACONT.HNPACODE.

Note: Additions or changes (through the table editor or through DMOPRO) to tuples with a value af AIN result in the error message that follows:

```
AIN is not a supported value.
```

Table size

Memory is allocated for 1000 codes in each assigned subtable.

For each serving translation scheme (STS), the maximum number of unique tuples in subtable HNPACONT.HNPACODE is 1022 for the following selectors

- DN
- STRG
- NPOSDN
- NSC
- FEAT

Description of code types

The method for datafilling the fields for subtable HNPACONT.HNPACODE is described on the following pages, organized in ascending alphabetical order of CD.

Datafill example

An example of datafill for subtable HNPACONT.HNPACODE with various CDs is shown below.

The example consists of all the previous examples, excluding code type VCT (assuming HNPA dialing is permitted) plus examples of the following:

- an FNPA 202 with three-digit translation and blocking if the fourth digit is 0 or 1
- the INWATS originating code 008
- a four-digit service code 4102 with code type SCD4
- a four-digit test maintenance code 0683 with code type OPC4
- an example of office code sharing, 692-0XXX to 692-2XXX routing using route index 18 in subtable HNPACONT.RTEREF, and 692-3XXX to

HNPACONT.HNPACODE (end)

692-9XXX routing using route index 19 in the HNPA route reference subtable 613

MAP display example for subtable HNPACONT.HNPACODE

```
            FROMDIGS              TODIGS
                               CDRRTMT
________________________________________________________

008                       008
                          INWO    0      025         025
                           TTC   12     0683        0683
                          OPC4   20      201         201
                          FRTE    1      202         202
                          FRTD    1      224         224
                          LRTE   38     4102        4102
                          SCD4   39      411         411
                          SCD3   10      416         416
                          FNPA    0      556         558
                          HRTE    1      575         575
                          STRG    0      613         613
                          HNPA    0     6920        6922
                          LRTE   18     6923        6929
                          LRTE   19      800         800
                         INWO    0
```

Code type AMBI: Ambiguous code (local/toll)

A description of code type AMBI appears in the following table.

Code type AMBI

Code type	Description
AMBI	*Ambiguous code* Code type (CD) AMBI applies if a dialed three-digit code represents a not clear home, local seven-digit, or foreign numbering plan area (FNPA) ten-digit code. Use one of the following methods to determine if the call requires a long or short route. Use this method if the expected number of digits is seven or ten: • Prefix method (PFX) - A present or absent prefix digit determines the expected number of digits. An example of a prefix digit is 1+. If a prefix is not present, the expected number of digits are seven and the selected route is short. If a prefix is present, the expected number of digits are ten and the route selected is long. • Timing method (TIM) - Present or absent additional digits within 4 s after the system receives the seventh digit determines the number of digits expected. If the expected number of digits is seven the selected route is the short route. If the expected number of digits are ten the selected route is the long route. • Old prefix method (OPF) for seven digit collection - The system selects the short route if one of the following is not true. If one of the following is true, the OPF selects the long route: — the call is incoming on a trunk and the digit count is greater than seven — the system marks the call DD or OA and the digit count is greater than seven — the call has a prefix, for example 1+ or 0+, and the digit count is greater than seven *Code combinations* — *Number of digits* — *Originating source* NXX-XXXX — 7 — local and non-toll NPA-NNX-XXXX — 10 — local and non-toll NPA-TTC-XXXX — 10 — non-local
Note: On the data input forms 2401A or B, the system requires three separate lines for each occurrence of CD AMBI.	

HNPACONT.HNPACODE type AMBI (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type AMBI appears in the following example.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits* Enter the ambiguous number. This number represents a single code or the first in a block of codes in sequence. These codes have the same input data.
		numeric (three digits)	*To digits* If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of numbers in sequence, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference or treatment* This field contains subfield CD.
	CD	AMBI	*Code type* Enter AMBI for ambiguous codes and enter data in refinements METHOD, SHORTRTE, and LONGRTE.

HNPACONT.HNPACODE type AMBI (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action

	METHOD	PFX, TIM, or OPF	Metho
			
			The PFX selector is most easy of the three methods. If you make the call and a prefix digit is not present, the system routes the call to the short route. The short route is for seven digits only. If the call is made with a prefix digit, the system routes the call to the long route. When Overlap Carrier Selection (OCS) is necessary, use the PFX method. The table HNPACONT.HNPACODE datafill appears in the following example:
			
			`FROMDIGS  TODIGS    CDRRTMT`
			`------------------------------`
			`214 214  AMBI PFX  LRTE 3 FRTE 8`
			`                     |      |`
			`                   Short   Long`
			
			The TIM selector counts the number of digits the system collects to distinguish between the long and short routes. After the seventh dialed digit, a timer begins and waits for more dialed digits, for example, a 10-digit call. The timer default time is 4 s. If the number of digits dialed after the timer expires is seven, the system uses the short route. If thee caller dials ten digits, the system uses the long route. The timer begins after the seventh dialed digit and ends after the XPM sends the last digits message. If you make a 10-digit call, the last digits message carries in the three digits that remain. This event causes most of the delays. You can change the length of the delay with datafill for the office parameter LN_SHORT_PARTIAL_DIAL_TIME in table OFCENG. The increments for this parameter are 160 ms.

HNPACONT.HNPACODE type AMBI (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	METHOD (continued)		The OPF selector uses a short route if one of the following is not true. If one of the following is true, the OPF selector uses the long route: • the call is incoming on a trunk and the digit count is greater than seven • the system marks the call DD or OA and the digit count is greater than seven • the call has a prefix, for example 1+ or 0+, and the digit count is greater than seven The OPF selector is the most complicated method. The use of this method occurs in different conditions. Many problems occur because the use of the OPF selector is not clear. Do not use the OPF selector method for translation of ambiguous calls. This dialing plan does not comply with Bellcore standards. The OPF selector uses the call type datafill in table STDPRTCT. The call type in STDPRTCT:STDPRT can be NP or NL. If this condtion occurs the call must be a seven-digit call from a line. If the call comes from a trunk, the seven-digit call takes the short route. If the call is a ten-digit call, the call takes the long route. If the call type in STDPRTCT:STDPRT is DD or OA, you can make non-prefixed 10-digit calls. These calls cannot use OCS. If the use of a prefix digit occurs, the switch determines how many digits are dialed. If the dialed digits are more than seven, the system uses the long route. If seven or less digits are dialed, the translation of the call waits for more digits. The translation waits for XPM to report the message from the last digit. If the user does not dial more digits the system uses the short route.
	SHORTRTE	see subfields	*Short route* This route is for seven-digit numbers. This route contains subfield CD and refinements that depend on CD. This information appears in the following paragraphs.

HNPACONT.HNPACODE type AMBI (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action		
			CD	CD refinements	Subtable HNPACONT. HNPACODE
			VCT	TMT	type VCT
			STRG	SNPA and NXX	type STRG
			DN	SNPA and NXX	type DN
			NPOSDN	SNPA and NXX	type NPOSDN
			other	RR	refer to table Code types toswitch types in table HNPACONT. HNPACODE
			See the appropriate CD for the definition of the CD and fields that depend on CD.		
	LONGRTE	see subfields	*Long route* This route is for the ten-digit numbers. This route contains subfields CD and subfields that depend on CD. This information appears in the following paragraph.		
			CD	CD refinements	Subrtable HNPACONT. HNPACODE
			VCT	TMT	type VCT
			STRG	SNPA and NXX	type STRG
			DN	SNPA and NXX	type DN

HNPACONT.HNPACODE type AMBI (end)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action		
			other	RR	refer to table Code types toswitch types in table HNPACONT. HNPACODE
			See the appropriate CD for the definition of the CD and fields that depend on CD.		

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD AMBI appears in the following example. An ambiguous code 212 in a local, toll, or local/toll switching unit appears in the example. Seven-digit calls are local, code type LRTE, and translation advances to route reference index number 1 in subtable HNPACONT.RTEREF. Ten-digit calls require six-digit translation. These calls advance to the 212 FNPA code table. Absent or present prefix digits define the number of digits.

MAP example for table HNPACONT.HNPACODE type AMBI

```
          FROMDIGS             TODIGS
                             CDRRTMT
   ________________________________________________________

            212               212
         AMBI PFX           LRTE    1    FNPA    1
```

Code type DN: Terminating line (local)

Code type (CD) DN replaces CD TERM.

The CD DN is not for use in a toll switch.

The CD DN is the format in subtable HNPACONT.HNPACODE for a terminating NXX code. A description of the DN code appears in the following table.

Code type DN

Code type	Description
DN	*Terminating line* If you enter data in the first three digits, the digits represent an office code that terminates in the switching unit. Code type DN allows the code combination NXX-XXXX, number of digits equal to seven and originating source local and non-local.

Datafill

Datafill for table HNPACONT.HNPACODE type DN appears in the following example.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits* Enter a digit string if the first three digits represent an office that terminates to a line in the switching unit.
TODIGS		numeric (three to four digits)	*To digits* Enter the code that terminates to a line in the switching unit. This code is equal to the datafill in field FROMDIGS.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.
	CD	DN	*Code type* Enter DN for terminating office code and enter data in refinements SNPA and NXX.

HNPACONT.HNPACODE type DN (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric	*Terminating serving numbering plan area* Enter the serving numbering plan area (SNPA) of the called terminating line directory number. If the operating company uses screening to intra-switch SNPAs, translation of the dialed digits proceeds to table TOFCNAME. Translation uses SNPA and NXX as the key.
	NXX	000 to 999	*Terminating nxx* Enter three digits for the NXX code of the called terminating line directory number.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD DN appears in the following example. The input for code 725 that terminates to a line in the switching unit appears in the example. The system can receive the correct code combination and number of digits from a local or non-local source. The system does not always route the call through the local calling area or class of service screening. When these event occur translation proceeds to the directory number translations for translation of the last four digits. The terminating office number for code 725 is 0.

MAP example for table HNPACONT.HNPACODE type DN

```
FROMDIGS                        TODIGS
                                        CDRRTMT
_____________________________________________________
725                             725
                                        DN 613 725
```

HNPACONT.HNPACODE type FNPA

Code type FNPA: Foreign numbering plan area (six-digit translations) (local/toll)

The following is the functional description of subtable HNPACONT.HNPACODE if the code is a foreign numbering plan area (FNPA) that requires six-digit translations. A description of the FNPA code appears in the following table.

Foreign numbering plan area code

Code type	Description
FNPA	*Foreign numbering plan area (six-digit translation)* Code type (CD) FNPA applies if a dialed 3-digit code represents a route outside the home numbering plan area (HNPA) and 6-digit translations are necessary. The CD FNPA does not apply to 3-digit codes that represent inward wide area telephone service (INWATS) codes. For INWATS see the following subtables: • HNPACONT.HNPACODE type INWC, INWO • HNPACONT.HNPACODE type INWS • HNPACONT.HNPACODE type INWT The system routes calls to codes with code type FNPA to the appropriate FNPA code table. The system routes the call for translation of the last three digits of a 6-digit code. The code combinations, number of digits and originating sources allowed with CD FNPA appear below. The code combinations can specify an originating source of non-local, receive an origination from a local source. If this condition occurs the system routes the originator to a vacant code treatment.

Code combinations	*Number of digits*	*Originating source*
NPA-1XX	6	non-local
NPA-11XXX	8	non-local
NPA-TTC-1XX	9	non-local
NPA-NNX-XXXX	10	local and non-local
NPA-TTC-XXXX	10	non-local

HNPACONT.HNPACODE type FNPA (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type FNPA appears in the following example.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits* Enter the 3-digit number assigned as a foreign numbering plan area (FNPA). This number represents a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (three digits)	*To digits* If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of numbers in sequence, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.
	CD	FNPA	*Code type* Enter FNPA for six-digit translation that uses table FNPACONT and subtables and enter data in refinement RR.
	RR	0	*Route reference* Enter 0. This field is not a requirement.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD FNPA appears in the following example. The FNPA 416 with six-digit translation appears in the example. The system can receive the correct code combination and number of digits from a local or non-local originating source. The local calling area or class of service screening does not always route the call again. When these condition occur, translation uses the data in the FNPA code subtable 613 for translation of the digits that remain.

HNPACONT.HNPACODE type FNPA (end)

MAP display example for table HNPACONT.HNPACODE type FNPA

```
            FROMDIGS              TODIGS
                                  CDRRTMT
_____________________________________________________________
              416                 416
                                  FNPA    0
```

HNPACONT.HNPACODE type FRTD and FRTE

Code types FRTD, FRTE: Foreign numbering plan area (three-digit translation) (local/toll)

The following is the functional description of subtable HNPACONT.HNPACODE if the code is a foreign numbering plan area (FNPA) that requires three-digit translations. A description of the FRTD and FRTE codes appears in the following table.

Code type FRTD or FRTE

Code type	Description
FRTD or FRTE	*Foreign area (three-digit translation)*Code types (CD) FRTE or FRTD apply if a dialed 3-digit code outside of home numbering plan area (HNPA) that only requires 3-digit translations. Calls to codes with CD FRTD or FRTE indexes into the home NPA route reference subtable. This subtable has the route reference index specified for the code. The code combinations, number of digits, and originating sources allowed with code types FRTD and FRTE appear in the list. Code combinations that specify an originating source of non-local receive an origination from a local source. When this condition occurs, the system routes the originator to a vacant code treatment. A call can originate from a local source. The CD for the code dialed is FRTD and the fourth digit dialed is equal to 0 or 1. When this event occurs, the system routes the originator to a vacant code treatment. *Code combinations* — *Number of digits* — *Originating source* non-local — 6 — non-local NPA-11XXX — 8 — non-local NPA-TTC-1XX — 9 — non-local NPA-NNX-XXXX — 10 — local and non-local NPA-TTC-XXXX — 10 — non-local 0-NPA-NXX-XXXX — 11 — local and non-local

HNPACONT.HNPACODE type FRTD and FRTE (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type FRTD and FRTE appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits* Enter a string if the first three digits represent a foreign numbering plan area (FNPA) code. This number represents a single code or the first in a block of codes in sequence with the same input data.
TODIGS		numeric (three digits)	*To digits* If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.
	CD	FRTD or FRTE	*Code type* Enter FRTD for routing to an FNPA with blocking. The fourth digit dialed can be equal to 0 or 1 and the call can originate from a local source. If these events occur the system routes the call to subtable TMTCNTL.TREAT with field TREATMT set to vacant code (VACT). Enter FRTE for routing to an FNPA that does not contain blocking on fourth digit. Enter data in refinement RR.
	RR	1 to 1023	*Route reference index* Enter the route reference index of the route list in subtable HNPACONT.RTEREF that translation proceeds to. The route reference index is at the same service numbering plan area (SNPA) position as this subtable

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD FRTE appears in the following example. The input for FNPA code 201 with only three-digit translation and without a fourth digit blocking appears in the example. The

HNPACONT.HNPACODE type FRTD and FRTE (end)

system can receive the correct code combination and number of digits from a local or non-local originating source. When this condition occurs, the system does not reroute the call through local calling area or class of service screening. Translation proceeds to subtable HNPACONT.RTEREF to select an idle trunk from the route list for route reference index number 1. Use code type FRTD if fourth digit blocking is a requirement.

MAP display example for table HNPACONT.HNPACODE type FRTD and FRTE

```
          FROMDIGS              TODIGS
                              CDRRTMT
_____________________________________________________

            201                 201
                              FRTE    1
```

HNPACONT.HNPACODE type HNPA

Code type HNPA: Home numbering plan area - dialing HNPA permitted (local/toll)

The following is the functional description of subtable HNPACONT.HNPACODE. This description applies if the code is a home numbering plan area (HNPA) and you have permission to dial an HNPA code. A description of the HNPA code appears in the following table.

Code type HNPA

Code type	Description
HNPA	*Home NPA* Code type (CD) HNPA applies if a dialed 3-digit code can occur and the dialed three-digit codes are HNPA. Code type HNPA ignores digit translation that follows. The following conditions can occur with code type HNPA: • code combination HNPA-NNX-XXXX • number of digits equal to ten • local or non-local originating source

Datafill

Datafill for table HNPACONT.HNPACODE type HNPA appears in the following example.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits* Enter the three-digit number assigned as the HNPA.
TODIGS		numeric (three digits)	*To digits* Enter the same three-digit number that appears in FROMDIGS.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.

HNPACONT.HNPACODE type HNPA (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CD	HNPA	*Code type* Enter HNPA if you can dial HNPA and enter data in refinement RR.
	RR	0 or 1	*Route reference index* Enter 0 when this subfield is not a requirement. Enter 1 to strip off the foreign numbering plan area (FNPA) digits on a ten-digit intra-office call terminating on a trunk. This action causes standard seven-digit outpulsing.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD HNPA appears in the following example. Input for HNPA code 613, if the dialing of HNPA code can occur, appears in the example. The system ignores the HNPA code during digit translations that follow.

MAP example for table HNPACONT.HNPACODE type HNPA

```
                FROMDIGS              TODIGS
                                    CDRRTMT
_____________________________________________________________

                  613                 613
                                     HNPA    0
```

HNPACONT.HNPACODE type HRTE

Code type HRTE: Home route (local/toll)

A functional description of subtable HNPACONT.HNPACODE for non-local routes in the home numbering plan area (HNPA) follows. A description of the HRTE code appears in the following table.

Code type HRTE

Code type	Description
HRTE	*Home route* Code type (CD) HRTE applies if a dialed three-digit code represents a non-local route in the HNPA. Calls to codes with code type HRTE, index the HNPA route reference subtable with the route reference index specified for the code. Code type HRTE allows the code combination NXX-XXXX, number of digits and local or non-local originating source.

Datafill

Datafill for table HNPACONT.HNPACODE type HRTE appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits* Enter a string if the first three digits represent an office code in the HNPA. This number represents a single code or the first in a block of the next codes that contain the same input data.
TODIGS		numeric	*To digits* If field FROMDIGS represents a single code, enter the same single code from field FROMDIGS. If field FROMDIGS represents the first number of a block of the next numbers, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.

HNPACONT.HNPACODE type HRTE (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CD	HRTE	*Code type* Enter HRTE for the HNPA route and enter data in refinement RR.
	RR	1 to 1023	*Route reference index* Enter the route reference index of the route list in subtable HNPACONT.RTEREF to where translations proceed. Enter this data at the same position service numbering plan area (SNPA) as this subtable.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD HRTE appears in the following example. The input for the non-local codes 556 to 558 that terminate in the HNPA appears in the example. If the following events occur, translation proceeds to subtable HNPACONT.RTEREF:

- the system receives the correct code combination and number of digits from a local or non-local originating source
- the system does not reroute the call by local calling area or class of service screening

This event occurs to select an idle trunk from the route list for route reference index number 1.

MAP display example for table HNPACONT.HNPACODE type HRTE

```
          FROMDIGS              TODIGS
                              CDRRTMT
_____________________________________________________________

            613                613
                             HRTE 0
```

HNPACONT.HNPACODE type INWC, INWO

Code types INWO, INWC: INWATS originating (local/toll)

A functional description of subtable HNPACONT.HNPACODE for an inward wide area telephone service (INWATS) originating codes for normal and CCIS signaling follows. A description of the INWO and INWC codes appears in the following table.

Code types INWO and INWC

Code type	Description
INWO or UNWC	*INWATS originating (regular or CCIS)* Code type (CD) INVO or INWC apply if a three-digit code that a user dials represents an INWATS originating code. The originating code must be in a switching unit that supports INWATS originating service. The system routes calls to codes with code type INWO or INWC to table INWORICN for translation of DEF digits. The following values are the code groups, number of digits, and originating source for code types INWO and INWC. A code combination that only specifies an originating source of non-local can receive an origination from a local source. If this event occurs, the system automatically routes the originator to a vacant code treatment. **Code combinations:** / **Number of digits:** / **Originating source:** 800 or 00X-1X1 / 6 / non-local 800 or 00X-NNX-XXXX / 10 / local and non-local

HNPACONT.HNPACODE type INWC, INWO (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type INWC, INWO appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits* Enter the three-digit number assigned as an INWATS code. This number represents a single code or the first in a block of the next codes that have the same input data.
TODIGS		numeric (three digits)	*To digits* If field FROMDIGS represents a single code, enter the same single code from field FROMDIGS. If field FROMDIGS represents the first number of a block of the next numbers, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.
	CD	INWO or INWC	*Code type* Enter the code type for INWATS originating: INWO for normal signaling, or INWC for CCIS signaling. Enter data in refinement RR.
	RR	0	*Route reference index* Enter 0. The table does not require this field.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD INWO appears in the following example. The input for the INWATS originating code 800 appears in the example. If the system receives the correct code combination and number of digits from a local or non-local originating source the system routes the call to table INWORICN. The system routes the call to table INWORICN for translation of the digits that remain.

HNPACONT.HNPACODE type INWC, INWO (end)

MAP display example for table HNPACONT.HNPACODE type INWC, INWO

```
                FROMDIGS              TODIGS
                                    CDRRTMT
_____________________________________________________
                  800                800
                                    INWO    0
```

HNPACONT.HNPACODE type INWS

Code type INWS: INWATS terminating (local/toll)

A functional description of subtable HNPACONT.HNPACODE for an inward wide area telephone service (INWATS) terminating code follows. A description of the INWS code appears in the following table.

Code type INWS

Code type	Description
INWS	*INWATS terminating* Code type (CD) INWS applies if a three-digit code that the user dials represents an INWATS terminating code. The arrangement of the switching unit must be for INWATS terminating service. The system routes calls to codes with code type INWS to table INWTERCN for translation of the fourth to ninth digits. Code type INWS allows the code combination 1XB-XXXX, number of digits equal to seven, and non-local originating source. If the system receives an origination from a local source, the system routes the originator to vacant code treatment.

Datafill

Datafill for table HNPACONT.HNPACODE type INWS 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 the three-digit number assigned as an INWATS code. This number represents a single code or the first in a block of the next codes that have the same input data.
TODIGS		numeric (three digits)	*To digits*If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of the next numbers, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.

HNPACONT.HNPACODE type INWS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CD	INWS	*Code type* Enter INWS for INWATS terminating. Enter data in refinement RR.
	RR	0	*Route reference index* Enter 0 (zero). This field is not necessary.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD INWS appears in the following example. The input for terminating INWATS code 167 appears in the example. The system can receive the correct code combination and number of digits from a non-local originating source. The system does not always reroute the call by class of service screening. If these events occur translation uses the data in table INWTERCN for translation of the digits that remain.

MAP display example for table HNPACONT.HNPACODE type INWS

```
                FROMDIGS              TODIGS
                                    CDRRTMT
_____________________________________________
                167                   167
                                    INWS    0
```

HNPACONT.HNPACODE type INWT

Code type INWT: INWATS tandem (local/toll)

A functional description of subtable HNPACONT.HNPACODE for an inward wide area telephone service (INWATS) tandem code follows. A description of the INWT code appears in the following table.

Code type INWT

Code type	Description
INWT	*INWATS tandem* Code type (CD) INWT applies if a three-digit code that a user dials represents an INWATS tandem code in a switching unit that supports INWATS tandem service. The system routes calls to codes with call type INWS to table INWORICN. This action occurs for the translation of the INWATS serving area NXX code. Code type INWT allows the code combination 08B-NXX-XXXX, number of digits equal to ten and non-local originating source. If the system receives origination from a local source, the system routes the originator to vacant code treatment.

Datafill

Datafill for table HNPACONT.HNPACODE type INWT 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 the three-digit number assigned as an INWT code. This number represents a single code or the first in a block of the next codes that have the same input data.
TODIGS		numeric (three digits)	*To digits* If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of the next numbers, enter the last number in the block.

HNPACONT.HNPACODE type INWT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.
	CD	INWT	*Code type* Enter INWT for INWATS tandem. Enter data in refinement RR.
	RR	0	*Route reference index* Enter 0. The table does not require this field.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD INWT appears in the following example. The input for INWATS tandem code 083 appears in the example. The system can receive the correct code combination and number of digits from a non-local originating source. The system does not always reroute the call by class of service screening. If these events occur translation uses the data in table INWORICN for the translation of the digits that remain.

MAP display example for table HNPACONT.HNPACODE type INWT

```
                FROMDIGS             TODIGS
                                  CDRRTMT

            ________________________________________
                 083               083
                                 INWT    0
```

HNPACONT.HNPACODE type LRTE

Code type LRTE: Local route (local/toll)

A functional description of subtable HNPACONT.HNPACODE for a local route follows. A description of the LRTE code appears in the following table.

Code type LRTE

Code type	Description
LRTE	*Local route* Code type (CD) LRTE applies if a three-digit code that a user dials represents a central office code to at least one originator. Calls to codes with code type LRTE index to subtable HNPACONT.RTEREF with the route reference index specified for the code. Code type LRTE allows the code combination NXX-XXXX, number of digits equal to seven, and local or non-local originating source.

Datafill

The datafill for table HNPACONT.HNPACODE type LRTE appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits* Enter a string if the leading three digits represent an office code in the home numbering plan area (HNPA). This number represents a single code or the first in a block of the next codes that have the same input data.
TODIGS		numeric	*To digits* If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of the next numbers, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference, and treatment* This field contains subfield CD.

HNPACONT.HNPACODE type LRTE (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CD	LRTE	*Code type* Enter LRTE for local route. Enter data in refinement RR.
	RR	1 to 1023	*Route reference index* Enter the route reference index of the route list in subtable HNPACONT.RTEREF that translation proceeds to. Enter this data at the same position service numbering plan area (SNPA) as this subtable.

Datafill example

The datafill for subtable HNPACONT.HNPACODE with CD LRTE appears in the following example. The input for the local code 224 appears in the example. The system can receive the correct code combination and number of digits from a local or non-local originating source. The system does not always reroute the call by local calling area or class of service screening. If these events occur translation proceeds to subtable HNPACONT.RTEREF to select an idle trunk from the route list for route reference index number 38.

MAP display example for table HNPACONT.HNPACODE type LRTE

```
        FROMDIGS          TODIGS
                        CDRRTMT
_______________________________________________________

          224             224
                        LRTE   38
```

HNPACONT.HNPACODE type NPOSDN

Code type NPOSDN: No position to DN (local/toll/TOPS)

A functional description of subtable HNPACONT.HNPACODE for code NPOSDN follows. A description of the NPOSDN code appears in the following table.

Local toll and Traffic Operator Position (TOPS) offices with the Basic Rate Access (BRA) to Enhanced Service Providers feature can use code type NPOSDN. The integrated services digital network (ISDN) and automatic message accounting (AMA) must be present.

NPOSDN

Code type	Description
NPOSDN	*No position to DN* Code type (CD) NPOSDN applies if a dialed three-digit code is in use. This code indicates that calling number identification (no position to directory number [DN]) is not a requirement for: • operator number identification (ONI) • automatic number identification (ANI) failure direct dial (DD) calls The system receives these calls over SuperCAMA (centralized AMA) (SC) or TOPS trunks. In the following conditions, NPOSDN is like the current CD DN: • calls originated from trunks other than SC or TOPS • calls without ONI or ANI failure indication

Datafill

The datafill for table HNPACONT.HNPACODE type NPOSDN appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits* Enter a string if the first three digits represent an office that terminates to a line in the switching unit.
TODIGS		numeric (three to four digits)	*To digits* Enter the three-digit or four-digit code that terminates to a line in the switching unit (equal to field FROMDIGS).

HNPACONT.HNPACODE type NPOSDN (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CDRRTMT		see subfield	*Code type, route reference and treatment* This field contains subfield CD.
	CD	NPOSDN	*Code type* Enter NPOSDN for terminating office code. Enter data in refinements SNPA and NXX.
	SNPA	numeric	*Terminating serving numbering plan area* Enter the serving numbering plan area (SNPA) of the destination address that requires the NPOSDN route selector.
	NXX	numeric (three digits)	*Terminating office code NXX* Enter the first three digits of the seven-digit destination address that requires the NPOSDN route selector.

Datafill example

Sample datafill for table HNPACONT.HNPACODE type NPOSDN appears in the following table.

MAP display example for table HNPACONT.HNPACODE type NPOSDN

```
          FROMDIGS          TODIGS
                        CDRRTMT
 ________________________________________________________
          976              976
                         NPOSDN 613 976
```

HNPACONT.HNPACODE type NSC

Code type NSC: Number service code (local/toll SSP)

A functional description of subtable HNPACONT.HNPACODE for code NSC follows. A description of the NSC code appears in the following table.

The NSC applies only to local/toll offices without service switching point (SSP).

The Number Service Code (NSC) feature provides inward call management features that require access to operating company databases. The NSC feature option Enhanced 800 (E800) is the only option available.

The E800 service is present on an SSP office that communicates with operating company databases. The SSP office communicates with operating company databases with signaling system 7 (SS7). An SSP is a node in the SS7 network that queries databases at a service control point (SCP). An SSP can be an access tandem (AT) or equal access end office (EAEO) in the equal access network.

Code type NSC (Sheet 1 of 2)

Code type	Description
NSC	*Number service code* Code type (CD) NSC applies if a dialed three-digit code accesses the E800 service table database to obtain special routing and call handling instructions. See the description of table NSCDEFS for more information on the NSC translation feature tables. The 800 calls with code type NSC index in to table NSCDEFS with the field NCSCODE set to E800. If field NSCCODE is REPLDIGS, the operating company can direct calls to a replacement of dialed digits database. This database is on a network services system (NSS) database control point (DBCP). The operating company can respond to queries from an NSS SSP with the SS7 signaling transaction abilities application part (SS7 TCAP). This database is for N00 dialing applications, like 800 and 900 service. Code type NSC in subtable HNPACONT.HNPACODE is for use in an EAEO SSP or AT SSP for E800 service calls from non-EAEOs. The advanced intelligent network (AIN) option in field NSCCODE triggers database queries with the public office dialing plan (PODP). The PODP trigger is a flexible trigger plan that allows database queries to a SCP. This service depends on the first three, six, and seven through ten dialed digits (3/6/10).

HNPACONT.HNPACODE type NSC (continued)

Code type NSC (Sheet 2 of 2)

Code type	Description
	The 3/6/10 digit PODP trigger is available to all plain ordinary telephone service (POTS) lines and trunks. This provision occurs through the use of feature group C (FGC) signaling in the NPA that table HNPACONT serves. You can not enter the NSC features Virtual Private Network (VPN) and Private Virtual Network (PVN) in table HNPACONT.HNPACODE.

HNPACONT.HNPACODE type NSC (continued)

Datafill

The datafill for table HNPACONT.HNPACODE type NSC appears in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits*. Enter a string if the first three digits represent an office code in the home numbering plan area (HNPA). This number represents a single code or the first in a block of codes in sequence that have the same input data. ***Note:*** If the 10-digit datafill includes all of the following: • a 3-digit numbering plan area (NPA) • a 3-digit central office code • a 4-digit station code and the number of dialed digits is greater than 19, the call receives treatment.
TODIGS		numeric	*To digits*. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of numbers in sequence, enter the last number in the block. ***Note:*** If the 10-digit datafill includes all of the following: • a 3-digit numbering plan area (NPA) • a 3-digit central office code • a 4-digit station code and the number of dialed digits is greater than 19, the call receives treatment.
CDRRTMT		see subfield	*Code type, route reference and treatment*. This field contains subfield CD.
	CD	NSC	*Code type*. Enter NSC for number service code. Enter data in refinement NSCCODE.

HNPACONT.HNPACODE type NSC (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NSCCODE	AIN, 800P, E800, PVN, REPLDIGS, or VPN	*Number service code*. Enter AIN. Enter data in refinements MINDIGS, MAXDIGS, and LINATTR_INDX. This entry activates the 3/6/10 digit (POTS) processing. You cannot enter 800P, 800 Plus service for subtable HNPACONT.HNPACODE. Enter E800 for Enhanced 800 service. An entry of E800 must be in table NSCDEFS, field NSCODE. You cannot enter PVN, private virtual network service for subtable HNPACONT.HNPACODE. Enter REPLDIGS if the REPLDIGS database in table REPLDATA requires a query. You cannot enter VPN, virtual private network service, for subtable HNPACONT.HNPACODE. All entries for field NSCCODE must be in table NSCDEFS before you enter the data in table HNPACONT.
MINDIGS		1 to 18	*Minimum digits*. Enter the minimum number of digits required to determine a match and start the SCP query. This field specifies the minimum number of digits that appear as the service key for SCP query messages. Values out of range are not correct.
MAXDIGS		1 to 18	*Maximum digits*. Enter the maximum number of digits required to determine a match and start the SCP query. This field specifies the maximum number of digits that appear as the service key for the SCP query messages. This condition applies when the system truncates additional digits. Values out of range are not correct.

HNPACONT.HNPACODE type NSC (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
LINATTR_NDX		0 to 2047	*Line attribute index*. Enter the line attribute index in table LINEATTR to translate the routing number the system returns from a successful SCP query.
XLAPLAN		alphanumeric (up to 16 characters)	*Translation plan index*. Enter the index into the XLAPLAN table.
RATEAREA		alphanumeric (up to 16 characters)	*Rate area index*. Enter the index into the RATEAREA table.

Datafill example

Sample datafill for table HNPACONT.HNPACODE type NSC appears in the following example.

MAP display example for table HNPACONT.HNPACODE type NSC

```
                FROMDIGS              TODIGS
                                    CDRRTMT
_____________________________________________________
                  800                800
                                   NSC E800
```

HNPACONT.HNPACODE type OPC3, OPC4, OPC5

Code types OPC3, OPC4, and OPC5: operator codes (local/toll)

A functional description of subtable HNPACONT.HNPACODE for operator codes OPC3, OPC4, and OPC5 follows. A description of the operator codes appears in the following table .

Code types OPC3, OPC4, and OPC5

Code type	Description
OPC3, OPC4 or OPC5	*Operator codes* Code types (CD) OPC3, OPC4 or OPC5 apply when one of the following operator or toll maintenance codes refers to an index in subtable HNPACONT.RTEREF. • three-digit • four-digit • five-digit A specified route reference index must be present for the code. The following are code combinations, number of digits and originating sources that can occur with code types OPC3, OPC4, and OPC4: This information can occur in local, toll, or local/toll switching units. If the system receives an origination from a local source, the system routes the originator to vacant code treatment.

Code combinations:	Number of digits:	Originating source:
0/1XX (OPC3)	3	non-local
XXXX (OPC4)	4	non-local
11XXX (OPC5)	5	non-local

HNPACONT.HNPACODE type OPC3, OPC4, OPC5 (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type OPC3, OPC4, OPC5 appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three to five digits)	*From digits*. Enter the three-digit, four-digit, or five-digit number assigned as an operator or toll maintenance code.
TODIGS		numeric (three to five digits)	*To digits*. Enter the same number as in field FROMDIGS.
CDRRTMT		see subfield	*Code type, route reference and treatment*. This field contains subfield CD.
	CD	OPC3, OPC4, or OPC5	*Code type*. Enter OPC3, OPC4, or OPC5 for a three-digit, four-digit, or five-digit operator or toll maintenance code. Enter data in refinement RR.
	RR	1 to 1023	*Route reference index*. Enter the route reference index of the route list in subtable HNPACONT.RTEREF. Enter the index at the same position service numbering plan area (SNPA) as this subtable. Translation proceeds to the route reference index you enter.

Datafill example

Datafill for subtable HNPACONT.HNPACODE with CD OPC4 appears in the following example. The input for a four-digit code appears in the example. Translation proceeds to subtable HNPACONT.RTEREF when the following conditions occur:

- a call originates from a non-local originating source with the correct code and number of digits
- the system does not reroute the call with calling area or class of service screening

Translation proceeds the subtable HNPACONT.RTEREF to select an idle trunk from the route list for route reference index number 26.

HNPACONT.HNPACODE type OPC3, OPC4, OPC5 (end)

MAP display example for table HNPACONT.HNPACODE type OPC3, OPC4, OPC5

```
           FROMDIGS            TODIGS
                            CDRRTMT
     ________________________________________________________

             1121            1121
                           OPC4   26
```

HNPACONT.HNPACODE type SACNWM

Code type SACNWM: Service access code network management (DMS-250)

A functional description of subtable HNPACONT.HNPACODE code type SACNWM follows. Code type SACNWM is for use in a DMS-250 switch. A description of the SACNWM code appears in the following table.

Code type SACNWM

Code type	Description
SACNWM	*Service access code network management code* Code type (CD) SACNWM applies if a dialed code translation must proceed to DMS-250 table INWATXLA.

Datafill

The datafill for table HNPACONT.HNPACODE type SACNWM appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits*. Enter the service access code (SAC) identified in table STDPRTCT as an SAC code.
TODIGS		numeric	*To digits*. Enter the same number as in field FROMDIGS.
CDRRTMT		see subfield	*Code type, route reference, and treatment*. This field contains subfield CD.
	CD	SACNWM	*Code type*. Enter the SAC network management code SACNWM. Enter data in refinement RR.
	RR	1 to 1023	*Route reference index*. Enter the route reference index of the route list in subtable HNPACONT.RTEREF. Enter this index at the same position service numbering plan area (SNPA) as this subtable. Translation proceeds to the route reference index you enter.

HNPACONT.HNPACODE type SACNWM (end)

Datafill example

Sample datafill for table HNPACONT.HNPACODE type SACNWM appears in the following example.

MAP display example for table HNPACONT.HNPACODE type SACNWM

```
            FROMDIGS              TODIGS
                                CDRRTMT
_____________________________________________________________

              800                 800
                                SACNWM     0      900      900
                                SACNWM     0      001      001
                                SACNWM     0
```

HNPACONT.HNPACODE type SCD3, SCD4

Code types SCD3 & SCD4: three- or four-digit local service codes (local/toll)

A functional description of subtable HNPACONT.HNPACODE for a three-digit or four-digit local service code follows. A description of the SCD3 and SCD4 codes appears in the following table.

SCD3 and SCD4

Code type	Description
SCD3 or SCD4 (three or four digits)	*Service codes* Code type (CD) SCD applies if a dialed three-digit or four-digit code represents local service or a maintenance test. Calls to codes with code types SCD 3 or 4, index to subtable HNPACONT.RTEREF. A specified route reference index for the code must be present. The following are the code combinations, number of digits and originating source that can occur with code types SCD3 or SCD4. If the system receives an origination from a non-local source, the system routes the originator to vacant code treatment. **Code combinations:** / **Number of digits:** / **Originating source:** XXX (SCD3) / 3 / local XXXX (SCD4) / 4 / local

Datafill

The datafill for table HNPACONT.HNPACODE type SCD3, SCD4 appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three or four digits)	*From digits*. Enter the three-digit or four-digit number assigned as a local service or maintenance code. This number represents a single code or the first in a block of codes in sequence that have the same input data.
TODIGS		numeric (three or four digits)	*To digits*. Enter the same number as in field FROMDIGS.

HNPACONT.HNPACODE type SCD3, SCD4 (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CDRRTMT		see subfield	*Code type, route reference, and treatment*. This field contains subfield CD.
CD		SCD3 or SCD4	*Code type*. Enter SCD3 or SCD4 for a three-digit or four-digit local service or maintenance test code. Enter data in refinement RR.
	RR	1 to 1023	*Route reference index*. Enter the route reference index of the route list in subtable HNPACONT.RTEREF. Enter this index at the same position service numbering plan area (SNPA) as this subtable. Translation proceeds to the route reference index you enter.

Datafill example

The datafill for subtable HNPACONT.HNPACODE with CD SCD3 appears in the following example. The input for the three-digit service code 411 appears in the example. Translation proceeds to subtable HNPACONT.RTEREF when the following conditions occur:

- the system receives a correct code combination and three digits from a local source
- the system does not reroute the call with local calling area or class of service screening

Translation proceeds to HNPACONT.RTEREF to select an idle trunk from the route list for route reference index number 10.

MAP example for table HNPACONT.HNPACODE type SCD3, SCD4

```
        FROMDIGS             TODIGS
                          CDRRTMT
____________________________________________________
          411             411
                        SCD3   10
```

HNPACONT.HNPACODE type SLRTE

Code type SLRTE: Special local route for SC/TOPS trunks code (toll)

The following is the functional description of subtable HNPACONT.HNPACODE for code type SLRTE. The SLRTE code is for centralized automatic message accounting (CAMA) or a Traffic Operator Position System (TOPS) toll office use. A description of the SLRTE code appears in the following table.

Code type SLRTE

Code type	Description
SLRTE	*Special local route for SC/TOPS trunks* Code type (CD) SLRTE applies when a dialed code provides the following abilities for SuperCAMA (SC) and TOPS trunk group types: allow special local route (SLRTE) calls suppress CAMA/TOPS billing for SLRTE calls The SLRTE applies when the following conditions occur: The call originates from a trunk of a trunk group type SC or TOPS that uses CAMA signaling Use of SLRTE occurs in table HNPACONT The entry of a correct LCANAME for the SC or TOPS trunk group type. The NLCA is not a correct LCANAME entry for this condition. The correct LCANAME handles the automatic number identification (ANI), operator number identification (ONI) or ANI failure conditions. Enter an entry in table BILLCODE with 000. The value 000 is the NXX of the ANI digits for each trunk group type SC common language location identifier (CLLI). The entry provides the LCANAME for ONI or ANI failure calls. The ANI is not available in this event. The entry of the NXX of the dialed digits occurs in table LCASCRCN to indicate that the call is a local call. When any of the previous conditions do not occur, the system treats SLRTE as a regular local route translation selector (LRTE). This event does not affect the automatic message accounting (AMA) record for a billable call. The switch routes a local call that uses CAMA signaling routes to treatment.

HNPACONT.HNPACODE type SLRTE (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type SLRTE appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits*. Enter a string when the leading three-digits represent an office code in the home numbering plan area (HNPA). This number can represent a single code. This number can represent the first in a block of consecutive codes that have the same input data.
TODIGS		numeric	*To digits*. When field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. When field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		refer to subfield	*Code type, route reference and treatment*. This field has subfield CD.
	CD	SLRTE	*Code type*. Enter SLRTE for special local route and enter refinement RR.
	RR	1 to 1023	*Route reference index*. Enter the route reference index of the route list in subtable HNPACONT.RTEREF that translation proceeds to. Enter this index at the same position service numbering plan area (SNPA) as this subtable.

Datafill example

Sample datafill for table HNPACONT.HNPACODE type SLRTE appears in the following example.

HNPACONT.HNPACODE type SLRTE (end)

MAP display example for table HNPACONT.HNPACODE type SLRTE

```
            FROMDIGS                TODIGS
                                 CDRRTMT
_________________________________________________________
              976                976
                               SLRTE    2
```

HNPACONT.HNPACODE type STRG

Code type STRG: Station ringer (local)

The following is the functional description of the new format in subtable HNPACONT.HNPACODE for a station ringer code. A description of the STRG code appears in the following table.

Code type (CD) STRG is not for use in a toll switch.

CD STRG replaces CD SRNG.

Note: This method requires the definition of a distinct station ringer test office code for each office code that this office serves.

An alternate method for station ringer test is available that does not involve the use of this subtable. With the alternate method, dial a single station ringer test access code for the complete office. After you dial this code, dial the seven- or ten-digit directory number (DN) for testing use. The system directs translation to a fixed common language location identifier (CLLI) (STRG). The system uses subtable STDPRTCT.STDPRT and table OFRT to direct translation to a CLLI STRG. The CLLI STRG appears in table CLLI.

Code type STRG

Code type	Description
STRG	*Station ringer* The CD STRG applies when a dialed three-digit code represents a station ringer test code. The code combination NXX-XXXX, number of digits equal to seven and local originating source is correct for code type STRG. When the reception of an origination from a non-local source occurs, the system routes the originatorto vacant code treatment.

HNPACONT.HNPACODE type STRG (continued)

Datafill

Datafill for table HNPACONT.HNPACODE type STRG appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (three digits)	*From digits*. Enter the three-digit number assigned as the station ringer test code.
TODIGS		numeric (three digits)	*To digits*. Enter the same number as in field FROMDIGS.
CDRRTMT		see subfield	*Code type, route reference, and treatment*. This field contains subfield CD.
	CD	STRG	*Code type*. Enter STRG for the station ringer test and enter data in refinements SNPA and NXX.
	SNPA	numeric	*Terminating serving numbering plan area.* Enter the serving numbering plan area (SNPA) of the called terminating line DN that the station ringer test code is assigned to. Translation of the dialed digits proceeds to table TOFCNAME with the use of refinements SNPA and NXX as the key.
	NXX	numeric	*Terminating office code nxx*. Enter the office code of the called terminating line DN that the station ringer test code is assigned to. Translation of the dialed digits proceeds to table TOFCNAME with the use of SNPA and NXX refinements as the key.

Datafill example

An example of datafill for subtable HNPACONT.HNPACODE with CD STRG appears in the following example. The input for code 725 appears in the example. The input terminates to a line in the switching unit. Translation

HNPACONT.HNPACODE type STRG (end)

proceeds to the DN translations for translation of the last four digits when the following conditions occur:

- the reception of the correct code combination and number of digits from a non-local source
- the system does not use local calling area or class of service screening to route the call

The terminating office number for code 725 is 0 (zero).

MAP display example for table HNPACONT.HNPACODE type STRG

```
                FROMDIGS              TODIGS
                                    CDRRTMT
_____________________________________________________________________
                  725                 725
                                    STRG 613 000
```

HNPACONT.HNPACODE type TTC

Code type TTC: Terminating toll center (local/toll)

The following is the functional description of subtable HNPACONT.HNPACODE for a terminating toll center code appears in the following table. A description of the TTC code appears in the follwoing table.

Code type TTC

Code type	Description
TTC	*Terminating toll center*. Code type (CD) TTC applies when a dialed three-digit code represents a terminating toll center code. Calls to codes with call type TTC indexes to subtable HNPACONT.RTEREF with the route reference index specified for the code. The following are the code combinations, number of digits and originating source acceptable with code type TTC. When the reception of an origination form a local source occurs, the system routes the originator to vacant code treatment. **Code combinations:** / **Number of digits:** / **Originating source:** XXX-1X1 / 6 / non-local XXX-11XX / 7 / non-local

Datafill

Datafill for table HNPACONT.HNPACODE type TTC 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 the three-digit code assigned as a terminating toll center code.
TODIGS		numeric (three digits)	*To digits*. Enter the same number as in field FROMDIGS.
CDRRTMT		see subfield	*Code type, route reference, and treatment*. This field has subfield CD.

HNPACONT.HNPACODE type TTC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CD	TTC	*Code type*. Enter TTC for terminating toll center and enter data in refinement RR.
	RR	1 to 1023	*Route reference index*. Enter the route reference index of the route list in subtable HNPACONT.RTEREF. Enter the index at the same position service numbering plan area (SNPA) as this subtable. Translation routes to this route reference index.

Datafill example

An example of datafill for subtable HNPACONT.HNPACODE with CD TTC appears in the following example. Input for the terminating toll center code 025 appears in the example. Translation proceeds to subtable HNPACONT.RTEREF to select an idle trunk from the route list for route reference number 12. Translation proceed to subtable HNPACONT.RTEREF when the following conditions occur:

- the reception of the correct code combination and number of digits from a non-local source or origination
- the system does not use class of service screening to route the call

MAP display example for table HNPACONT.HNPACODE type TTC

```
              FROMDIGS             TODIGS
                                CDRRTMT
________________________________________________________
TUPLE TO BE ADDED:
       025      025
               TTC   12
```

HNPACONT.HNPACODE type VCT

Code type VCT: Vacant code (local/toll)

The functional description of subtable HNPACONT.HNPACODE for a vacant code appears in the following table. A description of the VCT code appears in the following table .

Code type VCT

Code type	Description
VCT	*Vacant code*. Code type (CD) VCT applies when a dialed code represents a vacant code. The code combination XXXXXX represents the number of digits received from three to six. The code combination and local and non-local originating sources are acceptable for code type VCT.

Datafill

Datafill for table HNPACONT.HNPACODE type VCT appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric	*From digits*. Enter a string that routes to subtable TMTCNTL.TREAT with the entry field TREATMT equal to the entry in field TMT. This number can represent a single code. This number can represent the first in a block of consecutive codes that have the same input data.
TODIGS		numeric	*To digits*. When field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. When field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	*Code type, route reference, and treatmen*t. This field has subfield CD.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CD	VCT	*Code type*. Enter VCT to route a call to treatment specified in refinement TMT.
	TMT	alphanumeric	*Treatment*. Enter the treatment that indexes subtable TMTCNTL.TREAT.

Datafill example

An example of datafill for subtable HNPACONT.HNPACODE with CD VCT appears in the following example. A code that routes to treatment appears in the example. In this example, the system prevents HNPA dialing. The switch routes subscribers that dial an HNPA to HNPA intercept treatment (HNPI) in subtable TMTCNTL.TREAT.

MAP display example for table HNPACONT.HNPACODE type VCT

```
          FROMDIGS            TODIGS
                            CDRRTMT
______________________________________________________

       613      613
              VCT HNPI
```

HNPACONT.RTEMAP

Table name

ISDN Home NPA Route Reference Subtable

Functional description

Subtable HNPACONT.RTEMAP alters the routing index for calls with ISDN routing characteristics.

Enter datafill for subtable HNPACONT.RTEMAP before entries in subtable HNPACONT.RTEREF. This data entry can occur when an ISDN routing characteristic name is present in the call. The routing characteristic is in subfield RCNAME . The system does not always find a tuple with the matching routing characteristic name and route reference index in subtable HNPACONT.RTEMAP. When the system does not find this tuple in this subtable, the new route index reverts to the original route index through default.

Datafill sequence and meaning

You must enter data in the following tables before you enter data in table HNPACONT.RTEMAP:

- RCNAME
- HNPACONT.RTEREF

Table size

0 to 262 144 tuples

Datafill

Datafill for table HNPACONT.RTEMAP appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key into subtable HNPACONT.RTEMAP* This field has subfields RCNAME and INDEX.
	RCNAME	alphanumeric	*Routing characteristic name* Enter a routing characteristic name that table RCNAME recognizes.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	INDEX	0 to 1023	*Route reference index* Enter the route reference index of a basic route list in subtable HNPACONT.RTEREF. The subtable is in table HNPACONT at the same service numbering plan area (SNPA) as subtable HNPACONT.RTEMAP. Access to a basic route list in subtable HNPACONT.RTEREF can occur when 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 subtable HNPACONT.RTEREF. The subtable is in table HNPACONT at the same SNPA as subtable HNPACONT.RTEMAP. Access to a nonbasic routing list can occur when ISDN routing characteristics are present.

Datafill example

Sample datafill for table HNPACONT.RTEMAP appears in the following example.

MAP display example for table HNPACONT.RTEMAP

```
 KEY NEWINDEX
_____________________________________________________________

64KNAME 1   100

TNSPUB  1   101
```

HNPACONT.RTEREF

Table name

Home NPA Route Reference Subtable

Functional description

Each HNPACONT table requires one route reference subtable.

Each subtable can have a maximum of 1023 route lists.

The nine differences of the route list element are the same as the differences for table OFRT.

The system extends field NORTREFS of table HNPACONT. The system extends the field to the highest route index that the system uses in field RTE of subtable HNPACONT.RTEREF.

See table OFRT for a complete description of route list elements.

See table HNPACONT for related information.

Datafill sequence and meaning

Enter data in the following tables before you enter data in subtable HNPACONT.RTEREF:

- HNPACONT
- CLLI
- OFRT
- OFR2
- OFR3
- OFR4
- TRKMEM
- TRIGINFO
- OSNCCAP

Table size

0 to 1024 tuples.

Datafill

See table OFRT for descriptions of the nine differences of route lists.

HNPACONT.RTEREF (continued)

Datafill example

An example of datafill for subtable HNPACONT.RTEREF in a toll switching unit (DMS-200) follows. The subtable belongs to home numbering plan area (HNPA) 613. The HNPA code subtable 613 indexes the subtable.

Route reference index number 1

Translation takes this route if subtable HNPACONT.HNPACODE for the digits dialed specifies route reference number 1. Translation takes the route if system logic (illegal digits) or translation (screening) do not route the call again.

If idle trunks are in the trunk group (OTWAON1002TO), the system logic selects the most idle trunk. If the ABC digits dialed are 024, the system automatically deletes the digits 024 (standard digit manipulation).

If all trunks in the trunk group can be busy, translation proceeds to table OFRT, index number 1, to select an idle trunk.

Route reference index number 7

Translation takes this route if the ABC digits dialed are 725. The call can originate from a non-local source incoming on an intertoll trunk for translation to take this route. Translation can take this route if the call originates from a local source incoming centralized automatic message accounting (CAMA) trunk. The local calling area screening subtable for the incoming CAMA trunk group specifies that code 725 is a local code.

If idle trunks are in the trunk group (OTWAON0872AO), the system logic selects the most idle trunk. Translation deletes the digits 72. Translation outpulses the last five digits.

If all trunks in the trunk group are busy, the translation proceeds to table OFRT, index number 3, to select an idle trunk.

Route reference index number 12

Translation takes this route if the ABC digits dialed are 025. The call must originate from a non-local source (incoming on an intertoll trunk) for translation to take this route

If idle trunks are in the trunk group (OTWAON2301T0), the system logic selects the most idle trunk. The system logic automatically deletes the digits 025 (standard digit manipulation).

If all trunks in the trunk group are busy, translation proceeds to the intertoll treatment table treatment NCIT (no-circuit intertoll).

If the switching unit does not have an Intertoll Treatment table, the system logic reverts to table OFRT by default.

Route reference index number 20

Translation takes this route when the user dials for the test code (0683) for the no circuit announcement (NCA).

Route reference index number 26

Translation takes this route when the user dials for the balance termination test code 100.

Route reference index number 27

Translation takes this route when the user dials for the test board communication list code 101.

Route reference index number 28

Translation takes this route when the user dials for the milliwatt supply test code 102.

Route reference index number 29

Translation tales this route when the user dials for the signal supervisory test code 103.

Route reference index number 30

Translation takes this route when the user dials for the transmission test and noise check test code 104.

Route reference index number 31

Translation takes this route when the user dials for the echo suppressor test code 108.

The following is an example of datafill for subtable HNPACONT.RTEREF in a toll switching unit.

HNPACONT.RTEREF (continued)

MAP example for table HNPACONT.RTEREF

```
RTE                    RTELIST
_____________________________________________________________

 1                     (          S        D     OTWAON1002T0)
                                (           T    OFRT        1)$
7     (        N         D       OTWAON0872A0  2          N N)
                                (           T    OFR4        3)$
12                     (          S        D     OTWAON2301T0)$
20                     (          S        D              NCA)$
26                     (          S        D          TERM100Q)$
27                     (          S        D          T101GRP1)$
28                     (          S        D          TERM102T)$
29                     (          S        D          TERM103T)$
30                              (           T    TTL4        0)$
31                     (          S        D           TERM108)$
```

HNAPCONT.RTEREF in DMS-100

The following is an example of datafill for subtable HNPACONT.RTEREF in a local switching unit (DMS-100). This subtable belongs to HNPA 613. The HNPA code subtable 613 indexes this subtable.

Route reference index number 1

Translation takes this route if subtable HNPACONT.HNPACODE for the digits dialed specifies route reference index number 1. Translation takes this route if system logic (digits that are not permitted) or translation (screening) do not route the call again.

If idle trunks are in the trunk group (OTWAON2302T0), the system logic selects the most idle trunk. The system logic outpulses the dialed digits. The system does not outpulse prefix digits.

If all trunks in the trunk group are busy, the translation proceeds to treatment NCRT (no circuit) in the office treatment table.

Route reference index number 8

Translation takes this route if the ABC digits dialed are 237.

If idle trunks are in the trunk group (OTWAON232370), the system logic selects the most idle trunk. Translation deletes the digits 237. Translation outpulses the last four digits.

If all trunks in the trunk group are busy, the translation proceeds to table OFRT, index number 1, to select an idle trunk.

Route reference index number 10

Translation takes this route when the user dials for three-digit service code 411.

If idle trunks are in the trunk group (HULLPQMC61B0), the system logic selects the most idle trunk.

If all trunks in the trunk group are busy, the translation proceeds to treatment NCRT in table OFRT.

Route reference index number 16

Translation takes this route when the user dials for three-digit service code 611.

If idle trunks are in the trunk group (OTWAON23T050), the system logic selects the most idle trunk.

If all trunks in the trunk group are busy, the translation proceeds to treatment NCRT in table OFRT.

Route reference index number 38

Translation takes this route if the ABC digits the user dials are in the range of 224 to 226.

If idle trunks are in the trunk group (OTWAON11MG00), the system logic selects the most idle trunk. The translation deletes the digits 22 and outpulses the last five digits.

If all trunks in the trunk group are busy, the translation proceeds to treatment NCRT in table OFRT.

Route reference index number 39

Translation takes this route if dialing for the four-digit service code 4102 occurs.

If idle trunks are in the trunk group (OTWAON08W010), the system logic selects the most idle trunk.

If all trunks in the trunk group are busy, translation proceeds to treatment NCRT in table OFRT.

HNPACONT.RTEREF (end)

An example of datafill for subtable HNPACONT.RTEREF in a local switching unit appears below.

Route reference index number 40

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 HNPACONT.RTEREF, FNPACONT.RTEREF, OFRn and IBNRTn routing tables, 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 HNPACONT.RTEREF

```
RTE                  RTELIST
_____________________________________________________________________

 1                   (          S        D     OTWAON2302T0)$
 8                   (          S        D     OTWAON232370)
                               (           T     OFRT       1)$
10                   (          S        D     HULLPQMC61B0)$
16                   (          S        D     OTWAON23T050)$
38     (        N       D      OTWAON11MG00  2         N N)$
39                   (          S        D     OTWAON08W010)$
40  (CND MIGRATE SK 2)(DN 214 520 4)(CND ALWAYS ASK SK 1)(T OFRT 770)$
```

Table history

SN06 (DMS)

Added CND and NOT conditional routes to table HNPACONT.RTEREF for feature activity A00001207.

HOBICDEV

Table name

Hotel Billing Information Center Device Table

Overview

The Traffic Operator Position System (TOPS) Dial-up Autoquote tables (DUAQOPT and DQMODEM) ensure the proper management of dial-up autoquote (DUAQ) data.

Functional description

Table HOBICDEV stores hotel-related information. Each tuple in table HOBICDEV represents data for a DUAQ device.

Datafill sequence and implications

Table CLLI must be datafilled before table HOBICDEV.

Before adding an entry to table HOBICDEV, pseudo-common language location identifier (pseudo-CLLI) HOBICDEV must first be datafilled in table CLLI.

Table size

0 to 511 tuples

The size of table HOBICDEV depends on the entry in field SIZE in table DATASIZE. For example, if field SIZE is set to 10, ten entries can be datafilled in table HOBICDEV.

Datafill

The following table lists datafill for table HOBICDEV.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DEVNO		0 to 9999	Device number. Enter the hotel billing information center (HOBIC) device number. This number must be different from any number in table TOPSDEV. This field is the index into table HOBICDEV.
DEVTYPE		see subfield	Device type. This field consists of subfield HOBDEVSEL.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	HOBDEVSEL	DUAQ or NILDEV	Hotel billing information center device selector. Enter the selector for the HOBIC device. Enter DUAQ for dial-up autoquote and datafill refinements HACR, MINHELD, RECHELD, LANG, DEVDN, BAUD, and LC. Enter NILDEV if no device selector is used. No further datafill is required.
HACR		alphanumeric (3 digits)	Hotel acronym. Enter the hotel acronym.
MINHELD		1 to 10	Minutes held. Enter the number of minutes the buffer is held before transmission begins.
RECHELD		1 to 5	Records held. Enter the number of records held in buffer before transmission begins.
LANG		E or F	Language. Enter the letter designating English (E) or French (F).
DEVDN		table of 10 (N, 0 to 9, B to F)	Device directory number. Enter the device directory number.
BAUD		BD300 or BD1200	Baud rate. Enter the baud rate of the hotel device.
LC		FF, LF1, or LF17	Line control. Enter the line control for formfeeds (FF) and linefeeds (LF).

Datafill example

The following example shows sample datafill for table HOBICDEV.

In this example, device 7, associated with hotel HI1 and directory number 9197720002, can have a maximum of four records in buffer for a period of 5 min before transmission begins.

HOBICDEV (end)

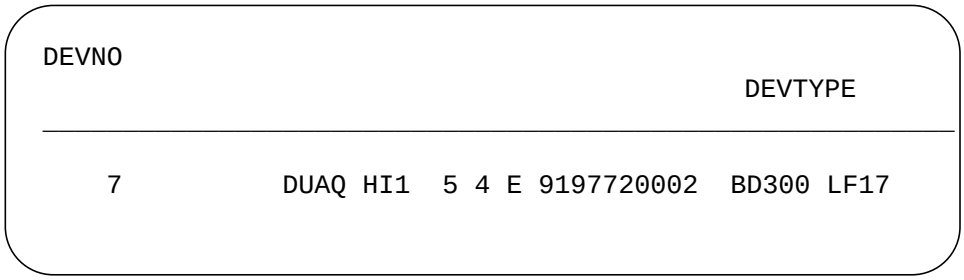


Table history

BCS36

Field DEVTYPE was added to table HOBICDEV and entry NILDEV was added to subfield HOBDEVSEL. Placement of refinement DEVDN was corrected.

HOLDAY

Table name

TOPS Holiday Table

Overview

Table HOLDAY is used by the operating company to list the holidays and the holiday treatment associated with each holiday for each schedule.

Public holidays must be identified when they involve rate treatment different from that which are normally given on the day of the week they occur. For example, on a particular rate schedule, Christmas is treated as a Sunday for rating purposes regardless of the day of the week in which it falls.

Caribbean expansion plan (CEP) International Traffic Operator Position System (TOPS) (ITOPS)

Calls requiring operator assistance result in a charge to the customer that is calculated by a downstream process using the call information (call type, destination, answer time, duration of call).

There are cases, however, where the charges on a call must be quoted to the customer. This is true for the following call types:

- hotel calls
- coin calls
- calls requiring time-and-charges quote

In all three cases, the ITOPS system calculates the charges on the call. For hotel calls, these charges are reported to the hotel billing center (HOBIC) for quoting; in the latter two cases, the operator quotes the charges.

CEP dialing plan

The dialing plan for the Caribbean islands is based on the North American plan (NPA-NXX-XXXX). The islands have numbering plan area (NPA) 809, with each island having one or more unique NXX associated with it.

CEP ITOPS rating zones

The following terminology is used within this document to define the different CEP ITOPS rating zones:

Local

Calls completed within the same rate zone as the calling customer (calls within the same NXX are always considered to be in the local rate zone)

HOLDAY (continued)

Domestic
Calls completed within NPA 809 but to an NXX in a different rate zone as the calling customer

North American
Calls completed from NPA 809 to any destination based on the NPA-NXX dialing plan (other than domestic calls)

International (or Overseas)
Calls completed from NPA 809 to a foreign country not based on the NPA-NXX dialing plan (outside of World Zone 1)

CEP: call origination time and day
Both the date and the time of day can have an effect on the charge calculation on a call.

First, the date is checked to see if it is a holiday by verifying if the date falls on one of the defined holidays in table HOLDAY. If the date is found to be a holiday, table HOLTRT is accessed to see if this holiday affects the rate schedule for this call. If a value is not found in this table, the holiday is deemed to not affect charges applicable to the rate Schedule.

If a holiday is found to apply to the rate schedule, the treatment specifies that the call is treated as if it originated on Saturday or Sunday (as specified).

Functional description

Table HOLDAY is used to list the name and date of the holidays to receive holiday treatment.

Overseas Operator Center (OOC):

Table HOLDAY gives the holiday name corresponding to the month and day of the year.

For OOC, table HOLDAY is not used but is retained for future enhancements. It is recommended that this table be left blank until further notice.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table HOLDAY.

Datafill

The following table lists datafill for table HOLDAY.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
HOLNAME		alphanumeric (1 to 10 characters)	Holiday name. Enter the name assigned to the holiday.
MONTH		JAN, FEB, MAR APR, MAY, JUN JUL, AUG, SEP OCT, NOV, DEC	Month of holiday. Enter the month of the holiday
DAY		1 to 31	Day of the holiday. Enter the day of the holiday.

Datafill example

The following example shows sample datafill for table HOLDAY.

MAP display example for table HOLDAY

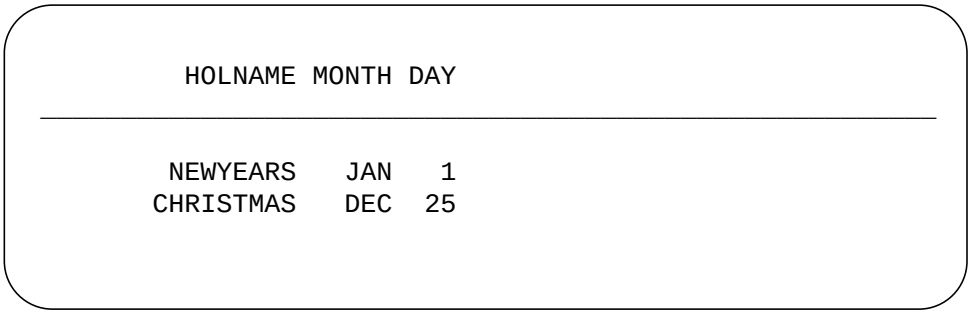
```
          HOLNAME MONTH DAY
_____________________________________________________________

           NEWYEAR   JAN  01
         CHRISTMAS   DEC  25
```

The second example shows datafill for the CEP ITOPS.

HOLDAY (end)

MAP display example for table HOLDAY



```
          HOLNAME MONTH DAY
_____________________________________________________________

         NEWYEARS    JAN   1
        CHRISTMAS    DEC  25
```

HOLIDAY

Table name

ITOPS Rating Charge Calculator Holiday Table

Functional description

Table HOLIDAY is used to list the name and date (month and day) of each holiday that is to receive holiday treatment.

For related information, refer to table ATRIMOD.

Datafill sequence and implications

The following tables must be datafilled after table HOLIDAY.

- HOLITRMT
- HOLITRMTI

Table size

0 to 60 tuples

Datafill

The following table lists datafill for table HOLIDAY.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
HOLNAME		alphanumeric (1 to 16 characters)	Holiday name. Enter the name assigned to the holiday.
MONTH		JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC	Month of holiday. Enter the month of the holiday.
DAY		1 to 31	Day of the holiday. Enter the day of the holiday.

Datafill example

The following example shows sample datafill for table HOLIDAY.

HOLIDAY (end)

MAP display example for table HOLIDAY

```
HOLNAME      MONTH   DAY
_____________________________________________________________
NEWYEAR       JAN      1
```

HOLITRMT

Table name

ITOPS Rating Charge Calculator Holiday Treatment Table

Functional description

Table HOLITRMT specifies what holiday treatment is to be given to specified combinations of

- a holiday (listed in table HOLIDAYS)
- and a schedule name

For related information, refer to table ATRIMOD.

Datafill sequence and implications

Table HOLIDAY must be datafilled before table HOLITRMT

Table size

0 to 60 tuples

Datafill

The following table lists datafill for table HOLITRMT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
HOLISCH		see subfields	Key into table HOLITRMT. The key into table HOLITRMT is composed of fields HOLINAME and SCHNAME. See the appropriate field name for its definition.
	HOLINAME	alphanumeric (1 to 16 characters)	Holiday name. Enter the name of the holiday known to table HOLIDAY.
	SCHNAME	alphanumeric (1 to 16 characters)	Schedule name. Enter the name of the schedule. Must be known to table SCHNAME.
HOLITRMT		SAT, SUN, MON, TUE, WED, THU, FRI, SPL1, SPL2, NON	Holiday treatment. Enter the holiday-schedule treatment. This is an index into table MODMAP, the charge modification map table, and must be known to table MODMAP.

HOLITRMT (end)

Datafill example

The following example shows sample datafill for table HOLITRMT.

MAP display example for table HOLITRMT

```
HOLISCH            HOLITRMT
_____________________________________________________________
 NEWYEAR     SCHED1     SAT
```

HOLTRT

Table name

TOPS Holiday Treatment Table

Functional description

Table HOLTRT specifies what holiday treatment, if any, is to be given to the holidays listed in table HOLDAY, for each schedule; that is, each holiday can be treated differently for each schedule.

Feature V0178 (TOPS Mass Table Control) permits data changes in table HOLTRT to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table HOLTRTI, and then, when all the required changes are entered, swap the contents of table HOLTRT with table HOLTRTI.

For further information on feature V0178, refer to table CHARGEI.

Overseas operator center (OOC)

Table HOLTRT provides the mapping of the holiday name to the corresponding holiday treatment for each schedules.

For OOC, table HOLTRT is not used but is retained for future enhancements. It is recommended that this table be left blank until further notice.

For related information, refer to table HOLDAY.

Datafill

The following table lists datafill for table HOLTRT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
HOLSCH		see subfields	Holiday treatment key. This field consists of subfields HOLNAME and SCHNAME.
	HOLNAME	alphanumeric (up to 16 characters)	Holiday name. Enter the holiday name as previously defined table HOLDAY.

HOLTRT (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SCHNAME	alphanumeric (1 to 16 characters)	Schedule name. Enter the schedule name. This name must be known to table SCHED. Only the schedules assigned a holiday treatment of SAT, SUN, or SPL can be listed and no treatment is assumed for any schedule not listed against a particular holiday.
HOLTRT		SAT, SPL, SUN, or NON	Holiday treatment. Enter the holiday treatment. Enter SAT (Saturday), SPL (special), or SUN (Sunday). Saturday or Sunday means the holiday is treated as Saturday or Sunday; that is, the Saturday or Sunday rate break sets are used. Special means the treatment prescribed for the actual day on which the holiday falls is used. However, if the selected rate table is no discount, discount 1 rates are to be used instead.

Datafill example

The following example shows sample datafill for table HOLTRT.

The first example shows datafill for North American TOPS.

MAP display example for table HOLTRT

```
          HOLSCH HOLTRT
_____________________________________________________________

NEWYEAR   ONTQUE   SUN
NEWYEAR   CANUSA   SUN
```

The second example shows datafill for the Caribbean Expansion Plan (CEP) International TOPS (ITOPS).

HOLTRT (end)

MAP display example for table HOLTRT

```
          HOLSCH HOLTRT
_____________________________________________________________

NEWYEARS      USA     SAT
NEWYEARS   CANADA     SUN
   XMAS       USA     SUN
   XMAS    CANADA     SUN
   XMAS        UK     SUN
```

HOLTRTI

Table name

TOPS Holiday Treatment Inactive Table

Functional description

Feature V0178 (TOPS Mass Table Control) permits data changes in table HOLTRT to be mass-table-controlled. In other words, the feature permits the simultaneous activation of data changes in the table by entering the data changes for the table into table HOLTRTI, and then, when all the required changes are entered, swap the contents of table HOLTRT with table HOLTRTI.

For further information on feature V0178, refer to table CHARGEI.

Datafill sequence and implications

Refer to table HOLTRT.

Table size

Refer to table HOLTRT.

Datafill

Refer to table HOLTRT.

Datafill example

Refer to table HOLTRT.

HOMELRN

Table name

Home Location Routing Number

Functional description

Table HOMELRN specifies location routing numbers (LRN) in an office. This table

- allows service providers to identify Home LRNs
- designates a Home LRN as a jurisdiction information parameter (JIP)
- specifies LRNs that are associated with remote switches

Local Number Portability (LNP) routes a call to a ported directory number (DN) to a terminating switch. No two switches in a LATA share the same LRN. LRNs can identify the site of a ported-in number for billing purposes.

Service providers use table HOMELRN to datafill 6- or 10-digit LRNs. Differences between types of LRNs follow:

- For 6-digit LRNs, the NPA-NXX of the incoming LRN must match the NPA-NXX in table HOMELRN in order to identify it as a Home LRN.
- For 10-digit LRNs, all ten digits from the incoming LRN must match (NPA-NXX-XXXX) in order to identify the incoming LRN as the Home LRN.
- For 7-digit incoming CalledPartyID parameter from the ISUP Initial Address Message, translations must occur to determine the NPA before table HOMELRN matches the digits with its datafill.

Each office must examine the LRN to determine where to terminate the call. If the incoming LRN matches an LRN that is defined by the switch, it is the home LRN. The call can terminate in that office. If the incoming LRN does not match an LRN that is defined by the switch, call translations continue routing the call.

Field options

Option SITE in table HOMELRN identifies the LRN for the HOST, and LRNs for remote switching units. Each office has at least one unique LRN.

Option SITE, entry HOST assigns a 6- or 10-digit Home LRN to identify the JIP for the office. (SITE_HOST is the equivalent to the JIP.) For a 10-digit Home LRN, only the first 6 digits (NPA-NXX pattern) are used as the JIP.

HOMELRN (continued)

Option SITE with an entry of a site name

- specifies remote switching units for an office
- can specify an LRN (used as the JIP) for a remote office

The following lists the field information in table HOMELRN:

- AREACODE is the area code of the Home LRN.
- OFCCODE is the NXX of the Home LRN.
- STNCODE is the station code of the Home LRN. This field is emptied [that is, enter a $ (dollar sign)] for a 6-digit Home LRN.
- STNCODE is the station code of the Home LRN. This field is emptied [that is, enter a $ (dollar sign)] for a 6-digit Home LRN.
- Option MAINT_LRN option indicates that it is not necessary for the tuple to have a valid NPA or NPANXX. The NPA in the AREACODE field does not need to exist in table SNPANAME and the AREACODE-OFCCODE combination does not need to exist in table TOFCNAME.
- Option SITE with SITE NAME of HOST is an option that assigns the Home LRN as the JIP for the office.
- Option SITE with <SITE NAME> is an option that identifies a remote switching unit.

Note: Site names must be datafilled in table SITE before these names are datafilled in table HOMELRN.

Datafill sequence and implications

Datafill the following tables before table HOMELRN.

- TOFCNAME
- SITE

Maintenance LRNs should only be present in table HOMELRN during the permissive dial period of an NPA split. If this tuple is present outside the permissive dial period, it may result in incorrect call terminations when the referenced NPANXX is assigned to another switch.

Table size

4000 to 8000 tuples

Note: The datafill in table HOMELRN determines the maximum number of tuples.

Datafill

The following table lists field descriptions for table HOMELRN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
AREACODE		3-digit code	Enter the area code of the Home LRN.
OFCCODE		3-digit code	Enter the NXX of the Home LRN.
STNCODE		4-digit code or empty	Enter the station code of the Home LRN. For a 6-digit home LRN, enter a $ (dollar sign).
OPTIONS	SITE		This option consists of subfield SITE and its refinements. Enter SITE to • assign the Home LRN identified as the HOST for the office • allow service providers to specify remote switching units ***Note:*** Option SITE can hold up to 10 site names (This includes a site name of HOST, which can only be entered once.) For example, one tuple can have HOST and up to nine remote switching units. Another tuple can have up to 10 remote switching units.

HOMELRN (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
		HOST and, or <SITE_NAME> <vector>	Enter HOST to indicate that the home LRN is host to the switch. Enter a vector of up to ten site indexes to specify remote switching units. ***Note:*** Operating companies must datafill site names in table SITE before they datafill these names in table HOMELRN.
		MAINT_LRN	This option indicates that it is not necessary for the tuple to have a valid NPA or NPANXX. The NPA in the AREACODE field does not need to exist in table SNPANAME and the AREACODE-OFCCODE combination does not need to exist in table TOFCNAME. The MAINT_LRN option is used to provision maintenance LRNs with the new NPA prior to ANI conversion. This guards against an incoming LRN containing the new NPA.

Datafill example

The following example shows sample datafill for table HOMELRN.

MAP display example for table HOMELRN

```
 AREACODE    OFCCODE   STNCODE              OPTIONS
-------------------------------------------------------
      613       722      1234   (SITE (HOST) $) $
      613       741         $   (SITE (REM5) $) $
```

Table history

NA013

Option MAINT_LRN was introduced by feature 59013762.

NA008

Increased the number of SITES that can be datafilled in table HOMELRN through option SITE.

NA007

Introduced table HOMELRN for Local Number Portability (LNP).

HOTLIST

Table name

TOPS Domestic—Hot List Table

Overview

BILL TO number validity checks

The following tables allow BILL TO number validity checks.

- CHKDIGIT
- DOMBILL
- HOTLIST
- NPACHECK
- OOCBILL
- OVSBILL
- OVSCC
- OVSCCYL
- RAO
- RAOCHECK
- REGNUM
- TERMSCRN

An operator handled call can be billed to a BILL TO number. To assist the Traffic Operator Position System (TOPS) operator in verifying the validity of the BILL TO number supplied by the customer, the following validity checks are available in DMS toll or combined local and toll switches.

Domestic BILL TO number validity checks

The following customer datafilled tables are available with feature package NTX030 (TOPS Call Processing Features):

- CHKDIGIT
- DOMBILL
- HOTLIST
- NPACHECK
- RAO
- RAOCHECK
- REGNUM

A customer can bill an operator-handled call to a domestic BILL TO number with one of the following formats:

- domestic third number: NPA Nxx xxxx (10 digits)
- special billing number: (0/1)xx xxxx RAO (10 digits)
- domestic credit card: NPA Nxx xxxx yyyy (14 digits)
- portable special billing number: RAO (0/1)xx xxxx yyyy (14 digits)

where

NPA
is the numbering plan area (NPA) (a valid area code) with the second digit being 0 or 1, as datafilled in table NPACHECK0/1 is digit 0 or 1

x
is a digit ranging from 0 to 9

yyyy
is a four-digit personal identification number (PIN) ranging from 0 to 9. One of the four digits is the check digit determined by field CHKDGPOS in table CHKDIGIT.

The DMS-TOPS program flashes the customer supplied BILL TO number on the screen to alert the operator if the number fails to meet any of the following checks:

Format check
the domestic BILL TO number must have one of the four formats previously listed

Special digit check
for 14-digit BILL TO numbers, one of the yyyy digits is checked against operating company data specified in tables CHKDIGIT, RAOCHECK, and NPACHECK

RAO validity check
for domestic BILL TO number, the format of which includes an RAO. The RAO is checked against operating company data specified in table RAO.

HOTLIST (continued)

Domestic (North American dialing plan) billing restrictions check

domestic BILL TO numbers are checked against a set of restrictions on a regional basis using tables DOMBILL and REGNUM

Special billing number checks are performed by the following methods:

- inward validation method using tables CHKDIGIT, RAOCHECK, and NPACHECK
- external database method introduced by AT&T

Inward validation method

Tables NPACHECK and RAOCHECK are used to define credit card numbers starting with a three-digit RAO or NPA that are checked by table CHKDIGIT. If the credit card numbers are found in the above tables, the display VFY does not appear on the operator's screen and table CHKDIGIT is looked up. This check is bypassed if the numbers are not found in tables NPACHECK and RAOCHECK.

External database method

To use this method, the operator must first enter the credit card number, then make a forward connection to the AT&T database using a regular trunk, then key in KP SPL2 START (with no digits) to cause the special number to be outpulsed. The operator then receives a spoken report on the validity of the number and proceeds accordingly.

Domestic Billing

Billing restrictions currently exist for overseas calls. Billing restrictions are also possible within specific regions of the North American dialing plan. These restrictions are referred to as domestic billing restrictions. They include:

- credit card billing restrictions
- third number billing restrictions
- collect call billing restrictions
- person rate billing restrictions

Two data tables, DOMBILL and REGNUM, are introduced to enable this restriction. Table DOMBILL associates a unique region name with a specific set of restrictions while table REGNUM associates region names to third numbers and credit card numbers. Table DOMBILL must be datafilled before table REGNUM.

Caribbean expansion plan (CEP) International TOPS (ITOPS)

Special billing numbers

The customer can request that the call be billed to a special billing number.

The operator inputs the special number using the SPL key. This key is used in conjunction with the START key in the format SPL + digits + START.

The input digits are echoed on the operator's screen once the entire sequence is input. If an invalid number of digits is entered, or the digits entered are in an invalid format, the input number flashes on the screen.

Entering the sequence SPL + START causes the previously input and displayed number (valid or not) to be erased from the screen and from memory.

Two types of special billing are supported:

- Calling card billing
- third party billing

Calling cards

Three types of calling cards are supported in the CEP special billing application:

- **NPA-NXX-XXXX-XXXX** If the operator enters a calling card numbers in an NPA-NXX format, the first four digits are checked to ensure that the format is correct (digit 1 1, digit 2 0/1, digit 4 1).
- **RAO-0/1XX-XXXX-XXXX** Numbers in the RAO format require that the fourth digit be 0 or 1 (this is how the system determines initially what type of calling card number is being input by the operator). Furthermore, the RAO entry is matched against an entry in table RAO to ensure that the RAO is indeed valid.
- **CCaxxxxxxxxx** Numbers in the overseas format require that a letter be present immediately following the country code associated with the calling card. If a letter is found in the input, the digits preceding it are assumed to form a country code and the validity of the country code is ascertained. The letter is then checked to see if it is valid for that country code. Tables OVSCC and OVSCCYL are customer datafillable and are used for this purpose.

Third numbers

Only numbers in an NPA-NXX format are valid as third numbers. Therefore, the same checks as for NPA-NXX calling cards are made to ensure validity of the number.

HOTLIST (continued)

Verifying special numbers

Table HOTLIST

Table HOTLIST is customer definable. It allows the operating company to input up to a maximum of 64 special numbers (calling cards or third numbers) that are considered hot (used in cases of fraud).

If the operator enters a special number, the number is matched with the entries in table HOTLIST. If a match is found, HOT is displayed on the operator's screen following the special number to indicate to the operator that this can be an instance of fraud. The operator can then take appropriate steps (as specified by the operating company).

The operator can allow billing to a HOT number. This is, however, recorded on the international centralized automatic message accounting (ICAMA) entry for the call.

Validation of calling card

If a calling card number is used as the method of billing, the operator can verify the calling card number by accessing a calling card database and requesting validation. That function is not supported directly from an ITOPS position and the operator must outpulse to an inwards operator with that capability.

To do this, the operator must first establish a forward connection to the appropriate operator (usually done by datafilling one of the OGT [outgoing] entries to outpulse to the appropriate number).

Once an indication to proceed is received by the ITOPS operator, the VFY SPL key is used to outpulse the calling card number to the inwards operator. The ITOPS operator then receives the results of the validation of the calling card. The ITOPS system is not told whether the validation was successful. It is the operator who is informed. The system cannot, therefore, stop processing a call billed to a calling card which has failed validation. However, the attempt to validate is recorded on the ICAMA record for the call.

Validation of third number

After a third number is secured as the billing number, the operator can attempt to outpulse to that number to obtain verbal acceptance of the charges. This is also done by using the VFY SPL key to outpulse the third number. As the acceptance is verbal, the system has no way of ensuring that acceptance is received. However, the attempt to secure acceptance is noted on the ICAMA record for the call.

Overseas BILL TO number validity checks:

The following customer datafilled tables are available with feature package NTX031 (TOPS Enhanced Call Handling I):

- OOCBILL
- OVSBILL
- OVSCC
- OVSCCYL

Overseas BILL TO number checks are available in toll switches and combined local and toll switches with feature packages NTX030 and NTX031.

An overseas BILL TO number can be used for charging an operator-handled call to the overseas country the BILL TO numbers belongs to.

An overseas BILL TO number can have one of the following formats :

Overseas third number

numeric variable length digit string starting with the overseas country code

Overseas credit card number

alphanumeric variable length digit string starting with the overseas country code and the year letter

The DMS-TOPS program flashes the called overseas number or the customer supplied overseas BILL TO number to alert operator when it fails to meet any of the requirements specified below.

The following checks are performed by the DMS-TOPS program to verify the validity of an overseas credit card number:

- The leading digits preceding the year letter (an alpha character) must be known as the country code number to:
  - — table CCTR
  - — table COUNTRY
- The overseas credit card number must meet the requirements of its country, specified in table OVSCC as follows:
  - — The number of alphanumeric characters in the credit card number must be within the limits specified.
  - — The expiry and start dates for the old and new overseas credit card number year letter, respectively, are specified here to be used in

HOTLIST (continued)

conjunction with the checks performed on the year letter as described below.

— The overseas credit card number year letter must be equal to the present or previous year letter in table OVSCCYL. Once the overseas credit card year is thus established, its validity on the date of use is verified using the dates specified in table OVSCC.

— The country codes in the called overseas number and the overseas credit card number must match.

Overseas third number

The following checks are performed by the DMS-TOPS program to verify the validity of an overseas third number:

- The country code must be known to:
  - — table CCTR
  - — table COUNTRY, to obtain the country name
- The country code in the called overseas number and the overseas third number must match
- The following checks are performed using table OVSBILL:
  - — If the called overseas number is the same as the overseas third number, field COLLECT is used to select on of the following for the called country:
    - – collect calls denied
    - – collect calls allowed
    - – person-to-person collect calls only allowed
- collect calls allowed, but handled by the overseas operating centre. In the absence of data for the called country, collect calls are allowed
- If station calls are not allowed to the called country then STA flashes on the operator screen if the operator attempts to complete a station call. In the absence of data for the called country station calls are allowed.
- If third number billing is legal for calls to this country. In the absence of data for a given country, third number billing is allowed.

Functional description

The domestic hot list check involves comparing each domestic credit card number special billing number or third number given by the customer against a list of numbers classified invalid or known to be used fraudulently.

If a match between the numbers occurs, HOT is displayed in the flashing mode against the entered number, warning the TOPS operator.

Table HOTLIST is not compiled until immediately before cutover by the operating company since the information it contains is normally treated as confidential and is subject to frequent changes.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table HOTLIST.

Table size

0 to 128 tuples

Datafill

The following table lists datafill for table HOTLIST.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
HOTNUM		see subfield	Hot number. This field is the key to the table and consists of subfield DIGILATOR_KEY.
	DIGILATOR_ KEY	0 to 9 (10 or 14 digits)	DIgilator key. Enter the number that is classified as hot. Hot numbers credit card numbers, special billing numbers, and third numbers. Up to 128 numbers can be datafilled.

Datafill example

The following example shows sample datafill for table HOTLIST.

MAP display example for table HOTLIST

```
HOTNUM
_____________________________________________________

1563249329
```

HOTLIST (end)

Table history

BCS36

Field HOTNUM was split into field HOTNUM and SUBFIELD DIGILATOR_KEY.

HPCPATTN

Table name

High Probability Completion Pattern

Note: The use of HPC Network Capabilities is restricted in the United States and U.S. Territories (Puerto Rico and U.S. Virgin Islands) to National Security/Emergency Preparedness (NS/EP) users authorized by the Office of the Manager, National Communication System (OMNCS). Operating company deployment of these HPC Network Capabilities must be coordinated with the OMNCS at the following address:

Office of the ManagerNational Communications System

Attn: GETS Program Office

701 South Courthouse Rd.

Arlington, VA 22204-2198

email: gets@ncs.gov

Functional description

Table HPCPATTN is used to specify HPC patterns, which can be 3, 6, or 10 digits in length. For a call to be recognized as an HPC call, the prefix digits are removed, and the remaining dialed digits must match one of the patterns specified in this table.

Only the first dialed digits are compared to table HPCPATTN entries. For example, if a 3-digit pattern of 711 is entered, any 10 digits dialed starting with 711 is recognized as an HPC call. Digits 7117652216 will match a 711 entry, but will not match any entry beginning with 765.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table HPCPATTN.

Table size

0 through 5 tuples

HPCPATTN (continued)

Datafill

The following table lists datafill for table HPCPATTN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		3, 6, or 10 digits	High probability completion pattern key. This field indicates the pattern that is to be used to label a call as an HPC call.

Datafill example

The following example shows sample datafill for table HPCPATTN.

MAP display example for table HPCPATTN

```
KEY
_____________________________________________________________

7106274387
711
710626
```

Error messages for table HPCPATTN

In addition to the standard DMS table control error messages, the HPC-specific error message that can be displayed when attempting to datafill table HPCPATTN is provided below:

Error messages for table HPCPATTN

Error message	Explanation and action
`HPC patterns must be 3, 6 or 10 digits`	An attempt has been made to datafill table HPCPATTN with an incorrect HPC digit pattern.
HPC patterns table is full	An attempt has been made to add a 6th pattern to the table.

Table history

NA008

Table HPCPATTN was introduced for the GETS HPC feature.

Supplementary information

When attempting to datafill table HPCPATTN, standard DMS table control error messages will be displayed when required.

HPWASTE

Table name

Heap Waste Table

Functional description

The amount of store each user of the heap facility does not use appears in table HPWASTE. This table is a read-only table. The addition of tuples from the software heap user occurs when the table identifies the tuples. To allow the table to identify the tuples, the tuples bind in. This table is for information purposes only. This table does not require input or input form.

See table HEAPTAB for related information.

Datafill sequence and meaning

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

Table size

0 to 127 tuples

Datafill

Datafill for table HPWASTE appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
USERNAME		alphanumeric (1 to 16 characters)	*User name* This character string identifies the user. Operating company personnel are not allowed to change this field.
WASTE6		0 to 32 767	*Waste6* This value indicates the average amount of store that the heap user in question does not use. A heap user can request a heap element of less than 6 bytes with an element of 6 bytes. The system can provide an element of 6 bytes. When these conditions occur, this field accumulates the bytes the heap user does not use. The operating company can recommend that the heap support different block sizes. ***Note:*** Deallocations that follow do not alter this waste value.

HPWASTE (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WASTE8		0 to 32 767	*Waste8*. Field WASTE8 is like field WASTE6. Field WASTE8 has a block size of 8 bytes.
WASTE10		0 to 32 767	*Waste10*. Field WASTE10 is like field WASTE6. Field WASTE10 has a block size of 10 bytes.
WASTE12		0 to 32 767	*Waste12*. Field WASTE12 is like field WASTE6. Field WASTE12 has a block size of 12 bytes.
WASTE14		0 to 32 767	*Waste14*. Field WASTE14 is like field WASTE6. Field WASTE14 has a block size of 14 bytes.
WASTE16		0 to 32 767	*Waste16*. Field WASTE16 is like field WASTE6. Field WASTE16 has a block size of 16 bytes.
WASTE24		0 to 32 767	*Waste24* Field WASTE24 is like field WASTE6. Field WASTE24 has a block size of 24 bytes.
WASTE32		0 to 32 767	*Waste32*. Field WASTE32 is like field WASTE6. Field WASTE32 has a block size of 32 bytes.
WASTE40		0 to 32 767	*Waste40*. Field WASTE40 is like field WASTE6. Field WASTE40 has a block size of 40 bytes.
WASTE48		0 to 32 767	*Waste48*. Field WASTE48 is like field WASTE6. Field WASTE48 has a block size of 48 bytes.
WASTE64		0 to 32 767	*Waste64Fie*. Field WASTE64 is like field WASTE6. Field WASTE64 has a block size of 64 bytes.
WASTE96		0 to 32 767	*Waste96*. Field WASTE96 is like field WASTE6. Field WASTE96 has a block size of 96 bytes.
WASTE128		0 to 32 767	*Waste128* Field WASTE128 is like field WASTE6. Field WASTE128 has a block size of 128 bytes.
WASTE192		0 to 32 767	*Waste192* Field WASTE192 is like field WASTE6. Field WASTE192 has a block size of 192 bytes.
WASTE256		0 to 32 767	*Waste256* Field WASTE256 is like field WASTE6. Field WASTE256 has a block size of 256 bytes.
WASTE510		0 to 32 767	*Waste510* Field WASTE510 is like field WASTE6. Field WASTE510 has a block size of 510 bytes.

HPWASTE (end)

Datafill example

Sample datafill for table HPWASTE appears in the following example.

MAP display example for table HPWASTE

```
USERNAME WASTE6 WASTE8 WASTE10 WASTE12 WASTE14 WASTE16 WASTE24 WASTE32
WASTE40 WASTE48 WASTE64 WASTE96 WASTE128 WASTE192 WASTE256 WASTE510
------------------------------------------------------------------------

GENDIG      0      0       0       0       0       0       0       0
    0       0       0       0         0         0         0         0
```

HSMLINK

Table name

High Speed Modem Link Table

Functional description

Table HSMLINK keeps an inventory of the high speed modem links available for communication with the enhanced services test unit (ESTU).

Datafill sequence and implications

The following tables must be datafilled before table HSMLINK.

- LNINV
- MPC
- MPCLINK

Table size

0 to 255 tuples

If an attempt is made to add a tuple to table HSMLINK after the maximum table size of 256 tuples has been reached, the incoming tuple is rejected.

Datafill

The following table lists datafill for table HSMLINK.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
HSMNUM		0 to 30	*High speed modem number* Enter the number to be used as the key.
MPCNO		0 to 255	*Multiprotocol controller number* This field specifies the existing multiprotocol controller (MPC) card for this entry. Enter the MPC number as datafilled in tables MPC and MPCLINK.

HSMLINK (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LINKNO		0 to 3	*Link number* Enter the MPC link number. Ports 2 and 3 are the only ports on the MPC card supported by the protocols. Enter the link number as datafilled in table MPCLINK. There is no default.
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 the 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.

Datafill example

The following example shows sample datafill for table HSMLINK.

MAP display example for table HSMLINK

```
HSMNUM   MPCNO   LINKNO   LEN
_____________________________________________________

     1       2        2   HOST 67 0 8 3
```

Table history

NA002

Table HSMLINK is introduced.

Supplementary information

High speed modem links can be by modem, line card, and enhanced multiprotocol controller (EMPC).

The number of high speed modem links should be 1 greater than the number of ESTUs.

If an attempt is made to datafill 0 or 1 in field LINKNO for the MPC card port, the following error message is displayed:

```
CAN NOT USE MPC LINK 0 OR 1
```

If an attempt is made to add a tuple when the field PROTOCOL in table MPCLINK (associated with the values for fields MPCNO and LINKNO) is not datafilled with the ASYNC value, the following error message is displayed:

```
MPCLINK NOT DATAFILLABLE WITH ASYNC PROTOCOL
```

If an attempt is made to add a tuple before busying the MPC link first, the following error message is displayed:

```
BUSY MPC LINK FIRST
```

HUNTGRP

Table name

Hunt Group Table

Functional description

Table HUNTGRP contains the data for each hunt group assigned in the switching unit.

If a switching unit has feature BR0750 (Hunt Group Size Expansion), then a distributed line hunt (DLH) group, directory number hunt (DNH) group, or multiline hunt (MLH) group can be assigned up to 1024 members.

For switching units without feature BR0750, a DLH, DNH, or MLH group can be assigned up to 256 members.

The maximum number of members for a bridged night number (BNN) hunt group is 210.

The Terminating Fault Option (TFO) specifies the type of search that is made of a hunt group's members for an incoming call.

If field TFO is set to Y (yes), then an incoming call attempts to terminate to the first member that appears idle, regardless of whether that member has passed line diagnostics. A DLH group must have field TFO is set to Y because DLH overrides the fault flag.

If field TFO is set to N (no), then an incoming call searches the hunt group for an idle line, but skips over any members that have failed line diagnostics. If no idle member is found, then a second search for an idle line is made through the members that have failed line diagnostics. Members that have failed line diagnostics are put last in the search order for an idle line. Incoming calls have a better chance of completing if field TFO is set to N.

The following information is applicable to switching units with software package NTX806AA (Enhanced Call Forwarding — POTS) and plain ordinary telephone service (POTS) hunt groups. Software package NTX806AA is required for the feature Call Forward Group Don't Answer (CFGDA).

Feature CFGDA can be assigned to MLH, DLH, BNN, and DNH groups on a hunt group basis.

HUNTGRP (continued)

Either feature Call Forward Don't Answer (CFDA) or feature CFGDA can be assigned to the pilots of only MLH and DLH groups. Features CFDA and CFGDA are mutually exclusive in function on MLH and DLH groups.

Call Forward Don't Answer can be assigned as CFDA to individual lines within a DNH group, and as CFGDA to the DNH group on a group basis. The line CFDA takes precedence over the group CFGDA, on a directly dialed DN.

The number of lines within a DNH group that can be assigned individual CFDA is restricted by the real-time considerations based on the number of features that can be assigned to a DNH group.

The forward directory number (DN) of a CFGDA group must never be a member of the same hunt group. This looping unnecessarily exhausts the simultaneous call limit and has a cost of real-time efficiency.

Field LINETYPE allows for the distinction between POTS and Meridian* Digital Centrex (MDC) lines. If MDC is selected, then calls can be forwarded within or outside an Integrated Business Network (IBN) hunt group.

Call Forward Group Don't Answer can be assigned so that calls to an idle hunt group station ring for a predetermined amount of time before being forwarded either to the next station in the hunt sequence or to a DN outside the hunt group but inside the customer group. This feature can be assigned only by the operating company; subscribers must contact the operating company to assign or deassign CFDA or to change the forward DN. The DN can be of any size up to 30 digits. No translation verification is performed when CFDA is entered into the database whether through the service order system (SERVORD) or table control, except to ensure that the station does not forward to itself.

The data for the CFDA and CFGDA features is stored in table CFW. Adding the CFGDA feature to table HUNTGRP automatically updates table CFW; similarly, updating table CFW updates table HUNTGRP.

The Terminating Billing Option (TBO) is incompatible with features CFGDA and CFDA.

Feature ISDN Packet single DN (AF6872) allows DLH, DNH, MLH, or PRH hunt groups to be assigned on the voice interface (VI) circuit mode data (CMD) appearance of a shared DN. Only DLH and DNH type hunt groups can be assigned to the packet data mode (PMD) appearance of a DN. A DN can only be datafilled as shared if SOC option NI000051 is on.

The following table control rules for shared ISDN terminals apply to table HUNTGRP:

- Members can be added to hunt groups for circuit switched (CS) and packet switched (PS) NI2 ISDN terminals provisioned on the same DN.
- Two separate hunt groups for CS and PS ISDN terminals can be added on the same DN.
- Attributes of hunt groups with CALLTYPES PMD and VI_CMD on the same DN can be changed.
- Hunt groups provisioned as shared DN can be deleted.

Note: For more information about DN CALLTYPE sharing, see subfield OPTION in table HUNTGRP and feature AF6782 in the Feature Description Manual.

If the LOD DN is a 1 + 10 digit inter-LATA call, the Primary Inter-LATA Carrier (PIC) assigned to the phone will not be used for the call. LOD is an overflow feature and does not reference line options for call routing. The Equal Access (EA) option for selector NET GEN in table IBNXLA can be used to specify a PIC in this situation.

The LODDN field in table HUNTGRP allows the capability to store DNs from 1 to 30 digits for the overflow option LOD.

Enhanced 911 emergency services

The following two options support E911:

- line appearance on a digital trunk [LDT] public safety answering point [PSAP] (LDTPSAP)
- line-ended PSAP (LINEPSAP) added through field E911PSAP

If field E911PSAP is set to Y, then two sets of subfields are possible, depending on the option (LDTPSAP or LINEPSAP), and the corresponding subfields are prompted for. If neither option LDTPSAP nor LINEPSAP has been assigned to a hunt group, then field E911PSAP for that hunt group entry has a default value of N.

Option LDTPSAP can be added to an MLH group only with line class code (LCC) IBN. Option LINEPSAP can be added to an MLH, DLH, or DNH group with LCC IBN.

Note: When adding option LDTPSAP or LINEPSAP, do not manually update table HUNTGRP through the table editor. Table HUNTGRP is automatically updated when either of these options is added to an IBN hunt

HUNTGRP (continued)

group, using SERVORD. (For information on the SERVORD, refer to the *SERVORD Reference Manual*.)

The LDTPSAP or LINEPSAP data is added to table HUNTGRP through field E911PSAP. When adding to or changing a hunt group tuple, the field name is E911PSAP. When positioning or listing on a hunt group tuple, the field name is LDTLNOPT.

Table HUNTGRP has a new field named NATLXLA. Entry to this field is prompted when assigning or modifying options LINEPSAP and LDTPSAP. If the entry to this field is 'Y' (yes), call translations to the PSAP are based on 10 digits (with NPA) and the PSAPDN field in table E911PSAP is datafilled with 10 digits. If the entry is 'N'(no), call translations to the PSAP are based on 7 digits (without NPA) and the PSAPDN field in table E911PSAP is datafilled with 7 digits. This affects 911 call routing.

CAUTION

Change to the NATLXLA field entry for an existing PSAP

If your office does not support the appropriate seven- or ten-digit call translations, changing the NATLXLA field entry for an existing PSAP can cause problems in completing 911 calls to that PSAP.

Release NA012 adds fields SNGLSANI and WANITYPE to table HUNTGRP. The SNGLSANI prompt occurs when the LDTPSAP option ENHDISP is equal to Y. Field SNGLSANI defines the ANI spill as either single or double. The WANITYPE prompt occurs when SNGLSANI is equal to Y or when ENHDISP is equal to N and NUMIDIGS is equal to one or three. Subfield WANITYPE defines the source for the ANI spill. The WANITYPE field also exists as a subfield to ENHDISP when ENHDISP is equal to N. The following represent the wireless ANI types:

- callback (mobile directory number)
- location (pseudo ANI)
- generated (a value generated for the WLS911 ALI protocol)

Release NA016 adds field OVFLFLSH to table HUNTGRP. The OVFLFLSH prompt occurs when LDTPSAP option ANISPILL is equal to Y. Field OVFLFLSH enhances the current FLASHING ANI feature, activated in table E911ESN, to include calls that get overflowed from one PSAP to another when all members are busy. If the OVFLFLSH option is activated for the terminating PSAP and Call Processing recognizes the call as being overflowed, then the flash bit is set.

Assignable hunt group types

The following types of hunt groups can be assigned in the switching unit.

- Directory number hunting (DNH)
- Multiline hunting (MLH)
- Multiple position hunting (MPH)
- Distributed line hunting (DLH)
- Bridged night number (BNN)

Directory number hunting

Each line in the hunt group has a unique DN. The hunt group can be accessed by dialing the main number (called the pilot DN) or by dialing the DN of one of the hunt group members. Hunting starts at the number dialed. The number of lines hunted to find an idle line is dependent on the hunting option assigned to the DNH group.

If option CIR (circular hunting) is assigned to the group, then all lines in the hunt group are hunted, regardless of the start point. If CIR is not assigned, then the default is sequential hunting (sometimes called linear hunting). Sequential hunting starts at the number dialed and ends at the last number in the hunt group. Therefore, if the pilot DN is not dialed, not all lines are hunted.

For optimum performance, no more than 70 lines within a given group should have any combination of features CFDA, CFW/CFX, MSB, RMB, SHU, DTM, or CDIV (Call Diversion), regardless of whether they are activated or not.

CDIV features can only be provided in a switching unit (international) with universal translations.

The above option limitations are not enforced by table control.

Multiline hunting

Only a pilot DN is associated with the hunt group. To access the group, the pilot must be dialed. Hunting starts with the pilot and ends at the last line, in a sequential fashion.

For optimum performance, no more than 140 lines within a given group should have any combination of features MSB, RMB, SHU, DTM, or CDIV.

CDIV features can only be provided in a switching unit (international) with universal translations.

HUNTGRP (continued)

The above option limitations are not enforced by table control.

Multiple position hunting

MPH with queue allows the distribution of calls evenly across multiple non-data-link attendant consoles. Calls are presented to the consoles in the order they arrive at the DMS-100* Family switch. Calls that cannot be presented to any console are enqueued in the DMS-100F switch until a console is available to serve that call.

A call is directed to a multiple hunting arrangement by associating a DN with each call type in the console group. A maximum of 32 call types are supported. To establish a multiple position arrangement, primary tables requiring datafill include SCGRP, SDGRP, MPHGRP, MPHCON, HUNTGRP, and HUNTMEM.

Night Service is activated by the operation of a service control point (SCP) from the master console in a console group. If Night Service is activated, arriving calls are redirected to a predefined DN. The Night Service DNs are assigned separately for each call type.

Many hunt group options are either not assigned to MPH groups, or have no effect on MPH hunting patterns. These options are CIR, TFO, LOR, LOD, CFGD, OFR, OFS, and TRMBOPT.

Options that are incompatible with MPH groups are ACD, AUL, BC, CFB, CFD, CFGD, CIR, CWI, CWX, DNH, DSCWID, DTM, LOD, LOR, MDN, OFR, OFS, RAG, RMB, SCMP, SCWID, SETMODEL, SHU, SLQ, SMDICND, SOR, SORC, TFO, TRMBOPT, and UCD.

To forward all calls directed to an MPH group (not all calls to a console group), Call Forwarding can be assigned to the pilot of that hunt group. Activation of Call Forwarding by the pilot redirects all calls destined for the hunt group to the forwarded-to number.

Other restrictions that apply are as follows:

- A maximum of 16 consoles are allowed in an MPH group.
- A maximum of 32 lines are allowed on a non-data-link console.
- A maximum of 32 calls can be enqueued for an MPH group.

Call request retrieval (CRR) calls can be made to consoles but queuing of this type of call is not supported.

Distributed line hunting

Only a pilot DN is associated with the hunt group. To access the group, the pilot must be dialed. Hunting always starts on the subsequent line in the group.

If the line where hunting starts is not idle due to an origination, the next line is checked. This continues until the hunting start point is reached. At this point, busy tone is returned unless options line overflow to DN (LOD) or line overflow to route (LOR) are assigned to the hunt group.

DLH is assigned to large hunt groups that require equal distribution of calls.

For optimum performance, no more than 170 lines within a given group should have any combination of features MSB, RMB, DTM, or CDI, regardless of whether they are activated or not.

CDIV features can only be provided in a switching unit (international) with universal translations.

The above option limitations are not enforced by table control.

Bridged night number

This type of hunt group has several BNNs that can be formed into a BNN hunt group. Hunting is sequential unless option CIR is assigned to the hunt group.

The following options can be assigned to DNH, MLH, and DLH groups:

- Line overflow to a route (LOR). If all the lines in a hunt group are busy, option LOR causes hunting to continue to a specified route index.
- Line overflow to a DN (LOD). If all the lines in a hunt group are busy, option LOD causes hunting to continue to a specified DN. This DN can be part of a hunt group.

If the hunt group belongs to an IBN customer group, the pilot DN and the hunt group members must belong to the same customer group. The LOD number can be outside the customer group.

If the hunt group has option LOD, the following applies for a Ring Again (RAG) request.

If a party calls the hunt group only to find it busy as well as the overflow DN busy, then the RAG request is activated against the LOD line and not against the hunt group. RAG Recall is activated against the REQUESTOR only if the LOD line becomes idle.

HUNTGRP (continued)

If any member of the hunt group becomes idle, the RAG Recall is not activated against the REQUESTOR. When the REQUESTOR answers the RAG Recall, the LOD DN is rung back.

CAUTION
Possible hunting loop may occur
Do not use the LOD option to overflow from one hunt group to a second group that overflows back to the first group, or any other configuration that results in a ”hunting loop.”

The operation of the LOD option for translation and billing is as follows:

- The pilot of the hunt group is considered to be the originator of this second leg.
- Pretranslation and screening is obtained from the line attribute information of the pilot DN.
- If the LOD and LOR options are not assigned and the hunt group is busy or unavailable for any reason, the caller hears busy tone.
- A hardware or software register can be assigned to the hunt group so that the register is incremented every time a call cannot find an idle line in the hunt group.
- The signal distributor (SD) points required for the operation of the hardware register are assigned in table SDGRP.
- The operating company uses the SERVORD to add and delete hunt groups and to change data to a hunt group.
- The test line and final line data is loaded into the switch from tape using the table editor, all other changes, additions and deletions must be entered by means of SERVORD.

For assignment of members to a hunt group, see table HUNTMEM.

Note: In NA012, feature 59006893, Provisioning for Enhanced Multi-NPA, allows hunt group member DNs to have NPAs different from those of the pilot DNs. When the NPA of a new pilot is different from that of the old pilot, the NPA in the NPA field in table HUNTGRP changes to that of the new pilot.

HUNTGRP (continued)

Datafill sequence and implications

The following tables must be datafilled before table HUNTGRP:

- TOFCNAME
- SNPANAME
- SCRNCLASS
- OFRT
- IBNTRE

To create a hunt group using table control, add hunt group datafill in the following order:

- first, table HUNTGRP
- table LENLINES or IBNLINES or KSETLINE
- last, table HUNTMEM

To delete hunt group datafill, remove data in the reverse order.

Deletion of an MPH, MLH, or DLH hunt group from table HUNTGRP can cause line data corruption. The line data corruption is from partially datafilled hunt members, members that are datafilled in the lines table but not in table HUNTMEM.

To avoid line data corruption, do not delete an MPH, MLH, or DLH hunt group from table HUNTGRP if line data exists for members in tables LENLINES, IBNLINES, or KSETLINE.

Table size

0 to 8192 tuples

HUNTGRP (continued)

Datafill

The following table lists datafill for table HUNTGRP.

Field descriptions

Field	Subfield	Entry	Explanation and action
HTGRP		0 to 32 767	Hunt group number. Enter the hunt group number assigned to the hunt group. Any entry outside the range of indicated values for this field is invalid.
SNPA		numeric	Serving numbering plan area. Enter the serving numbering plan area (SNPA) to which the hunt group belongs.
DN		numeric (up to 15 digits)	Directory number. Enter the listed DN of the hunt group.
GRPTYP		see subfield	Group type. This field consists of subfield GRPTYPE and refinements.
	GRPTYPE	BNN, CPU, DLH, DNH, MLH, MPH, PRH, or UA	Hunt group type. Enter the type of hunt group: BNN (bridged night number), CPU (call pickup), DLH (distributed), DNH (directory number), MLH (multiline), MPH (multiple position), PRH (preferential hunt), or UA (universal access). Any entry outside the range indicated for this field is invalid.

HUNTGRP (continued)

GRPTYPE = BNN, DLH, DNH, MLH, or PRH

Datafill CIR, TFO, TRMBOPT, TRMBILL, LOROPT, LODOPT, CFGADAOPT, OFROPT, OFSOPT, LDTLNOPT, SIZE, and OPTIONS, subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CIR	Y or N	Circular hunt. If the hunt group type is DNH and it is arranged for circular hunt, enter Y (yes). Otherwise, enter N (no).
	TFO	Y or N	Terminating fault option. If an attempt is made to terminate to the first idle member of a hunt group, regardless of whether or not the member has passed line diagnostics, enter Y. If GRPTYPE is DLH, then TFO must be Y. If an attempt is made to search for an idle member of a hunt group that has passed line diagnostics, before searching for an idle member that has not passed line diagnostics, enter N. Incoming calls have a better chance of completing if TFO is N.
	TRMBOPT	Y or N	Terminating billing option. If the optional terminator software package is provided, and if a record is generated for each call to a member of the hunt group, enter Y. Otherwise, enter N.
	TRMBILL	PILOT, RCVD, or TERM	Type of terminator billing. If service is billed to the pilot DN of the hunt group, enter PILOT. If service is billed to the number that the terminating office receives, enter RCVD. If service is billed to the DN that was actually terminated on, enter TERM.
	LOROPT		Line overflow to route option. Datafill the LOR subfield.
	LOR	Y or N	Line overflow to route. If the hunt group is arranged to overflow to a route if all lines are busy, enter Y and datafill the following subfields. Otherwise, enter N.

HUNTGRP (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TABID	AOSS, AOSSAMA, IBNRT2, IBNRT3, IBNRT4, IBNRTE, OFR2, OFR3, OFR4, OFRT, RRTE, TOPS, TOPSAMA, or TTL4	Table name. Enter the routing table that calls are routed to if all lines are busy.
	KEY	0 to 1023 or alphanumeric	Index. Enter the index (route reference number) within the routing table that all calls route to if all lines are busy. If the TABID field iis set to AOSS, AOSSAMA, TOPS, or TOPSAMA, then enter the call origination. For further information, refer to the AOSS, AOSSAMA, TOPS, or TOSAMA tables. If the TABID field is set to TTL4, then the range is 0 to 7. For further information, refer to the TTL4 table.
	LODOPT		Line overflow to directory number option. Datafill the subfield LOD.
	LOD	Y or N	Line overflow to directory number. If the hunt group is arranged to overflow to a DN if all lines are busy, enter Y and datafill the following subfields. Otherwise, enter N.
	LODDN	numeric (up to 30 digits)	Line overflow directory number. Enter the DN to which all overflow calls route. ***Note:*** Alphabetic characters are not allowed.
	CFGDAOPT		Call forward group don't answer option. Datafill the CFGDA subfield.

HUNTGRP (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CFGDA	Y or N	Call forwarding group don't answer. Enter Y if the switching unit has software package NTX806AA (Enhanced Call Forwarding — POTS) and the hunt group has the CFGDA feature and datafill the following subfield. Enter N if the switching unit has software package NTX806AA and the hunt group does not have the CFGDA feature or if software package NTX806AA is not in the load.
	LINETYPE	MDC or POTS	Line type. Enter MDC if CFGDA applies to an MDC hunt group. Enter POTS if CFGDA applies to a POTS hunt group.

LINETYPE = POTS

Datafill the SCRNCL, NUMCALLS, TIME, and FDN, subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SCRNCL	alphanumeric (1 to 4 characters)	Class of service screening name. Enter the name assigned in field SCRNSEL in the CLSVSCRC.CLSVSCR subtable that specifies the screening used if calls are forwarded from a hunt line that does not answer.
	NUMCALLS	1 to 1024	Number of calls. Enter the maximum number of simultaneous calls that can be forwarded through the hunt group.
	TIME	0 to 325	Time. Enter the time in seconds that the base station rings before the call is forwarded.
	FDN	1 to 30 digits	Forwarding directory number. Enter the 1 to 30-digit number to which an unanswered calll is routed.

HUNTGRP (continued)

LINETYPE = MDC

Datafill the INTERNAL, SPECTIME, and CFGTYPE, subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	INTERNAL	Y or N	
	CFGDN	numeric (up to 30 digits)	Extended digit register. Enter the DN to which the unanswered hunt group station is routed.
	SPECTIME	Y or N	Special Time. If a special time-out value applies, then enter Y and datafill the TIMEOUT subfield. If the time-out value is taken from information in the CUSTSTN table (the OPTION field is set to CFDATIM), enter N.
	TIMEOUT	12 to 325	Time-out. Enter the number of seconds that the base station rings before the call is forwarded.
	CFGTYPE	N, CFGDI, or CFGDE	Call forward group type.

GRPTYPE = BNN, DLH, DNH, MLH, or PRH

Datafill the OFROPT subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OFROPT		Overflow options. Datafill the OFR subfield and subfields.
	OFR	Y or N	Overflow. If Y datafill overflow signal distributer point (OFR) otherwise enter N.
	OFRSD	see subfields	Line overflow operates a signal distributor point. This field consists of subfields TMTYPE, TMNO, TMCKTNO, POINT, and NORMALST.
	TMTYPE	MTM, RMM, or RSM	Trunk module type. Enter the trunk module type, MTM (maintenance trunk module), RMM (remote maintenance module), RSM (remote service module), that the signal distributor (SD) card is mounted on.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMNO	0 to 2047	Trunk module number. Enter the number assigned to the MTM, RMM, or RSM that the SD card is mounted on.
	TMCKTNO	0 to 29	Trunk module circuit number. Enter the trunk module circuit number on the MTM, RMM, or RSM to which the SD point is assigned.
	POINT	0 to 6	Point. Enter the SD point number within the trunk module circuit number.
	NORMALST	0 or 1	Normal state. Enter the normal state of the SD point. Enter 0 (zero), if the SD point is normally off or open. Enter 1 if the SD point is normally on or closed.

GRPTYPE = BNN, DLH, DNH, MLH, or PRH

Datafill the OFSOPTsubfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OFSOPT		Overflow software options. Datafil the OFR subfield and subfields.
	OFS	Y or N	Line overflow increments a software register. If the hunt group is arranged to increment a software register every time a call cannot find an idle line in the hunt group, enter Y. Otherwise, enter N.

OFS = Y

Datafill the SWREGsubfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SWREG	0 to 255	Software register number. If the OFS subfield is set to N, leave this field blank. Enter 0 (zero) to indicate the number to which the software register is initialized. Any entry outside the range of indicated values for this field is invalid.

HUNTGRP (continued)

GRPTYPE = BNN, DLH, DNH, MLH, or PRH

Datafill the LDTLNOPT subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LDTNOPT		Datafill E911PSAP and PSAPTYPE subfields.
	E911PSAP	Y or N	E911PSAP. If option LDTPSAP or LINEPSAP is added to the hunt group, enter Y. Otherwise, enter N. The default value for this field is N.
	PSAPTYPE	LDTPSAP or LINEPSAP	Public safety answering point type. Enter the option that is added to the hunt group.

PSAPTYPE = LDTPSAP

Datafill the ANONCALL, ANISPILL, OVFLFLSH, ENHDISP, NUMIDIGS, NPD_MAPS, NPD, SNPA, PSAPNAME, MNALMPCT, MJALMPCT, CRALMPCT, BSYOTPCT and NATLXLA subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ANONCALL	Y or N	Anonymous call. Enter Y if the PSAP allows calls to terminate to it, other than through E911 translations. Calls are allowed to the PSAP by dialing the seven-digit PSAP DN. Otherwise, enter N to indicate that the PSAP can be reached only by dialing 911.
	ANISPILL	Y or N	Automatic number identification spill. Enter Y if the PSAP receives automatic number identification (ANI) from the E911 tandem. Otherwise, enter N.
	OVFLFLSH	Y or N	Overflow Flash. Enter Y to turn on the ANI flash bit for calls which overflow to the terminating PSAP. Otherwise, enter N. ***Note:*** If the ANISPILL option is set to Y, the user receives the prompt for the OVFLFLSH option.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ENHDISP	Y or N	Enhanced display. Enter Y to turn on the wireless protocol two-line display for PSAPs. Otherwise, enter N. ***Note:*** If the ANISPILL option is set to Y, the user receives the prompt for the ENHDISP option. If the ENHDISP option is set to Y, the NUMIDIGS option is turned off.
	NUMIDIGS	1 or 3	Number of ANI information digits. Enter the number of ANI information digits (1 or 3) the PSAP expects with ANI. ***Note:*** The system does not prompt for NUMIDIGS if ENHDISP is set to Y.
	SNGLSANI	Y or N	Single stream ANI. Enter Y to send a single ANI spill to an LDTPSAP with ENHDISP. ***Note:*** The system prompts for SNGLSANI when ENHDISP is set to Y.
	WANITYPE	CALLBACK LOCATION GENERATED	Wireless ANI type. Enter a value to configure the single stream ANI source. Enter CALLBACK for the mobile directory number. Enter LOCATION for the pseudo ANI. Enter GENERATED to support the WLS911 feature. ***Note:*** The WANITYPE prompt occurs when or after the NUMIDIGS prompt when ENHDISP = Y. • SNGLSANI = Y • ENHDISP = N and NUMIDIGS = 1 or 3

HUNTGRP (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	NPD_MAPS	Vector of <NPD, SNPA>	Numbering plan digit mapping. Enter up to four mappings for each LDT PSAP. Terminate the entry any time before entering the fourth pair by entering a nil vector ($). If the user enters the nil vector for the first pair, the LDT PSAP has no individual mappings. In this case, the LDT PSAP uses table E911NPD when an NPD is needed. If no pairs are present, this option is off. ***Note 1:*** Do not enter an NPD more than once for a PSAP. Do not map an SNPA to more than one NPD for each PSAP. ***Note 2:*** If NUMIDIGS is not set to 1, the system does not prompt for NPD_MAPS.
	NPD	0, 1, 2, 3	Numbering plan digit. Enter the NPDs in any order.
	SNPA	SERVING_ NUMBERING _PLAN_ AREA	Serving numbering plan area. Assign the SNPAs to any of the first set of NPDs (0 through 3). ***Note:*** Invalid NPD or SNPA entries cause errors. Do not map an SNPA to more than one NPD for each PSAP. A PSAP has to have all four NPD mappings defined.
	PSAPNAME	alphanumeric (up to 16 characters)	Public safety answering point name. Enter the name of the PSAP.
	MNALMPCT	0 to 100	Minor alarm percentage. Enter the percentage of LDT PSAP hunt group members required to be busy (in a state other than CPB, IDL, or INB) for the E911_LDTBSY_MINOR alarm to be raised. ***Note:*** If this alarm percentage is set to zero, the minor alarm will not be raised on behalf of the PSAP.

HUNTGRP (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	MJALMPCT	0 to 100	Major alarm percentage. Enter the percentage of LDT PSAP hunt group members that must be busy (in a state other than CPB, IDL, or INB) for the E911_LDTBSY_MAJOR alarm to be raised. ***Note:*** If this alarm percentage is set to zero, the major alarm will not be raised on behalf of the PSAP.
	CRALMPCT	0 to 100	Critical alarm percentage. Enter the percentage of LDT PSAP hunt group members required to be busy (in a state other than CPB, IDL, or INB) for the E911_LDTBSY_CRITICAL alarm to be raised. ***Note:*** If this alarm percentage is set to zero, the critical alarm will not be raised on behalf of the PSAP.
	BSYOTPCT	0 to 100	Busy out percentage. Enter the percentage of hunt group members in an LDT PSAP that can busy out automatically after two consecutive wink failures. ***Note:*** Set this percentage for each PSAP on an individual basis.
	NATLXLA	Y or N	If the entry is 'Y', call translations to the PSAP are based on 10 digits (with NPA) and the PSAPDN field in table E911PSAP is datafilled with 10 digits. If the entry is 'N', call translations to the PSAP are based on 7 digits (without NPA) and the PSAPDN field is datafilled with 7 digits.

HUNTGRP (continued)

PSAPTYPE = LINEPSAP

Datafill the ANONCALL, ENHDISP, NPD_MAPS, NPD, SNPA, PSAPNAME and NATLXLA subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ANONCALL	Y or N	Anonymous call. Enter Y if the PSAP chooses to allow calls to terminate to it, other than through E911 translations. Calls are allowed to the PSAP by dialing the seven-digit PSAP DN. Otherwise, enter N to indicate that the PSAP can only be reached by dialing 911.
	ENHDISP	Y or N	Enhanced display. Enter Y to turn on the wireless protocol two-line display for PSAPs. Otherwise, enter N.
	NPD_MAPS	Vector of <NPD, SNPA>	Numbering plan digit mapping. Enter up to four mappings for each Line PSAP. Terminate the entry any time before entering the fourth pair by entering a nil vector ("$"). If the user enters the nil vector for the first pair, the Line PSAP has no individual mappings. In this case, the Line PSAP uses table E911NPD when an NPD is needed. If no pairs are present, this option is off. ***Note:*** Do not enter an NPD more than once for a PSAP. Do not map an SNPA to more than one NPD for each PSAP.
	NPD	0, 1, 2, 3	Numbering plan digit. Enter the NPDs in any order.
	SNPA	SERVING_ NUMBERING_ PLAN_AREA	Serving numbering plan area. Assign the SNPAs to any of the first set of NPDs (0 through 3). ***Note:*** Invalid NPD or SNPA entries cause errors. Do not map an SNPA to more than one NPD for each PSAP. A PSAP does have to have all four NPD mappings defined.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	PSAPNAME	alphanumeric (up to 16 characters)	Public safety answering point name. Enter the name of the PSAP.
	NATLXLA	Y or N	If the entry is 'Y', call translations to the PSAP are based on 10 digits (with NPA) and the PSAPDN field in table E911PSAP is datafilled with 10 digits. If the entry is 'N', call translations to the PSAP are based on 7 digits (without NPA) and the PSAPDN field is datafilled with 7 digits.

GRPTYPE = BNN, DLH, DNH, MLH, or PRH

Datafill the SIZE subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SIZE	0 to 1024	Size. Enter the expected maximum number of members assigned to the hunt group. If a switching unit has feature Hunt Group Size Expansion for a DNH, DNH, or MLH group, the range is 0 to 1024. For switching units without this feature, the range is 0 to 256. For a BNN hunt group, the range is from 0 to 210.

HUNTGRP (continued)

GRPTYPE = BNN, DLH, DNH, MLH, or PRH

Datafill the OPTION subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OPTION	BCLID, SMDI, SMDICND, TBO, or CT	Option. Enter BCLID if an incoming call to a DNH or PRH group generates a bulk calling line identification (BCLID) message with a seven-digit DN of the member that was terminated on within field CALLED_DN in the BCLID message. An incoming call to a DLH, MLH, or BNN hunt group with the BCLID option generates a BCLID message with an eight-digit hunt group or hunt member number of the member that was terminated on within field CALLED_DN. If no idle members are found in the group, then field CALLED_DN of the BCLID message contains the group and member number of the pilot for DLH and MLH groups. For BNN hunt groups, field CALLED_DN contains the group and member number of the member that was dialed if there are no idle members in the group. In each of the above cases, if there are no idle members in a group, the called line status field of the BCLID message contains B. Enter SMDI if the DMS-100 switch can support various Customer Premise Equipment (CPE), such as Non-Data-Link Consoles (NDLC), Voice Messaging (VMS), and Text Messaging (TMS) systems by providing the user a choice of configuring a simplified message desk interface (SMDI)-based system using hunt groups. Enter SMDICND and datafill the subfields for simplified message desk interface (SMDI)-calling number delivery based system using hunt groups.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
			If the operating company generates AMA records for calls terminating to lines, enter TBO. If a call terminates to a line assigned option TBO, an AMA record with a call code between 800 and 999 is generated for each call terminating to that line. The call code is assigned if the TBO option is added to the line. Enter CT to assign two ISDN hunt groups with different call types to the same directory number (DN). If OPTION CT is selected datafill refinement CALLTYPE.

OPTION = BCLID

Datafill the BCGRPNUM subfield as follows..

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	BCGRPNUM	0 to 2047	Bulk calling line identification group number. Enter the BCLID number assigned to the particular hunt group.

OPTION = SMDI

Datafill the SMDIDESK and SMDILINK subfields as follows..

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SMDIDESK	1 to 63	Simplified message desk interface desk. Enter the message desk number associated with the specified hunt group.
	SMDILINK	alphanumeric	Simplified message desk interface link. Enter the datalink name associated with the message desk.

HUNTGRP (continued)

OPTION = SMDICND

Datafill the CGN_FOR_RES_DIRECT, CGN_FOR_RES_INDIRECT, CGN_FOR_IBN_DIRECT, and CGN_FOR_IBN_INDIRECT subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CGN_FOR_RES_DIRECT	block, deliver, compare_CG	Calling number for RES direct. Specifies delivery of the calling party information given a direct call to SMDI from a RES agent. Enter block, deliver, or compare_CG.
	CGN_FOR_RES_INDIRECT	block, deliver, compare_CG, compare_CG_ALL	Calling number for RES indirect. Specifies delivery of the calling party information given an indirect call to SMDI when the SMDI subscriber (forward-from party) is a RES agent. Enter block, deliver, compare_CG, or compare_CG_ALL.
	CGN_FOR_IBN_DIRECT	block, deliver, compare_CG	Calling number for IBN direct. Specifies delivery of the calling party information given a direct call to SMDI from an IBN agent. Enter block, deliver, or compare_CG.
	CGN_FOR_IBN_INDIRECT	block, deliver, compare_CG, compare_CG_ALL	Calling number for IBN indirect. Specifies delivery of the calling party information given an indirect call to SMDI when the SMDI subscriber (forward-from party) is an IBN agent. Enter block, deliver, compare_CG, or compare_CG_ALL.

OPTION = TBO

Datafill the TBOVARS subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CALLCODE	800 to 999	Call code. Enter the call code for the AMA record.
	SFPRSNT	Y or N	Service feature code presentation. Enter Y if a service code is associated with the feature and is printed on the AMA record. Otherwise, enter N.

SFPRSNT = Y

Datafill the SFVAL subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SFVAL	800 to 999	Service feature value. Enter the code associated with the feature.

OPTION = CT

Datafill the CALLTYPE subfield as follows.

Note: The packet mode data (PMD) call type can only be assigned to hunt group types DLH or DNH. Call type VI_CMD can be assigned to GRPTYPE BNN, DLH, DNH, MLH, or PRH.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CALLTYPE	VI_CMD, or PMD	Call type. Enter the call type for ISDN terminals. Voice interface circuit mode data (VI_CMD) or packet mode data (PMD) to apply to an ISDN DN. Hunt groups of both call types can be applied to the same DN.

GRPTYPE = MPH

Datafill the MPHGRP, CALLTYPE, SIZE, and OPTIONS subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	MPHGRP	0 to 31	Multiple position hunt console group. Enter the MPH console group the hunt group belongs to.
	CALLTYPE	0 to 31	Call type. Enter the call type that the MPH hunt group handles. The call type is an arbitrary numeric value used to differentiate between, for instance, Listed Directory Number calls, Dial 0 calls, and other call types.

HUNTGRP (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SIZE	0 to 1024	Size. Enter the number of members in the hunt group. The maximum acceptable value for this field is 512, even though the range of the type indicates a maximum value of 1024.
	OPTIONS	see subfield	Options. This subfield consists of subfield OPTION.
	OPTION	NSDN or SMDI	For night service, enter NSDN. Enter SMDI if the DMS-100 can support various Customer Premise Equipment (CPE), such as Non-Data-Link Consoles (NDLC), Voice Messaging (VMS), and Text Messaging (TMS) systems by providing the user a choice of configuring an SMDI-based system using hunt groups.

OPTION = NSDN

Datafill the NSDN subfield as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	NSDN	numeric (up to 11 digits)	Night service directory number. Enter the 11-digit DN for NSDN.

OPTION = SMDI

Datafill the SMDIDESK and SMDILINK subfields as follows.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SMDIDESK	1 to 63	Simplified message desk interface desk. Enter the message desk number associated with the specified hunt group.
	SMDILINK	SLLN	Simplified message desk interface link. Enter the datalink name associated with the message desk.

Datafill example

An example of datafill for the HUNTGRP table is shown below.

All the lines in the examples are located in SNPA 613.

Hunt group 0

This hunt group is a non-circular (field CIR) multiline hunt group (fields GRPTYP and GRPTYPE) with a listed DN of 725-2865. The TFO and TRMBOPT fields are set to N, and the service is billed to the number that the terminating office receives (RCVD). If all lines in the group are busy, calls overflow to the OFRT table, index (IDX) 6 (fields LOR, TABID, and KEY). Service is billed to the number received by the terminating office, as set in the TRMBILL field. This group has the CFGDA feature with line type POTS.

The screening class for a forwarded call is ABCD (field SCRNCL).

The maximum number of calls forwarded is 10.

If a call is not answered within 20 s (field TIME), the call is forwarded. The unanswered calls are forwarded to DN 725-2870.

The calls that overflow to the OFRT table are registered on a remote hardware register (field OFR). The SD card is mounted on MTM 0, circuit 14. The SD point is 3, and the normal state of the SD point is open. No software register is incremented (field OFS).

There are no PSAP options.

The hunt group can have a maximum size of 25 members.

Hunt group 1

This hunt group is a non-circular (field CIR) bridged night number (fields GRPTYP and GRPTYPE) with a listed DN of 621-8080. Field TFO is set to Y.

The TRMBOPT field is set to N, and the service is billed to the number that the terminating office receives (RCVD). The hunt group does not overflow to a route if all lines are busy (field LOR). If all lines in the group are busy, calls overflow to DN 621-8025. This hunt group is not provided with feature CFGDA.

Neither a remote hardware registered, nor a software register is incremented (fields OFR and OFS). There are no PSAP options.

The SMDI option is selected using message desk 63 and data link SMDI64.

HUNTGRP (continued)

The hunt group can have a maximum size of 35 members.

MAP display example for table HUNTGRP

```
HTGRP SNPA              DN
                      GRPTYP
                                            GRPDATA
__________________________________________________
    0  613         7252865
                   MLH  N   N   N  RCVD Y OFRT 6
         N           Y POTS ABCD 10  20 7252870
                              Y MTM 0 14 3 0
                                         N
                         N    25            $
  1  613        6218080                  BNN  N
                 Y   N  RCVD N            Y 6218025
        N                   N SMDI 63 SMDI 64
                                        35      $
```

An example of two IBN hunt groups, numbered hunt groups 2 and 3 is described below.

Hunt group 2

This hunt group, which can have a maximum size of 35 members, is a circular directory hunt (DNH) group (fields GRPTYP and GRPTYPE) with a listed DN of 725-2856. This group is not arranged to overflow to a DN or to a route, and does not increment a software or hardware register when all lines in the group are busy. The TFO field is set to N.

Service is billed to the number that the terminating office receives (the TRMBILL field). A record is generated for each call to a member of the hunt group. This hunt group is provided with the Call Forwarding Group Don't Answer feature (the CFGDA field). The MDC call is forwarded to the DN 725-6756.

The base station is rung for 15 s before the call is forwarded. Incoming intragroup calls are denied forwarding.

There are no PSAP options.

Hunt group 3

This hunt group, which can have a maximum size of 20 members, is a non-circular multiline hunt group with a listed DN 825-3911. The members of this hunt group are assigned in a remote location MERIVALE. The

members of this hunt group specify the site (MERV) name of the remote location. The TFO field is set to N.

Service is billed to the number that the terminating office receives (the TRMBILL field). This hunt group is not provided with the Call Forwarding Group Don't Answer feature. There are no PSAP options.

MAP display example for table HUNTGRP

```
 HTGRP SNPA               DN
                        GRPTYP
                                          GRPDATA
_____________________________________________________
    2  613          7252856
                              DNH  Y   N   Y  RCVD N
                       N         Y MDC Y 7256756
                                        Y 15  CFGDI
                       N  N    N    35           $
 3  613        8253911
                          MLH  N   N   N  RCVD N
                        N            N  MDC N
                                           N  N
                                     N    20       $
```

Error messages

If an attempt is made to datafill this table using the table editor, the following error message appears:

```
Protected table, use SERVORD to change.
```

This error message was added for the NA005 release in accordance with feature AN1653 (Enforcement of SERVORD).

All additions, deletions and changes must be entered using SERVORD. For additional information, refer to the *SERVORD Reference Manual*.

If a system error occurs from data corruption, while processing table control commands with DN call type (DNCT), the following error message will be issued:

```
ERROR: FAILED TO READ FROM DNCT PROTECTED DATA.
```

The recommended action is to reissue the command.

HUNTGRP (continued)

If the CALLTYPE option of a group being added in table HUNTGRP to a DN, is the same as the existing CALLTYPE, the following table control error will be reported:

```
ERROR:  A HUNT GROUP ALREADY PROVISIONED ON THIS DN
CALLTYPE.
```

Table history

NA016

When PSAPTYPE = LDTPSAP, added the OVFLFLSH subfield as a subfield to ANISPILL = Y for the 59028729 feature.

NA013

The LODDN field for the LOD option changes to allow a maximum of 30 digits with the 59013034 feature, Hunt LOD Expansion.

NA012

When PSAPTYPE = LDTPSAP, the following changes apply to the ANI spill protocol in the 59006358 feature:

- Added the SNGLSANI subfield as a subfield to ENHDISP = Y.
- Added the WANITYPE subfield as a subfield to the SNGLSANI subfield = Y and to the NUMIDIGS subfield.

The following additions and updates apply to the 59006893 feature, Provisioning for Enhanced Multi-NPA:

- Added information for the NATLXLA subfield under the PSAPTYPE option = LDTPSAP and PSAPTYPE = LINEPSAP.
- Added information on how Provisioning for Enhanced Multi-NPA affects NPA assignment to pilot and member DNs.

NA011

Added the BSYOTPCT option to the PSAPTYPE subfield = LDTPSAP for the AF7782 feature.

NA009

The following entries were changed for NA009:

- Added the ENHDISP option to the PSAPTYPE subfield = LDTPSAP and the PSAPTYPE subfield = LINEPSAP for the AF7232 feature.
- Added the NPD_MAPS, NPD, and the SNPA options to the PSAPTYPE subfield = LDTPSAP and the PSAPTYPE subfield = LINEPSAP for the AF7233 feature.

HUNTGRP (end)

NA008

The following entries are added or changed for NA008:

- Added error information for the table data corruption errors for the AF6777 feature.
- Added supplementary information; modification of hunt group attributes of CS ISDN terminals with DN sharing for the AF6782 feature.
- Added OPTION = CT and the VI_CMD and PMD subfields for DN sharing for the AF6777 feature.

NA007

Updated the Functional description section (PIC with LOD) for the NA007 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the NA007 timeframe.

Removed reference to MPH “Field descriptions for conditional datafill.

NA006

Added the MNALMPCT, MJALMPCT, and CRALMPCT fields to the LDTPSAP option in order to datafill the E911_LDTBSY_MINOR, E911_LDTBSY_MAJOR, and E911_LDTBSY_CRITICAL alarms on percentage of PSAP hunt group members busy.

Removed the CRITERIA and OTHERWISE subfields under the SMDICND option. Added the following fields under option SMDICND: CGN_FOR_RES_DIRECT, CGN_FOR_RES_INDIRECT.

NA005

Added information to “Error messages" section in accordance with feature AN1653 (Enforcement of SERVORD).

NA004

Changed the value for the FDN and CGFDN subfields from “1 to 24" to “1 to 30".

BCS36

Added the SMDICNDoption.

HUNTMEM

Table name

Hunt Group Member

Functional description

Table HUNTMEM lists the members assigned to the hunt groups in table HUNTGRP.

The numbering of the members of each hunt group must be consecutive commencing at 0 (zero).

If the hunt group belongs to an Integrated Business Network (IBN) customer group, the pilot directory number (DN) and the hunt group members must belong to the same customer group.

Call Forward Universal (CFU) and Call Forward Intragroup (CFI) features in table KSETFEAT can be assigned to any DN hunt (DNH) group or the pilot DN of any multiline hunt (MLH) or distributed line hunt (DLH) group that belongs to an IBN customer group. If a hunt member activates one of these features, the call forwarding takes precedence over hunting.

Call Forward Busy (CFB), Call Forward Busy Intragroup (CBI), Call Forward Do Not Answer (CFD), and Call Forward Do Not Answer Intragroup (CDI) features in table KSETFEAT cannot be assigned to members of a hunt group.

Malicious Call Hold (CLF) option and the Calling Line Identification (CLI) feature in table KSETFEAT can be assigned to a hunt group on a group basis only.

The following key-activated features can be assigned to DNH, MLH, or DLH groups:

- Random Make Busy (RMB)-directionalizes a preselected list of lines into one-way outgoing lines only.
- Stop Hunt (SHU)-cancels hunting at a line if activated. This feature can be assigned to one, several, or all lines in a hunt group. When this feature is activated (key operated) on a line in a DLH group, the hunting algorithm changes to MLH for the duration that the key is operated.

IBN business sets with feature Business Set Key Short Hunt (KSH) in table KSETFEAT, cannot be assigned as a member of DNH, DLH, or MLH hunt groups.

HUNTMEM (continued)

Members of a DNH group that are members of a Preferential Hunt (PRH) list must be deleted from table PREFHUNT before being deleted from table HUNTMEM.

To verify which PRH lists a member is assigned to, perform a query DN (QDN) or query line equipment number (QLEN) on that line.

The following error message appears if an attempt is made to datafill this table using the table editor:

```
Protected table, use SERVORD to change.
```

This error message was added for the NA005 release in accordance with feature AN1653 (Enforcement of SERVORD).

All additions, deletions and changes must be entered using the Service Order System (SERVORD). For information, refer to the *SERVORD Reference Manual*.

If a system error occurs from data corruption, while processing table control commands with DN call type (DNCT), the following error message will be issued:

```
ERROR: FAILED TO READ FROM DNCT PROTECTED DATA.
```

The recommended action is to reissue the command.

Feature ISDN PKT single DN (AF6872) allows DLH, DNH, MLH, or PRH hunt groups to be assigned on the voice interface (VI) circuit mode data (CMD) appearance of a shared DN. Only DLH and DNH type hunt groups can be assigned to the packet data mode (PMD) appearance of a DN. A DN can only be datafilled as shared if SOC option NI000051 is on.

The following table control rules for shared ISDN terminals apply to table HUNTMEM:

- Members can be added to hunt groups for circuit switched (CS) and packet switched (PS) NI2 ISDN terminals provisioned on the same DN.
- Attributes of members of hunt groups provisioned for CALLTYPES PMD and VI_CMD on the same DN can be changed.
- Hunt groups provisioned as shared DN can be deleted.

Datafill sequence and implications

The following tables must be datafilled before table HUNTMEM:

- HUNTGRP
- IBNLINES
- LENLINES
- KSETLINE

If option LOR is active, table IBNRTE or table OFRT must also be datafilled before table HUNTMEM as well.

Table size

0 to 32 767 tuples

If a switching unit has feature Hunt Group Size Expansion, the maximum number of members for a DLH, DNY, or MLH group is 1024.

For switching units without feature Hunt Group Size Expansion, the maximum number of members for a DLH, DNH, or MLH group is 256.

A bridged night number (BNN) hunt group can have a maximum of 210 members.

Datafill

The following table lists datafill for table HUNTMEM.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
HTGRP		0 to 8191	Hunt group number key. Enter the hunt group number the member belongs to. Any entry outside of the range is invalid.
SEQNO		0 to 1023	Line hunt sequence number. Enter the line hunt sequence number assigned to a specific member of a hunt group.
INSERT		Y or N	Insert. Enter Y (yes) if making an addition to an existing hunt group. The new member is inserted in the hunt group list at a specific location other than the last. Enter N (no) for initial input, or if adding a new member to the end of an existing hunt group list.

HUNTMEM (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
HTMDATA		see subfield	Hunt member data. This field consists of subfield SEL.
	SEL	B, D, L, or P	Select hunt group type. Enter bridged night number (B), directory number (D), multiline or distributed line (L), or multiple position (P) to specify the hunt group type.

Subfield SEL = B

If the entry for field SEL is B, datafill subfields HTGRP, HTMEM, and BNNDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	HTGRP	0 to 8191	Hunt group. Enter the number of the hunt group the BNN is assigned to. An entry outside of this range is invalid.
	HTMEM	0 to 1023 (up to 15 digits)	Hunt member. Enter the member number in the hunt group the BNN is assigned to.
	BNNDN	10-digit DN with NPA (maximum is 15 digits)	Bridged night number directory number. Enter the BNN. ***Note:*** Due to feature 59006893, Provisioning for Enhanced Multi-NPA, this DN can contain an NPA different fromt hat of the pilot DN when the feature is enabled. If 7 digits are entered, the pilot NPA is used with this DN.

Subfield SEL = D

If the entry for field SEL is D, datafill subfields DN and BNNDAT.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DN	10-digit DN with NPA (maximum is 15 digits)	Directory number. Enter the DN assigned to the hunt group sequence number. ***Note:*** Due to feature 59006893, Provisioning for Enhanced Multi-NPA, this DN can contain an NPA different fromt hat of the pilot DN when the feature is enabled. If 7 digits are entered, the pilot NPA is used with this DN.
	BNNDAT	see subfield	Bridged night number data. This field consists of subfield SEL.
	SEL	Y or N	Selector for bridged night number. If the member is assigned a BNN, enter Y. Otherwise, enter N.

Subfield SEL = Y

If the entry for field SEL is Y, datafill refinement BNNDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	BNNDN	10-digit DN with NPA (maximum is 15 digits)	Bridged night number directory number. Enter the DN of the BNN. ***Note:*** Due to feature 59006893, Provisioning for Enhanced Multi-NPA, this DN can contain an NPA different fromt hat of the pilot DN when the feature is enabled. If 7 digits are entered, the pilot NPA is used with this DN.

HUNTMEM (continued)

Subfield SEL = L

If the entry for field SEL is L, datafill subfields LEN and BNNDAT.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	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.
	BNNDAT	see subfield	Bridged night number data. This field consists of subfield SEL.
	SEL	Y or N	Selector for bridged night number. If the member is assigned a BNN, enter Y. Otherwise, enter N.

Subfield SEL = Y

If the entry for field SEL is Y, datafill refinement BNNDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	BNNDN	10-digit DN with NPA (maximum is 15 digits)	Bridged night number directory number. Enter the DN of the BNN. ***Note:*** Due to feature 59006893, Provisioning for Enhanced Multi-NPA, this DN can contain an NPA different fromt hat of the pilot DN when the feature is enabled. If 7 digits are entered, the pilot NPA is used with this DN.

Subfield SEL = P

If the entry for field SEL is P, datafill subfields LEN, MPHCON, and CONLINE.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LEN	see subfields	Line equipment number. This field consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, and CIRCUIT. See a description of these subfields under hunt group type DLH or MLH (field SEL = L).
	MPHCON	0 to 31	MPH console. Enter the MPH console the LEN is attached to. This is the index into table MPHCON.
	CONLINE	1 to 32	Console data line number. Enter the line number of the LEN on the specified non-data link console.

Datafill example

An example of datafill for table HUNTMEM is shown below.

The example shows memory allocated for 100 hunt group members. and lists some of the members of hunt groups 0, 1, 2, 3, and 4. See table HUNTGRP for the hunt group data and the maximum number of members that can be assigned to the above hunt groups.

The individual line assignments for each of the hunt group members are assigned in table LENLINES for plain ordinary telephone service (POTS) lines, table IBNLINES for IBN lines and table KSETLINES for business sets.

Hunt group 0 is an MLH hunt group and the example shows data for the three members: 0, 1, and 2.

Member number 1 is assigned feature SHU in table KSETFEAT.

Member number 2 is assigned BNN 725-1998.

Hunt group number 1 is a DLH hunt group and the example shows data for member numbers 0, 1, and 2.

Member numbers 1 and 2 are assigned BNNs 725-2871 and 725-2872 respectively.

HUNTMEM (continued)

Hunt group number 2 is a DNH hunt group and the example shows data for the three members: 0, 1, and 2. Each member is assigned a DN.

Member numbers 0 and 2 are arranged for features RMB and SHU (as set in table KSETFEAT).

If features SHU and RMB are activated, only calls to DN 725-2857 (BNN0 are allowed to terminate. Calls to 725-2855 and 725-2856 receive a busy tone.

Hunt group number 3 is an MLH hunt group and the example shows data for the two members, 0 and 1.

This hunt group is located at the Merivale remote location, which has a site name MERV.

Hunt group number 4 is an multiple position hunt group and the example shows data for member 1.

MAP display example for table HUNTMEM

```
HTGRP SEQNO INSERT HTMDATA
_____________________________________________________

   0     0      N                L       00 0 04 07 N
   0     1      N                L       00 0 05 07 N
   0     2      N L       00 0 06 07 Y         7251998
   1     0      N                L       01 0 03 04 N
   1     1      N L       00 1 04 07 Y         7252871
   1     2      N L       01 1 02 08 Y         7252872
    2     0      N                 D          7252856 N

    2     1      N                 D          7252857 N

    2     2      N                 D          7252855 N

    3     0      N                L MERV  00 0 03 06 N

    3     1      N                L MERV  00 1 02 08 N

    4     1      N             P HOST  00 1 04 09  2  1
```

Table history

NA012

The following updates apply to feature 59006893, Provisioning for Enhanced Multi-NPA:

- updated information on DN subfield when SEL=D
- updated information on BNNDN subfield when SEL=B
- updated information on BNNDN subfield when SEL=Y

NA008

The following entries are added or changed for NA008:

- Added warning information for table control data corruption errors feature AF6777.
- Added warning information for CALLTYPE mismatch in support of feature AF6777.
- Added supplementary information; modification of hunt member attributes of CS ISDN terminals with DN sharing feature AF6782.

NA005

Error message added to “Functional description" section in accordance with feature AN1653 (Enforcement of SERVORD).

Supplementary information

This section provides information on datafilling table HUNTMEM for specific applications, and product descriptive information related to table HUNTMEM.

Table control error messages

The following checks verify members that are added to a hunt group with option LDTPSAP or LINEPSAP:

- An error message is generated if a hunt member is added to table HUNTMEM, the corresponding hunt group in table HUNTGRP has option LDTPSAP datafilled, and the card code of the pilot is not PSAPWA, PSAPWN, or PSAPNN.
- If the hunt group has option LDTPSAP, the card code of the pilot must be PSAPWA, PSAPWN, or PSAPNN.
- An error message is generated if a hunt member is added to table HUNTMEM, the corresponding hunt group in table HUNTGRP has option LDTPSAP datafilled, and the card code of a member and the pilot do not match.

HUNTMEM (end)

```
MEMBER CARD CODE DOES NOT MATCH PILOT CARD CODE
```

- An error message is generated if a hunt member is added to table HUNTMEM, the corresponding hunt group in table HUNTGRP has option LDTPSAP datafilled with field ANISPILL = Y, and the card code of the member is not PSAPWA.

```
ANISPILL = Y, CARD CODE MUST BE PSAPWA
```

- An error message is generated if a hunt member is added to table HUNTMEM, the corresponding hunt group in table HUNTGRP has option LDTPSAP datafilled with field ANISPILL = N, and the card code of the member is not PSAPWN or PSAPNN.

```
ANISPILL = N, CARD CODE MUST BE PSAPWN or PSAPNN
```

- An error message is generated if a hunt member is added to table HUNTMEM and the corresponding hunt group in table HUNTGRP has option LDTPSAP datafilled with field NUMIDIGS = 2.

```
NUMIDIGS MUST BE 1 OR 3
```

- An error message is generated if a hunt member is added to table HUNTMEM and the corresponding hunt group in table HUNTGRP option LDTPSAP datafilled with field NUMIDIGS = 1 and office parameter E911_PSAPS_USING_1_INFO_DIGIT = N in table OFCSTD.

```
NUMIDIGS MUST BE 3 IF E911_PSAPS_USING_1_INFO_DIGIT = N
```

- An error message is generated if a hunt member is added to table HUNTMEM and the corresponding hunt group in table HUNTGRP has option LINEPSAP datafilled and a LDT card code is used for the pilot or member line equipment numbers (LEN).

If the HUNTGROUP has option LINEPSAP, the card code of the member must not be PSAPWA, PSAPWN, or PSAPNN.

If the CALLTYPE of a member being added or changed in table HUNTMEM is different from the CALLTYPE of the hunt group, the following table control error will be reported:

```
ERROR: CALLTYPE MISMATCH BETWEEN HUNT GROUP AND MEMBER.
```

For more information about DN CALLTYPE sharing, see subfield OPTION in table HUNTGRP and feature AF6782 in the Feature Description Manual.

HWM

Table name

High Water Mark

Functional description

Table HWM is an internal-use only table. The table holds high water marks (HWM) for the different pools that are bound to the CPPOOLMGR. This table allows HWMs to transfer from one software load to another load.

The HWMs indicate peak use of pools in the current software load. This table retains HWM information. The information in the table allows the pool to begin at normal levels of use. The pool levels do not increase without growing after a software upgrade.

Note: Table HWM is a read-only table.

Datafill sequence and meaning

Enter data in table OFCENG (Office Engineering) before you enter data in table HWM. Data entries in office parameter Dynamic_Memory_Size occur first. These data entries provide the total amount of memory available for every table of dynamic resources that the CPPOOLMGR handles.

Table size

256 tuples

HWM (end)

Datafill

Datafill for table HWM appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NAME		0 to 255	Pool name. This field provides a view to the pool names the CPPOOLMGR the CPPOOLMGR binds. The IPL restart entry code of current processes binds the entries.
HWM		0 to 2147483647	High water mark. This field is an index to the data structure of POOLEX. The system reads entries from this field from the data store structure.
Note: Telephone operating company personnel cannot change these fields.			

Datafill example

Sample datafill for table HWM appears in the following example.

MAP example for table HWM

```
        NAME                              HWM
  ------------------------------------------------------
  FTRQAGENTS                             00000000
  FTRQ0WAREAS                            00000000
```

Table history

TL05

This table was first released in TL05.

Additional information

There is no additional information.

IACINV

Table name

ISDN Access Controller Inventory Table

Functional description

Table IACINV is used to maintain a list of ISDN Access Controllers (IACs), which are datafilled in the DMS system, and identify where the IAC is located, the LOAD and the EXEC lineups required, and the network link connections.

A minimum of three C-side ports must be datafilled in table IACINV in order to connect the IAC to the network. The network modules must also be datafilled in the office in table NETWORK, before an IAC can be datafilled.

When the IAC is initially added to the IACINV table, the state of the PM is marked `OFFL'.

Deletion of an IAC entry can only be done when the state of the IAC is marked `OFFL' on the MAP and when all the STCM groups and P-side link connections are deleted from the corresponding entry in the IACPSINV table.

C-side links can be added, deleted, and moved with the IAC in service. When a C-side link is added, it is initially set to ManB. To delete a C-side link, the link must first be set to ManB, then removed from the IACINV table. Also, to move C-side links, the links must be set to ManB or the IAC must be in a ManB or OFFL state. A static data update is required in the IAC when a C-side link is changed to enable or disable IAC link maintenance. A static data update is also required when the exec lineup or the optional card list is changed.

In field EXECTAB, termtypes PRAD and PRAB are used for D and B channels for Primary Rate Access (PRA). The execs mapped to this IAC are DTCEX, FXODTC, UTR250 and DMS250.

The IAC type and the IAC number constitute the key for both the IACINV and IACPSINV tables. The only action allowed in the IACPSINV table is tuple updates. The addition of a tuple in table IACINV will automatically create a corresponding tuple in table IACPSINV. Similarly the deletion of a tuple in table IACINV will also result in the automatic deletion of the corresponding tuple in table IACPSINV.

Datafill sequence and implications

The following tables must be datafilled before table IACINV:

- PMLOADS
- NETWORK

IACINV (continued)

Datafill

The following table lists datafill for table IACINV.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
IACNAME		see subfields	*ISDN access controller name* This field consists of subfields XPMTYPE and XPMNO.
	XPMTYPE	IAC, RCC2, SRCC	*Peripheral module type* Enter the type of peripheral module.
	XPMNO	0 to 127	*Peripheral module number* Enter the peripheral module number.
FRTYPE		IAE	*Frame type* Enter the frame type on which the peripheral module equipment is mounted on. Any entry outside the range indicated for this field is invalid.
FRNO		0 to 511	*Frame number* Enter the number of the frame on which the peripheral module is mounted.
SHPOS		0 to 77	*Shelf position* Enter the position of the lower of the two units on the frame, in inches above the floor level.
FLOOR		0 to 99	*Floor* Enter the floor on which the peripheral module frame is located.
ROW		A-H, J-N, P-Z, AA-HH, JJ-NN, or PP-ZZ	*Row* Enter the row on the floor in which the peripheral module frame is located.
FRPOS		0 to 99	*Frame position* Enter the bay position of the peripheral module equipment frame.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
EQPEC		6X02AAor MX85AA	*Equipment product engineering code* Enter the product engineering code of the peripheral module. PEC code of RCC2 is MX85AA.
LOAD		alphanumeric(up to 8 characters)	*Load* Enter the name given to the issue of peripheral module software. For a list of available names, see the batch change supplement for the appropriate BCS release.
EXECTAB		see subfields	*Executive table* This field consists of subfields TRMTYPE and EXEC. This is a vector of up to 8 entries. A minimum of one entry is required.
	TRMTYPE	ISDNSETM5X09 M5X12PRADorP RAB	*Terminal type* Enter the type of peripheral module terminals used: ISDNSET for ISDN lines; M5X09 or M5X12 for voice and data lines; or PRAD or PRAB for D or B channels.
	EXEC	ISDNEX KSETEX DTCEXS FXODTC DMS250 UTR250orADTC IX	*Executive programs* Enter the set of executive programs required for the peripheral module specified in TRMTYPE entry. Currently only ISDNEX is valid for the IAC.
CSLNKTAB		see subfields	*C-side link table* This field is a vector of up to 16 multiples of the subfields belonging to this field. For switches equipped with the junctored network (JNET), this field consists of subfields NMPAIR and NMPORT. For switches equipped with the enhanced network (ENET), this field consists of subfields ENPAIR, ENSLOT, ENLINK, and ENDS30.

IACINV (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NMPAIR	0 to 31	*Network module pair number* Enter the network link on which the peripheral module is assigned, corresponding to C-side links 0 to 15 of the peripheral module.
	NMPORT	0 to 63	*Network port* Enter the network port corresponding to the network link datafilled in field NMPAIR.
	ENPAIR	0 to 3	*ENET pair number* Enter the network pair number on which the peripheral module is assigned, corresponding to C-side links 0 to 15 of the peripheral module.
	ENSLOT	13 to 19 (for ENET 16K) 10 to 16 25 to 32 (for ENET 128K)	*ENET slot number* Enter the crosspoint slot number on which the peripheral module is assigned, corresponding to C-side links 0 to 15 of the peripheral module.
	ENLINK	0 to 18	*ENET link number* Enter the link on the crosspoint on which the peripheral module is assigned, corresponding to C-side links 0 to 18 of the peripheral module.
	ENDS30	0 (see note)	*ENET DS-30 equivalent link number*Enter an ENET DS-30 equivalent link number (0 to 15) on a fiber link to an ENET. ***Note:*** This field defaults to 0, since it is not used for DS-30 links.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
OPTCARD		CONTINUITY, TONE6X79, UTR8, UTR9, UTR15, or UTR16	*Optional card* Enter the IAC optional cards.
PECS6X45		6X45AA 6X45AB 6X45AB 6X45CA 6X45AD 6X45AE 6X45AF 6X45BA 6X45BB(table of 2)	*6X45 equipment PECS* Enter the two product engineering codes of the 6X45 card. One PEC is required for each unit of the XPM. Enter the PEC for unit 0 first. The PEC that is datafilled for a unit must be the minimal among the 6X45s in its processor complex.

Datafill example

The following example shows sample datafill for table IACINV.

MAP display example for table IACINV

```
IACINV
  FRTYPE   FRNO   SHPOS   FLOOR   ROW FRPOS   EQPEC   LOAD
                              EXECTAB
                              CSLNKTAB
                              OPTCARD

  PECS6X45
_____________________________________________________________

IAC 0
  IAE      0       18      0      C    3       6X02AA   IA20A1
                                ( PRAD KSETEX)$
                                (2 10 4) (3 11 6) (5 15 9)$
                                 $
6X45CA 6X45CA
```

IACPSINV

Table name

ISDN Access Controller P-side Inventory Table

Functional description

This table contains all the P-side ports link information. An entry is automatically added when an integrated services digital network (ISDN) access controller (IAC) is added in table IACINV. Signaling Terminals Controller Modules (STCM) group numbers associated with the IAC are datafilled in this table.

Note: Addition or deletion of an entry is restricted in table IACPSINV. Only tuple changes are allowed.

A maximum of 10 STCMs (0 to 9) and one signaling terminal (ST) extension frame are allowed for each IAC. Four STCMs reside on the IAC frame and are numbered 0 to 3, while the remaining six reside on the ST extension frame (ST7E) and are numbered 4 to 9. STCM group 0 is reserved for packet handler interface (PHI) STs, and STCM groups 1 to 9 are used for the D-channel handler (DCH) STs. STCM group 0 must be datafilled in table IACPSINV.

There are ten dedicated P-side ports reserved for the STCMs as shown in the following table.

Dedicated P-side ports for STCMs

STCM group	Dedicated P-side port
0	2
1	3
2	6
3	7
4	10
5	11
6	14
7	15
8	18
9	19

None of these ports can be assigned to DS30A or DS-1 links. Only the remaining P-side ports can be datafilled with link information, and only ports 16 and 17 can support DS-1 links.

P-side ports for link allocation

The P-side ports available for link allocation are as follows: 0, 1, 4, 5, 8, 9, 12, 13, 16, and 17.

Datafill sequence and implications

The following tables must be datafilled before table IACPSINV.

- CARRMTC
- IACINV

Datafill

The following table lists datafill for table IACPSINV.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
IACNAME		see subfields	*ISDN access controller name* This field consists of subfields XPMTYPE and XPMNO.
	XPMTYPE	IAC	*Peripheral module type* Enter the type of peripheral module.
	XPMNO	0 to 255	*Peripheral module number* Enter the peripheral module number.
STCMODS		2 to 9 (vector of up to 10)	*STC modules* Enter the STC modules that are equipped on the IAC or on the STCM extensions frame (ST7E). STC modules 0 to 3 reside on the IAE frame and STC modules 4 to 9 reside on the ST7E frame. Do not put a space between each entry and do not end the vector with a $. Any entry outside the range indicated for this field is invalid.

IACPSINV (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
STCLOADS		alphanumeric (up to 8 characters)	*STC loadfile* Enter the STC loadfile names that are downloaded to the IAC. Up to 2 STC loads can be stored in the IAC.
EXTEQPD		see subfield	*Extension equipped* This field consists of subfield EXTFRAME and refinements.
	EXTFRAME	Y or N	*Extension frame* Enter Y (yes) if an ST7E frame exists and continue datafill for this table. Otherwise, enter N (no); no other datafill is required.
	EXTFRTYPE	ST7E	*Extension frame type* Enter the frame type.
	EXTFRNO	0 to 511	*Extension frame number* Enter the frame number of the extension frame.
	EXTFRPOS	0 to 99	*Extension frame position* Enter the bay position of the extension frame.
PSLNKTAB		see subfields	*P-side link info*This field consists of subfields PSLINK and PSDATA.
	PSLINK	0 to 19	*P-side link* Enter the P-side port number. Refer to the section ``Functional description'' for restrictions.
	PSDATA	DS30A, DS1, DS1PRA, D30, or NILTYPE	*P-side data* Enter DS1 for DS-1 type interface card for trunks and remote LCM, DS30A for P-side interface to local LCM, D30 for interface to PCM-30 trunks and DS1PRA for interface to ISDN trunks. NILTYPE is the default value and must not be datafilled for initial input.

PSDATA = DS30A or NILTYPE

If the entry in field PSDATA is DS30A or NILTYPE, no further datafill is required.

PSDATA = DS1 or D30

If the entry in field PSDATA is DS1 or D30, datafill fields CARRIDX and ACTION as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CARRIDX	alphanumeric (1 to 16 characters)	*Carrier index* Enter DEFAULT for the default template name in table CARRMTC or enter a valid template name (which must be datafilled in CARRMTC).
	ACTION	Y or N	*Action* Enter Y if the carrier is removed from service when the out-of-service limit for frame, slip, errored-second, or severe-errored-second is exceeded.

PSDATA = DS1PRA

If the entry in field PSDATA is DS1PRA, datafill fields CARRIDX, ACTION, and IID as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CARRIDX	alphanumeric (1 to 16 characters)	*Carrier index* Enter DEFAULT for the default template name in table CARRMTC or enter a valid template name (which must be datafilled in CARRMTC).

IACPSINV (end)

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ACTION	Y or N	*Action* Enter Y if the carrier is removed from service when the out-of-service limit for frame, slip, errored-second, or severe-errored-second is exceeded.
	IID	0 to 31	*Interface identifier* This field is used for Primary Rate Access (PRA) and the value entered must match the IID datafilled in the equipment which terminates the DS-1. Each DS-1 must have a different IID. The IID need not start with zero (0), or be consecutive.

Datafill example

The following example shows sample datafill for table IACPSINV.

The example shows the datafill information for IAC 0. In this example, IAC 0 contains STCMs 0, 1, 2 , 3, 4 and 5, which requires an STC load of either DCH20A1 or PHI20A1 from the IAC. An extension frame is used to support STCM 4 and 5. There are five P-side links datafilled. Ports 9, 12, and 13 support DS30A links while ports 16 and 17 support DS-1 links (trunk).

MAP display example for table IACPSINV

```
IACNAME     STCMODS       STCLOADS
                        EXTEQPD
                        PSLNKTAB
_____________________________________________________________
IAC 0       012345        (DCH20A1) (PHI20A1)
                         Y ST7E 0 1
                        (9 DS30A) (12 DS30A) (13 DS30A)
(16 DS1 DEFAULT Y) (17 DS1 DEFAULT N) $
```

IALTRTE

Table name

ITOPS International Alternate Routing Table

Overview

The following is a list of all the International Traffic Operator Position System (TOPS) (ITOPS) call routing and operator tables:

- ALTRTE
- ICNTRY
- IFORINW
- IFORDA
- IDBCLASS

The ITOPS call routing and operator tables are used by the ITOPS in the following international call handling features:

- feature AG0927 (ITOPS Delay Call Database), including booked call database administration device (DADS) teletype (TTY)
- Alternate Routing

ITOPS Delay Call Database and DADS TTY

The ITOPS Delay Call Database stores the details of international calls that cannot be completed for use in future attempts to complete the call. All calls stored in the delay call database can be retrieved using the calling party's directory number (NPA-NXX-XXXX) or the serial number assigned to the call when it was stored in the database.

The ITOPS Delay Call Database is administered through the DADS TTY device.

The ITOPS operator activities associated with the operation of the ITOPS Delay Call Database are the following:

- database call storage
- database call retrieval
- database call modification
- database call deletion (single or mass)
- database call processing

IALTRTE (continued)

The commands and reports available at the DADS TTY are the following:

- Reports:
  - printout of deleted database calls
  - printout of mass deleted calls
- Commands
  - DQ: display database entry
  - DD: delete database entry
  - DT: display database thresholds
  - DC: change database thresholds
  - DP: turn printing on or off of deleted calls
  - DB: print a subset of the calls in the database
  - DM: set or display mass deletion period
  - DV: display the number of calls on a country basis
  - DO: display the number of old calls in the database

The following is a sample TTY output:

```
DEL DB
6132391234   0226 0900 STA SPL CLG T&C FRED
43123456   AUSTRIA  020 HOTEL FREDS FRIEND
260051 0400 DELAY  1111 2012A 6132391243XXXX
THIS GUY IS A REAL NUT CASE, BE NICE TO HIM
```

Where the format of the report is the following:

```
Report_Type

Calling_Number mmdd hhmm billing_type T&C Calling_Name
Called_Number Country_Name Alt_Rte_Name Class Called_Name
Serial_Number Delay Delay_Type Operator Room Special_Number
Memo
```

where

- Report_Type identifies the report (for example, DEL DB is a deleted call print).
- Calling_Number contains a calling number up to 18 alphanumeric characters long. A calling number less than 18 characters is left justified and padded with blanks to the right of the number.
- mmdd is the date when the call was originally stored in the database.

- hhmm is the time when the call was originally stored in the database.
- Billing_Type is an 11-character field broken into two parts separated by a space. The first part is three characters and the second part is seven characters. The values for the fields are:
  - — first field (two values)
    - – STA (station-to-station call)
    - – PER (person-to-person call)
  - — second field (four values)
    - – COL (collect call
    - – PD (paid call (not collect)
    - – SPL CLG (special-calling call [calling party is billing the call to a special number])
    - – SPL CLD (special-called call [called party is billing the call to a special number])
- T&C has two possible values: time and charge (T&C) or three blank spaces. If T&C is present, this indicates that time and charges is requested on this call.
- Calling_Name contains the name of the calling party and consists of up to 20 alphanumeric characters. If the operator does not input a calling name this field remains blank.
- Called_Number contains a called number up to 18 alphanumeric characters long. If the called number is less than 18 characters it is left justified and padded with blank spaces to the right of the number.
- Country_Name contains 12-characters of the name of the country being called. The name is left justified and is found in table ICNTRY.
- Alt_Rte_Name is the 3-character abbreviation for the alternate route. If no alternate route was used, this field remains as three blank spaces. This abbreviation is the same one the operator sees on the screen when selecting an alternate route. This alternate route is datafilled in table IALTRTE.
- Class is the class of service. This six-character field can contain either of the following:
  - — HOTEL (if the party paying for the call is calling from a hotel)
  - — blank (if the party paying for the call is calling from a location other than a hotel)

IALTRTE (continued)

- Called_Name contains the name of the called party and consists of up to 20 alphanumeric characters. If the operator has not entered a called name, the field remains blank.
- Serial_Number is the six-digit serial number assigned to the call when it was stored in the database.
- Delay contains the total delay time for a timed-delay call. The entry is formatted as HHMM (hours and minutes). If a time was not entered for the call, this field remains blank.
- Delay_Type is the delay type used for the call. This seven-character field contains the database call class datafilled by the customer in table DBCLASS.
- Operator_Number contains the operator number of the last operator to store this call in the database.
- Room is a six-character field contains the room number of the party paying for the call, if the paying party is calling from a hotel. If the paying party is not calling from a hotel, this field remains blank.
- Special_Number is an 18-character field contains the special billing number, if one was used, and is printed left justified.

  Note: If a national calling card number is used, the last four digits (the PIN code) contains XXXX.

- Memo is the memo that was stored with the call data. This is a field of up to 64 alphanumeric characters. If a memo was not stored with the call, this line is not printed.

Most of the data in the ITOPS Delay Call Database is entered by the ITOPS operator . The following data is entered in table IDBCLASS:

- the class number
- the screen display associated with the class number
- the the first party to outpulse (calling or called), for a specified class number, once a timed delay call comes up for call processing

Alternate routing

Alternate routes are used by ITOPS operators to complete calls or to reach operators in a foreign country, when it is not possible to do so using a direct route. An alternate route may be used under the following conditions:

- there are no direct routes to the country

  Note: This is identified to the operator when an attempt is made to route directly to a country (using the FOR keypulse foreign key) and an alternate route is automatically displayed.

- a direct route exists to the country but the ITOPS operator is not able to make a connection over this route

Alt Rte (Alternate Route) key

This key is used by the operator to access the alternate route list for a given country. The country code must be entered, using the FOR (foreign) key for the ALT RTE key to function.

If a foreign number is entered (FOR + digits + START), table ICNTRY is checked to see if a direct route exists to this number. If no direct route exists, the first alternate route in the alternate route list (table ICNRTY) is displayed to the operator:

```
ALT RTE: LON
```

The operator can either outpulse to this route or use the ALT RTE key to select the next route in the alternate route list. If the operator is unable to complete the call using the alternate route, the operator can choose the next alternate route by using the ALT RTE key again.

Any time an alternate route is displayed, the operator can choose not to outpulse to this route. The alternate route key can be used instead to display the next route in the list. The operator can go through the list until a suitable alternate route is found.

The alternate route list for a country can have zero to six alternate routes in it. If the operator requests an alternate route and one is not available (because none are datafilled in the list or the operator has already exhausted the list), then the following is displayed:

```
ALT RTE:
```

IALTRTE (continued)

This tells the operator there are either no alternate routes for this country or the entire list has been viewed. At this point the operator can do one of three things:

- tell the customer to attempt the call at another time, or book the call for the customer
- go back to the top of the alternate route list (This is done by hitting the ALT RTE key again.)
- try to complete the call again using the direct route (Hitting START erases the alternate route display and attempts to outpulse to the direct route. If a direct route does not exist, then keying START re-displays the first route in the alternate route list on the screen.)

If the ALT RTE key is used on a call that is of foreign origin or if the called number on a nationally originated call is a national number, the following display is given to the operator to indicate that alternate routes are not allowed:

```
<ALT RTE:>
```

DA (Directory Assistance) and INW (Inwards) Keys

The operation of the DA and INW keys are identical and are detailed together in this description.

These keys are used by the operator to indicate that foreign Directory Assistance (DA) or Inwards (INW) assistance is required for a call. These keys are used in conjunction with the FOR key. If these keys are used with any other key they are ignored.

A forward party must not be connected to the call when the DA/INW key is used. If a forward party is attached to the call the key action is ignored.

The following keying sequence is used by the ITOPS operator to connect to the DA or INW operator:

```
>FOR + digits + DA/INW + START
```

> ***Note:*** The DA or INW key in this keying sequence is not position dependent (it may be entered before or after the digits). The digits are the called country code or the country and city code.

Upon successful input the following display appears at the ITOPS:

```
ALT RTE: DA (or INW)
```

If no digits are entered in the keying sequence the country for which DA or Inwards is required is the country associated with a previously entered called number. If no foreign called number had been entered then the following display is given to the operator to indicate that a number is required:

```
<CLD :>
```

If a forward number has not been entered or the country code is different from the country code already entered (by the FOR Key), then the country code (and possibly city code) is displayed to the operator in the CLD number field.

Direct route

If a direct route exist for a country, table ICNTRY is checked for available DA/INW numbers.

If only one DA/INW number exists for this country, the number is outpulsed and the ITOPS displays the following:

```
ALT RTE: DA (or INW)
```

If more than one DA/INW number exists for a country and the ITOPS operator has entered both the country and city code, the number is outpulsed and the ITOPS displays the following:

```
ALT RTE: DA (or INW)
```

If more than one DA/INW number exists and the operator has input only the country code, the following display appears at the ITOPS to indicate that a city code is also required:

```
ALT RTE: CITY
```

The following keying sequence is used by the ITOPS operator to input the city code:

>FOR + digits + DA/INW + START

where

the digits are the called DA/INW country and city code.

The DA/INW number is outpulsed and the ITOPS displays the following:

```
ALT RTE: DA (or INW)
```

IALTRTE (continued)

No direct route

When a direct route to a foreign country does not exist, routing to a DA/INW operator for that country must be completed using an alternate route. The first alternate route from the alternate route list is taken from table ICNTRY. The screen display for the appropriate alternate route is found and displayed to the ITOPS operator as follows:

```
ALT RTE: aaa
```

where

aaa
is the three-character name of the alternate route.

For further information on alternate routes refer to the description of the ALT RTE key.

Once a connection to a DA/INW operator has been established, keying RLS CLD followed by START can result in either of the following:

- If there has been a valid foreign number entered (using the FOR key), then this number is outpulsed, not the number associated with the DA/INW number. In order to outpulse to the DA/INW operator the keying sequence FOR DA/INW (digits) START must be keyed in.
- If no foreign billing number is entered, the DA/INW number is outpulsed again.

Entering a new forward number

Entering any new forward number (national or foreign) erases any previous DA, INW, or ALT RTE information from the operator screen. This happens whether the forward party is released or not.

False supervision

There is a false supervision indicator in table ICNTRY for each country. This indicates that answer supervision is not reliable for that country and the operator must stay on the line until a verbal answer is received. For calls marked for false supervision, the answer time is the time the operator keys ST TMG.

START (start) in isolation key

If the START key is hit in isolation, the key works in the following manner. First, a check is made for the presence of a calling (CLG) party, and if one is not attached to the call (but a CLG number is available) the CLG number is outpulsed. Second, if there is a CLG party already attached or no number is

present and an alternate route is selected, outpulsing is attempted to the alternate route. If no alternate route was selected but the DA or INW keys were used, then outpulsing is attempted to the DA or INW number. Third, outpulsing is attempted to a forward number if it is available.

Assistance and in-charge positions

The DA/INW and ALT RTE keys work the same at the in-charge and assistance positions.

Functional description

Table IALTRTE maps alternate routes to the numbers that are outpulsed to reach these routes.

The following restrictions apply to this table:

- an alternate route number of 0 (zero) is not valid
- an alternate route cannot be deleted from this table if it is used in table ICNTRY

Datafill sequence and implications

Table CCTR must be datafilled before table IALTRTE.

Table size

0 to 128 tuples

Datafill

The following table lists datafill for table IALTRTE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
IALTRTE		1 to 128	Alternate route key. Enter the alternate route key from field ARTELIST in table ICNTRY. ***Note 1:*** An alternate route number of 0 (zero) is not valid. ***Note 2:*** An alternate route cannot be deleted from this table if it is used in table ICNTRY.
SCRNDISP		alphanumeric (1 to 3 characters)	Alternate route name for screen display. Enter the alternate route name to be displayed on the screen. At least one character must be entered.

IALTRTE (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		see subfields	Alternate route type. For BCS35 and up, this field consists of subfields RTETYPE and AMAENTRY. Up to BCS35, this field consists of subfield RTETYPE.
	RTETYPE	FOR, MAN, or NAT	Alternate route type selector. Enter FOR for an overseas number alternate route and datafill refinement DIGITS. Enter MAN for a manual alternate route. No refinements require datafill. For BCS35 and up, go to field AMAENTRY. Otherwise, datafill is complete for table IALTRTE. Enter NAT for a national (domestic) number alternate route and datafill refinement DIGITS
	DIGITS	0 to 9 (1 to 18 digits)	Alternate route number to be outpulsed. If the entry in subfield RTETYPE is FOR or NAT, datafill this refinement. Enter the number to be outpulsed to reach the alternate route. The number must be a valid domestic number, overseas number, or operator code. A domestic number must be in the NPA-NXX-XXXX format and an overseas number must have a valid country code found in table CCTR.
	AMAENTRY (BCS35-)	0 to 999	Automatic message accounting record entry. Enter the route indicator that appears in the automatic message accounting (AMA) record. The default value is zero (0).

Datafill example

The following example shows sample datafill for table IALTRTE.

MAP display example for table IALTRTE

```
IALTRTE SCRNDISP                        RTETYPE
_____________________________________________________________
      1     VIE FOR                 43522121  11
      2     PAR FOR                    33121 233
```

Table history

BCS35

Field AMAENTRY was added. The range of field DIGITS was changed to 1 to 18 digits

IANNINFO

Table name

Internal Announcement Information Table

Functional description

Table IANNINFO contains the mapping of the Directory Assistance System (DAS) specified announcement number, the number of times the announcement number is repeated to the subscriber by the digital recorded announcement machine (DRAM), and whether the call is connected to an operator following the post announcement period.

Table IANNINFO is indexed by DAS announcement number. It contains: the number of times or cycles the announcement is repeated, and an indication whether an operator is allowed to connect to the call after the announcement for further handling.

The total number of times a call may be connected to an operator after the post announcement period has elapsed, is restricted by the appropriate tuple in table VROPT.

Since table IANNINFO is independent of call type, Auto-INT (Auto Intercept) and OH-INT (operator-handled intercept) announcements always have the same number of cycles. In addition, if Auto-INT can cut-through, then the corresponding OH-INT announcement can recall, unless the maximum recall limit for intercept has been reached.

Since table IANNINFO is independent of call type, Auto-INT, and INT, announcements always have the same number of cycles. In addition, if Auto-INT can cut-through, then the corresponding INT announcement can Recall, unless the maximum recall limit for an intercept is reached.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table IANNINFO.

Table size

0 to 256 tuples

Datafill

The following table lists datafill for table IANNINFO.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ANN		0 to 254	*Announcement number* Enter a number between 0 and 254. This value is returned from the Directory Assistance System (DAS) database to indicate which type of information is being provided in the database response.
DRAMIDX		1 to 63	*DRAMUSERS index announcement id* Enter a number used to find the phrase list (field PHRASELIST in table DRAMUSERS) to use in reciting the information to the querying subscriber. This must be datafilled after field ANN and before field CYCLES. An entry outside of this range is invalid.
CYCLES		1 to 7	*Number of spoken announcements* Enter a number that represents the number of times to repeat the announcement. A cycle is an entire announcement spoken once. For bilingual announcements, a cycle includes the full announcement spoken the preferred language followed by the equivalent alternate language announcement. If a number of cycles are required (independent of bilingualism), the first cycle is spoken, followed by the phrase “I repeat" if the next cycle begins in English or “Je repete" if in French.
OPRCONN		Y or N	*Operator connection* Enter Y (yes) if the connection to an operator is permitted following the post announcement period for this call type. Otherwise, enter N (no).

Datafill example

The following example shows sample datafill for table IANNINFO.

IANNINFO (end)

MAP display example for table IANNINFO

```
ANN  DRAMIDX  CYCLES  OPRCONN
_____________________________________________________________
0    1         1       Y
```

IBNATD

Table name

IBN Audio Tone Detector Table

Functional description

The DMS tone detector, NT5X29AC, is used to detect tones returned from far end offices while outpulsing. Tone detection is used in association with simplified dialing (table DIGMAN) to provide a signaling interface to private networks, for example, tandem tie trunk networks and specialized common carriers.

Tone detection, specifically call progress tone detection, is required:

- to detect dial tone to control outpulsing
- to detect call blocking, high and dry states and provide answer supervision
- to detect SCC (specialized common carrier) dial tone, after dialing the public network number for the SCC
- to detect some public network call progress tones to allow DMS to alternate route if the SCC is unavailable

The tone detector can be used in private networks for the automatic completion of calls over TTTNs (tandem tie trunk networks). The insertion of pauses (see table DIGMAN) in the outpulsing string is enhanced by:

- waiting for dial tone. If dial tone is slow in being returned from the far end, a pause only would lead to outpulsing before the far end was ready

  Note: If the audio tone detector (ATD) is specified for a trunk that is not engineered to return dial tone, then the call setup time increases. If dial tone is expected and timeout occurs, then alternate routing can occur. It is recommended that a tone detector not be designated if dial tone is not provided from that end point.

- immediately resuming the outpulsing of digits when dial tone is detected. This causes the call setup time to decrease and consequently the post dial delay to the subscriber is shorter
- detecting busy or reorder tone being returned from various tandem points in which case, the call can be alternate routed

IBNATD (continued)

The tone detector can also detect call progress tones on calls to SCCs such as:

- SCC dial tone as a start dial indication to DMS to outpulse an authorization code, a destination dirctory number (DN) or an account code
- network and station busy tones. This capability can be used to select an alternate route when a particular route is unavailable

When the tone detector is used during outpulsing, there are various parameters that are under the control of the datafill that can change the interpretation given by the tone detector results.

These parameters are datafilled in table IBNATD. They include:

High and dry time-out

This parameter is specified in seconds and is used to determine that the call has reached a dead end. Translation and routing at some other switch has been disrupted for an abnormal reason. The default value of this parameter is 6.4 s.

Number of ring cycles

This parameter is specified in number of cycles and it determines the number of ring cycles to detect before a timeout or no answer condition exists. The default value is 10 rings. This parameter affects the holding time of the ATD.

ATD deaf time

This parameter is used to mask off outpulsing noise returned from far end switches. This noise is found to exhibit itself as crashes or glitches to the originator. The tone detector treats these noises as a pseudo conversation and is fooled into thinking that the call was answered.

When outpulsing is complete, the tone detector immediately starts listening for the specified tone. If outpulsing noise is encountered on that link, then the ATD deaf time must be used to stop the tone detector from listening to the far end for the specified interval.

The default value for this parameter is 0 seconds. Typically, outpulsing noise is not heard by the originator.

Equate voice to tone

The tone detector tries to differentiate between voice and dial tone based on frequency and cadence parameters. If the customer wishes to provide a distinction between voice and dial tone for specific applications, then this parameter must be set to NO. The default value for this parameter is YES.

Default answer desired

This parameter is datafilled as YES or NO and is used when default answer is detected by the tone detector. If default answer desired is set to YES, then this can be recorded in the SMDR file. If default answer desired is set to NO, then the tone detector looks once more for a valid tone. If default answer is found again, then it is used this time to continue the progress of the call. This allows the customer to reduce the number of detected default answer conditions. The default value for this parameter is NO.

The default tuple in table IBNATD is set up with defaults such that 99.999% of all calls do not need to use this table. The datafill of table IBNATD is only necessary if a special problem involving tone detection applies.

Note: Table IBNATDC contains one default tuple, which cannot be changed and does not appear when the table is printed. The tables must only be datafilled whrn the default values described above are not suitable.

Tone detection is allowed on POTS (plain ordinary telephone service), IBN (Integrated Business Network), CAMA (centralized automatic message accounting), and AMR5 trunks.

If call failure occurs due to detection of busy or reorder tone or timeout, the call is eligible for call back queuing. When the subscriber is routed to treatment, attempts to activate call back queuing is denied.

When a busy or reorder tone is detected, the tone detector is freed. If the tone detected is busy or reorder tone and means station busy, the originator is disallowed from making a three-way call. This is especially important for the case of IBN NODISC and DISCONLY trunk groups where tone detection is used for answer generation supervision. These trunks do not see true electrical answer and the originator must go on-hook for longer than the flash interval. Only then is the trunk released.

CAMA trunks where the automatic number identification (ANI) spill signal is a sustained off-hook are also subject to the ambiguity of flash. Trunks that are supposed to receive true answer but do not because of the routing patterns determined by the operating company are also subject to the ambiguity of flash.

The originator is not eligible for call waiting until outpulsing and tone detection are completed.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table IBNATD.

IBNATD (continued)

Table size

Table IBNATD has a fixed size of 127 tuples.

Datafill

The following table lists datafill for table IBNATD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ATDKEY		1 to 127	*Audio tone detector key* Enter a digit that is the key to the table.
RNGCYCLE		4 to 31	*Ring cycles* Enter the number of ring cycles that the audio tone detector (ATD) detects before reporting too many rings.
DEAFTIME		0 to 31	*Audio tone detector deaf time* Enter the time, in seconds, that the ATD waits before looking for tone. This is used to mask out post outpulsing noise from the far end.
HIDRYTO		6 to 31	*High and dry time-out* Enter the time, in seconds, that the ATD waits listening to silence or no tone before reporting high and dry time-out.
EQVXTON		Y or N	*Equate voice to tone* Enter Y (yes) if voice and dial tone reported by the ATD are treated the same way. If a distinction between voice and dial tone is required, enter N (no).
ANSDEF		Y or N	*Default answer desired* Enter Y if default answer reported by the ATD is used as a valid answer for the call. Otherwise, enter N.

Datafill example

The following example shows sample datafill for table IBNATD.

The example consists of the following:

- the key to the table is 1
- the number of ring cycles before reporting is 20
- the ATD deaf time is 10 s
- the high and dry time out is 8 s
- no distinction between voice and tone is required
- no default answer is desired

MAP display example for table IBNATD

```
ATDKEY RNGCYCLE DEAFTIME HIDRYTO EQVXTON ANSDEF
_____________________________________________________
     1       20       10       8       Y      N
```

IBNFEAT

Table name

IBN Line Feature

Functional description

Table IBNFEAT contains information that defines Integrated Business Network (IBN) and Residential Enhanced Services (RES) line features.

If the operating company attempts to use the table editor to enter datafill in this table, the following error message displays:

```
Protected table, use SERVORD to change.
```

The operating company must enter all additions, deletions, and changes using the Service Order system (SERVORD). For information, refer to the *SERVORD Reference Manual*.

CAUTION
SERVORD required
The operating company must enter all additions, deletions, and changes using SERVORD. For information, see the *SERVORD Reference Manual*.

The input data format depends on the data feature.

Each feature assigned to an IBN line requires one entry in table IBNFEAT.

IBNFEAT (continued)

The following table lists the line features that are assigned to the IBN lines listed in table IBNLINES.

IBNFEAT features (Sheet 1 of 5)

Title	Feature
Announcement Before Routing	ABR
ACD Supervisor Position on 500/2500 Set	SUPR
Advanced Intelligent Network	AIN
AINDENY Option	AIN
Alternative Service Provider	ASP
Anonymous Caller Rejection	ACRJ
AT&T Line Study	SDY
Auto-identified Outward Dialing	AIOD
Automatic Call Distribution	ACD
Automatic Dial	AUD
Automatic Line	AUL
Automatic Location Identification	ALI
Auxiliary Service Position	ASP
Bulk Calling Line Identification	BCLID
Call Forward Fraud Prevention Override	CFFPOVR
Call Forward Indication	CFIND
Call Forward Timed for CFB	CFTB

Note 1: The CompuCall Associate Enhancements feature moves the ECM feature to table IBNFEAT from table IBNLINES. If the ECM feature was enabled on a line before a software upgrade, it will be enabled after a software upgrade through the One Night Process (ONP), with only the ECM suboption Call Events selected as Yes. If the end-user wants any other functions, the operating company must set the appropriate suboptions to Yes.

Note 2: The PREANSOP feature must be datafilled through the table editor, rather than SERVORD. The PREANSOP feature is required in the UK market for Software to Support Signaling Code Enhancement for PLD.

IBNFEAT (continued)

IBNFEAT features (Sheet 2 of 5)

Title	Feature
Call Forward Timed for CFD	CFTD
Call Forward Time of Day	CFTOD
Call Forward to Announcement	CFTANN
Call Forward to Operator	CFO
Call Forwarding	CFX
Call Forwarding Don't Answer Variable Timing	CFDVT
Calling Line Identification	CLI
Call Log	CALLOG
Call Management Group	CMG
Call Pickup	CPU
Call Screening, Monitoring, and Intercept	CSMI
Carrier Toll Denied	CTD
Call Transfer	CXR
Circuit Switched Digital Data Service	CSDDS
Custom IBN Disconnect Treatment	CDT
Deny Option	DENY
Denied Incoming	DIN
Distinctive Ringing	DRING
Do Not Disturb	DND

Note 1: The CompuCall Associate Enhancements feature moves the ECM feature to table IBNFEAT from table IBNLINES. If the ECM feature was enabled on a line before a software upgrade, it will be enabled after a software upgrade through the One Night Process (ONP), with only the ECM suboption Call Events selected as Yes. If the end-user wants any other functions, the operating company must set the appropriate suboptions to Yes.

Note 2: The PREANSOP feature must be datafilled through the table editor, rather than SERVORD. The PREANSOP feature is required in the UK market for Software to Support Signaling Code Enhancement for PLD.

IBNFEAT features (Sheet 3 of 5)

Title	Feature
Emergency Service (911) with Ringdown Trunk	ESL
Enhanced Secondary Directory Number	ESDN
Enhanced WATS Access Line	EWAL
Enhanced WATS Access Line InterLATA	EWALI
Executive Message Waiting	EMW
Extended Call Management (Note 1)	ECM
Fire Reporting System, Originating	FRO
Flexible Station Controlled Conference	CNF
Full Carrier Toll Deny for International carriers	FCTDINT
Full Carrier Toll Denied InterLATA	FCTDNTER
Full Carrier Toll Denied IntraLATA	FCTDNTRA
Group Intercom	GIC
Group Intercom All Call	GIAC
In-session Activation	ISA
International Primary Carrier	INTPIC
IntraLATA PIC	LPIC
Line Music on Hold	LMOH
Local Service Provider Account Owner	LSPAO
Local Service Provider Switch Owner	LSPSO

Note 1: The CompuCall Associate Enhancements feature moves the ECM feature to table IBNFEAT from table IBNLINES. If the ECM feature was enabled on a line before a software upgrade, it will be enabled after a software upgrade through the One Night Process (ONP), with only the ECM suboption Call Events selected as Yes. If the end-user wants any other functions, the operating company must set the appropriate suboptions to Yes.

Note 2: The PREANSOP feature must be datafilled through the table editor, rather than SERVORD. The PREANSOP feature is required in the UK market for Software to Support Signaling Code Enhancement for PLD.

IBNFEAT (continued)

IBNFEAT features (Sheet 4 of 5)

Title	Feature
Make Busy Key	MBK
Message Waiting	MWT
Multiparty Bridge	MPB
Network Facility Access	NFA
Network Translated Address Indicator Termination	NTAIT
Observe Agent from 500/2500 Set	OBS
OUTWATS	OUTWT
Preanswer Outpulsing (Note 2)	PREANSOP
Primary InterLATA Carrier	PIC
Quick Conference Key	QCK
Random Make Busy	RMB
Remote Message Indicator	RMI
Remote Meter Pulsing	RMP
Remote Register, SD Point	RMS
Requested Suspension	RSUS
Restricted Line Feature	RESL
Secondary Directory Number	SDN
Security	SEC
Series Completion	SCMP

Note 1: The CompuCall Associate Enhancements feature moves the ECM feature to table IBNFEAT from table IBNLINES. If the ECM feature was enabled on a line before a software upgrade, it will be enabled after a software upgrade through the One Night Process (ONP), with only the ECM suboption Call Events selected as Yes. If the end-user wants any other functions, the operating company must set the appropriate suboptions to Yes.

Note 2: The PREANSOP feature must be datafilled through the table editor, rather than SERVORD. The PREANSOP feature is required in the UK market for Software to Support Signaling Code Enhancement for PLD.

IBNFEAT features (Sheet 5 of 5)

Title	Feature
Set Model	SETMODEL
Simplified Message Desk Interface	SMDI
Simultaneous Ringing	SIMRING
Single Line Queuing	SLQ
Sleeve Leads for Public Fire Reporting System	FRS
Special Billing	SPB
Speed Calling Long List	SCL
Speed Calling Short List	SCS
Station Origination Restrictions	SOR
Station-specific Authcode	SSAC
Stop Hunt	SHU
Subscriber-activated Call Blocking	SACB
Subscriber Line Usage	SLU
Terminating Billing Option	TBO
Three-way Calling Public	3WCPUB
Uniform Call Distribution Signal Distribution Points	UCDSD
Voice Mail Easy Access Directory Number	VMEADN
Warm Line for Residential Enhanced Services	WML
Wake-up Call Request	WUCR

Note 1: The CompuCall Associate Enhancements feature moves the ECM feature to table IBNFEAT from table IBNLINES. If the ECM feature was enabled on a line before a software upgrade, it will be enabled after a software upgrade through the One Night Process (ONP), with only the ECM suboption Call Events selected as Yes. If the end-user wants any other functions, the operating company must set the appropriate suboptions to Yes.

Note 2: The PREANSOP feature must be datafilled through the table editor, rather than SERVORD. The PREANSOP feature is required in the UK market for Software to Support Signaling Code Enhancement for PLD.

IBNFEAT (continued)

Datafill sequence and implications

The following tables must be datafilled before table IBNFEAT:

- IBNLINES
- OCCNAME
- AUTHCDE
- KSETLINE
- CUSTSTN
- ACDSGRP
- SORLIST
- OPTCTL
- TRIGGRP
- TRIGITM

Enter the provider name in table LSPINFO before entering data for option LSPAO or option LSPSO using SERVORD.

Table size

The number of features present in the switch determines the size of table IBNFEAT.

Datafill

The following table lists general datafill for table IBNFEAT. Refer to Table 1 for the feature-specific datafill.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
LEN		see subfields	Line equipment number. This field defines the physical location of the equipment connected to a telephone line. Field LEN is common to more than 60 tables. This field 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. 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.
DNNO		(numeric) 0 to 6	Directory number number. Enter the directory number (DN) to specify the DN on the line equipment number (LEN) that is being referenced.

Datafill example

The following example shows sample datafill for table IBNFEAT.

IBNFEAT (continued)

MAP display example for table IBNFEAT

```
 LEN
        DNNO          DF    FEATURE
                                                              DATA
_____________________________________________________________________

HOST  00 0 02 18
                     0        PIC         PIC   ATT Y
HOST  00 0 03 03  0          CFFPOVR     CFFPOVR   IDD 20 15

HOST  00 0 03 16
                     0        SCS         SCS

HOST  00 0 03 16
                     0        CPU         CPU HOST  00 0 03 16

HOST  00 0 03 16
                     0        CXR         CXR
 CUSTOM NOCXFER NOCXFER NOCXFER NOCXFER    N   STD

HOST  00 0 03 16
                     0        CNF         CNF C06

HOST  00 0 03 16
                     0        GIC         GIC GROUP2 1560 Y N

HOST  00 0 03 16
                     0        DND         DND  1

HOST  00 0 03 16
                     0        MWT   .     MWT
                                           STD  Y      NO Y
HOST  06 1 05 29
                     0        ECM          ECM  Y Y Y Y Y Y Y
HOST  00 0 03 03   0          CMG          CMG 00 0 03 04 A Y
HOST  00 0 03 03   0     SIMRING      SIMRING       7 ACT $
HOST  00 0 03 03   0         ASP          ASP (JOE AMSG)  $
HOST  05 0 00 10   0     FCTDINT      FCTDINT (CARRIER1)$
HOST  06 0 00 10   0      FCTDINT      FCTDINT $
HOST  03 0 01 20   0      CFIND        CFIND   CWT 1500
HOST  01 0 10 09   0      SCL          SCL L100
HOST  01 0 00 24  0      NTAIT                      N
HOST   00 0 01 13 0     AINDENY  AINDENY (DENY TIID 4 PFC123)
```

Table history

MMP15

Added option NTAI for IBN lines for activity 59022245.

NA015

Added AINDENY option.

MMP14

Added subfield FTCODE (Feature Access Code) to WML option for feature Warm Line Interaction with Octothorpe Translation.

Added Restricted Line Feature (RESL).

Added CFIND to MAP display example.

Added SCL to MAP display example.

NA012

Removed XXTRG information.

Added CFIND to MAP display example.

EUR010

Added refinement DURATION to feature CFIND.

NA011

Corrected LMOH from “Multiple Music on Hold” to “Line Music on Hold” in the list of features. The feature number is AF7806.

Added FCTDINT feature within table IBNFEAT in accordance with AF7749.

Added TRIGITM to Datafill sequence and implications.

NA010

The following changes were made to table IBNFEAT in this release:

- SERVORD entries automatically update table IBNFEAT for the local service provider (LSP) switch owner (SO) option. The LSPSO option assigns a local service provider to a DN.
- Feature Network Intelligent Call Management (NICM) adds option NETICM to the existing options for ECM line feature.
- Feature Dual Line Call Management (DLCM) adds line feature CMG to table IBNFEAT features.

IBNFEAT (continued)

- Added CMG datafill example in table IBNFEAT.
- Added Simultaneous Ringing (SimRing) datafill information.
- Added AMSG datafill example.

APC009.1

Feature AJ5190 (Call Forward to Announcement) adds feature CFTANN.

Feature AJ5191 (Call Forward to Operator) adds feature CFO.

Feature AJ5194 (Announcement Before Routing) adds feature ABR.

NA009

SERVORD entries automatically update table IBNFEAT for the local service provider (LSP) account owner (AO) option. The LSPAO option allows subscribers to

- select a local service provider
- specify whether the DN is unbundled, native to the switch, or resold

NA008

The following changes were made to table IBNFEAT in this release:

- Added the Remote Message Indicator (RMI) feature.
- Added the Call Forward Indication (CFINDI) and Call Forward Fraud Prevention Override (CFFPOVR) features.

APC007

Added the feature Multiple Music on Hold Line Option (LMOH).

NA007

The following changes were made to table IBNFEAT in this release:

- Added the Enhanced WATS Access Line InterLATA (EWALI) feature.
- Added the International Primary Carrier (INTPIC) feature.

NA006

The following changes were made to table IBNFEAT in this release:

- Added options Call Forward Timed for CFB (CFTB) and Call Forward Timed for CFD (CFTD).
- Added options Full Carrier Toll Denied InterLATA (FCTDNTER) and Full Carrier Toll Denied IntraLATA (FCTDNTRA).

NA005

The following changes were made to table IBNFEAT in this release:

- Added error message information to “Functional description” section in accordance with the Enforcement of SERVORD feature.
- Added the Call Screening, Monitoring, and Intercept (CSMI) feature.
- The CompuCall Associate Enhancements feature moves option ECM (Extended Call Management) from table IBNLINES to table IBNFEAT. Added note that describes results of dump and restore process.

UK002

Added the PREANSOP feature; added subfield PAUSE to field DATA for PLD.

BCS36

Added the AIN and DMCT features. Added entry UDLC to field CMWIRING for the MWT feature.

IBNFEAT feature 3WCPUB

Three-way Calling Public (3WCPUB)

Feature 3WCPUB allows calls on lines with this option to be extended from an AT&T 50B Customer Premises System (CPS). Depending upon the datafill, the call can be extended and a public or private announcement made by the operator of the intent to extend the call.

A public announcement is made when the originating party, the operator, and the third party are bridged together. The operator announces to the third party the intention to forward the call to the third party. The third party can consent to the connection, ask for more information about the originating party, or refuse to allow the call to be extended.

A private announcement is made when the originating party is parked, and the operator and third party are connected. The operator announces to the third party the intent to connect the originating party to the third party. The third party can consent to the connection, ask for more information about the originating party, or refuse to allow the call to be extended.

Datafill

The following table lists the datafill for table IBNFEAT feature 3WCPUB.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		3WCPUB	*Data feature* Enter 3WCPUB for the Three-way Calling Public feature.
FEATURE		3WCPUB	*Data feature* Enter 3WCPUB.
DATA		see subfields	*Data* This field consists of subfields LOOPCON and SPLITKEY.

IBNFEAT feature 3WCPUB (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LOOPCON	Y or N	*Loop console selector* To indicate that the 3WCPUB option is added to a loop console like the 50B CPS, enter Y (yes). To indicate that the 3WCPUB option is not being added to a loop console, enter N (no).
	SPLITKEY	STARorOCT	*Split key indicator* This subfield is required if the LOOPCON subfield is set to Y. This subfield indicates which key is used to initiate a split operation from a loop console. The key can be either a star (*) or an octothorpe (#).

IBNFEAT feature ACD

Automatic Call Distribution (ACD)

Automatic Call Distribution (ACD) provides an equal distribution of incoming calls to a predetermined group of telephone sets designated for this purpose. The ACD feature is appropriate for service organizations where a large number of incoming calls are answered.

The 500/2500 sets can be used for ACD.

Datafill

The following table lists the datafill for table IBNFEAT feature ACD.

Field descriptions

Field	Subfield	Entry	Explanation and action
DF		ACD	*Data feature* Enter ACD for the Automatic Call Distribution feature.
FEATURE		ACD	*Data feature* Enter ACD.
DATA		see subfields	*Data* This field consists of subfields ACDGROUP, ACDSGRP, and IDNUM. Separate each subfield with a single space.
	ACDGROUP	alphanumeric (1 to 16 characters)	*Automatic Call Distribution group* Enter the ACD group name.
	ACDSGRP	0 to 255	*Automatic Call Distribution subgroup* Enter the ACD subgroup number.
	IDNUM	Y or N	*Identification number* Enter Y (yes) if the position number identification is assigned and datafill refinement POSID. Otherwise, enter N (no) and go to field IBNACD_OPTION.
	POSID	00001 to 30000	*Position identification* If the entry in field IDNUM is Y, datafill this refinement. Enter the ACD agent position number.

IBNFEAT feature ACD (end)

Field descriptions

Field	Subfield	Entry	Explanation and action
IBNACD_OPTION		ACDNR or SCAILINK	*Option* Enter ACDNR (ACD Not Ready) if the ability to deny ACD calls by the ACD agent is desired and datafill refinement ACDNR. Enter the SCAILINK option if the ACD agent is associated with a set of D-channels for switch-computer communications and datafill refinement SCAI_LINK.
	ACDNR	ACDNR	*Automatic Call Distribution not ready* If the entry in field IBNACD_OPTION is ACDNR, datafill this refinement. Enter the ACDNR option.
	SCAI_LINK	alphanumeric (1 to 8 characters)	*Switch computer access interface link* If the entry in field IBNACD_OPTION is SCAILINK, datafill this refinement. Enter the set of D-channels currently datafilled in table SCAILNKS to be associated with the ACD agent position. The default is SCAIDEF.

Table history

SN07 (DMS)

Activity A00004391 increased the range of subfield POSID to 30 000.

IBNFEAT feature ACRJ

Anonymous Caller Rejection (ACRJ)

Feature ACRJ rejects incoming calls to a subscriber's line when the calling party has suppressed (blocked) the identity of their name and/or directory number (DN), which would otherwise appear on a display. The caller, in this case, is routed to an announcement.

The ACRJ line option is classified as a Residential Enhanced Services (RES) option and appears as a valid line option in table IBNFEAT for all ACRJ lines except Meridian business sets.

Datafill

The following table lists the datafill for table IBNFEAT feature ACRJ.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		ACRJ	*Data feature* Enter ACRJ for the Anonymous Caller Rejection feature.
FEATURE		ACRJ	*Data feature* Enter ACRJ.
DATA		see subfield	*Data* This field consists of subfield STATUS.
	STATUS	ACTINACTU NIVAUNIVI	*Status* Enter ACT if this feature is to be active. Enter INACT if this feature is to be inactive. Entries UNIVA and UNIVI are not datafillable. Field STATUS is automatically updated when feature ACRJ is activated or deactivated universally. UNIVA status applies when ACRJ is activated universally. UNIVI applies when a line only has access to ACRJ universally, but has not activated ACRJ universally or has deactivated ACRJ universally.

IBNFEAT feature AIN

Advanced Intelligent Network

This feature allows individual telephone operating companies to create and modify telecommunication services to their subscribers.

Datafill

The following table lists the datafill for table IBNFEAT feature AIN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		AIN	Data feature. Enter AIN for the Advanced Intelligent Network feature.
FEATURE		AIN	Feature. Enter AIN.
DATA		see subfield	Data. This field consists of subfield AINGRP.
	AINGRP	alphanumeric (up to 16 characters), or TIID	Advanced Intelligent Network groupname. Enter the AIN group name from table TRIGGRP. Enter TIID to datafill the trigger item provisioning model refinements that follow.
	TDP	1, 3, 4, 17, 19, 20, 30, 32, 33	Trigger detection point. Datafill the appropriate TDP.
	TINAME	alphanumeric vector (1 to 8 characters)	Trigger tiem 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 in the TIID. Datafill the value OFF to deactivate the trigger item in the TIID

Datafill example

The following example shows sample datafill for table IBNFEAT feature AIN.

This example shows a line with the following attributes:

- The line with the feature is on LEN 2 0 0 1 at the host switching unit.
- The line is single party.
- The data feature is AIN.
- The AIN group name is AINGRP1.

IBNFEAT feature AIN (end)

MAP display example for table IBNFEAT feature AIN, trigger group data model

```
 LEN
                  DNNO       DF       FEATURE                          DATA
_____________________________________________________________________________

HOST  02 0 00 01
                     S       AIN          AIN                        AINGRP1
```

This example is datafilled for a line with the following attributes:

- The line with the feature is assigned to LEN 2 0 0 1 at the host switching unit.
- The line is single party.
- The data feature is AIN.
- The AIN group name TIID (the trigger item data model is in use).
- The line has trigger item 1 OFFIMM subscribed and turned off.
- The line has trigger item 19 OCPB subscribed and turned on.

MAP display example for table IBNFEAT feature AIN, trigger item data model

```
 LEN
        DNNO     DF    FEATURE                                        DATA
_____________________________________________________________________________

HOST  02 0 00 01
          S    AIN       AIN    TIID  ((1 OFFIMM OFF) (19 OCPB ON) $)
```

IBNFEAT feature AINDENY

Advanced Intelligent Network Deny

Table IBNFEAT (integrated business network line feature) lists the specific line features that are assigned to the integrated business network and residential enhanced services (RES) lines listed in the Table IBNLINES. All additions, deletions, and changes to this table must be entered using the Service Order System (SERVORD). RES lines which subscribe to option AINDENY have the subscription entry in Table IBNFEAT.

Datafill example

Data is automatically populated into this table through SERVORD.

The figure that follows shows sample datafill for Table IBNFEAT option AINDENY.

MAP display example for Table IBNFEAT option AINDENY

```
HOST 00 00 01 13 0 AINDENY AINDENY (DENY TIID 4 PFC123)
HOST 00 00 01 14 0 AINDENY AINDENY (DENY TIID 4 SFC234)(DENY ALL PFC)
```

IBNFEAT feature ASP

Alternate Service Provider

The Alternate Service Provider (ASP) feature allows the end user's service provider to process call completion services supported by ISA (In-session Activation) or AMSG (access to messaging) services.

Datafill

The following table lists the datafill for table IBNFEAT feature ASP.

Field descriptions

Field	Subfield	Entry	Explanation and action
DATA		see subfields	Data. This field consists of subfields PROVNNAME and SERVICE.
	PROVNAME	1 through 16 alphanumeric characters	Provider name. This field specifies the name of the service provider. A maximum of four providers can be datafilled.
	SERVICE	1 through 8 alphanumeric characters	Service. This field specifies the service, which in this case is ISA or AMSG.

Datafill example

The following example shows sample datafill for table IBNFEAT feature ASP.

MAP display example for table IBNFEAT feature ASP

```
LEN
           DNNO    DF   FEATURE        DATA
_____________________________________________________________
HOST 00 0 03 03 0   ASP  ASP    PROV_A ISA $ $
HOST 00 0 03 03 0   ASP  ASP    (JOE AMSG) $
```

IBNFEAT feature AUL

Automatic Line (AUL)

When an off-hook condition is reported from a line with feature AUL, a connection is made to a predetermined location. This predetermined location can also be served by the switching unit or it can involve outpulsing.

Pause insertion is not possible.

Datafill

The following table lists the datafill for table IBNFEAT feature AUL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		AUL	*Data feature* Enter AUL for the Automatic Line feature.
FEATURE		AUL	*Data feature* Enter AUL.
DATA		see subfield	*Data* This field consists of subfield DN.
	DN	(alphanumeric up to 15 digits)	*Directory number* Enter the number to be outpulsed when the line goes off-hook. ***Note:*** Certain features store digits as alphanumeric characters. The characters A, B, or C can appear in the DN subfield and represent the symbols 0, *, and # on a telephone keypad, respectively.

IBNFEAT feature BCLID

Bulk Calling Line Identification (BCLID)

Feature BCLID allows a Meridian Digital Centrex (MDC) line, plain ordinary telephone service (POTS) line, Residential Enhanced Services (RES) line, Uniform Call Distribution (UCD) group, hunt group, or private branch exchange (PBX) customer with a direct inward dial dialplan to receive call-related information on incoming calls.

The call-related data transmitted to the customer premises equipment (CPE) consists of the date and time the call was received, the calling and called directory numbers (DN), the called line status, the calling line type and a call forward indicator. This data is transmitted in ASCII (American Standard Code for Information Interchange) format to the CPE through a dedicated Bell 202A compatible data channel. The CPE collects the information for immediate use or storage. Since the data is transmitted over a data channel, the transmission of data to the CPE does not affect the completion of calls to or from the customer.

Table BCLIDGRP must be datafilled before this option can be used in table IBNFEAT.

Datafill

The following table lists the datafill for table IBNFEAT feature BCLID.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		BCLID	*Data feature* Enter BCLID for the Bulk Calling Line Identification feature.
FEATURE		BCLID	*Data feature* Enter BCLID.
DATA		see subfield	*Data* This field consists of subfield BCGRPNUM.
	BCGRPNUM	0 to 2047	*Bulk calling group number* Enter the bulk calling group number defined in table BCLIDGRP for this line to define what bulk calling line features are associated with this particular line.

IBNFEAT feature CALLOG

Call Log (CALLOG)

Feature CALLOG provides a switch-based incoming callers list (ICL) to CLASSPLUS customers. This feature is accessed by dialing an activation code and then viewed using softkeys on a Sesame customer premise equipment (CPE). This service can log the caller's name and/or number, time and date, the number of times the caller has called, whether the call was unanswered, forwarded or busy, and whether this call has been viewed by the subscriber.

Datafill

The following table lists the datafill for table IBNFEAT feature CALLOG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CALLOG	*Data feature* Enter CALLOG for the Call Log feature.
FEATURE		CALLOG	*Data feature* Enter CALLOG.
DATA		see subfield	*Data* This field consists of subfield NOTICE.
	NOTICE	CMWIorSTD	*Message waiting notification type* Enter the type of message waiting notification: CMWI (Custom Local Area Signaling Service [CLASS] mesage waiting) or STD (stutter dial tone). Any entry outside the range indicated for this field is invalid.

IBNFEAT feature CDT

Custom IBN Disconnect Treatment (CDT)

Feature CDT allows an operating company to assign a treatment to an Integrated Business Network (IBN) line for each directory number (DN) from table TMTCNTL (subtable LNT).

Feature CDT is best used for Automatic Line (AUL) applications. For example, if an IBN line with the AUL feature accidentally falls off-hook, a disconnect treatment specified in table TMTCNTL routes the line to idle. At this point, feature AUL rings the terminator. Once the terminator realizes that nobody is on the other end and goes back on-hook, the line is disconnected and routed back to idle. Then feature AUL reoriginates the call. This happens over and over until the phone is back on its cradle. By applying feature CDT to AUL, the call can be routed to treatments other than disconnect. In such case, a permanent signal treatment (PSIG) locks out the call in its second attempt.

Datafill

The following table lists the datafill for table IBNFEAT feature CDT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CDT	*Data feature* Enter CDT for the Custom IBN Disconnect Treatment feature.
FEATURE		CDT	*Data feature* Enter CDT.
DATA		see subfield	*Data* This field consists of subfield TREATMENT.
	TREATMENT	PSIG	*Extended treatment* Enter PSIG for a permanent signal treatment for automatic lines (AUL) application.

Call Forwarding Do Not Answer Variable Timing (CFDVT)

Feature CFDVT allows customers the flexibility to assign a different Call Forward Do Not Answer (CFDA) time-out value.

This feature can only be assigned to stations that have feature CFDVT.

If a station is assigned this feature, the timing specified here, 0 to 60 s in 1-s increments, overrides the timing specified for the customer group in field CFDATO of option CFDATIM in table CUSTSTN (Customer Group Station Option).

For stations without this feature, the timing is as specified for the customer group in field CFDATO of option CFDATIM in table CUSTSTN.

Datafill

The following table lists the datafill for table IBNFEAT feature CFDVT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CFDVT	Data feature. Enter CFDVT for the Call Forwarding Do Not Answer Variable Timing feature.
FEATURE		CFDVT	Data feature. Enter CFDVT.
DATA		see subfields	Data. This field consists of subfields TIMEVAL and RINGCTRL.
	TIMEVAL	0 to 60	Time-out value. This field indicates the time-out value, in seconds. Enter the CFDA time-out period, in 1-s increments.
	RINGCTRL	PRGRING or FIXRING	Ring control. Enter PRGRING to indicate that the CFDA end user can set the ringing time-out period using an access code. Enter FIXRING to indicate that the CFDA end user has a fixed ringing time-out period, which cannot be changed.

Datafill example

The following example shows sample datafill for table IBNFEAT feature CFDVT.

IBNFEAT feature CFDVT (end)

MAP display example for table IBNFEAT feature CFDVT

```
LEN                DNNO  DF    FEATURE  TIMEVAL   RINGCTRL
_____________________________________________________________
HOST 01 0 01 19     0    CFDVT  CFDVT      12      FIXRING
HOST 01 0 01 20     0    CFDVT  CFDVT      54      PRGRING
```

Call Forward Fraud Prevention Override (CFFPOVR)

The CFFPOVR line option lets an operating company override dial plan restrictions. CFFPOVR applies to the residential enhanced services (RES), centrex and plain ordinary telephone service (POTS) agents programmable call forwarding types. All or part of the dial plan codes are overridden. A list with the line option specifies the overridden dial plan code restrictions. When the line option is present on the line, specified dial plan codes are not blocked.

CFFPOVR also specifies the number of times a subscriber can program a forward-to directory number (DN). This programming occurs within a fixed time period. The TIME_PERIOD field in office parameter CFFP_CONTROL defines the time period. CFFPOVR also displays the programming attempts counter with a QDN or QLEN command.

Datafill

The following table lists the datafill for table IBNFEAT feature CFFPOVR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CFFPOVR	Data feature. This field specifies the feature assigned to the line. The specified feature is CFFPOVR.
FEATURE		CFFPOVR	Feature. This field specifies the feature assigned to the line. The specified feature is CFFPOVR.
DATA		see subfields	Data. This field consists of subfields DPLNCODE and LIMIT, for CFFPOVR. These subfields are described as follows.
	DPLNCODE	IDDD, FGB, INTERTOL, INTRATOL, COIN, I500, I700, I800, I900, N11, NPANXX	Dial plan code. This field specifies restricted dial plan codes overridden with CFFPOVR.
	LIMIT	0 through 30 or OFFICE_DEFAULT	Limit. This field specifies a limit to the number of times a forward-to DN is programmed. This forward-to DN has a restricted dial plan overridden by CFFPOVR.

IBNFEAT feature CFFPOVR (end)

Datafill example

The following example shows sample datafill for table IBNFEAT feature CFFPOVR.

MAP display example for table IBNFEAT feature CFFPOVR

```
LEN                DNNO   DF       FEATURE    DATA
_____________________________________________________________

HOST 00 0 03 03    0      CFFPOVR  CFFPOVR    IDDD 20
```

IBNFEAT feature CFIND

Call Forwarding Indication (CFIND)

Feature CFIND alerts customers attempting to make calls on a phone with call forwarding features when the phone is manually forwarded. If a call forwarding feature is active, the customer receives an audible tone as a reminder that the phone is forwarded.

You can assign this feature to 500/2500 sets that have the following features:

- Call Forward (CFW)
- Call Forward Universal (CFU)
- Call Forward Intragroup (CFI)
- Call Forward Fixed (CFF)
- Call Forward to Operator (CFO)
- Call Forward to Announcement (CFTANN)
- Call Forward Busy (CFB) except for features that have no subscriber control
- Call Forward Don't Answer (CFD) except for features that have no subscriber control

Datafill

The following table lists the datafill for table IBNFEAT feature CFIND.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CFIND	*Data feature* Enter CFIND for the Call Forwarding Indication feature.
FEATURE		CFIND	*Data feature* Enter CFIND.
CFIND_DATA		see subfields	*Data* This field consists of subfields ANNC, TONE and CF_UNCONDITIONAL BOOLEAN.

IBNFEAT feature CFIND (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	STN_TONE	AVPMT, AVPSPD, BVTONE, CFT, CWT, DCRWTONE, DISTCWT, EBOT, ENHCWT1, ENHCWT2, ENHCWT3, ERWT, OHQT, PCALR, PCNOR, PCWT, ROH	*Special tone index* Enter the special tone associated with the CFIND tone. The entry in this field must correspond to one of the TONE_INDEX entries in table STN, unless you enter CFT for the CFIND special condition dial tone. ***Note:*** When providing CFIND tone to a Succession line, CFT is provided regardless of the tone associated with the customer group.
	CFIND_ TONE_ DURATION	numeric (0, 250, 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500, 2750, 3000, 3250, 3500, 3750, 4000)	*Duration* Enter a duration for the indication tone. Duration can be set in increments of 250 ms from 0 ms to 4000 ms (4 s). The normal default value is 0 (0 ms). You must set the default value in table DEFDATA.
	CF_UNCONDI TIONAL	Y or N	If this boolean is set to Y, CFIND tone is provided only for call forward universal (CFU), call forward intragroup (CFI) and call forward fixed (CFF). If the boolean is set to N, CFIND tone is provided for all types of call forwarding. The normal default value is N. You must set the default value in table DEFDATA.

Datafill example

The following example shows sample datafill for table IBNFEAT feature CFIND.

MAP display example for table IBNFEAT feature CFIND

```
LEN              DNNO  DF     FEATURE  DATA
_____________________________________________________

HOST 00 1 07 03    0   CFIND  CFIND    CWT 1500
```

Datafill example

The following example shows sample datafill for table IBNFEAT feature CFIND using CFT.

MAP display example for table IBNFEAT feature CFIND

```
LEN              DNNO  DF     FEATURE  DATA
_____________________________________________________

HOST 00 0 08 16    0   CFIND  CFIND    CFT 2000
```

Table history

SN06

Added tone CFT for activity A89005956.

IBNFEAT feature CFTB

Call Forward Timed for CFB

Feature CFTB is an enhancement to Call Forward Busy (CFB) for MDC lines. CFTB enhances call coverage by routing unanswered forwarded calls to treatment after a predetermined time-out period. Treatment may consist of a tone or an announcement.

Call Forward Timed (CFT) is initiated whenever a call is forwarded by a subscriber to an idle line within the same customer group and switch. The subscriber must have the CFB and CFTB line options assigned. The feature is invoked when the forwarded call is not answered. A timer monitors the line for a predetermined time-out period. If the call is not answered within the time-out period, the call is routed to treatment.

Datafill

The following table lists the datafill for table IBNFEAT feature CFTB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CFTB	Data feature. Enter CFTB for Call Forward Timed for CFB.
FEATURE		CFTB	Feature. Enter CFTB.
DATA		see subfields	Data. This field consists of the following subfields:
	TIMEOUT_VAL	12 to 60	Timeout value. Enter the number of seconds the timer will operate until it expires. The default is 36 seconds.
	TRMT_SEL	ANN, TONE	Treatment selector. Enter either ANN or TONE depending on whether the call is routed to a recorded announcement or a tone.
	ANN_CLLI	CLLI name	Announcement CLLI. If the entry in field TRMT_SEL is ANN, enter the common language location identifier (CLLI) name of the announcement in table CLLI.
	TONE_CHOICE	BUSY or REORDER	Tone choice. If the entry in field TRMT_SEL is TONE, enter either BUSY or REORDER.

IBNFEAT feature CFTB (end)

Datafill example

The following example shows sample datafill for table IBNFEAT feature CFTB.

MAP display example for table IBNFEAT feature CFTB

```
LEN           DNNO   DF FEATURE           DATA
_____________________________________________________

HOST 00 1 01 01 0   CFTB CFTB    12     ANN  CFTB_ANN
```

IBNFEAT feature CFTD

Call Forward Timed for CFD

Feature CFTD is an enhancement to Call Forward Don't Answer (CFD) for MDC lines. CFTD enhances call coverage by routing unanswered forwarded calls to treatment after a predetermined time-out period. Treatment may consist of a tone or an announcement.

Call Forward Timed (CFT) is initiated whenever a call is forwarded by a subscriber to an idle line within the same customer group and switch. The subscriber must have the CFD and CFTD line options assigned. The feature is invoked when the forwarded call is not answered. A timer monitors the line for a predetermined time-out period. If the call is not answered within the time-out period, the call is routed to treatment.

Datafill

The following table lists the datafill for table IBNFEAT feature CFTD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CFTD	Data feature. Enter CFTD for Call Forward Timed for CFD.
FEATURE		CFTD	Feature. Enter CFTD.
DATA		see subfields	Data. This field consists of the following subfields:
	TIMEOUT_VAL	12 to 60	Timeout value. Enter the number of seconds the timer will operate until it expires. The default is 36 seconds.
	TRMT_SEL	ANN, TONE	Treatment selector. Enter either ANN or TONE depending on whether the call is routed to a recorded announcement or a tone.
	ANN_CLLI	CLLI name	Announcement CLLI. If the entry in field TRMT_SEL is ANN, enter the common language location identifier (CLLI) name of the announcement in table CLLI.
	TONE_CHOICE	BUSY or REORDER	Tone choice. If the entry in field TRMT_SEL is TONE, enter either BUSY or REORDER.

IBNFEAT feature CFTD (end)

Datafill example

The following example shows sample datafill for table IBNFEAT feature CFTD.

MAP display example for table IBNFEAT feature CFTD

```
LEN              DNNO    DF FEATURE                    DATA
_____________________________________________________________

HOST 00 1 01 01 4      CFTD CFTD     12      ANN   CFTD_ANN
```

IBNFEAT feature CFX

Call Forwarding (CFX)

The Integrated Business Network (IBN) Call Forwarding feature (CFX) allows a customer to have incoming calls to a station automatically forwarded to a predetermined telephone number. The station corresponding to the dialed number is referred to as the base station; the number to which calls are forwarded is referred to as the remote station.

If the station is not assigned feature CFDVT, the answer time-out interval is specified in field CFDATO of option CFDATIM in table CUSTSTN.

The maximum number of Call Forwarding Don't Answer assignments that can be active at any one time depends upon the availability of software resources provided by the parameters FTRQAGENTS, FTRQSIZE, NO_OF_FTR_CONTROL_BLKS, NUMCPWAKE, NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS, CFW_EXT_BLKS and FTRQ2WAREAS in table OFCENG.

Call Forwarding can only be assigned in switching units that have parameter IBN_CFW set to Y.

See operational measurement (OM) group CALLFWD for the OMs associated with the Call Forwarding feature.

The maximum number of IBN lines allowed to have Call Forwarding in SL-100 and DMS-100 switches is 24000 and 32000 respectively.

Call Forwarding variants

Call Forwarding consists of the following variants:

Call Forwarding Busy (CFB)

When the called station is busy, all calls are forwarded to a predefined station inside or outside the customer group, unless the feature is deactivated by the owner of the feature.

If a line A with CFB is in a talking state, it follows the Call Waiting feature if it is called by a line B with either Dial Call Waiting (CWD) or Call Waiting Originator (CWO). Any subsequent calling parties at this point follow feature CFB. Thus, if line A with CFB does not wish to have Call Waiting imposed, assign the line option Call Waiting Exempt (CWX) for exemption of CWD or CWO.

If an IBN station forwards a call by means of CFB/CFD/CFI over an intragroup trunk to a station that activates CFU to an outside directory number (DN), the call is forwarded outside the customer group. If the incoming trunk is in the customer group and the intragroup flag in trunk group data is set, then the call is forwarded.

Call Forwarding Don't Answer (CFD)

If the called station does not answer within a prescribed time, the incoming call is automatically routed to another designated station or the attendant, unless the feature is deactivated by the owner of the feature.

Call Forwarding Fixed (CFF)

CFF permits stations to forward calls only to locations initially entered by the operating company. This does not allow users to program the forwarding number.

Variant CFF only forwards calls to a predefined number initially entered and changed by the operating company. Variant CFF does not permit the entering of a user-programmable number.

Call Forwarding Intragroup (CFI)

CFI permits stations to forward calls only to customer-defined locations within the customer group programmable at activation time. This is done by setting an intragroup flag for the appropriate routes.

A station with variant CFI/CFU that is forwarded to itself is a call forward feature restriction. The call is not forwarded.

Variants CFI and CFU forward calls to a destination defined by users during activation.

Call Forwarding Universal (CFU)

CFU permits stations to forward calls to user-defined locations inside and outside the customer group, including the attendant, programmable at activation time. If the station is assigned CFU, the CFI feature is included.

Selective Call Forwarding (SCF)

SCF permits stations to forward calls only if the originator's DN matches any one in the SCF screening list defined by the subscribers. If the incoming DN cannot be obtained, the call continues as though SCF was not present. When SCF is active, it takes precedence over other types of Call Forwarding. For example, if both SCF and CFU are active, and the originator's DN appears in the SCF screening list, the call is forwarded to the SCF forward-to number. If the DN does not match any in the SCF list then the call is forwarded to the CFU forward-to number.

IBNFEAT feature CFX (continued)

Call Forwarding Busy (CFB) and Don't Answer (CFD)

The following control types apply to variants CFB and CFD:

- Variants CFB and CFD fixed method of control allows activation and deactivation of the CFB and CFD variants by IBN station users.
- Variants CFB and CFD programming for the set is the responsibility of the operating company.
- Variants CFB and CFD programmable method of control allows activation and deactivation of the two variants by IBN station users.

The programming of the CFB and CFD variants for the set is done by the user at activation time.

The feature code access method of control for variants CFB and CFD allows activation and deactivation of the CFB and CFD variants through feature access code only.

A feature action NACK (negative acknowledgement) treatment is given if the user attempts to activate variant CFB or CFD with the respective variant already active. To recover, the user must deactivate the feature and restart the activation sequence.

See table IBNXLA for the assignment of activation and deactivation codes for variants CFB and CFD.

The default method of control activating and programming variants CFB and CFD on an IBN set is through the Service Order System (SERVORD) or table control.

Programming variant CFB or CFD is done at datafill time for the set and the variant is activated when the feature is successfully assigned to the set.

To deactivate variant CFB or CFD, the variant must be successfully removed from the set.

Only the primary member of a Multiple Appearance Directory Number (MADN) group is able to program, activate or deactivate either variant for the group.

Call Forwarding Busy (CFB)

If variant CFB is activated, calls are forwarded to the remote station when the base station is busy.

The following eight variants exist for variant CFB. Only one variant, CBU, can be assigned to Residential Enhanced Services (RES) lines.

- **N** If the base station is busy, the call is forwarded to the remote station within the customer group. This option includes all calls (incoming DID, EPSCS, tie trunk, intragroup calls, and others).
- **CBE (Call Forward Busy External Deny)** CBE is a variant available on variant CFB that prevents the forwarding of external (outside the customer group) calls on certain applications where a high proportion of the incoming calls are of external origin. Installation of this variant prevents the remote station from being flooded with external calls. This is particularly useful in Message Waiting applications. Calls are only forwarded to remote stations within the customer group.
- **CBECBU (Call Forward Busy External Deny Unrestricted)** The CBECBU option is similar to the CBE variant, but calls can be forwarded to remote stations outside the customer group (unrestricted).
- **CBI (Call Forward Busy Intragroup Deny)** CBI is a variant available on variant CFB that prevents the forwarding of intragroup calls. In certain applications where a high proportion of the incoming calls are of intragroup origin, installation of this variant prevents the remote station from being flooded with intragroup calls. This can be especially relevant if several stations have variant CFB or CFD to the attendant or to the same secretary. Calls are only forwarded to remote stations within the customer group.
- **CBICBU (Call Forward Busy Intragroup Deny Unrestricted)** The CBICBU option is similar to the CBI variant, but calls can be forwarded to remote stations outside the customer group (unrestricted).
- **CBU (Call Forward Busy Unrestricted)** CBU option is similar to the N variant except calls can be forwarded to remote stations outside the customer group (unrestricted).
- **IECFB (Internal External Call Forward Busy Deny)** IECFB variant is similar to the N variant where internal (inside the customer group) and external (outside the customer group) originated calls are forwarded to different remote stations within the customer group. See table IBNXLA for assigning the access codes for the activation and deactivation of the external and internal DNs.
- **IECFBCBU (Internal External Call Forward Busy Unrestricted)** IECFBCBU variant is similar to the IECFB variant where internal (inside the customer group) and external (outside the customer group) originated calls can be forwarded to different remote stations outside (unrestricted) the customer group.

IBNFEAT feature CFX (continued)

CFB limitations and restrictions

Calls are not forwarded in the following cases:

- The call is of intragroup origin and the base station has variant CBI.
- The call is of external origin and the base station has variant CBE.
- The remote station is attendant and night service is in effect.
- The forward number is not an intragroup number and the base station does not have the unrestricted feature.

For any of the above scenarios the caller hears a busy tone.

Calls are forwarded in the following cases if the forward number is intragroup:

- The number routes to the intragroup tie trunk or another intragroup route.
- The number is to a hunt group.
- The number is to a station that does not have denied originating (DOR), denied terminating (DTM), suspended (SUS) or plug-up options assigned in table IBNLINES.

Call Waiting and CFB are compatible features, with Call Waiting taking precedence over CFB. The first call to a busy station with both CWT and CFB is call waited. Subsequent calls are forwarded to the CFB DN.

If the base station activates variant CFI or CFU, these variants take precedence.

If the remote base station activates variant CFU, the call is not forwarded if the base station does not have the unrestricted feature. CFB calls must stay within the customer group without the unrestricted feature.

Note that call handling is not always predictable because the feature permits variant CFB to intragroup DNs that are served by other PBXs. Therefore, the caller is subject to the actions of features in the remote PBX.

Variant CFB cannot be assigned to hunt groups.

If night service is active, variant CFB to the attendant is deactivated. CFB is reactivated when daytime service is restored.

IBNFEAT feature CFX (continued)

Attendant Camp-on and CFB are compatible features as follows:

- If the attendant extends a call to a busy station, camp-on applies. If a call is already camped on, the attendant hears a reorder tone. The CFB variant does not apply. Camped-on calls are subject to Automatic Recall (AR).
- If the attendant originates a call to a busy station, variant CFB applies except where the forward DN is back to the attendant. Camp-on does not apply to attendant-originated calls.
- A maximum of five forward loops are supported within the switching unit, after which the caller hears a busy tone.
- If a closed loop is detected, A to B to C to A or B, the switching unit returns a busy tone. The call is not forwarded from C to A or B.
- Incoming callers are not aware of variant CFB within the switching unit. This does not apply if the CFB DN is served by another PBX.
- Timers do not apply to the CFB feature.
- The CFB DN can be from 1 to 30 digits.
- If a call is made to a busy line with variant CFB and the line that was forwarded to is also busy, then feature Executive Busy Override (EBO) can be activated on the first called party. However, if the original called party is the member of a MADN group, the request is disallowed and the station with option EBO gets a reorder tone.
- If an IBN station forwards a call through variant CFB/CFD/CFI over an intragroup trunk to a station that activates CFU to an outside DN, the call is forwarded outside the customer group. If the incoming trunk is in the customer group and the intragroup flag is set and the trunk group data is set, then the call is forwarded.

The following information is required for each line with one or more of the five Call Forwarding variants:

- the site name of the remote location (for remote lines)
- the line equipment number (LEN) to which the line with the feature is assigned
- the data feature CFX

The following data is required with variant CFBD:

- the method of activation of the CFB and CFD feature
- the 1 to 30 DNs to which calls have to be forwarded (if method of activation of the CFB and CFD feature is default or fixed)

IBNFEAT feature CFX (continued)

- whether to exclude intragroup or external (outside customer group) originated calls from CFB
- whether calls can be forwarded to stations outside the customer group (unrestricted) if the station is busy
- whether to exclude intragroup or external (outside the customer group) calls from CFD
- whether calls can be forwarded to stations outside the customer group (unrestricted) if the station does not answer

The following data is required with variant CFB:

- the method of activation of the CFB feature.
- the 1 to 24 DNs to which calls have to be forwarded (if the method of activation of the CFB feature is default or fixed)
- whether to exclude intragroup or external (outside customer group) originated calls from CFB
- whether calls can be forwarded to stations outside the customer group (unrestricted) if the station is busy

The following data is required with variant CFD:

- the method of activation of the CFD feature.
- the 1 to 24 DNs to which calls have to be forwarded (if method of activation of the CFD feature is default or fixed)
- whether to exclude intragroup or external (outside the customer group) calls from CFD
- whether calls can be forwarded to stations outside the customer group (unrestricted) if the station does not answer

Call Forwarding Don't Answer (CFD)

If variant CFD is activated, calls are forwarded to the remote station when the base station does not answer the call.

The following eight variants exist for variant CFD. Only one variant, CDU, can be assigned to Residential Enhanced Services (RES) lines.

- **N** If the base station does not answer within the prescribed time, the call is forwarded to the remote station within the customer group. This option includes all calls (for example, incoming DID, EPSCS, tie trunk, and intragroup calls)
- **CDI (Call Forward Don't Answer Intragroup Deny)** The CDI variant prevents the forwarding of intragroup calls. In certain applications where

a high proportion of the incoming calls are of intragroup origin, installation of this option prevents the remote station from being flooded with intragroup calls. This can be especially relevant if several stations have CFB/CFD to the attendant or to the same secretary. Calls are only forwarded to remote stations within the customer group.

- **CDE (Call Forward Don't Answer External Deny)** The CDE variant prevents the forwarding of external (outside the customer group) calls on certain applications where a high proportion of the incoming calls are of external origin; installation of this option prevents the remote station from being flooded with external calls. This is particularly useful in Message Waiting applications. Calls are only forwarded to remote station within the customer group.
- **CDECDU (Call Forward Don't Answer External Deny Unrestricted)** The CDECDU variant is similar to the CDE variant, but calls can be forwarded to remote stations outside the customer group (unrestricted).
- **CDICDU (Call Forward Don't Answer Intragroup Deny Unrestricted)** The CDICDU variant is similar to the CDI variant, but calls can be forwarded to remote stations outside the customer group (unrestricted).
- **CDU (Call Forward Don't Answer Unrestricted)** The CDU variant is similar to the N variant except calls are allowed to be forwarded to remote stations outside the customer group (unrestricted).
- **IECFD (Internal External Call Forward Don't Answer Deny)** The IECFD variant is similar to the N variant where internal (inside the customer group) and external (outside the customer group) originated calls are forwarded to different remote stations within the customer group. See table IBNXLA for assigning the access codes for the activation and deactivation of the external and internal DNs.
- **IECFDCDU (Internal External Call Forward Don't Answer Unrestricted)** The IECFDCDU variant is similar to the IECFD variant where internal (inside the customer group) and external (outside the customer group) originated calls can be forwarded to different remote stations outside (unrestricted) the customer group.

CFD limitations and restrictions

Calls are not forwarded in the following cases:

- The call is of intragroup origin and the base station has variant CDI.
- The call is of external origin and the base station has variant CDE.

IBNFEAT feature CFX (continued)

- The remote station is attendant and night service is in effect.
- The base station does not have the unrestricted feature and the forward number is not an intragroup number (remote station has activated Call Forwarding outside the group or features LOD or LOR results in forwarding outside the group).

Calls are forwarded in the following cases if the forward number is intragroup:

- The number routes to intragroup tie trunk or other intragroup route.
- The number is to a hunt group.
- The number is to a station that does not have denied terminated (DTM), denied originating (DOR), suspended (SUS) or plug-up options assigned in table IBNLINES.
- The remote station is idle. If the remote station also has variant CFD or CDI, it is rung for the answer time-out interval before being forwarded again subject to the same restrictions.
- The remote station is busy and
  - — has Call Waiting and a call is not already waiting
  - — has CFB

If a line is assigned both variants CFB and CFD, the remote DN is not necessarily the same for both features.

If variant CFI or CFU is active, it takes precedence over any other CFX variants assigned to the base station. If a CFD call without the unrestricted feature (that is, to intragroup lines destinations only) is to be forwarded to a remote station and the remote station has activated Call Forwarding outside the customer group, the call is not forwarded but continues to ring on the base station. CFD calls without the unrestricted option must stay within the defined customer group.

Note that the remote station can be served by another PBX, the only criterion being that the outgoing route must be intragroup. Therefore the call, once forwarded outside the switching unit, is subject to whatever features that PBX supports.

CFX applies to attendant-originated calls except where the forward DN is to the attendant. CFX does not apply to attendant extended calls. Attendant extended calls are subject to Automatic Attendant Recall.

A call to a busy station with Call Waiting is call waited. Variant CFD does not apply to busy lines.

A maximum of five Call-Forward legs within the switching unit are permitted. The call continues to ring the fifth station.

The only type of hunt group CFD can be assigned to is directory number hunt (DNH).

Variant CFD is subject to class-of-service restrictions. If the remote station is not permitted to receive the type of call to be forwarded, the call rings the base station until abandoned or answered.

Variant CFD to the attendant only applies to daytime service. At night the call continues to ring the base station.

Assignment of an ICI to CFD on the console is not a condition for forwarding such calls to the attendant.

If a closed loop is detected (A to B to C to A or B), the call continues to ring on C. It is not forwarded to A or B.

If the MULTICFB (multiple call forward blocking) option in table CUSTSTN is present, there is no limit to the number of calls forwarded simultaneously for variant CFD. If option MULTICFB is absent, only one call is allowed to be forwarded simultaneously. If field SIMULT in table IBNFEAT is datafilled, the datafill in this field takes precedence and imposes a limit to the number of simultaneously forwarded calls. Calls that cannot be forwarded because the maximum simultaneous limit was reached continue to ring the CFD base station until answered or abandoned.

The DN input for CFD can be from 1 to 30 digits in length.

Call Forwarding Fixed (CFF), Intragroup (CFI), and Universal (CFU)

The remote station to which calls are forwarded to can also have activated Call Forwarding on their line. In this case the forwarded call can again be forwarded to the next remote station. Within the switching unit, up to five Call-Forward legs are permitted. If the sixth station has activated Call Forwarding, the caller hears a busy tone.

If two or more users set up a Call Forwarding loop such as A to B, B to C, and C to A or B, then any call coming into the loop receives busy tone.

The number of simultaneously forwarded calls for each line can be set if so desired. Calls that cannot be forwarded because the simultaneous limit has been reached get busy tone. If the simultaneous limit is not set for a particular line, the number of simultaneous forwarded calls is determined by option

IBNFEAT feature CFX (continued)

MULTICFX (Multiple Call Forwarding) in table CUSTSTN: unlimited if the option is present, or limited to 1 if the option is not present.

The operating company can specify a Call Forwarding network class-of-service screening (NCOS) for lines with an LCC of IBN, which is different from the standard NCOS of the lines. This NCOS can prevent certain subscribers from Call Forwarding to a select number of destinations.

The operating company can specify a Call Forwarding class-of-service screening (CFXSCRL) for lines with an LCC of RES, which is different from the standard screening of the lines. This screening can prevent certain subscribers from Call Forwarding to a select number of destinations.

Lines with variants CFF, CFI, or CFU can be assigned a Call Forwarding Remote Access (CFRA) option, which enables a line to activate or deactivate Call Forwarding from a remote location.

Originators of incoming calls that are forwarded are unaware that Call Forwarding is in effect.

When Call Forwarding is active, the base station's ability to originate calls is unaffected. This includes the ability to pick up calls.

Call Forwarding is implemented only in a sending environment. Pause insertion (*) does not apply.

These features cannot be assigned to automatic lines, lines denied origination or termination, or suspended lines.

If the base station has activated Call Forwarding to service codes (N11), operators, test lines or other similar facilities, these calls are given blank DN treatment and are not forwarded.

If the base station has activated Call Forwarding to itself, the caller hears a busy tone.

Station restrictions applicable to the remote station still apply. For example, if the remote station is restricted from receiving direct inward dial (DID) calls, such calls are not forwarded and the caller receives a busy tone.

All Call Forwarding activation and deactivation is recorded in case an office reload is required. Each time an activation or deactivation is completed, the DMS switch attempts to record the change in the journal file. If the journal file is not available, a log message is written to the system hard copy terminal.

When Call Forwarding is active, a 500/ms ring splash is applied to the base station (if idle) each time a call is forwarded. The call cannot be answered by the base station. Ring splash serves as a reminder that Call Forwarding is still active. If the base station goes off-hook at any time, it receives a dial tone.

If the base station number is dialed from the base station while variant CFI or CFU is active, the call is forwarded to the remote station.

If Call Forwarding is active, appropriate SMDR entries are made for any calls that are forwarded.

These features can only be activated by the base station.

Universal Access to Call Forwarding (UCFW)

Universal Access to Call Forwarding (UCFW) allows the operating company to make the Call Forwarding Universal (CFU) feature available to telephones with a line class code of RES, RES-1FR and RES-1MR without requiring that each line first subscribe to CFU through the operating company's business office. The UCFW feature is indicated by CFU with the CFXUSP option.

Confirmation tone

A confirmation tone informs the user that the DMS switch has stored the number as dialed. The tone does not imply that the number is valid. Number validity is only determined at the time the DMS switch actually attempts to forward a call.

To activate the feature, the base station goes off-hook and dials the activation code assigned to Call Forwarding. The station receives a special dial tone. The station then enters the number to which calls are to be forwarded. This number can be from 1 to 7 digits if the station has variant CFI, and 1 to 30 digits if the station has variant CFU.

The DMS switch then returns a confirmation tone to inform the user that the Call Forwarding number has been stored as dialed.

The activation code dialed to activate Call Forwarding is the same for variants CFI and CFU. This code can be any two- or three-digits (typically 1XX), or it can be a function code (* plus two digits).

While feature CFX is active, he base station can check the status of Call Forwarding by dialing the activation code and listening for a reorder tone.

If the base station dials its own DN, the base station is forwarded. This is a further check.

IBNFEAT feature CFX (continued)

To change the Call Forwarding DN, the base station must first deactivate feature CFX.

To deactivate feature CFX, the base station dials the deactivation code. The deactivation code is the same for variants CFI and CFU. This code can be two- or three-digits (typically 1XX), or it can be a function code (* plus two digits). Confirmation tone is returned regardless of whether variant CFI or CFU is active.

The activation and deactivation codes are assigned in table IBNXLA.

If the base station also has Call Waiting, Call Waiting is disabled for the duration that Call Forwarding is active. The same applies to Attendant Camp-on. Call forwarding to the attendant is deactivated while night service is active. While deactivated, calls to the base station will cause that station to be rung until the call is answered, abandoned, or upon ringing time out. When daytime service is restored, Call Forwarding to the attendant again applies.

Variant CFI or CFU can be assigned to hunting DNs and takes precedence over hunting when the variant is active.

The remote station number for variant CFI or CFU may be a hunt group.

Speed Calling can be used to enter the remote number to activate Call Forwarding.

Datafill

The following table lists the datafill for table IBNFEAT feature CFX.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DF		CFX	Data feature. Enter CFX for the Call Forwarding feature.
FEATURE		CFX	Data Feature. Enter CFX.
DATA		see subfields	Data. This field consists of subfields CFUIFVAR, CFBDVAR, OPTVAR, and KEYLIST. Separate each subfield with a space.

IBNFEAT feature CFX (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CFUIFVAR	see subfield	Call Forward Universal Intragroup Fixed variables. This field consists of subfield CFUIFOPT.
	CFUIFOPT	CFF, CFI, CFK, CFU, or N	Call Forward Universal Intragroup Fixed Option. Enter CFF if the line has the Call Forward Fixed feature only and datafill refinement CFFDN. Enter CFI if the line has the Call Forward Intragroup feature only and datafill field CFBDVAR. Enter CFK if the line has the Call Forward Universal per Key feature only and datafill field CFBDVAR. Enter CFU if the line has the Call Forward Universal feature only and datafill refinement OVRDACR. Enter N if the line does not have any of the above options and datafill field CFBDVAR.
	OVRDACR	Y or N	Override account code required. If the entry in subfield CFUIFOPT is CFU, datafill this refinement. Enter Y (yes) if account code requirements for CFU calls are overridden. Otherwise, enter N (no). Datafill subfield CFBDVAR.
	CFXUSP	Y or N	Call Forward Feature Usage Sensitive Pricing. Enter Y to indicate usage sensitive CFX. Enter N to indicate flat rate CFX.
	CFFDN	numeric (1 to 30 digits)	Call Forward Fixed Directory Number. If the entry in subfield CFUIFOPT is CFF, datafill this refinement. Enter the DN to which the call is forwarded when feature CFF is activated. Datafill subfield CFBDVAR.

IBNFEAT feature CFX (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CFBDVAR	see subfields	Call Forward Busy Don't Answer Variables. This field consists of subfield CFBDOPT.
	CFBDOPT	CFB, CFBD, CFD, or N	Call Forward Busy Don't Answer Option. Enter CFB if the line has only feature Call Forward Busy and datafill refinements CFBCNTL, CBTYPE, CFBDN, ICFBDN, and EXCFBDN. Enter CFBD if the line has both feature Call Forward Busy and feature Call Forward Don't Answer, and datafill refinements CFBCNTL, CBTYPE, CFBDN, ICFBDN, EXCFBDN, CFDCNTL, CDTYPE, CFDDN, INCFDDN, and EXCFDDN. Enter CFD if the line has only feature Call Forward Don't Answer and datafill refinements CFDCNTL, CDTYPE, CFDDN, INCFDDN, and EXCFDDN. Enter N if the line does not have any of the above features. No refinements need datafilling. Go to field OPTVAR.

CFBDOPT = CFB or CFBD

If the entry in subfield CFBDOPT is CFB or CFBD, datafill the following refinements.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CFBCNTL	F, N, or P	Call Forward Busy Control. Enter F (fixed) if the CFB feature is activated or deactivated by the user. Field CFBDDN is datafilled by the operating company and is supplied by the user during application. Enter N (the default) if feature CFB is always activated. Enter P (programming) if feature CFB is activated or deactivated by the user.
	CBTYPE	CBE, CBECBU, CBI, CBICBU, CBU, IECFB, IECFBCBU, or N	Call Forward Busy Type. If the entry in refinement CFBCNTL is P, enter the CFB selector described below and go to refinement CFDCNTL. Enter CBE to deny external (outside the customer group) calls forwarded when the line is busy. Intragroup calls are forwarded to remote station within the customer group. Enter CBECBU to deny external (outside the customer group) calls forwarded. Intragroup calls are forwarded to remote stations within or outside the customer group (unrestricted).

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CBTYPE (continued)		Enter CBI to deny intragroup calls forwarded. External calls are forwarded to remote stations within the customer group. Enter CBICBU to deny intragroup calls forwarded. External calls are forwarded to remote station within or outside the customer group (unrestricted). Enter CBU to have all calls forwarded to remote stations within or outside the customer group (unrestricted). Enter IECFB to forward internal (inside the customer group) and external (outside the customer group) calls to remote stations within the customer group specified by refinements INCFBDN and EXCFBDN respectively. Enter IECFBCBU to forward internal (inside the customer group) and external (outside the customer group) calls to remote stations within or outside the customer group specified by refinements INCFBDN and EXCFBDN respectively. Enter N to forward all calls to remote stations within the customer group. If the entry in subfield CFBDOPT is CFB and the entry in refinement CFBCNTL is P, go to subfield OPTVAR.
	CBTYPE (continued)		If the entry in subfield CFBDOPT is CFBD and the entry in refinement CFBCNTL is P, go to subfield CFDCNTL. If the entry in subfield CFBDOPT is CFBD and the entry in refinement CFBCNTL is P, go to subfield CFDCNTL.

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CFBDN	numeric (1 to 30 digits)	Call Forward Busy Directory Number. If the entry in refinement CFBCNTL is F or N and the entry in refinement CBTYPE is CBE, CBI, CBECBU, CBICBU, CBU, or N, enter the DN to which the call is forwarded when the line is busy. Go to field OPTVAR.
	INCFBDN	numeric (1 to 30 digits)	Call Forward Busy Internal Directory Number. If the entry in refinement CFBCNTL is F or N and refinement CBTYPE is set to IECFB or IECFBCBU, enter the internal DN to which the call is forwarded when the line is busy.
	EXCFBDN	numeric (1 to 30 digits)	Call Forward Busy External Directory Number. If the entry in refinement CFBCNTL is F or N, and refinement CBTYPE is set to IECFB or IECFBCBU, enter the external DN to which the call is forwarded when the line is busy. If the entry in subfield CFBDOPT is CFB, go to field OPTVAR.

IBNFEAT feature CFX (continued)

CFBDOPT = CFBD or CFD entries

If the entry in subfield CFBDOPT is CFBD or CFD, datafill the following refinements.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CFDCNTL	F, N, or P	Call Forward Don't Answer Control. For control of activation, deactivation and programming of feature CFD, enter F (fixed) if the CFD feature is activated or deactivated by the user. Field CFDDN is datafilled by the operating company. Enter N (default) if feature CFD is always activated. Field CFDDN is datafilled by the operating company. Enter P (programming) if feature CFD is activated or deactivated by the user. The entry for field CFDDN is supplied by the user during activation.
	CDTYPE	CDE, CDECDU, CDI, CDICDU, CDU, IECFD, IECFDCDU, or N	Call Forward Don't Answer Type. If the entry in refinement CFDCNTL is P, enter a CD selector described below and go to subfield OPTVAR. For forwarding calls when the line has feature Call Forward Don't Answer, enter CDE to deny external calls forwarded. Intragroup calls are forwarded to remote station within the customer group. Enter CDECDU to deny external calls forwarded. Intragroup calls are forwarded to remote stations within or outside the customer group (unrestricted).

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CDTYPE(continued)		Enter CDI to deny intragroup calls forwarded. External calls are forwarded to remote station within the customer group. Enter CDICDU to deny intragroup calls forwarded. External calls are forwarded to remote stations within or outside the customer group (unrestricted). Enter CDU to call forward all calls to remote stations within or outside the customer group (unrestricted). Enter IECFD to forward internal (inside the customer group) and external (outside the customer group) calls to remote stations within the customer group specified by refinement INCFDDN and EXCFDDN respectively. Enter IECFDCDU to forward internal (inside the customer group) and external (outside the customer group) calls to remote stations within or outside the customer group specified by refinements INCFDDN and EXCFDDN respectively. Enter N to call forward all calls to remote stations within the customer group.
	CFDDN	numeric (1 to 30 digits)	Call Forward Don't Answer Directory Number. If refinement CFDCNTL is set to F or N and refinement CDTYPE is set to CDE, CDECDU, CDI, CDICDU, CDU, or N, enter the DN to which the call is forwarded when the line does not answer.

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	INCFDDN	numeric (1 to 30 digits)	Call Forward Don't Answer Internal Directory Number. If refinement CFDCNTL is set to F. IECFD or IECFDCDU, enter the internal DN to which the call is forwarded when the line does not answer.
	EXCFDDN	numeric (1 to 30 digits)	Call Forward Don't Answer External Directory Number. If refinement CFDCNTL is set to F or N, and refinement CDTYPE is set to IECFD or IECFDCDU, enter the external DN to which the call is forwarded when the line does not answer. Go to subfield OPTVAR.

CFBDOPT = all entries

For all entries in subfield CFBDOPT, datafill the following fields.

Field descriptions for conditional datafill (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	OPTVAR	see subfield	Call Forwarding option variables. This field consists of subfield CFXOPTS.
	CFXOPTS	Y or N	Call Forwarding options. If Call Forwarding options are required, enter Y (yes) and datafill refinements SIMVAR, SCRVAR, SCFVAR, CFRAVAR, and CMCFVAR. Otherwise, enter N (no). No further datafill is required for option CFX.
	SIMVAR	see subfield	Simultaneous variables. This refinement consists of subfield SIMULT.

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SIMULT	Y or N	Simultaneous. If the entry in refinement CFXOPT is Y, datafill this refinement. Enter Y if the number of calls that can be forwarded simultaneously for the line must be set and datafill refinements NCFUIF, NCFB, NCFD, and NSCF. Otherwise, enter N and go to subfield SCRVAR.
	NCFUIF	1 to 1024	Number of simultaneous Call Forward Universal Intragroup Fixed calls. If the entry in refinement SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for the line with Call Forwarding Universal, Intragroup and Fixed.
	NCFB	1 to 1024	Number of simultaneous Call Forward Busy calls. If the entry in refinement SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for the line with Call Forward Busy.
	NCFD	1 to 1024	Number of simultaneous Call Forward Don't Answer calls. If the entry in refinement SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for the line with Call Forward Don't Answer.
	NSCF	1 to 1024	Number of simultaneous selective Call Forward calls. If the entry in refinement SIMULT is Y, datafill this refinement. Enter the number of calls that can be forwarded simultaneously for the line with Selective Call Forwarding.
	SCRVAR	see subfield	Screening variables. This refinement consists of subfield SCREEN.

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SCREEN	N, NCOS, or SCRNCL	Screening. Enter NCOS if screening of forwarded calls is required and datafill refinement CFXNCOS. Enter SCRNCL if screening of forwarded calls is required for Residential Enhanced Services (RES) lines and datafill refinement CFXSCRCL. Otherwise, enter N and go to subfield SCFVAR.
	CFXNCOS	0 to 511	Call Forwarding network class-of-service screening. If the entry in refinement SCREEN is NCOS, enter the NCOS number required for screening the forwarded calls.
	CFXSCRCL	alphanumeric (1 to 16 characters)	Call Forwarding screening class. If the entry in refinement SCREEN is SCRNCL, enter the class-of-service screening required for screening the forwarded calls. The screening class must be assigned in table SCRNCLAS.
	SCFVAR	see subfield	Selective Call Forwarding variables. This field consists of subfield SCFOPT.
	SCFOPT	Y or N	Selective Call Forwarding options. Enter Y for selective Call Forwarding options and datafill refinement RINGMEM. Otherwise, enter N and go to refinement CFRAVAR.
	RINGMEM	NANORINGor RING	Ring reminder. This field indicates whether a ring splash is applied to the base station when a call is forwarded. Enter NA if the ring reminder value of the customer group is used (field CFXFEAT in table CUSTSTN). Enter NORING to suppress the ring reminder. Enter RING to send a ring reminder.
	CFRAVAR	see subfield	Call Forwarding Remote Access variables. This refinement consists of subfield CFRA.

IBNFEAT feature CFX (continued)

Field descriptions for conditional datafill (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	CFRA	CFRA or N	Call Forward Remote Access. Enter CFRA if the station has the Call Forward Remote Access (CFRA) option and datafill refinement CFRAAUTH. Otherwise, enter N and go to refinement CMCFAVAR. If subfield CFUIFOPT is set to N, this field must be equal to N.
	CFRAAUTH	numeric (2 to 10 digits, 0 to 9)or N	Call Forward Remote Access authorization code. This field is a vector of up to ten codes. Enter the two- to ten-digit authorization code or personal identification number (PIN) code the user must specify when accessing the CFRA feature. If more than one code is needed, separate each code with a space.
	FIRSTUSE	Y or N	First Use. This field indicates whether or not the user still needs to change the PIN before using CFRA for the first time when option SPP is datafilled in table CUSTSFN. This field should be set to Y to require the user to change their PIN using SPP before using CFRA for the first time.
	CMCFVAR	see subfield	Control of multiple Call Forwarding. This refinement consists of subfield CMCF.
	CMCF	Y or N	Control of multiple Call Forwarding. Enter Y if the station has the Control of Multiple Call Forwarding (CMCF) option and datafill refinements ANCFI and ANCFE. Otherwise, enter N and go to subfield KEYLIST. ***Note:*** Option CMCF must be assigned to the customer group in table CUSTSTN before table KSETFEAT.

IBNFEAT feature CFX (end)

Field descriptions for conditional datafill (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	ANCFI	0 to 1023	Additional number of calls to forward intragroup. If the entry in refinement CMCF is Y, datafill this refinement. Enter the number of additional calls allowed to forward simultaneously over and above the group values for intragroup DNs, by a member of the customer group to a DN belonging to the same customer group.
	ANCFE	0 to 1023	Additional number of calls to forward external. If the entry in refinement CMCF is Y, datafill this refinement. Enter the number of additional calls allowed to forward simultaneously over and above the group values for external DNs by a member of the customer group to a DN outside the customer group.

Table history

NA006

Added field CFXUSP to table IBNFEAT.

NA004

Updated the CFB DN from 24 to 30 digits. Updated the following subfields from 24 to 30 digits: CFBDN, CFDDN, CFFDN, INCFBDN, INCFDDN, EXCFBDN, and EXCFDDN.

IBNFEAT feature CLI

Calling Line Identification (CLI)

When this feature is assigned to a line, all calls (local and toll) terminating on the subscriber's line record the following information on the DMS log system:

- directory number (DN) of calling party when the calling party is located on the switching unit or the incoming trunk number if the called party is on an external switching unit
- date and time the call originated

Datafill

The following table lists the datafill for table IBNFEAT feature CLI.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CLI	*Data feature* Enter CLI for the Calling Line Identification feature.
FEATURE		CLI	*Data feature* Enter CLI.

IBNFEAT feature CMG

Call Management Group (CMG)

The CMG line option identifies the Dual Line Call Management (DLCM) member. The line option determines if simultaneous ringing applies to the DLCM member. Also the CMG line option determines if SDNs should receive simultaneous ringing. The default is simultaneous ringing is set to active and SDNs do not receive simultaneous ringing.

Datafill

The following table lists the datafill for table IBNFEAT feature CMG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CMG	Data Feature. Enter CMG for Call Management Group feature.
FEATURE		CMG	Feature. Enter CMG.
DATA		see subfield	Data. This field consists of subfield CMG.
	CMG	see refinements	Call Management Group. This subfield consist of refinements LINK_DN_OR_LEN, CMGRING, and DENY_SDN.
	LINK_DN_OR _LEN	Type is DR_LEN_TYPE (DN or LEN)	Link directory number or line equipment number indicates the DLCM member linked to a line. Specify the DN of a MDN line or MLH/DLH hunt member. The switch prompts the end user for the CMG_LINK_LEN or LEN of the line.
	DENY_SDN	Y or N	Deny secondary directory number denies simultaneous ringing on SDNs when the CMG line option is on the primary DN of the teen line.

Datafill example

The following example shows sample datafill for table IBNFEAT feature CMG.

IBNFEAT feature CMG (end)

MAP display example for table IBNFEAT feature CMG

```
LEN    DNNO    DF    FEATURE  DATA
_____________________________________________________________
HOST 00 0 03 03 0 CMG CMG 00 0 03 04 A Y
```

IBNFEAT feature CNF

Flexible Station Controlled Conference (CNF)

This feature permits a 500/2500 IBN station to establish a conference call consisting of more than three parties without the assistance of the attendant.

The maximum number of conferees, including the 500/2500 station, is 30.

The station can be assigned one of seven feature variants of 6, 10, 14, 18, 22, 26, or 30 conferees.

The conferees can include lines in the same customer group, lines belonging to another customer group, and stations reached by trunks.

The access codes for adding or releasing conferees are defined in table IBNXLA with feature selectors CONF and RLS.

Datafill

The following table lists the datafill for table IBNFEAT feature CNF.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CNF	*Data feature* Enter CNF for the Flexible Station Controlled Conference feature.
FEATURE		CNF	*Data feature* Enter CNF.
DATA		see subfield	*Data* This field consists of subfield MAXSIZE.
	MAXSIZE	C06, C10, C14, C18, C22, C26, or C30	*Maximum number of conferees* Enter the maximum number of conferees. For example, C06 for six, C10 for ten, and so on.

Call Pickup (CPU)

Call Pickup permits a station to answer calls incoming to another station within a preset pickup group. Call Pickup is provided on an individual station basis within an IBN customer group. To pick up a call, the station user dials the code assigned to the feature.

See operational measurement (OM) GROUP CPICKUP for the OMs associated with feature CPU.

Datafill

The following table lists the datafill for table IBNFEAT feature CPU.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CPU	Data feature. Enter CPU for the Call Pickup feature.
FEATURE		CPU	Data feature. Enter CPU.
DATA		see subfield	Data. This field consists of subfield LINKLEN.
	LINKLEN	see subfields	Link line equipment number. This field is identical to field LEN and 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.

IBNFEAT feature CSMI

Table name

Call Screening, Monitoring, and Intercept (CSMI)

Functional description

CSMI allows end users of Network Based Answering Services (NBAS) to monitor and intercept calls being handled by the NBAS. Call monitoring allows the end user to listen to a message as it is being left in the end user's voice mailbox in the NBAS. Call interception allows the end user to connect to the call to speak directly to the caller.

Datafill

The following table lists datafill for table IBNFEAT feature CSMI.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DF		CSMI	Data feature. Enter CSMI for the Call Screening, Monitoring, and Intercept feature.
FEATURE		CSMI	Data feature. Enter CSMI.
DATA		see subfield	Data. This field consists of subfield CSMIOPT.
	CSMIOPT	Y or N	CSMI options. Enter Y to indicate that CSMI is assigned to the line and datafill subfields CSMISTATE, CSMIPPU, CONNEC3W, and SCRACTIVE. Or enter N and skip to subfield DENYCSMIOPT.
	CSMISTATE	A or I	CSMI state. Enter A if CSMI is active on this line. Enter I if CSMI is inactive.

IBNFEAT feature CSMI (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	CSMIPPU	Y or N	CSMI billing. This subfield indicates the billing scheme to be used. When set to N, CSMI is billed on a monthly flat-rate basis. When set to Y, CSMI is billed on a usage- sensitive basis and an AMA billing record is generated each time CSMI is accessed. ***Note:*** When CSMIPPU is set to Y, CSMI is offered to all types of call forwarding on the line (except those restricted through DENYCSMIOPT) and does not depend on the presence of options CFDA, CFBL, or MWT on a line.
	CONNEC3W	Y or N	Three-way connection. This subfield indicates how call interception is to occur. When set to N, the interception establishes a two-way connection between the caller and the end user. When set to Y, the interception uses establishes a three-way call between the two parties and the NBAS.
	SCRACTIVE	Y or N	Screening active. This subfield indicates what factor determines the duration of the screening timer. When set to Y, the duration of the screening timer is determined by the value in subfield SCRDUR. When set to N, the duration of the screening timer is determined by office parameter CSMI_ SCREENING_TIMER for subscription-based CSMI and Centrex end users, and by office parameter CSMI_PPU_SCREENING_ TIMER for CSMIPPU end users.

IBNFEAT feature CSMI (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SCRDUR	0 to 120	Screening timer duration. This subfield indicates the duration (in seconds) of the screening period (that is, the duration when the CSMI end user can begin to monitor the call once a ring splash is received). Monitoring ceases after the timer expires. (Entering a value of 0 indicates that the screening period lasts as long as the forwarded call.) ***Note:*** This field only displays if subfield SCRACTIVE was set to Y.
	DENYCSMIOPT	DENYALL, DENYCFDA, DENYCFBL, or DENYCFW	Deny CSMI options. This subfield prevents option CSMI from being activated on calls forwarded by the following Call Forwarding types: • all Call Forwarding types (DENYALL) • Call Forwarding Do Not Answer (DENYCFDA) • Call Forwarding Busy Line (DENYCFBL) • Call Forwarding (DENYCFW)

Datafill example

The following example shows sample datafill for table IBNFEAT feature CSMI.

MAP display example for table IBNFEAT feature CSMI

```
HOST          DNNO      DF     FEATURE    DATA
-------------------------------------------------
HOST 01 0 01 04 0       CSMI   CSMI       A
```

Carrier Toll Denied (CTD)

If this feature is assigned, toll access is denied from the given IBN station to up to 21 selected carriers.

Datafill

The following table lists the datafill for table IBNFEAT feature CTD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		CTD	*Data feature* Enter CTD for the Carrier Toll Denied feature.
FEATURE		CTD	*Data feature* Enter CTD.
DATA		see subfield	*Data* This field consists of subfield CARRIERS.
	CARRIERS	alphanumeric (1 to 16 characters)	*Carriers* Enter up to 21 IC_INC_CARRIER_NAMES defined in table OCCNAME to which the station is denied toll access. If less than 21 carriers are required, end the list with a $ (dollar sign).

IBNFEAT feature CXR

Call Transfer (CXR)

Feature CXR is assigned to a station if the call transfer for the station is different from the call transfer assigned to the customer group in table CUSTSTN.

The type of call transfer defined with this feature overrides the call transfer option in table CUSTSTN.

Specify which of the following transfer types is required:

- ATTRCLF if the call is always to be transferred to the attendant.
- CTALL if the ability to transfer all incoming and outgoing is required. The first and second legs of the call can be INTERGROUP or INTRAGROUP.
- CTINC if the ability to transfer all incoming calls is required. The first leg of the call must be INTERGROUP and the second leg of the call must be INTRAGROUP.
- CTINTRA if the ability to transfer all incoming and outgoing calls is required. The first leg of the call can be INTERGROUP or INTRAGROUP and the second leg of the call must be INTRAGROUP.
- CTOUT if the ability to transfer all incoming and outgoing calls is required. The first leg of the call must be INTERGROUP and the second leg of the call must be INTRAGROUP.
- CUSTOM if, given a type of call for the first leg, the customer can select the type of call for the second leg.
- NCT if the call is to be transferred to the attendant for incoming calls when the first leg of the call is INTERGROUP.

If the call transfer type is CUSTOM, call transfer type can be specified for the following four types of call:

- originating intergroup (ORGINTER)
- originating intragroup (ORGINTRA)
- terminating intergroup (TRMINTER)
- terminating intragroup (TRMINTRA).

The above four types of call can be assigned one of the following call transfer types:

- AC if the terminator on the second leg can be the attendant console.
- INTRA if the second leg of the call can be an intragroup call.

- INTER if the second leg of the call can be an intergroup call.
- TRATER if the second leg of the call can be an intragroup or intergroup call.
- NOCXFER if no call transfer is allowed.

An enhancement allows the transferred call to recall the transferring station if the recall timer expires. Fields CXRRCL and RCLTIM must be datafilled for this option to be implemented.

An additional enhancement is implemented to allow call transfer to any kind of treatment. This type of transfer is only allowed in a situation where the controller of the three-way call flashed for the first time and by some action, was routed to a treatment. At this point, when the controller goes on-hook, the transferee on the first leg is routed to precisely the same treatment. The controller is not able to conference in a treatment. As usual, two flashes get rid of the treatment and recover the original leg of the call.

If a call is transferred to a busy line and the transferee has RAG (ring again) as a line option, a RAG request on the busy line to which the transferee was transferred can be issued, provided the intragroup requirement is satisfied. When the transferred-to line becomes idle, the transferee is recalled with a distinct ringing pattern. When the RAG requestor answers, an audible ring is heard and the desired station is rung. This is very useful in cases where the three-way call controller goes on-hook immediately after dialing the busy number and the call that attempted to transfer was important.

As usual, if the call transfer option, either on a line or customer group basis, whichever comes first, is not compatible with the call configuration, all parties are dropped when the controller goes on-hook, regardless of whether the second leg was routed to treatment.

Feature CXR can cause two OP or two A5 trunks to be left in the transferred call. If terminating hold is assumed, then each trunk holds the other up, that is, the trunks remain call processing busy (CPB) until they are discovered by operating company personnel.

Field HOLDTYPE for trunk group types OP and A5 trunks has two possible values: NOHOLD and TERMHOLD.

When A5 and OP trunks are used in non-operator type configurations, set field HOLDTYPE to NOHOLD. Feature CXR must still be aware of configurations that involve two operator trunks if terminating hold or joint hold is applicable.

IBNFEAT feature CXR (continued)

The controller of a three-way call can transfer to an OP or A5 trunk provided it was established that the first leg provides both answer and disconnect supervision. Abiding by this restriction guarantees that two trunks are not held up back-to-back in the transferred call. Certain configurations where only one agent in the transferred call provides either answer or disconnect supervision is datafillable at the customer group level.

Datafill

The following table lists the datafill for table IBNFEAT feature CXR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		CXR	*Data feature* Enter CXR for the Call Transfer feature.
FEATURE		CXR	*Data feature* Enter CXR.
DATA		see subfields	*Data* This field consists of subfields CXFERVAR, CXFERRCL, and METHOD.
	CXFERVAR	see subfield	*Variable call transfer* This field consists of subfield CXFERTYP.

IBNFEAT feature CXR (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CXFERTYP	ATTRCLF CTALL CTINC CTINTRA CTOUT CUSTOMorNCT	*Call transfer type* Enter the type of call transfer applicable to the customer group. Enter ATTRCLF if all calls are transferred to an attendant and go to subfield CXFERCCL on the following pages. Enter CTALL if all incoming and outgoing calls are transferred. The first and second legs of the call can be intergroup or intragroup. Go to subfield CXFERCCL on the following pages. Enter CTINC if incoming calls are transferred. The first leg of the call must be intergroup and the second leg of the call must be intragroup. Go to subfield CXFERCCL on the following pages. Enter CTINTRA if incoming and outgoing calls are transferred. The first leg of the call can be intergroup or intragroup, but the second leg of the call must be intragroup. Go to subfield CXFERCCL on the following pages. Enter CTOUT if incoming and outgoing calls are transferred. The first leg of the call must be intergroup and the second leg of the call must be intragroup. Go to subfield CXFERCCL onthe following pages. Enter CUSTOM if the operating company selects the type of the second leg of the call is. Datafill refinements ORGINTER, ORGINTRA, TRMINTER, and TRMINTRA. Enter NCT (incoming calls are transferred to an attendant if the first leg of the call is intergroup). Go to subfield CXFERCCL on the following pages.

IBNFEAT feature CXR (continued)

CXFERTYP = CUSTOM

If the entry in subfield CXFERTYP is CUSTOM, datafill refinements ORGINTER, ORGINTRA, TRMINTER, and TRMINTRA as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ORGINTER	AC, INTER, INTRA, NOCXFER, or TRATER	*Originating intergroup* Enter the type of call transfer for originating intergroup calls as follows: • AC (terminator on the second leg can be attendant console) • INTER (second leg of the call can be an intergroup call) • INTRA (second leg of the call can be an intragroup call) • TRATER (second leg of the call can be an intergroup or intragroup call)
	ORGINTRA	AC, INTER, INTRA, TRATER, or NOCXFER	*Originating intragroup* Enter the type of call transfer for originating intragroup calls.
	TRMINTER	AC, INTER, INTRA, TRATER, or NOCXFER	*Terminating intergroup* Enter the type of call transfer for terminating intergroup calls.
	TRMINTRA	AC, INTER, INTRA, TRATER, or NOCXFER	*Terminating intragroup* Enter the type of call transfer for terminating intragroup calls.

CXFERTYP = all entries

For all entries in subfield CXFERTYP, datafill subfields CXFERRCL and METHOD as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CXFERRCL	see subfield	*Call transfer recall* This field consists of subfield CXRRCL.
	CXRRCL	Y or N	*Call transfer recall* Enter Y (yes) if call transfer recall is allowed and datafill refinement RCLTIM. Otherwise, enter N (no) and go to field METHOD.
	RCLTIM	12 to 120	*Recall timer* If the entry in subfield CXRRCL is Y, datafill this refinement. Enter the length of the recall timer.
	METHOD	DIAL (see note) or STD	*Method* Enter DIAL to activate call completion with trunk optimization (CCTO). Enter STD to select the existing CXR transfer feature. Any entry outside the range indicated for this field is invalid.
Note: Canada only			

IBNFEAT feature DENY

Deny Option (DENY)

Feature DENY is a Residential Enhanced Services (RES) option used to indicate which options or features are denied.

Datafill

The following table lists the datafill for table IBNFEAT feature DENY.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		DENY	*Data feature* Enter DENY for Deny Option feature.
FEATURE		DENY	*Data feature* Enter DENY.
DATA		see subfield	*Data* This field consists of subfield DENYOPT.
	DENYOPT	DENYACB DENYACRJ DENYAR DENYCNAB DENYCNB DENYCNDB DENYCNNB DENYCNND DENYCOT DENYDRCW DENYSCA DENYSCF DENYSCRJ	*Deny option* Enter the features that are to be denied. The option consists of the word DENY followed by the feature abbreviation. See table "IBNFEAT features" for an explanation of the feature.

Denied Incoming (DIN)

If feature DIN is assigned, the line cannot receive calls from outside the customer group. This includes all calls incoming by trunks, except those trunk groups flagged as intragroup. The attendant cannot complete incoming calls to the station if the call originates outside the customer group unless DIN is modified by a terminating restriction code (TRC).

List the TRCs that are allowed to terminate to the line. All incoming trunk groups that are assigned one of the TRCs assigned to the line are allowed to terminate to the line. The number of restriction codes is eight, and the range is 0 to 7.

If the trunk group type is IBNTI or IBNT2 in table TRKGRP, or a virtual facility group in table VIRTGRP, enter the TRC (0 to 7) assigned to the trunk group or virtual facility group.

All plain ordinary telephone service (POTS) lines and trunks are automatically assigned TRC 0 (zero).

List the alternate TRCs that are allowed to terminate to the line. The alternate TRCs specify which incoming trunk groups are allowed to terminate to the line when calls are routed by the attendant.

The following table below shows examples of entering data for TRCs and alternate TRCs.

Terminating restriction codes

Codes assigned	Data
2 and 5	25
2, 6, and 7	367
4	4
ALL	01234567
NONE	$

IBNFEAT feature DIN (continued)

Datafill

The following table lists the datafill for table IBNFEAT feature DIN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		DIN	*Data feature* Enter DIN for the Denied Incoming feature.
FEATURE		DIN	*Data feature* Enter DIN.
DATA		see subfields	*Data* This field consists of subfields TRC, ALTTRC and DINOPT. Separate each subfield with a single space.
	TRC	numeric (0 to 7)	*Terminating restriction codes* Enter the terminating restriction codes (TRC) that are assigned to the line. A maximum of eight codes can be assigned. If more than one code is needed, separate each code with a single space. If less than eight codes are needed, end the list with a $ (dollar sign).

IBNFEAT feature DIN (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ALTTRC	numeric (0 to 7)	*Alternate terminating restriction codes* Enter the alternate TRCs that are assigned to the lines. A maximum of eight codes can be assigned. If less than eight codes are required, end the list with a $ (dollar sign).
	DINOPT	DINE or N	*Denied Incoming option* Enter DINE if the DINE option is desired when assigning DIN to the line using the Service Order System (SERVORD) or table control. If DINE is not desired, enter N. The DINE option provides the capability to transfer calls from outside the customer group to a restricted station (one that has DIN assigned) within the customer group. For attendant consoles, if DINE is present on the terminating line, DINE takes precedence over TRC and ALTTRC checking.

IBNFEAT feature DMCT

Deny Malicious Call Termination (DMCT)

Feature DMCT allows Meridian Digital Centrex (MDC) subscribers or ACD groups to identify callers from whom they do not want to receive calls. When a call originating from a number on the subscriber's list is received, the call is routed to an announcement that indicates the call is not accepted by the subscriber. This feature is supported for calls originating from lines within the same office, and for calls originating on Japan Public Network 7 (JPN7) ISUP trunks.

To register or deregister an entry in a DMCT list, the subscriber dials the DMCT list management access code. Since ACD agents on electronic business sets (EBS) cannot originate calls from their INCALLS key, a secondary directory number (SDN) key initiates a DMCT list management session. If the DMCT access code is dialed from any SDN key on an ACD set, the latest call received on the INCALLS key is included in the DMCT list.

ACD agents on 2500 sets initiate DMCT list management sessions in the same manner as individual subscribers.

Feature DMCT can be assigned to a line or an ACD agent. To be assigned to an ACD agent, feature DMCT must first be assigned to the ACD group before it can be assigned to the agent.

Datafill

The following table lists the datafill for table IBNFEAT feature DMCT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		DMCT	*Data feature* Enter DMCT for the Deny Malicious Call Termination feature.
FEATURE		DMCT	*Data feature* Enter DMCT.

Do Not Disturb (DND)

Feature DND is assigned to IBN stations. This feature only applies if option DND is assigned in table CUSTSTN. Option DND in table CUSTSTN defines how many groups can be assigned; the maximum is 64.

The schedules for the DND groups are defined in table DNDSCHED. Incoming call identification code 13 must be assigned, if required, in tables FNMAP and ICIDATA for the DND feature.

Datafill

The following table lists the datafill for table IBNFEAT feature DND.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		DND	*Directory number number* Enter the directory number (DN) to specify which DN on the line equipment number (LEN) is being referenced.
FEATURE		DND	*Data feature* Enter DND.
DATA		see subfield	*Data* This field consists of subfield DNDGRP.
	DNDGRP	1 to 63	*Do not disturb group* Enter the DND group number to which the line is assigned.

IBNFEAT feature DRING

Distinctive Ringing (DRING)

Feature DRING allows distinctive ringing to be assigned on a line-by-line basis. If the customer group to which the line belongs also has distinctive ringing assigned in table CUSTSTN, then distinctive ringing of the line takes precedence over the customer group's ringing.

Distinctive ringing is currently supported only on lines that use coded ringing. These are lines that have C (coded 20 Hz), C30 (coded 30 Hz) or CSR (coded special ringing) datafilled as ring type in tables LMRNG or LCMINV. Coded ringing provides a set of eight distinct ring patterns, known as Bell Canada Ring Codes (BCRC) 1 through 5 and Teen Services ring codes 6 to 8.

Distinctive Ringing can provide different distinct ring patterns for different call types, based on the origin of the call. The call types supported are as follows:

- Intragroup calls: IBN lines in the same customer group or attendant consoles (originating a call) in the same customer group
- Intergroup calls: IBN lines external to the customer group, attendant consoles (originating a call) in other customer groups, or attendant consoles (extending a call), in the same customer group
- IBN trunks calls: IBN trunks in the same customer group. Distinctive ringing can be applied to all trunks owned by the group, or to selected trunks.
- GIC calls: all Group Intercom calls
- Recall: all recall ringing used by features, such as Call Park (PRK), Directed Call Park (DCPK) and others
- UCD: Uniform Call Distribution calls
- ACD: Automatic Call Distribution calls
- All remaining calls: includes POTS lines, POTS trunks, and IBN trunks not owned by the same customer group.

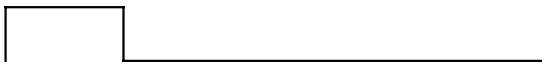
Distinctive ring patterns

The following figure shows the eight distinctive ringing patterns.

IBNFEAT feature DRING (continued)

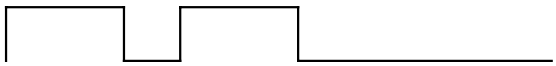
Distinctive ringing patterns

Ringing code 1 - Bell Canada ringing code 1



1.5 s on 4.5 s off

Ringing code 2 - Bell Canada ringing code 2

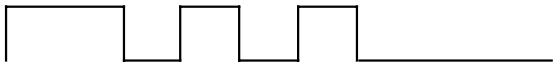


1.5 s on 0.5 s off 1.5 s on 2.5 s off

Ringing code 3 - Bell Canada ringing code 3

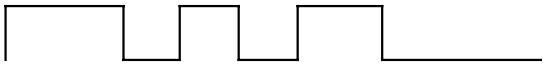
1.5 s on 0.5 s off 0.5 s on 3.5 s off

Ringing code 4 - Bell Canada ringing code 4



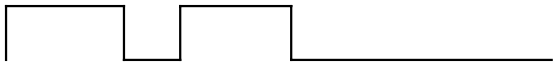
1.5 s on 0.5 s off 0.5 s on 0.5 s off
0.5 s on 2.5 s off

Ringing code 5 - Bell Canada ringing code 5



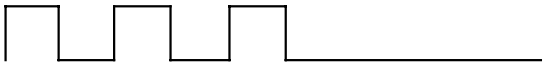
1.5 s on 0.5 s off 0.5 s on 0.5 s off
1.0 s on 2.0 s off

Ringing code 6



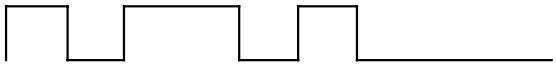
1.0 s on 0.5 s off 1.0 s on 3.5 s off

Ringing code 7



0.5 s on 0.5 s off 0.5 s on 0.5 s off 1.0 s on
3.0 s off

Ringing code 8



0.5 s on 0.5 s off 1.0 s on 0.5 s off 0.5 s on
3.0 s off

Note: Ringing codes 2 and 6 are identical in cadence but are different in timing. These ringing codes should not be assigned to the same line as it is difficult for people to differentiate them.

IBNFEAT feature DRING (continued)

Datafill

The following table lists the datafill for table IBNFEAT feature DRING.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
DF		DRING	*Data feature* Enter DRING for the Distinctive Ringing feature.
FEATURE		DRING	*Data feature* Enter DRING.
DATA		see subfields	*Data* This field consists of subfields INTRNL, EXTRNL, TRKS, GIC, RECALL, UCD, REST, ACD, MAKECALL, and DRINGTYP.
	INTRNL	Y or N	*Internal* Enter Y (yes) if intragroup calls from Integrated Business Network (IBN) lines in the same customer group have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N (no) for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield INTRNL is Y, datafill this refinement. Enter the ringing code applied to the call type.
	EXTRNL	Y or N	*External* Enter Y if intergroup calls from IBN lines external to the customer group have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield EXTRNL is Y, datafill this refinement. Enter the ringing code applied to the call type.

IBNFEAT feature DRING (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRKS	ALL, NO, or SEL	*Trunks* Enter ALL if trunk calls from all trunks owned by the customer group have feature DRING and datafill refinement DRINGTYP. Enter NO if all trunks have normal ringing. Enter SEL if only selected trunks can have feature DRING, that is, trunks that have field TRKDSR equal to Y in table TRKGRP, and datafill refinement DRINGTYP.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield TRKS is ALL or SEL, datafill this refinement. Enter the ringing code applied to the call type.
	GIC	Y or N	*Group intercom* Enter Y if group intercom (GIC) calls have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield GIC is Y, datafill this refinement. Enter the ringing code applied to the call type.
	RECALL	Y or N	*Recall* Enter Y if recall type of calls have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield RECALL is Y, datafill this refinement. Enter the ringing code applied to the call type.

IBNFEAT feature DRING (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	UCD	Y or N	*Uniform Call Distribution* Enter Y if inbound Uniform Call Distribution (UCD) calls have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield UCD is Y, datafill this refinement. Enter the ringing code applied to the call type.
	REST	Y or N	*Rest* Enter Y if calls from POTS lines, POTS trunks, and IBN trunks not owned by the customer group have feature DRING, and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield REST is Y, datafill this refinement. Enter the ringing code applied to the call type.
	ACD	Y or N	*Automatic Call Distribution* Enter Y if inbound Automatic Call Distribution (ACD) calls have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	*Distinctive ringing type* If the entry in subfield ACD is Y, datafill this refinement. Enter the ringing code applied to the call type.

IBNFEAT feature DRING (end)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	MAKECALL	Y or N	*Make call* Enter Y if outbound ACD calls have feature DRING and datafill refinement DRINGTYP. Otherwise, enter N for normal ringing.
	DRINGTYP	1 to 8	If the entry in subfield MAKECALL is Y, datafill this refinement. Enter the ringing code applied to the call type.

IBNFEAT feature ECM

Extended Call Management

Feature ECM enables a CompuCALL host application session to receive information about a line or perform third-party call control on that line.

Feature ECM allows Residential Enhanced Services (RES) or MDC lines to subscribe to individual CompuCALL features on a per-line basis. All MDC or RES lines with the feature ECM can be associated to a host computer, provided the host computer and the line belong to the same customer group and the line is not associated with another host computer at that time.

The ECM feature is incompatible with the following:

- Multiple Appearance Directory Number (MADN)
- Uniform Call Distribution (UCD)
- Automatic Call Distribution (ACD)
- Single-Line Queuing (SLQ)
- data units

See “Datafilling ACD CompuCALL Base" in the translations section of this document for information about table flow.

Datafill

The following table lists the datafill for table IBNFEAT feature ECM.

See “Datafilling ACD CompuCALL Base" in the translations section of this document for more information about the datafill required to activate the ECM feature in table IBNFEAT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		ECM	Data feature. Enter ECM for the Extended Call Management feature.
FEATURE		ECM	Feature. Enter ECM.
DATA		see subfield	Data. This field consists of subfield ECM.
	ECM	see refinements	Extended Call Management. This subfield consists of refinements CALL_EVENTS, MAKECALL, CONF_XFER, MSG_WAIT, SCAICC, and CHKLOPT.

IBNFEAT feature ECM (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CALL_EVENTS	Y or N	Call events. This option enables a line to be associated to a CompuCALL host session so call events can be reported. The host session must have either the CTXEVENT or RESEVENT service enabled in table SCAIPROF depending on whether the datafilled line is an MDC or RES line. Enter Y to select the call events option. Otherwise, enter N.
	MAKECALL	Y or N	Make call. This option enables a line to originate calls from this line through a CompuCALL host session. The host session must have the call initiation service enabled by field CALLINIT in table SCAIPROF. Enter Y to select the make call option. Otherwise, enter N.
	CONF_XFER	Y or N	Conference calling. This option enables a line to request three-way calling services (add party, conference party, transfer party, and drop party) through a CompuCALL host session. The host session must have the three-way calling service enabled by field SCAI3WC in table SCAIPROF. Enter Y to select the conference option. Otherwise, enter N.

IBNFEAT feature ECM (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	MSG_WAIT	Y or N	Message waiting. This option enables a line to receive message waiting notification of activation and deactivation of Message Waiting (MWT) and Executive Message Waiting (EMW) features through a CompuCALL host session. The host session must have the message waiting service enabled through field SCAIMWT in table SCAIPROF. If the MSG_WAIT suboption of ECM is selected Y and the line does not have MWT or EMW assigned, a warning appears on the display. The host session cannot activate MSG_WAIT without MWT or EMW assigned. You can continue by adding the MWT and EMW options. The host CompuCALL computer can then associate the line to receive the MWT and EMW trigger event message, dv-Message-Waiting. Enter Y to select the message waiting option. Otherwise, enter N.
	SCAICC	Y or N	SCAI Call Control. This option enables the host computer to request an answer, hold, unhold, or release of an incoming call to an MDC or RES line through SCAI signaling. The host must be subscribed to the SCAI service through table SCAISSRV. Enter Y to select the SCAI call control option. Otherwise, enter N.
	CHKLOPT	Y or N	Check line option. This option verifies that the host computer is allowed to receive the caller's name and number after validation of the line or feature group options. If set to N, the name and number is sent to the host computer without validation of any line or feature group options. (The CompuCALL Enhancements for Web-based Call Manager feature, AR2244, introduces this option in NA008.)

IBNFEAT feature ECM (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	SCAIREDIR	Y or N	Enter Y to present subfield MSGTO (Message Timeout)
	MSGTO		
		1 to 60 seconds	

Datafill example

The following example shows sample datafill for table IBNFEAT feature ECM.

MAP display example for table IBNFEAT feature ECM

```
                LEN
                   DNNO       DF     FEATURE
                                                              DATA
_____________________________________________________________________
HOST    06 1 05 29
                     0       ECM    ECM        Y Y Y Y Y Y
                                                                  $
```

MAP display example for table IBNFEAT feature ECM

```
                LEN
                   DNNO       DF     FEATURE
                                                              DATA
_____________________________________________________________________
HOST    05 0 00 05
                     0       ECM    ECM Y Y Y Y Y Y Y Y60
                                                                  $
```

Feature history

SN07 (DMS)

Added a sub-option named SCAIREDIR to the ECM option for feature activity A00003923.

IBNFEAT feature EMW

Executive Message Waiting (EMW)

Feature EMW is equivalent to the Message Waiting (MWT) feature. Refer to the MWT feature for an explanation of Message Waiting. The difference is that feature EMW introduces the Message Waiting Class of Service (MCOS).

MCOS provides the MWT feature with a grouping capability to administrate the usage of the messaging services to a group of users. As an example, users can access a particular MCOS only if they subscribe to that MCOS.

Sixteen MCOSs (classes A to P) for each customer group are provided. CLASSP is a special MCOS that is used as a default to support the interaction with the existing Message Waiting (MWT)/Call Request (CAR) capabilities.

Only one MCOS can be associated with a directory number (DN).

Datafill

The following table lists the datafill for table IBNFEAT feature EMW.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		EMW	*Data feature* Enter EMW for the Executive Message Waiting feature.
FEATURE		EMW	*Data feature* Enter EMW.
DATA		see subfields	*Data* This field consists of subfields NOTICE and MAILBOX.

IBNFEAT feature EMW (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOTICE	MWL or STD	*Notice* Enter the type of notification use to inform the user that there is a message waiting against the line. MWL is a message waiting lamp indicator. STD is a stuttered dial tone.
	MAILBOX	CLASSA CLASSB CLASSC CLASSD CLASSE CLASSF CLASSG CLASSH CLASSI CLASSJ CLASSK CLASSL CLASSM CLASSN CLASSO CLASSP	*Mailbox class of service* Enter the MCOS given to the associated line equipment number (LEN). Only one class-of-service type can be entered for each DN.

IBNFEAT feature EWALI

Enhanced WATS Access Line IntraLATA

The Enhanced WATS Access Line for IntraLATA (EWALI) feature provides the ability for Enhanced WATS (EWATS) customers to choose a presubscribed carrier network for intraLATA calls. This feature is assigned to RES lines only with a line class code (LCC) of EOW (Enhanced Outward WATS) or ETW (Enhanced Two-Way WATS).

The EWALI feature contains a field LWICLIST, which has a maximum of five WIC and BANDSET combination names. The bandset name must be datafilled in table BANDSETS.

Datafill

The following table lists the datafill for table IBNFEAT feature EWALI.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		EWALI	Data feature. Enter EWALI for the Enhanced WATS Access Line for IntraLATA feature.
FEATURE		EWALI	Feature. Enter EWALI.
DATA		see subfield	Feature. This field consists of subfield LWICLIST.
	LWICLIST	see refinements	IntraLATA WATS interexchange list. This subfield consists of refinements WIC and BANDSET. A maximum of five WIC and BANDSET combination names can be assigned. If less than five carriers are required, end the list with a $ (dollar sign). The band set name must be datafilled in table BANDSETS.
	WIC	valid carrier or DEFAULT	WATS interexchange carrier. Enter the WATS carriers that can be used with this function. Up to five carriers can be entered, the first of which is the primary WIC. Tables OCCNAME and OCCINFO contain a list of valid carrier names.
	BANDSET	alphanumeric (1 to 8 characters)	Band set. Enter the allowable calling area as defined in table BANDSETS.

Datafill example

The following example shows sample datafill for table IBNFEAT feature EWALI.

MAP display example for table IBNFEAT feature EWALI

```
LEN
              PTY      DF     FEATURE                    DATA
_____________________________________________________________

HOST  00 0 00 00
                S     EWALI  EWALI       (car1 0thru2)
                                         (car2 0thru3) $
```

IBNFEAT feature FCTDINT

Full Carrier Toll Deny for International Carriers (FCTDINT)

The new line option FCTDINT applies to Integrated Business Network/Residential Enhanced Services (IBN/RES) lines indirectly using SERVORD, which updates table IBNFEAT.

FCTDINT applies to international call types 011+CC+NN and 10XXX/101XXXX+CC+NN, where

XXX/XXXX=carrier identification codeCC=country code digitsNN=national number digits

When FCTDINT is present, subscriber access regarding these international call types is either

- denied to all international carriers if no carriers are specified with the option
- allowed to specific international carriers (up to 21) if carriers are entered with the option

Datafill

The following table lists the datafill for table IBNFEAT feature FCTDINT.

Field descriptions

Field	Subfield	Entry	Explanation and action
DF		FCTDINT	Data feature. This field specifies the feature assigned to the line. The specified feature is FCTDINT.
	FEATURE	FCTDINT	Feature. This field specifies the feature assigned to the line. The specified feature is FCTDINT.
	DATA	CARRIER	Data. This field consists of carriers. Enter a carrier name. 21 carriers may be entered.
Note: This information must be entered in SERVORD.			

Datafill example

The following example shows sample datafill for table IBNFEAT feature FCTDINT.

IBNFEAT feature FCTDINT (end)

MAP display example for table IBNFEAT feature FCTDINT

```
LEN
         DNNO     DF       FEATURE
                                  DATA
_____________________________________________________________________
HOST  05 0 00 10
          0     FCTDINT  FCTDINT
                               (  CARRIER1)$
```

IBNFEAT feature FRO

Fire Reporting System, Originating (FRO)

The FRO feature provides an indication, at a remote location, of the busy or idle condition of lines that have the FRO option. This feature operates a signal distributor (SD) point for each call originating from or terminating to a line with option FRO. The SD point is turned off only for an on-hook signal. The SD point remains on even if the call goes to lockout.

The FRO option is assigned to lines with both originating and terminating service that require sleeve lead control. This feature is also known as Sleeve Lead Control.

The associated SD point must appear as a valid entry in table SDGRP. In addition, no special line cards are required to generate the line reversal signal, but a special line is required to trigger the office alarm unit (OAU).

Datafill

The following table lists the datafill for table IBNFEAT feature FRO.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		FRO	*Data feature* Enter FRO for the Fire Reporting System, Originating feature.
FEATURE		FRO	*Data feature* Enter FRO.
DATA		see subfields	*Data* This field consists of subfields TMTYPE, TMNO, TMCKTNO, POINT, and NORMALST.
	TMTYPE	MTM, RMM, or RSM	*Trunk module type* Enter the type of trunk module (TM) on which the signal distributor (SD) card is mounted, MTM (maintenance trunk module), RMM (remote maintenance module), or RSM (remote service module). The type of TM is determined by the location of the line and the signal distributor (SD) card.

IBNFEAT feature FRO (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	0 to 2047	*Trunk module number* Enter the TM number on which the SD card is mounted.
	TMCKTNO	0 to 23	*Trunk module circuit number* Enter the TM number to which the SD point belongs.
	POINT	0 to 6	*Signal distributor point* Enter the SD point within the TM circuit number.
	NORMALST	0 to 1	*Normal state* Enter the normal state of the SD point. If the SD point is normally off or open, enter 0 (zero). If the SD point is normally on or closed, enter 1.

IBNFEAT feature FRS

Sleeve Lead for Public Fire Reporting System (FRS)

Feature FRS is required for line circuits that interface with dial dictation equipment that sends an off-hook signal back to the switching unit.

Datafill

The following table lists the datafill for table IBNFEAT feature FRS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		FRS	*Feature* Enter FRS for the Sleeve Lead for Public Fire Reporting System feature.
FEATURE		FRS	*Feature* Enter FRS.
DATA		see subfields	*Data* This field consists of subfields RINGING, TMTYPE, TMNO, TMCKTNO, POINT, and NORMALST. Separate each subfield with a single space.
	RINGING	Y or N	*Ringing* Enter Y (yes) if the set is to ring when called. Enter N (no) if the set is not to ring when called.
	TMTYPE	MTM, RMM, or RSM	*Trunk module type* If line and signal distributor (SD) card are located at the host switching unit, enter MTM (maintenance trunk module) as the trunk module (TM) type on which the SD card is mounted. If line and SD card are located at a remote location, enter RMM (remote maintenance module) or RSM (remote service module).

IBNFEAT feature FRS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	0 to 2047	*Trunk module number* Enter the number assigned to the TM on which the SD card is mounted. For an MTM, the range is 0 to 255. For an RMM or RSM, the range is 0 to 99.
	TMCKTNO	0 to 23	*Trunk module circuit number* Enter the TM circuit number to which the SD point belongs.
	POINT	0 to 6	*Point* Enter the SD point within the TM circuit number.
	NORMALST	0 to 1	*Normal state* Enter the normal state of the SD point. If the SD point is normally off or open, enter 0 (zero). If the SD point is normally on or closed, enter 1.

IBNFEAT feature GIC

Group Intercom (GIC)

Feature GIC permits members of an intercom group to be reached by either depressing the # (octothorpe) or dialing an access code datafilled as the octothorpe equivalent and the member's number. An intercom group must belong to one customer group, and it can consist of 10, 100, 1000, or 10 000 members.

A customer group can have more than 1 intercom group.

A station can be a member of only one intercom group.

Feature GIC cannot be assigned to Multiple Appearance Directory Number (MADN) lines.

The pilot of a Multiline hunt (MLH), Directory Line Hunt (DLH), directory Number Hunt (DNH) hunt group, and each member of a DNH group can be members of a GIC group.

Datafill

The following table lists the datafill for table IBNFEAT feature GIC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		GIC	*Data feature* Enter GIC for the Group Intercom feature.
FEATURE		GIC	*Data feature* Enter GIC.
DATA		see subfields	*Data* This field consists of subfields ICMGRP, MEMBER_NO, SMDR, and IGNORMSB. Separate each subfield with a single space.
	ICMGRP	alphanumeric (up to 8 characters)	*Icm group* Enter the name of the intercom group to which this line belongs.
	MEMBER_NO	0 to 9999	*Member number* Enter the member number of this line.

IBNFEAT feature GIC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SMDR	Y or N	*Station Message Detail Recording* Enter Y (yes) if Station Message Detail Recording (SMDR) records are to be produced for all GIC calls made from this line. Otherwise, enter N (no).
	IGNORMSB	Y or N	*Ignore Make Set Busy* Enter Y if the intercom group is exempt from Make Set Busy (MSB), that is, MSB is ignored and the call goes through. Enter N if the intercom group is not exempt from MSB and the call is blocked.

IBNFEAT feature INTPIC

International Primary Carrier (INTPIC)

The International Primary Carrier (International PIC) feature allows Equal Access End Office (EAEO) subscribers to presubscribe to an international call carrier, independent of the selected interLATA call carrier.

To add the International PIC feature to IBN lines, use the Service Order System (SERVORD) to add option INTPIC to table IBNFEAT. All additions, deletions and changes to table IBNFEAT must be entered using the Service Order System (SERVORD). For information, refer to the *SERVORD Reference Manual*.

CAUTION
Servord required
All additions, deletions, and changes must be entered using the Service Order System. For information, see the *SERVORD Reference Manual*.

Option EA must also be assigned in table IBNXLA for option INTPIC in table IBNFEAT to function.

If the subscriber makes an international call and no carrier is specified using INTPIC, the the call defaults to the INTPIC assigned to the Network Class of Service (NCOS) preliminary translator in table IBNXLA.

Datafill

The following table lists the datafill for table IBNFEAT feature INTPIC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		INTPIC	Data feature. Enter INTPIC for the International PIC feature.
FEATURE		INTPIC	Feature. Enter INTPIC.
	CARRIER	alphanumeric (up to 16 characters)	Carrier name. Enter the selected international carrier. A list of valid carrier names is found in table OCCNAME.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CHOICE	Y or N	Choice. Enter Y or N to allow or disallow the choice for Carrier Access Code (CAC) dialing.
DATA			Data.

Datafill example

The following example shows sample datafill for table IBNFEAT feature INTPIC.

MAP display example for table IBNFEAT feature INTPIC

```
      LEN
       DNNO         DF          FEATURE            DATA
_____________________________________________________________
HOST 06 0 05 31
        0          INTPIC     INTPIC             CARR1 Y
```

IBNFEAT feature ISA

In-Session Activation

In-Session Activation (ISA) provides operating companies with the capability to offer call completion services , such as Automatic Call Back (ACB), Message Delivery Service (MDS), and Universal Voice Messaging (UVM), to end users who encounter a busy or ring/no answer (RNA) condition. In-Session Activation enables end users to access a call completion service without having to first hang up and then dial an access code.

Datafill

The following table lists the datafill for table IBNFEAT feature ISA.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		ISA	*Data feature*. This field specifies the ISA (In-Session Activation) feature, which is assigned to the line.
FEATURE		ISA	*Feature*. This field specifies the ISA (In-Session Activation) feature, which is assigned to the line. The refinements that must be datafilled for feature ISA are described below.
	BSYLOCAL	1 through 16 alphanumeric characters, or NILMENU	*Busy local*. This field specifies the menu identifier that corresponds to the announcement to be played when a busy condition is encountered for a local call. When NILMENU is entered, ISA is not invoked.
	BSYTOLL	1 through 16 alphanumeric characters, or NILMENU	*Busy toll*. This field specifies the menu identifier that corresponds to the announcement to be played when a busy condition is encountered for a toll call. When NILMENU is entered, ISA is not invoked.
	RNALOCAL	1 through 16 alphanumeric characters, or NILMENU	*Ring/no answer local*. This field specifies the menu identifier that corresponds to the announcement to be played when an RNA condition is encountered for a local call. When NILMENU is entered, ISA is not invoked.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	RNATOLL	1 through 16 alphanumeric characters, or NILMENU	*Ring/no answer local*. This field specifies the menu identifier that corresponds to the announcement to be played when an RNA condition is encountered for a toll call. When NILMENU is entered, ISA is not invoked.
	RNATIMER	12 through 72	*Ring/no answer timer*. This field specifies the number of seconds before the ISA announcement is started when an RNA condition is encountered. ***Note:*** This field only appears when the value in either RNALOCAL or RNATOLL is other than NILMENU.

Datafill example

The following example shows sample datafill for table IBNFEAT feature ISA.

MAP display example for table IBNFEAT feature ISA

```
LEN
            DNNO    DF   FEATURE        DATA
_____________________________________________________________
HOST 00 0 03 03 0   ISA ISA    MENU1 MENU2 MENU3 NILMENU 12
```

IBNFEAT feature LMOH

Line Music on Hold

Feature LMOH provides an audio source for a line different from the customer group audio source for specific line features. The audio source for the line features is applied after assignment of LMOH to a line.

Feature LMOH operates with the line features that follow:

- Call Hold (CHD)
- Call Park (PRK)
- Flex Call (FLEXCALL)
- Keyset Music on Hold (KSMOH)
- Meridian Business Set Camp-On (MBSCAMP)
- Permanent Hold (PHD)

Datafill

The table that follows lists the datafill for table IBNFEAT feature LMOH.

Field descriptions

Field	Subfield	Entry	Explanation and action
DF		LMOH	Data feature. Enter LMOH for the Line Music on Hold feature.
FEATURE		LMOH	Data feature. Enter LMOH.
DATA		see subfield	Data. This field includes subfield AUDIOGRP.
	AUDIOGRP	AUDIO1 to AUDIO512	Audio group. Enter the audio group from table AUDIO. The audio group identifies the announcement or music application for a call on hold.

Datafill example

The figure that follows shows sample datafill for table IBNFEAT feature LMOH.

IBNFEAT feature LMOH (end)

MAP example for table IBNFEAT feature LMOH

```
          LEN
            DNNO          DF    FEATURE                  DATA
_____________________________________________________________
HOST 00 0 08 18 0          LMOH   LMOH                   AUDIO1
```

Table history

NA011

NA011 created the feature LMOH.

IBNFEAT feature LPIC

Intra-LATA PIC (LPIC)

Feature LPIC provides intra-LATA (local access and transport area) carrier pre-subscription, screening, and routing capabilities for Meridian Digital Centrex (MDC) stations and PX trunks of an equal access end office (EAEO) that wish to choose a primary carrier for their intra-LATA services. This includes ISDN subscribers.

These capabilities are provided in a similar manner to the Primary Inter-LATA Carrier (PIC) service. LPIC is an optional service. If no intra-LATA carrier is chosen, the subscriber's intra-LATA calls are handled as before.

Datafill

The following table lists the datafill for table IBNFEAT feature LPIC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		LPIC	Data feature. Enter LPIC for the Intra-LATA PIC feature.
FEATURE		LPIC	Data feature. Enter LPIC.
DATA		see subfield	Data. This field consists of subfield CARRIER.

IBNFEAT feature LPIC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CARRIER	alphanumeric (1 to 16 characters)	Carrier name. Enter the name of the subscriber's Intra-LATA carrier. Enter NILC if no carrier is to be used. This name must be datafilled in table OCCNAME before it can be used here.
LPIC	LCHOICE	Y or N	LCHOICE used with LPIC. The LPIC option allows the user to choose a primary carrier for intra-LATA service. For the intra-LATA primary inter-LATA carrier option, enter LPIC and datafill refinement CARRIER with an alphanumeric representing the carrier. The datafill of the LPIC option prompts for the LCHOICE field. The LCHOICE entry (Y or N) determines if the LPIC subscriber is permitted to dial 10XXX/101XXXX codes. In the LCHOICE field, either Y or N must be entered; this field does not have a default value. ***Note:*** There are special checks made when SOC goes from IDLE to ON to see if it is the first time that the SOC has been turned on after a one night process (ONP) and a TABXFR have occurred. If it is the first time, SOC changes the LPIC option to match the existing PIC option if the PIC option exists.

Table history

NA006

Added description of field LCHOICE in accordance with the Intra-LATA PIC Enhancements feature.

IBNFEAT feature LSPSO

Local Service Provider Switch Owner (LSPSO)

For a description of feature LSPSO, refer to IBNFEAT.

IBNFEAT feature LSPSO assigns a local service provider switch owner to a directory number (DN). SERVORD assigns feature LSPSO to an RES (Residential Enhanced Services) DN in table IBNFEAT using the NEW or ADO command.

Use the LSPSO feature only in a multi-jurisdictional environment on DNs outside the jurisdiction where the switch resides. In a single-jurisdictional environment, Nortel recommends that you use only the new OFCENG parameter DEFAULT_LSPSO. The software does not prevent customers from assigning the LSPSO option to DNs in a single jurisdiction environment.

Datafill

The following table lists the datafill for table IBNFEAT feature LSPSO. SERVORD updates this table automatically when customers make changes to the LSPSO feature. This table shows the datafill for reference only.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		LSPSO	Data feature. Enter LSPSO for the Local Service Provider feature.
FEATURE		LSPSO	Data feature. Enter LSPSO.
DATA			
	PROVIDER	alphanumeric (1 to 8 characters)	Enter the provider name of the switch owner. The name can be any provider name datafilled in table LSPINFO.

Datafill example

The following example shows sample datafill for table IBNFEAT feature LSPSO.

IBNFEAT feature LSPSO (end)

MAP display example for table IBNFEAT feature LSPSO

```
>IBNFEAT

LEN                DNNO   DF       FEATURE      DATA

_____________________________________________________________
HOST 06 1 10 22     0    LSPSO     LSPSO        CLEC1
```

IBNFEAT feature MBK

Make Busy Key (MBK)

Feature MBK creates a Make Busy Key (MBK) line option. When the MBK option is assigned, a scan point circuit that is controlled by an external key is associated with the line. The external key is used to activate the MBK line option.

When activated, option MBK causes an incoming call to be forwarded whether the line is busy or idle. When MBK is not activated, calls are forwarded only when the line is actually busy (as normal).

Datafill

The following table lists the datafill for table IBNFEAT feature MBK.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		MBK	*Feature* Enter MBK for the Make Busy Key feature.
FEATURE		MBK	*Feature* Enter MBK.
DATA		see subfields	*Data* This field consists of subfields TMTYPE, TMNO, TMCKTNO, POINT, and NORMALST. Separate each subfield with a single space.
	TMTYPE	MTM, RMM, or RSM	*Trunk module type* If line and signal distributor (SD) card are located at the host switching unit, enter MTM (maintenance trunk module) as the trunk module (TM) type on which the SD card is mounted. If line and SD card are located at a remote location, enter RMM (remote maintenance module) or RSM (remote service module).

IBNFEAT feature MBK (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	0 to 2047	*Trunk module number* Enter the number assigned to the TM on which the SD card is mounted. For an MTM, the range is 0 to 2047. For an RMM or RSM, the range is 0 to 99.
	TMCKTNO	0 to 29	*Trunk module circuit number* Enter the TM circuit number to which the SD point belongs.
	POINT	0 to 6	*Point* Enter the SD point within the TM circuit number.
	NORMALST	0 to 1	*Normal state* Enter the normal state of the SD point. If the SD point is normally off or open, enter 0 (zero). If the SD point is normally on or closed, enter 1.

IBNFEAT feature MWT

Message Waiting (MWT)

Feature MWT allows the set to receive messages from the message center and dial the MCDN (message center directory number) to retrieve the messages. A visual (lamp) or audible (stuttered dial tone) indication notifies the station that there is a message or call request to be retrieved. This feature is only available for calls within a customer group.

Message Waiting is useful in conjunction with Call Forwarding (CFX). When the set is not answering, the call can be routed to the message center and a message taken by the attendant.

Variations of this feature are as follows:

Call Request (CAR)

This feature allows the user to make a call request against another line or set when the terminator is busy or not answering. Only one call request can be placed against a terminating station.

Call Request Exempt (CRX)

This feature allows the user to be exempted from call requests made against the line.

CLASS Message Waiting Indicator (CMWI)

This feature allows the implementation of Message Waiting on 500/2500-type telephone sets. The only prerequisite is that the set must be capable of receiving and decoding CLASS (Custom Local Area Signaling Services) modem transmissions.

Call Request Retrieval/Call Forwarding Interaction (CRRCFW)

This feature enhances the existing Call Request Retrieval (CRR) feature when invoked by means of a display set. CRR follows call forwarding options applicable to the initiator of the call request. The retriever's display set (with name and/or reason display assigned) lists the initiator's number, as well as the forwarded-to number. This display notifies the retriever that call forwarding is in effect for that number.

To receive a message or call request, the requestee can perform one of two actions:

- Dial the MCDN. If there is a message from the center, the attendant relates the message. This does not retrieve messages in the order queued. If there

is no message from the center, the user can disconnect the call and dial the CRR access code defined in table IBNXLA.

- Dial the CRR access code and retrieve the message or call request in the order queued. If the highest queued is a message from the center, the requestee is connected to the center. If not, the requestor of a call request is rung. If the requestor is busy or does not answer, the call request remains queued.

The MWT lamp or stuttered dial tone remains on until no message or call requests remain in the queue.

Access codes associated with this feature are as follows:

Call Request Activate (CRA)

If a busy or unanswered line is encountered, a call request can be placed against the terminating line by dialing the CRA access code.

Call Request Retrieve (CRR)

Messages and call requests can be retrieved by dialing the CRR access code.

Call Request Delete Specific (CRDS)

By dialing the CRDS access code followed by the DN of the requestee, the requestor can delete a call request placed against the requestee.

Call Request Delete All (CRDA)

The requestee can dial a CRDA access code to delete all messages and call requests queued for the line.

An option can be specified as to whether the station is to receive visual (lamp flashing) or audible (stuttered dial tone) indication when a message or call request is waiting.

See operational measurement (OM) group MWTCAR for the OMs associated with the Message Waiting feature.

Datafill

The following table lists the datafill for table IBNFEAT feature MWT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		MWT	*Data feature* Enter MWT for the Message Waiting feature.
FEATURE		MWT	*Data feature* Enter MWT.
DATA		see subfields	*Data* This field consists of subfields NOTICE, CAR, and CRX. Separate each subfield with a single space.
	NOTICE	CMWI, MWL, PRN, STD	*Notice* Enter CMWI if the line is to receive CLASS (Custom Local Area Signaling Service) Message Waiting indication and datafill refinements CMWISTD and CMWIRING. Enter MWL for Message Waiting lamp indication. No refinements require datafill. Go to subfield CAR on page Section , "NOTICE = all entries" on page -6. Enter PRN to indicate that periodic ring notification is desired and datafill refinements IRN, STATUS, CAR, and CRX. Enter STD if the line receives a stuttered dial tone when there is a message or call request for the line. No refinements require datafill. Go to subfield CAR.

NOTICE = CMWI

If the entry in subfield NOTICE is CMWI, datafill refinements CMWISTD and CMWIRING as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CMWISTD	Y or N	*CLASS Message Waiting Indication stuttered dialtone* Enter Y (yes) if the line is to receive stuttered dial tone when there is a message or call request for the line. Otherwise, enter N (no).
	CMWIRING	UDLCorY or N	*CLASS Message Waiting Indication ringing notification* For BCS36 and up, enter UDLC (universal digital loop carrier) to provide the capability to ring an MWT line with CMWI notification to activate or deactivate an MWI. Ringing precedes activation and deactivation. Enter Y if the line is to receive ringing when there is a message or call request for the line, and datafill refinement CRN. Otherwise, enter N. No refinements require datafill. Go to subfield CAR on the following pages.
	CRN	Y or N	*CLASS Message Waiting Indication ring notification* If the entry in field CMWIRING is UDLC or Y, datafill this refinement. Enter Y to indicate that periodic ringing for CMWI is desired. Enter N to indicate the standard CMWI ring (a single ring) is desired.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IRN	ALWAYSorOFFHOOK	*Immediate ring notification* If the entry in field CMWIRING is UDLC or Y, datafill this refinement. Enter ALWAYS if immediate ring notification (IRN) is to occur, regardless of whether the subscriber is on-hook or off-hook. Enter OFFHOOK if immediate ring notification (IRN) is to occur only if the subscriber is off-hook when the message is queued. For BCS36 and up, if the entry in field CMWIRING is UDLC, field IRN cannot be set to OFFHOOK because ringing must always accompany a message to the set, not just when the user was off-hook.
	STATUS	Y or N	*Status* If the entry in field CMWIRING is UDLC or Y, datafill this refinement. If field CMWIRING is set to Y, this field must be set to Y. Field STATUS is used to determine if the CMWIRING feature is active. This information is used by internal checking algorithms when feature activation or deactivation is initiated by the subscriber.

NOTICE = PRN

If the entry in subfield NOTICE is PRN, datafill refinements IRN and STATUS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IRN	ALWAYSorOFFHOOK	*Immediate ring notification* Enter ALWAYS if immediate ring notification (IRN) is to occur, regardless of whether the subscriber is on-hook or off-hook. Enter OFFHOOK for immediate ring notification (IRN) to occur only if the subscriber is off-hook when the message is queued.
	STATUS	ACT or INACT	*Status* Enter ACT if PRN notification is active or INACT if PRN notification inactive.

NOTICE = all entries

For all entries in subfield NOTICE, datafill subfields CAR and CRX as described below.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CAR	Y or N	*Call request* Enter Y (yes) if the line is allowed to make call requests to another line and to receive call requests from others and datafill refinement CRRCFW. Otherwise, enter N (no).

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CRRCFW	ALL DISPLAY or NO	*Call request retrieval/call forwarding* If the entry in field CAR is Y, datafill this refinement. Enter ALL to allow the call request retrieval to forward. Enter DISPLAY to allow the call request retrieval to forward only if the requestee has a display set. Enter NO to stop call request retrieval from forwarding. If field CAR is set to N, then this refinement does not display, and is automatically datafilled as NO.
	CRX	Y or N	*Call request exempt* Enter Y to exempt the line from call requests placed on it (the line does not receive any call requests). Otherwise, enter N.

IBNFEAT feature NFA

Network Facility Access (NFA)

Feature NFA provides Network Facility Access (NFA) for subscribers of the DMS-100 or DMS-100/200, directly connecting a subscriber line to an intelligent processor (IP) and its services. The modes of access are implicit (auto), explicit (dialed), and remote.

In implicit mode, the subscriber is directly connected to the IP simply by going off-hook. The subscriber can interact with the IP or can revert to regular call processing by dialing as normal.

In explicit mode, the subscriber must first dial an NFA explicit access code. Once the connection to the IP is established, the subscriber can interact with the IP and enter digits for the IP to interpret. If the digits are dial pulse (DP), they are converted to dual-tone multifrequency (DTMF) digits by the DMS before being relayed to the IP.

Remote access to NFA allows the subscriber to establish a remote connection to an NFA trunk from other locations in addition to the subscriber's base telephone line.

Datafill

The following table lists the datafill for table IBNFEAT feature NFA.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
DF		NFA	*Data feature* Enter NFA for the Network Facility Access feature.
FEATURE		NFA	*Data feature* Enter NFA.
DATA		see subfields	*Data* This field consists of subfields USR_ID, IMPLCT_ACC, EXPLCT_ACC, AMA_IPDIAL, and REM_ACC.

IBNFEAT feature NFA (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	USR_ID	numeric (1 to 10 digits)	*User identification* Enter the line userid corresponding to the LEN. In Service Orders, this value defaults to the subscriber's seven-digit ANI (Automatic Number Identification), that is, NXX+xxxx, but can be overwritten with any one- to ten-digit number.
	IMPLCT_ACC	Y or N	*Implicit access* Enter Y (yes) for implicit access to NFA and datafill refinements IMPLCT_SC and IMPLCT_STAT. This field can only be set to Y if the line's customer group has the NFA option added in table CUSTSTN. If implicit access is not desired, enter N and go to subfield EXPLCT_ACC. If a line already has the WML line option, this field must be set to N (no). If a line already has the NFA option with this field set to Y, WML cannot be added to that line. This field defaults to Y.
	IMPLCT_SC	0-9, *, # (1 to 5 digits)	*Implicit access service code* If the entry in subfield IMPLCT_ACC is Y, datafill this refinement. Enter values representing the service code outpulsed over the NFA trunk during an implicit access. In SERVORD, this field defaults to 0 (zero).
	IMPLCT_STAT	ACT or INACT	*Implicit access status* If the entry in subfield IMPLCT_ACC is Y, datafill this refinement. Enter ACT to indicate that implicit access is active for the line. Enter INACT to indicate that implicit access is inactive for the line. This field defaults to ACT.

IBNFEAT feature NFA (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	EXPLCT_ACC	Y or N	*Explicit access* Enter Y for explicit access to NFA and datafill refinement AMA_EXPLCT. If explicit access is not desired, enter N and go to subfield AMA_IPDIAL. This field defaults to Y.
	AMA_EXPLCT	Y or N	*Explicit access automatic message accounting* If the entry in subfield EXPLCT_ACC is Y, datafill this refinement. Enter Y to generate an automatic message accounting (AMA) record with call code 174 and module code 047 following an explicit connection to the intelligent processor (IP). Otherwise, enter N and no AMA record with call code 174 is generated following an explicit connection to the IP.
	AMA_IPDIAL	Y or N	*Intelligent processor dialed call automatic message accounting* Enter Y to generate an AMA record following an IP dialed call. Otherwise, enter N and no AMA record with call code 175 is generated following an IP dialed call in which no other AMA records are generated. In the case where the IP dials a call and another AMA record is normally generated, module code 047 is still appended to that record, regardless of whether the entry for this field is Y or N.
	REM_ACC	Y or N	*Remote access* Enter Y to allow remote access to NFA and datafill refinements AMA_REM and NFRAPIN. If remote access to NFA is not desired, enter N. No further datafill is required. The default value for field REM_ACC is N.

IBNFEAT feature NFA (end)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	AMA_REM	Y or N	*Remote automatic message accounting* If the entry in subfield REM_ACC is Y, datafill this refinement. Enter Y if an AMA record is to be generated to record the connection to the NFA trunk. Otherwise, enter N.
	NFRAPIN	numeric (0 to 9, 2 to 10 digits)	*Network Facilities Remote Access personal identification number* If the entry in subfield REM_ACC is Y, datafill this refinement. Enter the personal identification number (PIN) that the subscriber can use to gain access to the IP. The PIN only applies to the Network Facilities Remote Access (NFRA) feature and does not have to be unique. Only the operating company can initialize or change the PIN.

Observe Agent from 500/2500 Set (OBS)

Feature OBS allows a 500/2500 Automatic Call Distribution (ACD) Supervisor position to use the ACD Observe Agent feature. (This feature does not provide any other supervisory capabilities.)

The OBS option (datafilled in table IBNFEAT) allows the 500/2500 supervisor position to use the Observe Agent feature. When this option is being added, the system prompts for extended OBS capabilities. If extended OBS is not chosen, the system then prompts for a specific ACD group. Supervisor positions datafilled without extended OBS can observe only agents within the specified ACD group. However, the extended OBS option allows the supervisor to observe any agent in the customer group. (The OBS option is valid only if the SUPR option has been previously datafilled.)

This feature also allows the addition of the OBS option to table IBNXLA. This option allows an ACD Observe Agent feature activation code to be datafilled.

The ACD Observe Agent feature on the 500/2500 set interacts with other IBN features the same as the standard ACD Observe Agent feature.

The supervisor cannot have any other features active to activate the OBS feature. The observer cannot activate any features while the Observe Agent feature runs.

Datafill

The following table lists the datafill for table IBNFEAT feature OBS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		OBS	*Data feature* Enter OBS for the Observe Agent from 500/2500 Set feature.
FEATURE		OBS	*Data feature* Enter OBS.
DATA		see subfield	*Data* This field consists of subfield OBSTYPE.

IBNFEAT feature OBS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OBSTYPE	BASICor EXTENDED	*Observe type* Enter BASIC to restrict supervisor positions to observing only agents in the ACD group specified in subfield ACDGROUP and datafill refinement ACDGROUP. Enter EXTENDED to allow supervisor positions to observe any agent in the customer group. Any entry outside the range indicated for this field is invalid.
	ACDGROUP	alphanumeric (1 to 16 characters)	*Automatic Call Distribution group* If the entry in subfield OBSTYPE is BASIC, datafill this refinement. Enter the ACD group name.

Primary Inter-LATA Carrier (PIC)

Feature PIC assigns a primary inter-LATA (local access and area code) carrier (PIC) to an IBN line. The IC_INC_CARRIER_NAME defined in table OCCNAME is entered as the PIC of the subscriber or NILC (nil carrier) is entered. Field CHOICE is datafilled (Y or N) to indicate whether the subscriber is allowed to access carriers other than the PIC.

Datafill

The following table lists the datafill for table IBNFEAT feature PIC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		PIC	*Data feature* Enter PIC for the Primary Inter-LATA Carrier feature.
FEATURE		PIC	*Data feature* Enter PIC.
DATA		see subfields	*Data* This field consists of subfields CARRIER and CHOICE.
	CARRIER	alphanumeric (1 to 16 characters)	*Carrier* Enter the IC_INC_CARRIER_NAME defined in table OCCNAME that is the PIC of the subscriber.
	CHOICE	Y or N	*Choice* Enter Y (yes) if the subscriber is allowed to access carriers other than the PIC. Enter N (no) if the subscriber is not allowed to access other carriers.

IBNFEAT feature RMB

Random Make Busy (RMB)

Feature RMB can be assigned in one of the folowing three types of hunt groups: Directory Number Hunt (DNH), Multiline (MLH), or Distributed Line Hunt (DLH). The feature provides for a miscellaneous scan point circuit controlled by an external key. The line is made permanently busy when the key is activated, and is normal when the key is not activated. The same scan point can be assigned to one, several, or all lines within the hunt group, depending on the lines to be made busy.

The scan point must belong to one of the scan groups assigned in table SCGRP.

Datafill

The following table lists the datafill for table IBNFEAT feature RMB.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		RMB	*Data feature* Enter RMB for the Random Make Busy feature.
FEATURE		RMB	*Data feature* Enter RMB.
DATA		see subfields	*Data*This field consists of subfields TMTYPE, TMNO, TMCKTNO, POINT, and NORMALST.
	TMTYPE	MTM, RMM, or RSM	*Trunk module type* If line and scan card are located at the host switching unit, enter MTM (maintenance trunk module) as the trunk module (TM) type on which the scan card is mounted. If line and scan card are located at a remote location, enter RMM (remote maintenance module) or RSM (remote service module).
	TMNO	0 to 2047	*Trunk module number* Enter the number assigned to the TM on which the scan card is mounted. For an MTM, the range is 0 to 2047. For an RMM or RSM, the range is 0 to 99.

IBNFEAT feature RMB (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TMCKTNO	0 to 23	*Trunk module circuit number* Enter the TM circuit number to which the scan point belongs.
	POINT	0 to 6	*Point* Enter the scan point within the TM circuit number.
	NORMALST	0 to 1	*Normal state* Enter the normal state of the scan point. If the scan point is normally off or open, enter 0 (zero). If the scan point is normally on or closed, enter 1.

IBNFEAT feature RSUS

Requested Suspension (RSUS)

Feature RSUS is assigned when the customer requests suspension of service.

If feature RSUS is assigned, specify the treatments to which origination from and terminations to the customer line have to be routed:

- the treatment in the Line Treatment Table (value LNT in table TMTCNTL) to which a line with this feature is routed upon going off-hook
- the treatment in the Line, Local Trunk Table (value TITRKGRP in table TMTCNTL) or Office Treatment Table (value OFFTREAT in table TMTCNTL)to which a line or trunk is routed when attempting to terminate to the line with this feature

If the originator is a line, it is routed to the treatment in the Line Treatment Table. If no input has been provided in the Line Treatment Table for the treatment specified, translation defaults to the same treatment in the Office Treatment Table.

If the originator is a trunk, it is routed to the treatment in the Local Trunk Treatment Table. If no input has been provided in the Local Trunk Treatment Table for the treatment specified, translation defaults to the same treatment in the Office Treatment Table.

Datafill

The following table lists the datafill for table IBNFEAT feature RSUS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		RSUS	*Data feature* Enter RSUS for the Requested Suspension feature
FEATURE		RSUS	*Data feature* Enter RSUS.
DATA		see subfields	*Data* This field consists of subfields OSUS and TSUS.

IBNFEAT feature RSUS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OSUS	alphanumeric (1 to 4 characters)	*Originating suspension* Enter the treatment in the Line Treatment Table to which the line is routed when the line goes offhook.
	TSUS	alphanumeric (1 to 4 characters)	*Terminating suspension* Enter the treatment in the Line Treatment, Local Trunk Treatment or Office Treatment Table to which a line or trunk is routed when attempting to terminate to a line with the RSUS feature.

IBNFEAT feature SACB

Subscriber-activated Call Blocking (SACB)

Feature SACB allows subscribers to control originations from their lines by identifying call classes that control completion to certain dialed numbers. The restricted call classes are specified when adding the new SACB option to the subscriber line during a Service Order System (SERVORD) session.

Feature SACB applies only to Residential Enhanced Services (RES) lines and Meridian Digital Centrex (MDC) lines. The SACB line option can only be added to the primary member of a multiple appearance directory number (MADN) group.

Feature SACB is incompatible for subscribers with the following features:

- Denied Origination (DOR)
- Subscriber Outgoing Restriction (SOR)
- International Line Restriction (ILR)
- Toll Denial (TDN)

Note: Emergency calls must complete, regardless of the SACB restrictions assigned to the subscriber line. Therefore, 911 calls and calls dialed as 0- to reach an operator completed provided the numbers are entered against subfield FPBALLOW.

Fraud Prevention Blocking (FPB) prevents origination of calls without the entry of a personal identification number (PIN). However, dial digits entered in subfield FPBALLOW in table SACB can originate without a PIN. SACB restricts the dial digits entered in other call classes.

Some numbers must complete without a PIN. The numbers entered into the FPBALLOW subfield in table SACBcan be completed. All other numbers require a PIN.

SACB suspension (SACBSUS) is a boolean function. SACBSUS, when set to Y, compares the dialed number with numbers entered in subfield FPBALLOW. If the numbers match, the call continues. If the numbers do not match, a busy treatment is the result. If SACBSUS is set to N and FPB is on the line, the dialed digits are compared with numbers entered in subfield FPBALLOW. If the digits match, the call continues. If the digits do not match, the call is restricted and the PIN is required. If FPB is on the line, a check is made for other call classes.

For SACBSUS as 'Y', feature activation and deactivation is not restricted. However, SACB activation and deactivation is not allowed.

IBNFEAT feature SACB (continued)

Datafill

The following table lists the entries in table IBNFEAT for feature SACB.

IBNFEAT field descriptions for SACB (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
DF		SACB	*Data feature* Enter SACB for the Subscriber Activated Call Blocking feature.
FEATURE		SACB	*Feature* Enter SACB.
DATA		see subfields	*Data* This field consists of subfields STATUS, SACBCC, and SACBPIN.
	STATUS	ACT or INACT	*Status* Enter ACT if this feature is to be active. Enter INACT if this feature is to be inactive.
	SACBCC	ALL, I800, I900, I976, LDAS, NONE, SPEC, TDAS, OPRA, ZROM, TOLL, IDDD, FPB	*Subscriber Activated Call Blocking call class* Enter any of the SACB call classes that are to have denial of call completion whenever the SACB option has been activated. The initial values of SACBCC are entered when assigning the SACB option. Enter ALL to select all call classes. Enter NONE to select none of the call classes. Enter FPB to block all calls except those that are entered in field FPBALLOW in table SACB.

IBNFEAT feature SACB (end)

IBNFEAT field descriptions for SACB (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	SACBPIN	numeric (2 to 10 digits)	*Subscriber Activated Call Blocking personal identification number* Enter the SACB personal identification number that the subscriber enters to override blocking. The initial value of the SACB PIN is entered when assigning the SACB option. The SACB PIN can be any non-hex digits.
	SACBSUS	Y or N	*SACB suspend a line* A boolean function. Enter Y to block all of the calls from an originating line except those entered in table SACB for subfield FPBALLOW. The STATUS field must be set to ACT, to avoid an error condition and message. The default value is N.

MAP display example for table IBNFEAT for feature SACB

```
 LEN   DNNO            DF       FEATURE     DATA

_____________________________________________________

HOST   00 0 15 01   1   SACB      SACB      ACT   ALL $   $ N
```

Speed Calling List Long (SCL)

Feature SCL permits a customer to place calls to a previously designated list of frequently called numbers by dialing a two-digit speed calling code instead of the complete number.

The long list can consist of 30, 50, 70 or 100 numbers. The speed calling codes assigned to stored numbers can range from 00 to 29, 00 to 49, 00 to 69 or 00 to 99 for CEPT line option, but must not conflict with codes used for other features.

The Speed Calling Long List can belong to an individual line, in which case it can only be updated, deleted from, and used by this line. It can also be accessed by a number of users, in which case it becomes a Group Speed Calling list. However, only one line, called the controller, can change the contents of this list.

See operational measurement (OM) group SPEEDCAL for the OMs associated with the SCL feature.

Datafill

The following table lists the datafill for table IBNFEAT feature SCL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		SCL	Enter SCL for the Speed Calling List Long feature.
FEATURE		SCL	*Data feature* Enter the Speed Calling List Long data feature SCL. The auxiliary data feature GRP displays under this field if group number feature control is activated. The GRP data feature is used to store the CPU group number information in a tuple that is linked to the display of information about a specific LEN.

IBNFEAT feature SCL (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DATA		see subfields	*Data* This field consists of subfields LISTTYPE.
LISTTYPE		L30, L50, or L70, L100	*List type* Enter the quantity of numbers that can be entered into the speed calling list by the line with the feature: L30 for 30, L50 for 50, or L70 for 70 and L100 for 100 (CEPT line option).

Series Completion (SCMP)

Feature SCMP supports IBN lines assigned this option. Similar to feature CFB and to hunt groups in terms of functionality, feature SCMP defines a new line option that enables incoming calls to be redirected to another directory number (DN) assigned to the switch. This occurs only in the busy state. The targeted DN is specified as a parameter of option SCMP.

Groups of lines can be linked by feature SCMP to form a chain that functions in a similar manner to a hunt group, but there is an important difference. Linking lines by SCMP allows almost any hunting algorithm to be implemented.

Datafill

The following table lists the datafill for table IBNFEAT feature SCMP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SCMP	*Data feature* Enter SCMP for the Series Completion feature.
FEATURE		SCMP	*Data feature* Enter SCMP.
DATA		see subfield	*Data* This field consists of subfield SCMPDN.
	SCMPDN	numeric(7 to 10 digits)	*Series Completion directory number* Enter a valid DN that resides on the switch.

IBNFEAT feature SCS

Speed Calling List Short (SCS)

Feature SCS permits a customer to place calls to a previously designated list of frequently called numbers by dialing a one-digit speed calling code instead of the complete number.

The short list can consist of a maximum of ten stored numbers. The speed calling codes assigned to stored numbers can be from 0 to 9.

See operational measurement (OM) group SPEEDCAL for the OMs associated with the Speed Calling Short feature.

Datafill

The following table lists the datafill for table IBNFEAT feature SCS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SCS	Enter SCS for the Speed Calling List Short feature.
FEATURE		SCS	*Data feature*Enter SCS.

Secondary Directory Number (SDN)

Feature SDN applies to RES and IBN lines, and allows multiple directory numbers (DN) to be assigned to a single line without additional line equipment. Distinctive ringing patterns enable subscribers to screen calls to the primary directory number (PDN) and to the secondary directory numbers (SDN) on the same line. Three distinctive ringing patterns and a normal ringing pattern can be assigned to any of the SDNs. The PDN has a normal ringing pattern. Up to six SDNs are supported for peripheral modules (PM) equipped with coded-20 Hz, coded-30 Hz or superimposed ringing. Only one SDN is allowed with frequency-selective ringing due to the limited variations in the ringing pattern.

If the PDN has feature CFW, individual SDNs can be call forwarded to the same number as the PDN for each SDN. The PDN can activate or deactivate CFW to another DN. An SDN can also support its own options, independent of the PDN. SDNs that support their own options are called enhanced SDNs (ESDN). ESDNs are specific to Residential Enhanced Services (RES) and Meridian Digital Centrex (MDC) environments. Once options are added to SDNs, it is possible for those SDNs to identify themselves in order to originate calls and to program features, such as Call Forwarding.

The table “Ringing patterns for coded and superimposed ringing” shows the ringing patterns for coded and superimposed ringing.

Ringing pattern for coded and superimposed ringing

SDN ring pattern number	Pattern
0	Normal ringing (approximately 2 s on, 4 s off)
1	2 long rings
2	2 short, 1 long ring
3	1 short, 1 long, 1 short ring

IBNFEAT feature SDN (continued)

The table “Ringing patterns for frequency selected ringing” able shows the ringing patterns for frequency selective ringing.

Ringing pattern for frequency selective ringing

SDN ring pattern number	Pattern
0	Normal ringing (approximately 2 s on, 4 s off)
1	2 short rings

The following information is required for each SDN associated with the Teen Service feature:

- The line equipment number (LEN) to which the SDN is assigned. The LEN can have a line class code of 1FR, 1MR, RES, or IBN.
- Teen Service is supported only for lines connected to line modules (LM), line concentrating modules (LCM), remote line concentrating modules (RLCM), and digital subscriber carriers with superimposed, frequency selective, or coded ringing. The supported digital subscriber carriers are the RCU, RCT, and RCS. The LCM is connected to the central control (CC) by a line group controller (LGC) or by a line trunk controller (LTC). The RLCM is connected to the CC by an LTC. The digital subscriber carriers are connected to the CC by subscriber carrier modules (SCM).
- The data feature is SDN.
- The DNs assigned for each SDN must be listed in table DN and must be unassigned. The SDN must have the same SNPA as the PDN.
- Each SDN must have an SDN option.

Datafill

The following table lists the datafill for table IBNFEAT feature SDN.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
DF		SDN	*Data feature* SDN for the Secondary Directory Number feature.
FEATURE		SDN	*Data feature* SDN entry.

IBNFEAT feature SDN (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
DATA		see subfields	*Data* This field consists of up to six multiples of subfields DN, SDNRING, and SDNOPT. If less than six multiples are required, the list ends with a $ (dollar sign).
	DN	up to 15 digits	*Directory number* This field contains the DNs (including NPA) of the SDNs in sequential order. The DNs are not previously assigned and are found in table DNINV. A $ (dollar sign) appears if SDN is undefined.
	SDNRING	0 to 3	*Secondary Directory Number ring pattern* This field contains ring pattern that the SDN receives. See table “Ringing patterns for coded and superimposed ringing” and “Ringing patterns for frequency selective ringing”.

IBNFEAT feature SDN (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
	SDNOPT	E, N, or P	*Secondary Directory Number option* A 'E' displays if the SDN is to support its own options (options of the PDN are not utilized by the SDN). A 'N' displays if the SDN is not to be call forwarded, regardless of whether the PDN has Call Forwarding (CFX). A 'P' dispalys if the SDN is to be forwarded to the same number as the PDN, provided that the PDN has CFW and CFW is active (activated by the PDN).
	SDN_DNY	DNYCWT, NODNY, or $	*Secondary Directory Number Deny* A '$' dispalys if Call Waiting (CWT) tone is to remain active for calls to the SDN. 'DNYCWT' displays if CWT tones are to be disconnected for calls to the SDN. The default value is $. Note 1: For RES and IBN lines, SND_OPT selection E is not compatible with SDN_DNY selection DNYCWT. Note 2: NODNY will only appear when the option was datafilled in a patch to the previous switch software load. Note 3: The only valid options for IBN lines are NODNY or $.

AT&T Line Study (SDY)

Feature SDY is assigned to lines that require an automatic message accounting (AMA) record to be generated for complaint observing (OBS) or line usage studies (LUS) or both.

Datafill

The following table lists the datafill for table IBNFEAT feature SDY.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SDY	*Feature* Enter SDY for the AT&T Line Study feature.
FEATURE		SDY	*Feature* Enter SDY.
DATA		see subfields	*Data* This field consists of subfields OBS and LUS. Separate each subfield with a single space.
	OBS	Y or N	*Complaint observed studies* Enter Y (yes) if the line is arranged for complaint observed studies. Otherwise, enter N (no).
	LUS	Y or N	*Line usage studies* Enter Y if the line is arranged for line usage studies. Otherwise, enter N.

IBNFEAT feature SEC

Security (SEC)

Feature SEC allows a variable length code to be assigned to a valid IBN station directory number (DN). This code can then be used to restrict feature activation associated with this DN. Feature SEC can only be used in conjunction with other features, it is not a functional feature in itself. This feature should not be confused with the Authorization Code feature. The features are unrelated in both operation and implementation.

The security code is designed as a series of one to seven digits. For each individual line assigned a security code, a set of features associated with that code is also assigned. Therefore, the security code for a line can be used with zero features or up to ten features. At present, only the Directed Call Park (DCPK) feature can be used in conjunction with the Security Code feature.

The need for a security code evolved from a need to restrict the retrieval of calls “parked" by the DCPK feature.

Datafill

The following table lists the datafill for table IBNFEAT feature SEC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SEC	*Data feature* Enter SEC for the Security feature.
FEATURE		SEC	*Data feature* Enter SEC.
DATA		see subfields	*Data* This field consists of subfields FEATURES and SECCODE. Separate each subfield with a single space.
	FEATURES	DCPK	*Features* Enter DCPK, the line option associated with feature SEC.
	SECCODE	numeric (1 to 7 digits)	*Security code* Enter the security code assigned to the line, to be used with the DCPK option.

Stop Hunt (SHU)

Feature SHU can be assigned in one of the following three types of hunt groups: Directory Number Hunt (DNH), Multiline Hunt (MLH), or Distributed Line Hunt (DLH). Although the SHU option is allowed on DLH hunt groups, SHU is not compatible with DLH. Stop Hunt provides for a miscellaneous scan point circuit controlled by an external key. When the key is not activated, the line is normal. The hunting feature is canceled when the key is activated. The same miscellaneous scan point may be simultaneously assigned to one, several, or all lines within the hunt group, depending on the number of lines having hunting canceled.

The scan point must belong to one of the scan groups assigned in table SCGRP.

Datafill

The following table lists the datafill for table IBNFEAT feature SHU.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		SHU	*Data feature* Enter SHU.
FEATURE		SHU	*Data feature* Enter SHU for the Stop Hunt feature.
DATA		see subfields	*Data* This field consists of subfields TMTYPE, TMNO, TMCKTNO, POINT, and NORMALST. Separate each subfield with a single space.
	TMTYPE	MTM, RMM, or RSM	*Trunk module type* If line and scan card are located at the host switching unit, enter MTM (maintenance trunk module) as the trunk module (TM) type on which the scan card is mounted. If line and scan card are located at a remote location, enter RMM (remote maintenance module) or RSM (remote service module).

IBNFEAT feature SHU (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	0 to 2047	*Trunk module number* Enter the number assigned to the TM on which the scan card is mounted. For an MTM, the range is 0 to 2047. For an RMM or RSM, the range is 0 to 99.
	TMCKTNO	0 to 23	*Trunk module circuit number* Enter the TM circuit number to which the scan point belongs.
	POINT	0 to 6	*Point* nter the scan point within the TM circuit number.
	NORMALST	0 to 1	*Normal state* Enter the normal state of the scan point. If the scan point is normally off or open, enter 0 (zero). If the scan point is normally on or closed, enter 1.

IBNFEAT feature SimRing

Simultaneous Ringing

The Residential Enhanced Services (RES) Simultaneous Ringing (SimRing) feature introduces the SIMRING line option. The SimRing feature allows simultaneous alerting of a user-defined group of up to five directory numbers (DN). This simultaneous alert occurs when the pilot DN (PDN) of the group receives a call. The first alerted DN that answers the call connects to the calling party. At the same time, the calls to the other alerted DNs are released.

SimRing group members other than the PDN are referred to as non-pilot member DNs (NPMDN). A SimRing group consists of a single PDN and up to four NPMDNs.

A SimRing subscriber can do the following through the SimRing user interface:

- activate or deactivate the SimRing feature on a line
- edit the NPMDN list

The SimRing subscriber can perform these tasks either locally from the PDN or remotely from any other DN. During remote access to the SimRing user interface, the switch prompts the subscriber to enter a personal identification number (PIN) for security reasons.

Datafill

The following table lists the datafill for table IBNFEAT feature SimRing.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SIMRING	Data feature. Enter SIMRING for the Simultaneous Ringing feature.
FEATURE		SIMRING	Feature. Enter SIMRING for the Simultaneous Ringing feature.
DATA		see subfield	Data. This field consists of subfields GRPKEY, STATE, and PIN.

IBNFEAT feature SimRing (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	GRPKEY	numeric (0 to 9999)	Group key. This subfield specifies the value for the index of the SimRing group. It allows mapping into table PILOTGRP. ***Note:*** Table PILOTGRP contains the information that defines all SimRing groups on a switch. This information includes the NPMDNs for each group.
	STATE	ACT or INACT	State. This subfield specifies the state of the SimRing feature (active or inactive). If the SimRing feature is active, the switch alerts the SimRing group when the PDN receives an incoming call.
	PIN	numeric (2 to 10 characters)	Personal identification number. This field specifies the SimRing PIN value. ***Note:*** The value of subfield PIN does not display. The value appears as a dollar sign ($) character.
	MEM_REDIR	Y or N	SimRing Deny Redirection Y assigned to this subfield of the SimRing group option indicates that NPMDN terminators with active call forwarding are allowed to redirect calls. N assigned to this subfield of the SimRing group option indicates that NPMDN terminators are not allowed to redirect calls.

Datafill example

The following example shows sample datafill for table IBNFEAT feature SimRing.

IBNFEAT feature SimRing (continued)

MAP display example for table IBNFEAT feature SimRing

```
LEN  DNNO  DF        FEATURE          DATA
_____________________________________________________
HOST 01 0 01 00 0    SIMRING  SIMRING 0 ACT N $
```

MAP display example for table IBNFEAT feature SimRing showing the redirection option

```
LEN DNNO DF FEATURE DATA
_____________________________________________________
> pos HOST 1 0 1 simring
HOST 01 0 01 00 0 SIMRING SIMRING 0 ACT Y$
> cha
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UMAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
> y
FEATURE: SIMRING
>
GRPKEY: 0
>
STATE: ACT
>
MEM_REDIR: Y
> x
 *** ERROR***
X
|
TYPE OF MEM-REDIR IS YES_NO
> x
 *** ERROR ***
X
|
TYPE OF MEM_REDIR IS YES_NO
TYPE IS YES_NO {N,Y}
MEM_REDIR: Y
> n
PIN: $
>
TUPLE TO BE CHANGED:
HOST 01 0 01 00 0 SIMRING SIMRING 0 ACT N $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
> y
TUPLE CHANGED:
JOURNAL FILE INACTIVE
```

IBNFEAT feature SimRing (end)

Table history

SN07 (DMS)

Added a new subfield MEM_REDIR to the SimRing group option to support activity A00003073. Documentation updated at SN08 (DMS) release.

IBNFEAT feature SLU

Subscribers Line Usage (SLU)

Feature SLU is assigned to a station that requires a peg count of all originating and terminating calls.

If the switching unit has the optional Operational Measurement and Data Modification Order Selectable Subscribers Line Usage Scan Interval software, then the following office parameters must be set to the correct values:

- OPTIONAL_SLU_FEATURE in table OFCOPT
- ENG640M1_SCAN RATE, TRA250M1_SCAN RATE, TRA125M1_SCAN_RATE, and TRA125M2_SCAN_RATE in table OFCVAR

Datafill

The following table lists the datafill for table IBNFEAT feature SLU.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SLU	*Data feature* Enter SLU for the Subscribers Line Usage feature.
FEATURE		SLU	*Data feature* Enter SLU.

IBNFEAT feature SMDI

Simplified Message Desk Interface (SMDI)

Feature SMDI identifies the message desk as a member of an SMDI Uniform Call Distribution (UCD) group.

Feature SMDI provides communication between the message desk and the switch by means of a data link. The message desk can receive and deliver messages, and activate and deactivate Message Waiting indication for a station.

The message desk must be arranged as a UCD group and each UCD group member must have the SMDI option.

Datafill

The following table lists the datafill for table IBNFEAT feature SMDI.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SMDI	*Data feature* Enter SMDI for the Simplified Message Desk Interface feature.
FEATURE		SMDI	*Data feature* Enter SMDI.
DATA		see subfields	*Data* This field consists of subfields LINENO, UCDGRP, and AUTOLOG.
	LINENO	1 to 1024	*Line number* Enter the line number for the SMDI desk.
	UCDGRP	alphanumeric (1 to 16 characters)	*Uniform Call Distribution group name* Enter the Uniform Call Distribution (UCD) group name defined in table UCDGRP.
	AUTOLOG	Y or N	*Autolog* Enter Y (yes) if the line is to be autologged into the UCD group. Otherwise, enter N (no).

IBNFEAT feature SOR

Station Origination Restrictions (SOR)

Feature SOR allows station origination restrictions (SOR) to be applied against this line or a group of lines with the SOR feature by an SOR controller.

Datafill

The following table lists the datafill for table IBNFEAT feature SOR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SOR	*Data feature* Enter SOR for the Station Origination Restrictions feature.
FEATURE		SOR	*Data feature* Enter SOR.
DATA		see subfield	*Data* This field consists of subfield SORGRP.
	SORGRP	1 to 64	*Station origination restrictions group* Enter the number of the group to which this LEN belongs.

IBNFEAT feature SPB

Special Billing Code (SPB)

Feature SPB permits a billing directory number (DN), other than the station's DN, to be written to tape.

For Station Message Detail Recording (SMDR), the SPB DN, not the station DN, is used if this feature is assigned to the line.

The SPB DN must be a seven- or ten-digit number of the North American numbering plan format.

Datafill

The following table lists the datafill for table IBNFEAT feature SPB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		SPB	*Data feature* Enter SPB for the Special Billing Code feature.
FEATURE		SPB	*Data feature* Enter SPB.
DATA		see subfield	*Data* This field consists of subfield DN.
	DN	numeric(7 or 10 digits)	*Directory number* If the office is non-LAMA (local automatic message accounting), enter the seven-digit special billing number. If the office is LAMA, enter the ten-digit special billing number (NPA + DN).

IBNFEAT feature SUPR

ACD Supervisor Position on 500/2500 Set (SUPR)

Feature SUPR allows a 500/2500 set to be specified as an Automatic Call Distribution (ACD) supervisor position.

Feature SUPR provides an enhancement to table IBNFEAT that allows the 500/2500 set to be specified as a supervisor position. A new option, SUPR, enables this function. This option can be added on any normal directory number (DN) line, as well as any DN line that has been specified as an ACD agent position (by datafilling the ACD option). The system prompts for ACD group, subgroup, and identification (ID) number. Any ACD group and subgroup can be datafilled in the table only if no supervisor already exists for the specified group and subgroup. The specified ID number must also not be currently assigned to any other ACD supervisor or agent position.

Datafill

The following table lists the datafill for table IBNFEAT feature SUPR.

Field descriptions

Field	Subfield	Entry	Explanation and action
DF		SUPR	*Data feature* Enter SUPR for the ACD Supervisor Position on 500/2500 Set feature.
FEATURE		SUPR	*Data feature* Enter SUPR.
DATA		see subfields	*Data* This field consists of subfields ACDGRP, ACDSGRP, IDNUM, and POSID.
	ACDGRP	alphanumeric (1 to 16 characters)	*Automatic Call Distribution group* Enter the ACD group name.
	ACDSGRP	1 to 255	*Automatic Call Distribution subgroup* Enter the ACD subgroup number.

IBNFEAT feature SUPR (end)

Field descriptions

Field	Subfield	Entry	Explanation and action
	IDNUM	Y or N	*Identification number* Enter Y (yes) if the position number ID is assigned and datafill refinement POSID. Otherwise, enter N (no).
	POSID	00001 to 30000	*Position identification* If the entry in subfield IDNUM is Y, datafill this refinement. Enter the ACD agent position number.

Table history

SN07 (DMS)

Activity A00004391 increased the range of subfield POSID to 30 000.

IBNFEAT feature TBO

Terminating Billing Option (TBO)

The TBO feature allows the operating company to generate automatic message accounting (AMA) records for calls terminating to lines. When a call terminates to a line assigned the TBO option, an AMA record with a call code between 800 and 999 is generated for each call terminating to that line. The call code is assigned when the TBO option is added to the line.

Datafill

The following table lists the datafill for table IBNFEAT feature TBO.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		TBO	*Data feature* Enter TBO for the Terminating Billing Option feature.
FEATURE		TBO	*Data feature* Enter TBO.
DATA		see subfields	*Data* This field consists of subfields CALLCODE and SFPRSNT.
	CALLCODE	800 to 999	*Call code* Enter the call code for the AMA record.
	SFPRSNT	Y or N	*Service feature code present* Enter Y (yes) if there is a service code associated with the feature, that is printed on the AMA record and datafill refinement SFVAL. Otherwise, enter N (no).
	SFVAL	800 to 999	*Service feature value* If the entry in subfield SFPRSNT is Y, datafill this refinement. Enter the code associated with the feature.

IBNFEAT feature UCDSD

UCD Signal Distribution Points (UCDSD)

Uniform Call Distribution (UCD) allows calls to be evenly distributed to a number of predesignated 500/2500 sets. The nature of UCD often requires that agents log into the UCD group.

Feature UCDSD can be assigned to the line equipment number (LEN) of a UCD station to provide login and logout monitoring.

Datafill

The following table lists the datafill for table IBNFEAT feature UCDSD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		UCDSD	*Data feature* Enter UCDSD for the UCD Signal Distribution Points feature.
FEATURE		UCDSD	*Data feature* Enter UCDSD.
DATA		see subfields	*Data* This field consists of subfields SDGRPNO and SDPOINT.
	SDGRPNO	0 to 511	Enter the signal distribution (SD) group number.
	SDPOINT	0 to 6	*Signal distribution point number* Enter the SD point number.

Voice Mail Easy Access Directory Number (VMEADN)

VMEA is a service offered to residential subscribers that provides an integrated access to a voice messaging service (VMS) from an End Office (EO) by simplified dialing. Customers who have subscribed to a voice messaging service like Call Answer have the ability to directly access their voice mailboxes by dialing an access code from their home telephone set. The VMEADN is the directory number of the VMS system.

This is a set feature and must be assigned to a vacant key:

Datafill

The following table lists the datafill for table IBNFEAT feature VMEADN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FEATKEY		see subfields	KSET feature key. This field consists of subfields LEN, KEY, and FEAT.
	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. 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.
	KEY	1 to 69	Physical key. Enter the number associated with the physical key to which the feature is being assigned.
DF		VMEADN	Data feature. Enter the VMEADN for the Voice Mail Easy Access Directory Number feature.
FEATURE		VMEADN	Data feature. Enter VMEADN

IBNFEAT feature VMEADN (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DATA		see subfield	Data. This field consists of subfield DN.
	DN	vector of up to 30 digits	Directory number. Enter the DN of the subscriber's VMS system.

Datafill example

The following example shows an example of feature VMEADN assigned to key 1

MAP display example for table IBNFEAT feature VMEADN

```
                            FEATKEY       FEATURE
                                                           KVAR
________________________________________________________________

ISDN 209               1     VMEADN    VMEADN         6210000
```

Warm Line for RES and MDC (WML)

When a Meridian Digital Centrex (MDC) or Residential Enhanced Services (RES) subscriber goes off-hook, the Warm Line (WML) feature waits for a preset time period before originating a call to a predefined number that resides on the switch. The subscriber is able to process calls and features as usual before the expiration period.

Feature WML starts a timer when a RES or MDC subscriber goes off-hook. Dialing begins if the timer expires. A call is automatically set up to a target Warm Line directory number (WMLDN). If the subscriber begins dialing before the timer expires, the timer is canceled and normal call and feature processing continues.

Subscribers can bypass the time-out period by dialing two octothorpes (##) to immediately initiate the automatic call to the WMLDN. Dialing one octothorpe routes the call to the WMLDN after a 5-s delay, due to interdigital timing.

Datafill

The table that follows lists datafill for table IBNFEAT feature WML.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DF		WML	*Data feature* Enter WML for the Warm Line for RES and MDC feature.
FEATURE		WML	*Data feature* Enter WML.
DATA		see subfields	*Data* This field consists of subfields CUSTMOD, ACTIVE, DN, TIMEOUT, and FTCODE.
	CUSTMOD	Y or N	*Customer mode* Enter Y (yes) if the customer can modify the warm line directory number. Otherwise, enter N (no).

IBNFEAT feature WML (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ACTIVE	Y or N	*Active* Enter Y if the Warm Line feature is currently active on the line. Otherwise, enter N.
	DN	numeric (1 to 18 digits)	*Directory number* Enter the Warm Line DN to which the call is directed when the warm line timer expires.
	TIMEOUT	1 to 20	*Time-out* Enter the time in seconds, after a subscriber goes off-hook, before a call is placed to the Warm Line DN.
	FTCODE	Y or N	*Feature access code* Enter Y to allow subscriber to dial octothorpe (#) to access MDC features. Enter N to allow subscriber to dial # to override Warm Line feature timer. FTCODE is prompted when office parameter WML_OCT_IS_LINE_OPT_PARM is set to Y.

Datafill examples

The figures that follow show sample datafill for table IBNFEAT feature WML.

In both examples, the customer can modify the DN. The call is directed to DN 6211234 after 6 s. The first example is with office parameter WML_OCT_IS_LINE_OPT_PARM enabled which gives the FTCODE prompt. The customer can dial # to access MDC features.

MAP display example for table IBNFEAT feature WML with FTCODE prompt

```
                    DF    FEATURE   DATA

_____________________________________________________________

HOST  00 0 06 04  WML  WML       Y   Y  6211234  6   Y
```

The second example is with office parameter WML_OCT_IS_LINE_OPT_PARM disabled which removes the FTCODE prompt.

MAP display example for table IBNFEAT feature WML with no FTCODE prompt

```
                    DF   FEATURE   DATA

_____________________________________________________________________

HOST  00 0 06 04  WML  WML       Y  Y   6211234  6
```

IBNFEAT feature WUCR

Wake-up Call Request (WUCR)

Feature WUCR allows a subscriber to have a phone ring at a specified time. This wake-up call service is valid for Residential Enhanced Services (RES) and Meridian Digital Centrex (MDC) lines and is activated or deactivated using access codes. This feature can only be assigned to the primary directory number (DN) of a Meridian business set (MBS) and cannot be assigned to ISDN lines.

Datafill

The following table lists the datafill for table IBNFEAT feature WUCR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DF		WUCR	Enter WUCR for the Wake-up Call Request feature.
FEATURE		WUCR	*Data feature* Enter WUCR.

IBNFXDS1

Table name

IBN Digital FX Trunk Table

Functional description

All Integrated Business Network (IBN) outgoing or two-way trunk groups (trunk group types IBNTO or IBNT2 respectively) that have card code DS1FXO assigned in table TRKSGRP automatically have entries in table IBNFXDS1 once table TRKSGRP is datafilled.

Each trunk subgroup entry in the table specifies the seize sequence used when a trunk in the subgroup is seized in the outgoing direction.

The seizure sequence can be either analog or digital.

The seizure sequence (field SEIZESEQ value) is ANALOG if interfacing with analog channel units and DIGITAL if interconnections are digital.

When a subgroup is automatically added to this table, the seize sequence defaults to DIGITAL.

Additions and deletions are not allowed in this table. If the digital seize sequence is desired, the CHANGE command of the table editor must be used to alter the seize sequence to DIGITAL.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table IBNFXDS1.

Table size

Memory is automatically allocated for this table.

IBNFXDS1 (end)

Datafill

The following table lists datafill for table IBNFXDS1.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) that is assigned to the trunk group and listed in table CLLI.
	SGRP	numeric(0 to 1)	*Trunk subgroup number* Enter the trunk subgroup number.
SEIZESEQ		ANALOGorDIGITAL	*Seizure sequence* Enter the seizure sequence, ANALOG or DIGITAL.

Datafill example

The following example shows sample datafill for table IBNFXDS1.

MAP display example for table IBNFXDS1

```
SGRPKEY                         SEIZESEQ
_____________________________________________________
IBNDDPGS2W 1                    DIGITAL
IBNDDTGS2W 1                    DIGITAL
```

IBNLINES

Table name

IBN Line Assignment Table

Functional description

Table IBNLINES contains the line assignments for each 500/2500 set assigned to an Integrated Business Network (IBN), Residential Enhanced Services (RES), and Multiple Appearance Directory Number (MADN) station number. This table also contains the line assignments for the IBN attendant consoles (AC).

This table contains the line assignments for data channel links for the Bulk Calling Line Identification (BCLID) feature under the format name of BL.

The line assignments for stations with 500/2500 sets that are not assigned to an IBN or RES customer group are assigned in table LENLINES. For line assignments for business sets and data units, see table KSETLINE.

Four input data formats are provided for this table:

- The first format supports IBN ACs and has a format name of AC.
- The second format supports the BCLID data channel links and has a format name of BL.
- The third format supports IBN and RES station numbers and has a format name of STN.
- A fourth format supports IBN and RES MADN lines and has a format name of MDN.

Listed directory numbers (DN) for a customer group that do not have line appearances are not assigned in this table. Listed DNs for a customer group are assigned in table WRDN. Table WRDN was replaced by table DNROUTE in BCS33.

If customer data change is permitted on a line, its line equipment number (LEN) also appears in table CDCLENS. If a LEN appears in both table IBNLINES and CDCLENS, the customer group assigned in both tables must be the same. Any attempt to change the customer group in either table is not allowed.

The input is forwarded to Nortel Networks for production of an input data tape.

Test lines and AC line assignments are required for the initial input data tape.

The IBN line assignments are required for the final line data tape.

IBNLINES (continued)

Option SCWID (Spontaneous Call Waiting Identification) must be entered using SERVORD.

A LEN for an IPE analog line must be datafilled in table LNINV with an analog card code prior to being datafilled in table IBNLINES.

A remote digital terminal (RDT) related tuple can only be added in this table if field CARDCODE in table LNINV is either RDTLS or RDTLSG.

The product of the SHELF and SLOT for an RDT entry cannot exceed 1022.

As of NA007, Software Optionality Control (SOC) MDC00058 specifies the maximum number of IBN lines that can be assigned in this table.

Office parameter MAX_RES_LINES in table OFCOPT specifies the maximum number of RES lines that can be assigned in this table.

Office parameter MAX_BCLID_DATA_LINKS in table OFCOPT specifies the maximum number of BCLID data links that can be assigned in this table.

When a tuple is added to IBNLINES for MADN on a line already assigned Call Screening, Monitoring, and Intercept (CSMI), there is a check performed to see if MDN is being added as the primary member. If the check fails, the following error message is generated:

```
CSMI is present, it is compatible only with primary MDN members.
```

The following error message appears if an attempt is made to datafill this table using the table editor:

```
Protected table, use SERVORD to change.
```

This error message was added for the NA005 release in accordance with feature AN1653 (Enforcement of SERVORD).

MIGRATE is available in OPTLIST and must be assigned in conjunction with the conditional routing selector MIGRATE. For information, refer to the *Translations Guide*.

All additions, deletions, and changes must be entered using the Service Order System (SERVORD). For information, refer to the *SERVORD Reference Manual*.

Formats

The following are IBNLINES formats:

- FormatAC
- FormatBL
- FormatSTN
- FormatMDN

Datafill sequence and implications

The following tables must be datafilled before table IBNLINES:

- CUSTENG
- CUSTHEAD
- LNINV
- OPTCTL

Note: When a tuple is added to table IBNLINES for a new hunt group member, add a corresponding tuple to table HUNTMEM.

Table size

The maximum number of IBN lines is 100 000.

Datafill example

An example of datafill for table IBNLINES, along with a line-by-line description of the table entries for this example, is provided below.

MAP display example for table IBNLINES

```
LEN  DNNO  RESULT
_____________________________________________________________________

HOST 01 0 01 03 0  DT  STN  IBN  6211013  BNR  0  0  613  MIGRATE $
```

Table history

SN06 (DMS)

Development activity 00001207 introduces changes to the IBNLINES table to support MIGRATE.

IBNLINES (continued)

SN04 (DMS)

Conversion of RES lines to IBN lines (59037976) performed on the INACTIVE CPU during the One Night Process (ONP). The converted RES line tuples are updated (see IBNLINES option STN).

MMP16

Added option IICB to field RESULT for assignment to RES lines.

MMP15

Added option COIN to subfield OPTLIST.

Added option NTAIT for IBN lines.

NA013

Added options call redirect (CRT) and call redirect deny (CRTDENY) to subfield OPTLIST.

Added option who's calling (WC) to subfield OPTLIST.

Added qualification about hunt group member datafill.

NA012

Development activity 59007050 introduces changes to field LINEATTR of selector STN. This field now accepts an alphanumeric string instead of an integer string.

NA011

Added options Call Waiting Conference (CWTC) and DENYCWTC to subfield OPTLIST.

NA010

Added options Access to Messaging (AMSG), Access to Messaging Deny (AMSGDENY), and Message Deactivation (MSGDEACT) to subfield OPTLIST.

APC010

This release added the following options to the OPTLIST subfield of the RESULT field:

- Japan Priority Indication (PRI)
- Call Forwarding With Announcement (CFWANN)

APC009.1

Added options No Collect Call (NOCOLL) and Line Reversal on Seizure (LRS) to table IBNLINES subfield OPTLIST.

NA009

Added SNPA field. Table IBNLINES automatically extracts the SNPA fields from table LINEATTR except for POTS and RES lines. The POTS and RES lines must be associated with the SNPA field in tables IBNLINES and LENLINES.

NA007

Added option LNPTST.

Added a table size description and examples for table DNINV.

Replaced reference to office parameter MAX_IBN_LINES with SOC MDC00058.

EUR005

Added option UCDLI to table IBNLINES in field OPTLIST.

NA005

Error message information added to “Functional description” section in accordance with feature AN1653 (Enforcement of SERVORD).

Added error message information for IBNLINES table control for feature CSMI.

Added option SDSDENY.

Option ECM moved from table IBNLINES to table IBNFEAT.

NA004

Added option SDS.

Deleted option DSCWID.

NA003

Added line options CID and DNID.

Expanded list of compatible line card types in description of option NHT - No Hazard Test.

IBNLINES (end)

BCS36

Added option DCND.

IBNLINES option AC

Attendant console

The AC format is required for attendant console (AC) line assignments. The ACs have a line module interface using three tip-and-ring pairs onto three standard line cards.

The three line cards are assigned to the following functions:

- voice
- transmitting keyboard information from the AC to the switch
- receipt of information from the switch to the AC

The three line cards assigned to the AC must be assigned to the same line drawer within the same line module.

The LEN and function for each of the line cards must be compatible with the assignment specified in the Attendant Console Table.

One record is required for each AC.

IBNLINES option AC (continued)

Datafill

The following table lists the datafill for table IBNLINES option AC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LEN		see explanation	*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.
DNNO		0 to 6	*Directory number number* Enter the directory number (DN) number to specify which DN on the LEN is being referenced.
RESULT		see subfields	*Resul* This field consists of subfields SIGTYPE, FORMAT, ACNUM, and CARDTYPE.
	SIGTYPE	DP	*Signal type* Enter signal type dial pulse (DP) for an attendant console (AC).
	FORMAT	AC	*Format* Enter format name for an IBN AC.

IBNLINES option AC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ACNUM	0 to 255	*Attendant console number* Enter the attendant console number (ACNUM). For the initial input, this field must be equal to 0 (zero).
	CARDTYPE	INC_SIG_CARD OUT_SIG_CARD VOICE_CARD or NIL_CARD_TYPE	*Card type* Enter the function assigned to the line card: • INC_SIG_CARD (incoming signal) • OUT_SIG_CARD (outgoing signal) • VOICE_CARD (voice) • NIL_CARD_TYPE (nil) For the initial input, this field must be equal to NIL_CARD_TYPE.

Datafill example

An example of datafill for a line with the AC format is shown below.

The LEN of this line card is 01 4 03 17 and the DN number is 0. The signal type is dial pulse (DP). The ACNUM is 0. The CARDTYPE is NIL_CARD_TYPE. The datafill for the attendant console enters the correct ACNUM and CARDTYPE.

MAP display example for table IBNLINES option AC

```
                LEN
                    DNNO
RESULT
_____________________________________________________________

      01 4 03 17
                  0             DP  AC   0 NIL_CARD_TYPE
```

IBNLINES option BL

Bulk calling line identification

The Bulk Calling Line Identification (BCLID) feature allows a Meridian Digital Centrex (MDC) line, plain ordinary telephone service (POTS) line, Residential Enhanced Services (RES) line, Uniform Call Distribution (UCD) group, hunt group, or private branch exchange (PBX) customer with a Direct Inward Dialing dialplan to receive call-related information on incoming calls.

The call-related data transmitted to the customer premises equipment (CPE), consists of the date and time the call is received, the calling and called directory numbers, the called line status, the calling line type, and a call forward indicator. This data is transmitted in ASCII (American Standard Code for Information Interchange) format to the CPE through a dedicated Bell 202A compatible data channel. The CPE collects the information for immediate use or storage. Since the data is transmitted over a data channel, the transmission of data to the CPE does not affect the completion of calls to or from the customer.

Table IBNLINES must be datafilled before table BCLIDGRP in order to use the BCLID feature.

IBNLINES option BL (continued)

Datafill

The following table lists the datafill for table IBNLINES option BL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
LEN		see explanation	*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.
DNNO		0 to 6	*Directory number number* Enter the directory number (DN) number to specify which DN on the LEN is being referenced.
RESULT		see subfields	*Result* This field consists of subfields SIGTYPE and FORMAT.
	SIGTYPE	DP	*Signal type* Enter the signal type of dial pulse (DP) for the BL format (Bulk Line for Bulk Calling Line Identification [BCLID] feature).
	FORMAT	BL	*Format* Enter BL for the BCLID feature.

Datafill example

An example of datafill for a line with the BL format is shown below.

The line with the BCLID feature is assigned to the LEN 00 1 04 05 at the host switching unit. The DN number is 0.

The signal type is DP.

IBNLINES option BL (end)

The format is BL.

MAP display example for table IBNLINES option BL

```
         LEN
             DNNO                                          RESULT
_____________________________________________________________________

HOST  00 1 04 05
                    0                                      DP  BL
```

IBNLINES option LNPTST

Local Number Portability Test Call

Option Local Number Portability Test Call (LNPTST) allows operating company personnel to assign option LNPTST to single party residential lines (1FR RES lines), through SERVORD.

Note: Only lines with this option can be used to initiate LNP test calls.

Option LNPTST is only compatible with the Digitone (DGT) line option. SERVORD blocks all other existing line options from being assigned to a line on which LNPTST exists. Similarly, SERVORD blocks the assignment of LNPTST to a line on which line options other than DGT exist.

Note: When LNP is disabled on the originating switch, LNP Test Call cannot be initiated even if option LNPTST is assigned to a 1FR RES line and a Feature Access Code for LNP Test Call is datafilled in table IBNXLA.

While input collection is in progress for an LNP Test Call originating from a 1FR RES line, all office-wide and customer-based features and options are blocked at run time for that line with option LNPTST. This eliminates the impact of different features on LNP Test Call functionality.

Datafill

The following table lists datafill for table IBNLINES option LNPTST.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	OPTLIST	LNPTST	Enter LNPTST for Local Number Portability Test Call. This allows operating company personnel to assign option LNPTST to single party residential lines (1FR RES lines), using SERVORD.

Datafill example

The following example shows sample datafill for table IBNLINES option LNPTST.

IBNLINES option LNPTST (end)

MAP display example for table IBNLINES option LNPTST

```
LEN
      DNNO                          RESULT
_____________________________________________________________

HOST 05 1 03 17
        0 DT STN RES 7228900 COMKODAK 0 0 613 (LNPTST)$
```

IBNLINES option MDN

Multiple appearance directory number

Use the multiple directory number (MDN) format to assign multiple appearance directory numbers (MADN) to Meridian Digital Centrex (MDC) or Residential Enhanced Services (RES) stations.

The MDN format has four variations: Single Call Arrangement (SCA), Multiple Call Arrangement (MCA), Call Appearance Call Handling (CACH), and Extension Bridging (EXB). You can assign MDN types MCA, and CACH only to lines with a line class code (LCC) of IBN. Assign MDN type SCA to both IBN and RES lines. Assign MDN type EXB only to RES lines.

You can mix 500/2500 sets with business sets in the same MADN group. Since some options and features are assigned to the primary member of the MADN group, it is preferable to assign one member as the primary member. If not assigned, a member is chosen randomly as the primary member.

For CACH MADN groups, 500/2500 sets are restricted to be secondary members or primary members of non-primary call appearances (CA). They cannot be designated as the controller.

The maximum number of members in a MADN group is 32. For CACH, each CA can have up to 32 members. Since all MADN members of the same group are rung at the same time, try to spread the members of the same group across different line modules (LM) and line concentrating modules (LCM).

The following engineering assignment rules are enforced in table control and service orders:

- A maximum of four members of the same MADN group are allowed for each line subgroup (LSG).
- The actual maximum number of members that can be assigned to an LSG is defined in parameter MAX_MADN_MEMBERS_PER_LSG in table OFCENG.
- Because the maximum number of MADN members of the same MADN group is eight for each LCM or LM, spread the eight members over as many LSGs as possible. No more than eight members of the same MADN group are allowed for each LCM or LM.
- A maximum of 16 members of the same MADN group are allowed for each line group controller (LGC) or line trunk controller (LTC).
- No more than 32 members are allowed in any MADN group.

IBNLINES option MDN (continued)

Since switching units with existing datafill can violate these rules if members are being added because of a dump and restore, then the office parameter DUMP_RESTORE_IN_PROGRESS is true. If this is the case, then error messages are still output, but the member is added.

MADN ENG is a utility (nonres program) that can be loaded into any switching unit with a BCS17/19 software release. The program runs through office data to check on any existing MADN engineering violations.

MADN ENG is run from the command interpreter (CI) level of the MAP (maintenance and administration position) terminal and run at that priority. The busyness and size (MADN penetration) of the switching unit determine the time required to finish the check. Only MADN groups with four or more numbers are checked, as smaller groups do not violate any rule.

All violations produce an output report that includes all MADN group-associated line equipment numbers (LEN).

For each MADN group assigned or deleted from this table, an entry is automatically entered or deleted from tables MDNGRP and MDNMEM.

Single Call Arrangement

SCA limits to one the number of calls that can be set up on the group. When access to the group is granted to a member, all other members are locked out. Access to a MADN group is granted when a member originates a call on the idle MADN group or answers an incoming call.

The SCA Privacy Release feature uses at least one six-port conference circuit. A maximum of 30 members, including the external party, are allowed in a bridged call. When an SCA call is in the talking state, the active member must invoke the Privacy Release feature to allow another member to join the call.

Multiple Call Arrangement

MCA allows individual calls by all members of the group to be independent of the call states of others. Incoming calls to the MADN group are presented to all idle members, and the first member to go off-hook is connected to the external party.

If no network connection is available between the off-hook member and the incoming call, the member is given reorder treatment. The rest of the group remains in the ringing state.

If there is more than one incoming call and the first incoming call is presented to the off-hook member, the other members remain in the ringing state.

If no network connection is available between the off-hook member and the first incoming call, another incoming call is connected. If this attempt also fails, then this member is given reorder treatment.

Call Appearance Call Handling

The Call Appearance Call Handling (CACH) feature allows MADN EKTS calls to be directed to call appearances rather than directory numbers. Multiple call appearances of the same DN can then appear on the terminals. If the first CA of the DN is busy, a second call terminates to the next CA. With MADN CACH, a shared DN can have multiple appearances (up to 16). Each appearance of the DN represents a group. Each group can contain up to 32 members. These groups are referred to as Call Appearances (CA). The number of calls that can be set up on each CA is limited to one. Each member is called a terminal call appearance (TCA).

Extension Bridging

This arrangement, like a single call arrangement (SCA), is permitted only one active call for each group. The first idle EXB member to go off-hook can conference into a call that is in a stable talking state by going off-hook. Idle EXB members that subsequently go off-hook receive an audible treatment and are locked out. Any EXB member active on a call can use the privacy option to prevent other idle members from bridging in.

In a MADN EXB group, all members with the Speed Calling feature share a common speed calling list that includes 30, 50, or 70 entries for Speed Calling Long (SCL) list or ten entries for Speed Calling Short (SCS) list. Any EXB member can use and modify the speed calling list.

Feature interactions

The following options and features and MADN are mutually exclusive:

- Circuit Switched Digital Data Systems (CSDDS)
- Uniform Call Distribution (UCD)
- Do Not Disturb (DND)
- Group Intercom (GIC)
- Customer Originated Trace (COT)
- Private Business Line (PBL)
- Call Forwarding for SMDI (SMDI)
- Hunt groups, all types

When an attempt is made to use option Executive Busy Override (EBO) on a busy member of a MDN group, the request is disallowed and the station with

IBNLINES option MDN (continued)

option EBO receives reorder tone. This also applies to feature Call Forward Busy (CFB). When a call is made to a busy line with feature CFB and the line that was call forwarded to is also busy, then EBO can be activated on the first called party. If the original called party is the member of a MDN group, the request is disallowed and the station with option EBO receives reorder tone.

Options EBO and Directed Call Pickup Barge-In (DCBI) cannot be used to barge in on an incoming call to the MADN group by another line. A member in the MADN group can use option EBO to barge in on another line outside the group.

If a TOPS position performs a busy verify (BVL) on an idle MDN group, the MDN group members will not be alerted. During the busy verify on an idle MDN group, if bridging is allowed, any secondary SCA/EXB/CACH member that goes offhook will be connected to silence. Once the TOPS position releases the MDN, any MDN member that went offhook will be idled.

Bridging is not allowed if one of the following features and options is active on the call:

- Call Transfer
- Directed Call Pickup Barge-In
- Executive Busy Override
- Preset Conference
- Station Controlled Conference
- Meet Me Conference
- Malicious Call Hold
- Three-way Calling

Bridging is permitted if the external party is the controller of a three-way call. The three-way call can be in a conference or non-conference state when bridging occurs. The external party remains in control of the three-way call after a conference bridge has been established.

The external party cannot activate three-way calling after a conference bridge has been established. Bridging is not allowed if MADN hold is active. MADN hold cannot be activated after a conference bridge has been established. The Privacy Release feature is exclusive to CACH and MADN SCA lines.

Bridging is not allowed if the external party activated Privacy Release or if the external party is part of a privacy release conference. An external party cannot

IBNLINES option MDN (continued)

activate Privacy Release after a conference bridge was set up. Bridging is not allowed if the external party is an attendant console (AC).

The Call Forwarding feature is assigned for each group and must be assigned to the primary member.

In a MADN EXB or CACH group, any member can program, activate, and deactivate Call Forwarding if the primary member has the appropriate Call Forwarding line option. In the other MADN groups (MCA, MCB, and SCA), only the primary member can program, activate, and deactivate Call Forwarding.

Only the primary or CACH call controller member of SCA and MCA MADN groups receives ring splash when the call is forwarded.

For MCA and CACH, the call is forwarded when all resources are exhausted, that is, all members are busy for CFB, and no member answers the call for a predetermined amount of time for Call Forward Don't Answer (CFD).

Option Call Park (CPK) is assigned on a line-by-line basis or for individual members. Only the member of the group who parked the call is rerung when the 'parking meter' times out. Since the call is parked against the DN, only one call is parked for each MADN group.

Option Call Pickup (CPU) is assigned on a line-by-line basis or for individual members. Members are not restricted to belong to the same CPU group. Option CPU provides a series of distinct warning tones to alert conferees in a three-way call or call transfer that the controlling (transferring) party is still connected to the call. This prevents the controlling party from monitoring a conversation without the knowledge of the other two parties.

Options Call Waiting originating (CWO) and Dial Call Waiting (CWD) are assigned on a line-by-line basis or for individual members. Call waiting restrictions on MADN lines apply if the line being terminated on belongs to a MADN group, that is, the call is waited on the active line of a SCA group, or on the primary member of the MCA group, when all members are busy.

Option Call Waiting (CWT) is assigned on a line-by-line basis or for individual members for SCA, but can only be assigned to the primary member for MCA. The call is only waited on the primary member's line of the MADN MCA group when all members are busy on a call. For SCA, the call is waited when a line having this option is active on a call. The CWT option is incompatible with CACH.

IBNLINES option MDN (continued)

Option Directed Call Park (DCPK) can be assigned to group members that have the MCA or SCA call arrangement. Since all members of a MADN group share the same DN, only one call for each MADN group can be parked at any given time. The DCPK recall, if it occurs, only rings the station of the MADN member who originally parked the call. For SCA members, the recall only occurs if the group is idle. On the recall to an SCA member, the lamp states of the other members are updated to indicate the fact that the group is busy. The DCPK option is incompatible with CACH.

Option Ring Again (RAG) is assigned on a line-by-line basis or for individual members. Any member is allowed to instigate RAG, but only that member receives the RAG recall for that call. Only one RAG request is allowed for each MADN member.

Subscriber line usage (SLU) can only be assigned on a line-by-line basis or for individual members.

A MADN group can be a Trunk Answer From Any Station (TAFAS) device that can be answered directly or picked up through the use of the TAFAS access code. A MADN group member can also answer a TAFAS call through the use of the access code.

IBNLINES option MDN (continued)

Datafill

The following table lists the datafill for table IBNLINES option MDN.

Field descriptions

Field	Subfield	Entry	Explanation and action
LEN		see explanation	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.
DNNO		0 to 6	Directory number number. Enter the DN number to specify which DN on the LEN is being referenced.
RESULT		see subfields	Results. This field consists of subfields SIGTYPE, FORMAT, LCC, DN, MDNTYP, CA, RING, PRIMARY, and OPTLIST.
	SIGTYPE	DP or DT	Signal type. Enter the type of pulsing expected: DP (dial pulse) or DT (Digitone).
	FORMAT	MDN	Format. Enter the format MDN for multiple appearance directory numbers.
	LCC	IBN or RES	Line class code. Enter IBN for an Integrated Business Network line and datafill refinements DN, CUSTGRP, SUBGRP, NCOS, and SNPA. Enter RES for a Residential line or coin line with residential features and datafill refinements DN, LNATTIDX, XLAPLAN, RATEAREA, and SNPA.
	DN	numeric (vector of upto 15 digits)	Directory number. Enter the directory number assigned to the IBN or RES station.

IBNLINES option MDN (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	LNATTIDX	0 to 31 999	Line attribute index. Enter the line attribute index number defined in table LINEATTR to which the RES line is assigned. The index must have field LCC equal to 1FR, 1MR, ETW, OWT, INW, 2WW, EOW, CCF, CDF, CFD, or CSP. Field RESINFO must equal Y.
	CUSTGRP	alphanumeric	Customer group. Enter the code assigned in table CUSTHEAD for the customer group to which the IBN line is assigned.
	SUBGRP	0 to 7	Subgroup. Enter the subgroup within the customer group to which the IBN line is assigned.
	NCOS	0 to 511	Network class of service. Enter the NCOS number assigned to the IBN line.
	XLAPLAN	alphanumeric string (maximum of 16 characters)	Translations plan key. Specify the key into table XLAPLAN.
	RATEAREA	alphanumeric string (maximum of 16 characters)	Rate area key. Specify the key into table RATEAREA.
	SNPA	numeric	Serving NPA. Enter the serving NPA to which the IBN line is assigned.
	MDNTYP	SCA, MCA, CACH, EXB	MADN type. Enter the type of call arrangement. Enter SCA for Single Call Arrangement. Enter MCA for Multiple Call Arrangement. Enter CACH for Call Appearance Call Handling. Enter EXB for Extension Bridging.
	CA	0 to 16	Call appearance. Identifies the call appearance (CA) of the DN to which the line is a member.
	RING	Y or N	Ring set. Enter Y (yes) if the IBN station is to be rung on terminations to this directory number. Otherwise, enter N (no). This field is always set to Y if this line is a primary member of the MADN group.

IBNLINES option MDN (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	PRIMARY	Y or N	Primary number. Enter Y if this is the primary member of the multiple appearance group. Otherwise, enter N.
	OPTLIST	ACB,AMATEST, AR, ARDDN, ATC, CCW, CHD, CLF, CNAB, CNDB, CNDBO, COD, CTW, CWD, CWI, CWO, CWT, CWX, DCBI, DCBX, DCF, DCPK, DCPU, DCPX, DOR, DTM, EBO, EBX, ELN, FIG, FNT, GLTC, HLD, ICSDEACT, ILB, IMB, IRR, LCDR, LNR,MIGRATE, NDC, NHT, NLT, NOH, NTS_CID, NTS_DNID, ONI PLP, PRI, PRK, RAG, RCHD, RSP, SCWID, SDS, SDSDENY, SL, SLVP, SMDR, STRD, SUS, TES, 3WC	Option list. Enter the list of options that are assigned to the IBN station. Options must be separated from each other by a blank column. Refer to IBNLINES format STN for a description of each option. ***Note 1:*** Option SCWID must be entered using SERVORD and requires the WATS on RES feature in order to be compatible with line class codes OWT and EOW. ***Note 2:*** SCWID is delivered to MADN groups according to regular call waiting operation. For some group types this means that SCWID call waiting tone is only delivered to the Primary MADN member. Name delivery becomes compatible with MADN groups with feature CLASS Calling Name Delivery on MADN.

Datafill example

An example of datafill for a line with the MDN format is shown in the following figure.

The first entry is for a RES line with line class code RES, assigned to line attribute 99. The line has option LCDR.

The DN has the EXB option and is not the primary member of the multiple access group. Ringing is not to be applied to the set on termination.

IBNLINES option MDN (end)

The second entry is for an IBN line with line class code IBN. The line is assigned to subgroup 0 of customer group BNRMC, network class of service number 0, home serving numbering plan area (NPA) 613, and has the Directed Call Pickup Exempt (DCPX) and Station Message Detail Recording (SMDR) options.

The DN has the MCA option and is the primary member of the multiple access group. Ringing is applied to the set on termination.

MAP display example for table IBNLINES option MDN

```
   LEN
                DNNO                                          RESULT
_____________________________________________________________________________

HOST 06 1 05 29 0 DT MDN IBN 9529301 CGA 1 0 909 SCA  0 Y Y (3WC) $
HOST 00 0 01 29 0 DT MDN IBN 9519371 CGA 0 0 909 EXB  0 Y Y (3WC) $
HOST 01 1 08 29 0 DT MDN IBN 9529371 CGA 1 0 909 CACH 1 Y Y $
```

Table history

SN06 (DMS)

Added CND and NOT conditional routes to table IBNLINES option MDN for feature activity A00001207.

IBNLINES option STN

Table name

IBNLINES option STN

Functional description

The STN (station) format is required for line assignments for IBN and Residential Enhanced Services (RES) stations.

This table is reformatted for the ‘RES to IBN’ conversion according to the conversion flag (RES_TO_IBN_CONV) state.

One entry is required for each IBN or RES station. An entry can consist of one or more records and is dependent on the number of options assigned.

If the IBN or RES line has the Automatic Line (AUL) feature in table IBNFEAT (IBN Line Feature) assigned, the signal type is dial pulse (DP).

Table 1 lists, in alphabetical order, options available for line class codes (LCC) IBN and RES with the STN format.

The Y denotes the option is compatible with the LCC. The N denotes the option is not compatible with the LCC.

Option SCWID must be entered using the Service Order System (SERVORD). Option SCWID is compatible with RES, one-party flat rate (1FR), and one-party message rate (1MR) LCCs and can be made compatible with other LCCs such as IBN, OWT, and enhanced outward WATS (EOW).

The description of options follows the following table.

Option compatibility with IBN and RES line class codes

		Line class code	
Option	**Name**	**IBN**	**RES**
ACB	Automatic Call Back	Y	Y
AMATEST	AMA Test	Y	N
AR	Automatic Recall	Y	Y
ARDDN	Automatic Recall Dialable Directory Number	Y	Y
ATC	Time and Charge Services on 1+ Calls	Y	Y

IBNLINES option STN (continued)

Option compatibility with IBN and RES line class codes

		Line class code	
Option	**Name**	**IBN**	**RES**
CCSA	Common Control Switching Arrangement	Y	N
CCW	Cancel Call Waiting	Y	Y
CDC	Customer Data Change	Y	N
CHD	Call Hold	Y	N
CID	800 Calling Number Identification	Y	Y
CLF	Calling Line Identification with Flash	Y	Y
CNAB	Calling Name Delivery Blocking	Y	Y
CNDB	Calling Number Delivery Blocking	Y	Y
CNDBO	Calling Number Delivery Blocking Override	Y	Y
COD	Cutoff on Disconnect	Y	Y
COIN	Coin lines	Y	N
COT	Customer Originated Trace	Y	Y
CRT	Call Redirect	N	Y
CRTDENY	Call Redirect Deny	N	Y
CTW	Call Transfer Warning	Y	N
CWD	Dial Call Waiting	Y	N
CWI	Call Waiting Intragroup	Y	Y
CWO	Call Waiting Origination	Y	N
CWR	Call Waiting Ringback	Y	Y
CWT	Call Waiting	Y	Y
CWTC	Call Waiting Conference	Y	Y
CWX	Call Waiting Exempt	Y	N
DCBI	Directed Call Pickup Barge-in	Y	N

IBNLINES option STN (continued)

Option compatibility with IBN and RES line class codes

		Line class code	
Option	**Name**	**IBN**	**RES**
DCBX	Directed Call Pickup Barge-in Exempt	Y	N
DCF	Denied Call Forwarding	Y	N
DCND	DTMF Calling Number Delivery	Y	N
DENYCWTC	Deny Call Waiting Conference	Y	Y
DENYISA	Deny In-Session Activation	Y	Y
DENYSRA	Deny Suppressed Ringing Access	Y	Y
DENYU3WC	Deny Three-Way Calling Usage Sensitive	Y	Y
DCPK	Directed Call Park	Y	N
DCPU	Directed Call Pickup Non-Barge-in	Y	N
DCPX	Directed Call Pickup Non-Barge-in Exempt	Y	N
DOR	Denied Originating Service	Y	Y
DNID	800 Dialed Number Identification Delivery	Y	Y
DSCWID	SCWID with Disposition	Y	Y
DTM	Denied Terminating Service	Y	Y
EBO	Executive Busy Override Originator	Y	N
EBX	Executive Busy Override Exempted	Y	N
ELN	Essential Line Service	Y	Y
FIG	Ignore Flash	Y	Y
FNT	Free Number Terminating	Y	Y
FTRGRP	Feature Group	Y	Y
FTS	FAX-Thru Service	Y	Y
GLTC	Ground Loop Test Cancel	Y	N
HLD	Permanent Hold	Y	N

IBNLINES option STN (continued)

Option compatibility with IBN and RES line class codes

		Line class code	
Option	**Name**	**IBN**	**RES**
ICSDEACT	In Call Service Deactivation	Y	Y
IICB	Incoming International Call Barring	N	Y
ILB	Inhibit Line Busy	Y	Y
IMB	Inhibit Make Busy	Y	Y
IRR	Inhibit Ring Reminder	Y	Y
ISADEACT	In-Session Activation Deactivation	Y	Y
LCDR	Local Call Detail Recording	Y	Y
LDSA	Long Distance Signal Activate	N	Y
LDSO	Long Distance Signal Option	N	Y
LDSR	Long Distance Signal Ring	N	Y
LDST	Long Distance Signal Tone	N	Y
LNR	Last Number Redial	Y	N
LRS	Line Reversal on Seizure	Y	N
MIGRATE	Identifies lines migrating from a collapsing office to a CS2000	Y	Y
MSB	Make Set Busy All Calls	Y	Y
MSBI	Make Set Busy Intragroup	Y	N
NDC	No Double Connection	Y	Y
NHT	No Hazard Test	Y	Y
NLT	No Line Insulation Test	Y	Y
NOCOLL	No Collect Call	Y	N
NOH	No Receiver Off-Hook Tone	Y	Y
ONI	Operator Number Identification	Y	Y

IBNLINES option STN (continued)

Option compatibility with IBN and RES line class codes

		Line class code	
Option	**Name**	**IBN**	**RES**
PDO	Prevent Deletion Option	Y	Y
PLP	Plug Up	Y	Y
PRI	Priority Indication	Y	N
PRK	Park	Y	N
RAG	Ring Again	Y	N
RCHD	Residential Call Hold	N	Y
RMR	Remote Message Register for Local Calls	Y	N
RMT	Remote Message Register for Non-Local Calls	Y	N
RSP	Restricted Sent Paid	Y	Y
SCWID	Spontaneous Call Waiting Identification	Y	Y
SDS	Special Delivery Service	Y	Y
SDSDENY	Special Delivery Service Deny	Y	Y
SL	Secondary Language	Y	Y
SLVP	Single Line Variety Package	N	Y
SMDR	Station Message Detail Recording	Y	N
SORC	Station Origination Restrictions Controller	Y	N
SRA	Suppressed Ringing Access	Y	Y
STRD	Short Timed Release Disconnect	Y	Y
SUS	Suspended Service	Y	Y
TES	Toll Essential Service	Y	Y
UCD	Uniform Call Distribution	Y	Y
UCDLI	Uniform Call Distribution Logged In Indication	Y	Y
VMEADENY	Voice Mail Easy Access Deny	N	Y

IBNLINES option STN (continued)

Option compatibility with IBN and RES line class codes

		Line class code	
Option	**Name**	**IBN**	**RES**
WC	Who's Calling	N	Y
3WC	Three-Way Calling	Y	Y

800 Calling Number Identification (CID)

Option CID enables the end-user to display the identification number of the calling party on an 800 call. This line option is supported on MDC, Automatic Call Distribution (ACD), RES, and call management service (CMS) lines for telephone sets with display capabilities.

Table IBNLINES (IBN Line Assignments) is automatically datafilled when this option is assigned to an IBN or RES line using SERVORD.

Note: The external symbol for option CID is NTS_CID, which is used when accessing the line option in SERVORD.

800 Dialed Number Identification Delivery (DNID)

Option DNID enables the end-user to display the 800 number dialed by the calling party. This line option is supported on MDC, ACD, RES, and CMS lines for telephone sets with display capabilities.

Table IBNLINES is automatically datafilled when this option is assigned to an IBN or RES line using SERVORD.

Previously, line option DNID was available only for customer groups.

Table IBNLINES is automatically datafilled when this option is assigned to an IBN or RES line using SERVORD.

Note: The external symbol for option DNID is NTS_DNID, which is used when accessing the line option in SERVORD.

Automatic Call Back (ACB)

Option ACB can be assigned only to a line with an LCC of RES. ACB enables an end-user to place a call to the last station called. The previous state of the line does not affect ACB.

Option ACB is similar to the Ring Again (RAG) feature, but is used in the public network.

For option ACB, the called station can be served by the same switch (intranode) or a different switch (internode). Internode ACB requires Common Channel Signaling 7 (CCS7) to communicate between the originating and destination node.

When the end-user completes the activation procedure, the busy/idle and class of service status of the called line are checked. When the terminating line is idle and the class of service permissible, call setup is attempted. If the call cannot be completed immediately due to a busy line, the call is queued. Call completion is attempted when both stations are idle. As part of the completion attempt, the calling station is given special ringing (two short rings and one long ring within 6 s). When the subscriber (calling party) answers, the call is set up and the called station is given regular ringing.

The activation and deactivation codes for this option are assigned in table IBNXLA (IBN Translation).

The number of lines on which this option can be active at one time is dependent on the software resources provided by office parameters NO_OF_MEDIUM_EXT_BLKS, FTRQAGENTS, FTRQ8WAREAS, and FTRQ16WAREAS in table OFCENG (Office Engineering).

AMA Test (AMATEST)

Option AMATEST designates an originating or terminating IBN or POTS line as an automatic message accounting (AMA) test call line.

If a call to or from a line with option AMATEST enabled produces a billing record, a 1 appears in the fourth character of the Study Indicator field.

Automatic Recall (AR)

Option AR can be assigned only to a line with an LCC of RES. Option AR allows end-users to place a call to the last station that called them. The previous state of the line does not affect AR.

For option AR, the called station can be served by the same switch (intranode) or a different switch (internode). Internode AR requires the CCS7 signaling system to communicate between the originating and destination node.

When the end-user completes the activation procedure, the busy/idle and class-of-service status of the called line are checked. When the terminating line is idle and the class of service is permissible, call setup is attempted. If the call cannot be completed immediately, it is queued and call completion is

IBNLINES option STN (continued)

attempted when both stations are idle. As part of the completion attempt, the calling station is given special ringing (two short rings and one long ring within 6 s). When the end-user (calling party) answers, the call is set up and the called station is given regular ringing.

The activation and deactivation codes for this option are assigned in table IBNXLA.

The number of lines on which this option can be active at one time depends on the software resources provided by office parameters NO_OF_MEDIUM_EXT_BLKS, FTRQAGENTS, FTRQ8WAREAS, and FTRQ16WAREAS in table OFCENG.

Automatic Recall Dialable Directory Number (ARDDN)

Option ARDDN voices which digits to dial to place a call to the last station that called. These digits are known as the dialable directory number (DDN).

Call Hold (CHD)

Option CHD allows the end-user to hold one call for any length of time by dialing the CHD access code, provided that neither party goes on-hook. The station can then originate a call to another line or instigate another task, such as programming a speed call list. The caller can retrieve the held call by going on-hook, in which case the caller is rerung, or by flashing the switchhook and reactivating CHD.

The number of lines on which this option can be active at one time is dependent on the availability of the software resources provided by office parameters FTRQAGENTS, NUMCPWAKE, FTRQ2WAREAS, NO_OF_FTR_CONTROL_BLKS, NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, and NO_OF_LARGE_FTR_DATA_BLKS in table OFCENG.

See operational measurements (OM) group CALLHOLD for the OMs associated with this feature.

Calling Line Identification with Flash (CLF)

Option CLF allows the called party to hold the connection in the switching unit on a malicious call by flashing the switchhook and staying off-hook. As a result, an alarm is generated in the switching unit. See software alarm table SFWALARM for details. Where both the calling and called parties are terminated in the switching unit, the entire connection is held until the called party goes on-hook. Where the call is on an incoming trunk and terminates within the switching unit, the connection is held back to the incoming trunk.

IBNLINES option STN (continued)

Calling Name Delivery Blocking (CNAB)

Option CNAB allows calling parties to control, for each call, the availability of their name for display to the terminal equipment of terminating subscribers with Calling Name Display (CNAMD).

The activation code for this option is assigned in table IBNXLA.

Calling Number Delivery Blocking (CNDB)

Option CNDB allows calling parties to control, for each call, the availability of their directory number (DN) for display to the terminal equipment of called parties with Calling Number Delivery (CND).

The activation code for this option is assigned in table IBNXLA.

Calling Number Delivery Blocking Override (CNDBO)

Option CNDBO overrides the Calling Line Identification Display (CLID) presentation restrictions at the terminating end of a call and can be used for calls terminating on emergency services agents to display calling party numbers which would otherwise be restricted. Calling name delivery is unaffected. Line option CNDBO is assignable to Integrated Voice Data (IVD), MDC, RES, and IBN lines and is assigned to each line individually by SERVORD. Option CNDBO is also assignable to attendant consoles (AC) through table CUSTSTN (Customer Group Station Option) on a customer-group basis.

Calls originating on ACs that terminate on display sets with option CNDBO assigned have the common language location identifier (CLLI) of the originating party displayed. CNDBO has no effect on line-to-AC calls. The display of the calling number on line-to-AC calls is never restricted.

This option is specific to the appearance of the DN. If CNDBO is to be added to a set that has multiple DN appearances, CNDBO must be added to each DN individually. Option CNDBO is packaged separately from every other option; that is, it cannot be packaged together with other options.

Call Redirect (CRT)

Call Redirect (CRT) provides residential subscribers with the ability to transfer objectionable calls to a pre-defined routing directory number (DN). The transfer occurs when the subscriber flashes and dials the CRT access code during an established two-party call. On successful activation, the subscriber receives a confirmation treatment defined by the operating company.

Operating company personnel can define the routing DN to route incoming calls, to a local tone or announcement or to an external platform, after CRT

IBNLINES option STN (continued)

activation. The CRT feature is available to all residential line subscribers in an office on a pay-per-use (PPU) billing basis. Assign the CRT option to a residential subscriber line to bill the feature on a subscription basis. Only the terminator in a two-party call can activate CRT.

Call Redirect Deny (CRTDENY)

Assign the CRTDENY option to deny the CRT feature on individual residential subscriber lines in an office.

Call Transfer Warning (CTW)

Option CTW provides a series of distinct warning tones to alert conferees in a three-way call or call transfer that the controlling (transferring) party is still connected to the call. This alert prevents a situation in which the controlling party can monitor a conversation without the knowledge of the other two parties.

Call Waiting (CWT)

Option CWT alerts the station that it is being called by a third party while talking in a stable state to another party. The call is not waited if it is an intragroup call except when option CWI is also assigned. The basic CWT option only applies to attendant extended, Direct Inward Dialing (DID), Enhanced Private Switching Communication System (EPSCS), and tie trunk calls.

The number of lines on which option CWT can be active at one time is dependent on the availability of the software resources provided by office parameters FTRQAGENTS, NMULTIBLKS, NUMPERMEXT, NO_OF_FTR_CONTROL_BLKS, NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS, and NUMCPWAKE in table OFCENG.

See OM group CALLWAIT for the OMs associated with this feature.

As of BCS33, the addition of option CCW to a RES line is disallowed if the line does not have the CWT option. Attempts to remove option CWT from a RES line without also removing option CCW are also denied.

Call Waiting Conference (CWTC)

Option CWTC assigns the call waiting conference functionality to a subscriber line. The subscriber can conference a waiting party when involved in an existing call waiting call.

IBNLINES option STN (continued)

Call Waiting Exempt (CWX)

Option CWX prohibits CWT from being imposed on the line if the calling station has either the Dial Call Waiting (CWD) or Call Waiting Origination (CWO) features when the station is busy.

Call Waiting Intragroup (CWI)

Option CWI allows call waiting of intragroup calls. This option can be assigned only to stations that have option CWT.

When line A, which has Dial Call Waiting (CWD) or Call Waiting Originator (CWO), calls a busy line B, which has Call Waiting (CWI) and imposes call waiting, then CWI takes precedence over CWD or CWO.

The number of lines on which option CWI can be active at one time is dependent on the availability of the software resources provided by office parameters FTRQAGENTS, NMULTIBLKS, NUMPERMEXT, NO_OF_FTR_CONTROL_BLKS, NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS, and NUMCPWAKE in table OFCENG.

See OM group CALLWAIT for the OMs associated with this option.

Call Waiting Origination (CWO)

Option CWO permits call waiting on a busy line that does not have CWX. This option applies to intragroup calls. While the originator is call waited, either an audible ringback tone, a recorded announcement, or music is provided as specified by treatment option CWO in table CUSTSTN.

The number of lines on which option CWO can be active at one time is dependent on the availability of the software resources provided by office parameters FTRQAGENTS, NMULTIBLKS, NUMPERMEXT, NO_OF_FTR_CONTROL_BLKS, NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS, and NUMCPWAKE in table OFCENG.

See OM group CALLWAIT for the OMs associated with this option.

Call Waiting Ringback (CWR)

Option CWR applies to lines that have option CWT. When present on the terminating line, CWR provides a distinctive ring cadence to the caller indicating whether the destination is idle or engaged in another call.

IBNLINES option STN (continued)

If the destination is idle, standard audible ringback is returned to the caller. If the destination is engaged in another call, a distinctive audible ringback is returned to the caller. This ringback consists of the following sequence: 1200 ms of audible ringing tone, 400 ms of silence, 400 ms of audible ringing tone, then 4 s of silence.

For example, station A makes a call to station B that has line options CWT and CWR. If station B is idle, standard audible ringback is returned to station A and ringing is started on station B. If station B is engaged in a stable two-port call, distinctive audible ringback is returned to station A and a call-waiting tone is sent to station B.

If the destination has option CWI as well as option CWT, a distinctive, audible ringback is provided for callers in the customer group as well as external callers. Cases where the destination is not available for CWT are not affected by this option.

Cancel Call Waiting (CCW)

Option CCW determines if Cancel Call Waiting is permitted. This option acts differently for RES and MDC lines. For RES lines, office parameter CCW_WAITING must be set to Y. For both RES and MDC lines, an access code must be assigned for CCW in table IBNXLA.

As of BCS33, the addition of option CCW to a RES line is disallowed if the line does not have option CWT. Attempts to remove option CWT from a RES line without also removing option CCW are denied.

Coin lines (COIN)

Option COIN is introduced in MMP15 for the Turkey market only. COIN enables a regular IBN line to be used as a coin line. Hardware metering is done for the IBN lines which have this option.

Common Control Switching Arrangement (CCSA)

Option CCSA identifies an IBN line as a member of a common control switching arrangement (CCSA) facility. A CCSA network provides private communications facilities between MDC and private branch exchange (PBX) customer locations.

When an IBN line assigned option CCSA originates a call, an automatic message accounting (AMA) record is generated, identified by call code 021. This AMA record is identified by call code 021 only if the call is non-billable (NP in subtable STDPRT) and option CCSA is assigned to the originating IBN line.

Generation of an AMA record, identified by call code 021, is dependent on the attributes of the originating station.

Customer Data Change (CDC)

Option CDC is available for lines assigned to customer groups that have the Customer Data Change feature.

When assigned to a line, this option automatically adds the corresponding tuple in table CDCLENS (Customer Data Change Line). The option can be deleted using table CDCLENS only.

Customer Originated Trace (COT)

Option COT gives the end-user the ability to activate a trace of the last incoming call. The trace generates an output report using the log subsystem. Information about a possibly malicious call is made available to the operating company, although not to the end-user who initially activated the trace.

Since COT is end-user activated and requires no operating company intervention (except the administration of the COT table control or service order and COT log stream), the potential exists to eliminate many of the costs currently associated with the tracing of malicious calls.

The two-digit access code for activation and deactivation of this option is datafilled in table IBNXLA.

The announcements associated with option COT are assigned in tables ANNS (Announcement), ANNMEMS (Announcement Members), DRAMTRK (Digital Recorded Announcement Machine Track), and RESOFC (Residential Line CLASS Office Data).

See OM group OTS for the OMs associated with this option.

Cutoff on Disconnect (COD)

Option COD is assigned to lines that require cutoff on disconnect.

Deny Call Waiting Conference (DENYCWTC)

Option DENYCWTC denies the call waiting conference functionality on a per-line basis. The operating company can deny the call waiting conference functionality on a line when the feature is offered office-wide or on a customer group basis.

Deny In-Session Activation

This option allows the operating company to deactivate ISA permanently on the line.

IBNLINES option STN (continued)

Deny Suppressed Ringing Access (DENYSRA)

This option is used to deny the SRA feature when SRA is deployed on an office-wide basis.

Deny Three-Way Calling Usage Sensitive (DENYU3WC)

This option can be assigned to a RES line or POTS line when the end-user does not want access to U3WC. When this option is added to a line, the flash privilege remains as long as there are other flashable options. If, however, there are no other flashable options on the line, then the flash privilege is removed. When this option is deleted from a line, the flash privilege must be given to lines which are U3WC compatible.

Denied Call Forwarding (DCF)

Option DCF prevents the receipt of any incoming forwarded call.

Denied Originating Service (DOR)

Option DOR is assigned to any line where the end-user can receive calls only. If a line with DOR attempts to originate a call, the line is routed to originating suspended service (ORSS) treatment in the Line Treatment table.

Denied Terminating Service (DTM)

Option DTM is assigned to any line where the end-user can originate calls only. If translation attempts to terminate to a line with denied terminating service, translation is routed to denied terminating treatment (DNTR) in the Line Treatment table.

Dial Call Waiting (CWD)

Option CWD permits call waiting on a busy station that does not have Call Waiting Exempt (CWX).

This feature can be activated in the following ways:

- When the calling party goes off-hook, the party can dial the CWT activation code, followed by the DN of the called party.
- When the calling party encounters a busy signal, the party can flash and dial the CWT activation code.

If the called station is busy, the caller hears either an audible ringback tone, a recorded announcement, or music as specified by treatment option CWD in table CUSTSTN. This originating line option is applicable to intragroup calls.

The number of lines on which this option can be active at one time is dependent on the availability of the software resources provided by parameters FTRQAGENTS, NMULTIBLKS, NUMPERMEXT,

NO_OF_FTR_CONTROL_BLKS, NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS and NUMCPWAKE in table OFCENG.

See OM group CALLWAIT for the OMs associated with this option.

Directed Call Park (DCPK)

Option DCPK provides IBN lines with 500/2500 sets the capability of parking one call against any valid IBN station DN in the customer group, from where it can later be retrieved by any station.

If the line has the SEC feature assigned in table IBNFEAT, it allows the use of a variable-length security code with this feature.

The security code can be variable in length, but it must contain at least one digit and can be a maximum of seven digits long. When dialing the security code, the system waits for seven digits to be collected before it times out. An octothorpe (#) can be entered by the end-user to signify end of digit dialing.

If a call is parked against a DN that has the SEC feature assigned in table IBNFEAT, the retriever is prompted by tone to enter the security code following the request for retrieval and digit entry of the DN that the call is parked against.

Any IBN station with a 500/2500 set is capable of retrieving parked calls, regardless of whether that station has option DCPK assigned.

The following events can occur during DCPK retrieval:

- If no call is parked against the dialed DN, the retrieving party receives reorder. At this point, the end-user must restart the retrieval process.
- If an invalid security code is entered, the retriever receives reorder. The call remains parked and recalls the parker if the correct security code is not entered.

This option can be considered an enhanced version of the Call Park feature, since it adds the capability of parking a call against any valid IBN station DN (as opposed to only that of the parker) and the option of a security code.

To cancel the call park request, either party can flash the switchhook. The feature is automatically canceled, and the flash is handled as usual, invoking either 3WC or call waiting answer.

IBNLINES option STN (continued)

Any IBN station can retrieve a call parked by option DCPK by dialing the call park retrieve code and the DN of the station the call is parked against and the security code (if required).

When a call has entered the held state, a timer (Station Call Park Timer) is started to recall the parker upon time-out. The timer is canceled when the call is unparked or recall occurs.

The recall timer can be set to recall the parker within 12 to 240 s. If the recall is never answered, the parkee remains parked until exit occurs. The recall timer can be set to 0 (zero) indicating that no recall is to take place. The parkee hears a previously assigned audio announcement until the call is unparked or exit occurs.

Once the recall has been answered, the call is in a normal talking state and other features can now be activated.

A recall to a busy station causes the recall timer to be reset. The parked party remains parked and continues to hear an assigned audio announcement until the call is retrieved or the parker goes on-hook and is now able to answer the recall.

Attempts to park more than one call on a given DN are denied since the feature imposes a restriction of one parked call for each DN.

For each customer group, it is possible to impose a limit on the number of simultaneously parked calls against DNs belonging to the same customer group. When this limit is reached, further attempts at parking calls from members of that group are denied.

Attempts to activate this feature on calls that are not in the talking state or on calls that are incompatible with this feature are considered invalid DCPK attempts.

The following types of calls are incompatible with the DCPK feature:

- calls involving an operator position or an AC
- conference calls and calls in which other features are in effect
- calls on which the Calling Line Identify with Flash or Malicious Call Hold features have been activated

For DCPK store to function on 500/2500 sets, each station must either be assigned the 3WC feature or must belong to a customer group having the

customer group option CPK retrieval functions on any set, regardless of feature assignments.

Since an end-user must already have the CPK feature before assigning option DCPK, this option uses the existing OM registers for peg counts. These registers are moved to the OM group PRKOM. Another register, DCPKSUCC, pegs the number of calls successfully parked using feature DCPK.

Table CUSTHEAD defines customer group resources. Call Park Audio treatment (CPK_AUDIO) and the maximum number of parked calls allowed for each customer group (CPKMAXNO) are used for both CPK and DCPK. Table CUSTSTN defines parameters that are applicable to station features. The CPK recall timer, CPKRECTO, is defined in this table and is also used by both CPK and DCPK.

Directed Call Pickup Barge-in (DCBI)

Option DCBI permits a station to answer a call that is ringing on any other line within the same customer group by dialing the Directed Call Pickup (DCP) access code. If the call is answered by the called station, the DCBI station can barge in to the answered call and be connected into a three-way call configuration.

Directed Call Pickup Barge-in Exempt (DCBX)

Option DCBX blocks any attempt by another station with option DCBI to barge in if the call has been answered by the called station.

Directed Call Pickup Non-Barge-in (DCPU)

Option DCPU allows a station to answer a call ringing on any other line in the same customer group by dialing the DCP access code. Access can be gained if the call is not answered by the called station when the dialing sequence is completed.

Directed Call Pickup Non-Barge-in Exempt (DCPX)

Option DCPX blocks any station assigned with DCBI or DCPU from picking up a call ringing on this station.

SCWID with Disposition (DSCWID)

Option DSCWID allows the subscriber to receive calling party information during call waiting and presents a set of incoming call disposition options to treat the waiting call. After the subscriber hears the call-waiting tone that indicates a call is waiting, the customer premise equipment (CPE) display is updated with the call-waited party identification and with a display of softkey options from which the subscriber can choose a treatment for the waiting call.

IBNLINES option STN (continued)

DTMF Calling Number Delivery (DCND)

Option DCND sends the number of the calling party to an analog line using dual tone multi-frequency signaling (DTMF) tones. The called party receives the DN just prior to ringing.

Essential Line Service (ELN)

Option ELN applies to lines that are allowed to originate calls when line load control is active on the switching unit.

Executive Busy Override Exempted (EBX)

Option EBX specifies that the line is exempt from override attempts.

Executive Busy Override Originator (EBO)

Option EBO allows a line to gain access to a busy line by flashing the switchhook during the busy tone and then dialing an access code. The EBO must be assigned an IBN line connected to a busy tone.

Extended Call Management (ECM)

Option ECM allows an external host computer to associate to non-ACD lines. Association to a line is done from the host computer by sending a DV_DN_ASSOCIATE message containing the DN of the line. All non-ACD lines with the option ECM can be associated to a host computer provided the host computer and the line belong to the same customer group and the line is not associated with another host computer at that time. A host computer can associate itself to a maximum of 2000 non-ACD lines on an SCAI session.

FAX-Thru Service (FTS)

Option FTS is a subscribed service offered only following correct provisioning. FAX callers are offered a call completion service when they encounter a line that is busy or is not answered within a specified length of time. FAX calls are routed to a FAX messaging platform that attempts to forward the message to the busy or unanswered line at a later time.

Feature Group (FTRGRP)

Option FTRGRP is assigned to lines that belong to a feature group identified in table FTRGMEMS (Feature Group Members). Option FTRGRP appears in field OPTLIST when the line's tuple in table IBNLINES is displayed.

Option FTRGRP cannot be added or deleted from table IBNLINES. This option appears when table FTRGMEMS is datafilled.

IBNLINES option STN (continued)

Free Number Terminating (FNT)

Option FNT is assigned when a charge condition is not to be returned to a terminating call. This option applies to local or Extended Area Service (EAS) calls.

Ground Loop Test Cancel (GLTC)

Option GLTC can be assigned to individual lines to override a Y setting of parameter PER_CALL_GND_LOOP_TEST in table OFCVAR (Variable Office Parameter). As a result, the performance of the ground loop test is not allowed. If PER_CALL_GND_LOOP_TEST is set to N in table OFCVAR, option GLTC has no effect, since ground loop tests are off on a global office basis.

The PER_CALL_GND_LOOP_TEST tuple in table OFCVAR determines if a ground loop test is performed before terminating to a ground start line. If the PER_CALL_GND_LOOP_TEST tuple in table OFCVAR is set to Y and option GLTC is not assigned, a ground loop test is performed on all terminations to all ground start lines. The PER_CALL_GND_LOOP_TEST tuple controls the ground loop test on a global office basis.

The ground loop test applies only to LCCs of IBN, 1FR, and 1MR.

In Call Service Deactivation (ICSDEACT)

The ICSDEACT option prevents the service(s) specified in fields BSYMODE and RNAMODE in table SDSINFO from being offered to a line. Typically, this line option is added by the end user using the ICSCTRL feature, otherwise it is assigned using the service order utility (SERVORD). For more information on the services that can be specified using fields BSYMODE and RNAMODE, consult the Access to Messaging feature, RES00077 and the Enhanced Busy Call Return (EBCR) feature, RES00076.

Incoming International Call Barring (IICB)

The IICB is a system feature which is assigned and removed using ADO and DEO Service Order commands. Its activation and deactivation can only be processed by telephone agency personnel. The IICB option is supported for both RES and ISDN for incoming international calls from ISUP and FDCP trunks. If an international call attempts to terminate on a line with the IICB line option, the call is cleared and the “Call Not Allowed” treatment is returned on the trunk carrying the incoming call.

Ignore Flash (FIG)

Option FIG is assigned to lines for which the switching unit must ignore flash signals.

IBNLINES option STN (continued)

Inhibit Line Busy (ILB)

Option ILB inhibits Call Forward Busy (CFB) service whenever a line is actually busy. Incoming calls cannot be forwarded when the line is busy.

Inhibit Make Busy (IMB)

Option IMB is used in conjunction with option MBK. When MBK is activated on a line that is also assigned option IMB, an incoming call cannot be forwarded and a busy tone or user-defined treatment occurs.

Inhibit Ring Reminder (IRR)

Option IRR turns off the ring reminder for a line with the Call Forwarding feature. A line with option IRR still call forwards, but without a ring reminder.

In-Session Activation Deactivation (ISADEACT)

This option indicates that the end users deactivated ISA indefinitely on the line.

Last Number Redial (LNR)

Option LNR permits redialing of the last number dialed by using a single key instead of dialing the full number. Every time a number is dialed, it is stored as the LNR number. LNR can be activated either by pressing the octothorpe (#) key for 2500 sets, dialing the access code datafilled as the # equivalent for 500 sets, or by dialing the LNR access code datafilled in table IBNXLA.

The number of lines on which option LNR can be active at one time is dependent on the availability of the software resources provided by office parameters FTRQAGENTS, FTRQ2AREAS, FTRQ4AREAS, and FTRQ8WAREAS in table OFCENG.

See OM group LNREDIAL for the OMs associated with this option.

Line Reversal on Seizure (LRS)

Line Reversal on Seizure (LRS) prevents a user from making a call on a line when another call is coming in on the same line. The user must answer the incoming call before making another call. LRS is available on IBN lines.

Local Call Detail Recording (LCDR)

Option LCDR is assigned to lines if details of all local calls originated by a line are recorded on the AMA tape and the office is arranged for local automatic message accounting (LAMA). This option must be assigned to an INWATS line if the count of calls to the line is required. This option affects the value of parameters NUM_OF_BC_LAMA_UNITS or NUM_OF_NT_RECORDING_UNITS in table OFCENG.

IBNLINES option STN (continued)

Long Distance Signal Active (LDSA)

This option allows temporary activation/deactivation of the Long Distance Signal (LDS) functionality on a per-line basis by one of the following methods:

- the subscriber dialing the LDA activate (LDSA) code (*49 or 1149). The code acts as a toggle: if the LDSA option is provisioned on the subscriber's line, *49 removes (deactivates LDSA) the option; otherwise, *49 adds (activates LDSA) the option.
- the operating company activates or deactivates the LDSA option using SERVORD or table editor.

Note: LDSA can be added to a line only if the line already has the LDSO, LDSR, or LDST option assigned or if the LDSO, LDSR, or LDST option is being added at the same time.

Long Distance Signal Option (LDSO)

This option indicates that LDS is allowed on a line. LDSO is assigned on a per-line basis using SERVORD or table editor.

Note: The LDSO option cannot be removed from a line unless the LDSA option has been removed from a line or is being deleted at the same time.

Long Distance Signal Ring (LDSR)

This option indicates that LDA is allowed on a line. Option LDSR is assigned on a per-line basis using SERVORD or table editor.

Note: Option LDSR is one of a group of LDA distinctive alerting options, consisting of LDSR, LDST, and LDSO. Only one of these options can be assigned to a given line. The distinctive alerting option cannot be removed from a line unless option LDSA has been removed or is being deleted at the same time.

Option LDSR is not automatically provisioned. Option LDSO is automatically provisioned if LDSR or LDST is not already present on the line.

Options LDSA and LDSO, LDST, or LDSR are removed if option LDSV is not provisioned against the line group. Automatic provisioning and deprovisioning occur at the next call termination or the *49 invocation.

IBNLINES option STN (continued)

Long Distance Signal Tone (LDST)

This option indicates that LDA is allowed on a line. Option LDST is assigned on a per-line basis using SERVORD or table editor.

> ***Note:*** Option LDST is one of a group of LDA distinctive alerting options, consisting of LDSR, LDST, and LDSO. Only one of these options can be assigned to a given line. The distinctive alerting option cannot be removed from a line unless option LDSA has been removed or is being deleted at the same time.

Option LDST is not automatically provisioned. Option LDSO is automatically provisioned if LDSR or LDST is not already present on the line.

Options LDSA and LDSO, LDST, or LDSR are removed if option LDSV is not provisioned against the line group. Automatic provisioning and deprovisioning occur at the next call termination or the *49 invocation.

Make Set Busy All Calls (MSB)

Option MSB permits end-users to make their line busy or available to all incoming calls by dialing the MSB activation or deactivation code. While MSB is active on a line, any external incoming calls that normally terminate on the line are given the treatment specified in table CUSTSTN. If the treatment is not specified, external calls receive busy tone as the default treatment. Intragroup calls always receive busy tone. When a call is diverted, a momentary ring splash of ringing (500 ms) is applied to the line to serve as a reminder that MSB is active.

Make Set Busy Intragroup (MSBI)

Option MSBI permits end-users to make their line busy or available to intragroup calls (internal) by dialing the MSBI activation or deactivation code. External calls are not blocked. Intragroup calls blocked while MSBI is active always receive busy tone. When a call is diverted, a momentary ring splash of ringing (500 ms) is applied to the line to serve as a reminder that MSBI is active.

Migrate

Identifies lines which are in the process of migrating from a collapsing office into a Call Server Complex (CS2000). The migrating lines are pre-datafilled in the new office, but are blocked from terminations by the existence of the MIGRATE option until the physical move is complete. Terminations to the DN on the CS2000 are avoided by routing to the collapsing site while the DN is still in service. This is accomplished during the routing stage of call processing by using a conditional route selector (CND MIGRATE) in tables HNPACONT:RTEREF, FNPACONT:RTEREF, OFRn and IBNRTn. When the

CND MIGRATE conditional selector is encountered, terminating calls are completed to DNs which are not assigned the MIGRATE option. The call is redirected via an office route or trunk CLLI to the collapsing office for DNs which are assigned the MIGRATE option.

No Collect Call (NOCOLL)

Option NOCOLL prevents a caller from making a collect call to a coin telephone. A tone generates to warn the operator that the caller is making a collect call to a coin telephone. The operator can refuse to connect the call when the called party answers the phone.

No Double Connection (NDC)

Option NDC is assigned to lines that are not to be connected to a verification or test circuit when the line is busy.

No Hazard Test (NHT)

Option NHT allows the operating company to prevent the line hazard test (LHT) from running on specific lines. The NHT is valid for line cards 2X17, 2X18, 6X17AC, 6X18AA and AB, and 6X19. Any attempt made to add this line option to another line card type results in an error message. Office parameter LINE_CARD_MONITOR in table OFCVAR is responsible for enabling or disabling the line hazard test for the entire office. The LHT tests the line for a line hazard condition, for instance, low resistance, ring-to-ground fault, or high voltage on the subscriber's loop.

No Line Insulation Test (NLT)

Option NLT is assigned to lines that are to be skipped by the automatic line insulation test.

No Receiver Off-Hook Tone (NOH)

Receiver off-hook tone is not transmitted to lines with option NOH when the lines have a permanent signal or partial dial condition.

Operator Number Identification (ONI)

Option ONI is assigned to lines that require operator number identification (ONI). Lines that are not assigned this option are assigned as automatic number identification (ANI) lines.

Park (PRK)

Option PRK is assigned to stations that are allowed to park a call against their own DN.

IBNLINES option STN (continued)

Permanent Hold (HLD)

Option HLD allows an end-user with a 500/2500 set to hold one active call against its own DN without attendant assistance. To accomplish this, the station with option HLD must flash and dial the HLD access code.

The station with option HLD can go on-hook while the other party is on hold but cannot perform another task (originate a call or instigate speed call programming).

The station that placed the call on hold can retrieve that call in either of the following ways:

- if on-hook, go off-hook
- if off-hook, go on-hook and then off-hook

Prevent Deletion Option (PDO)

The PDO prevents the removal of a line from service. If you try to remove a line from service that has PDO assigned, an error message displays and the command fails.

Plug Up (PLP)

Option PLP is assigned to lines that are in the plug-up state.

Priority Indication (PRI)

Option Priority Indication (PRI) allows network calls that originate from a PRI line to complete to overloaded or network congested exchanges.

Remote Message Register for Local Calls (RMR)

Option RMR is a line option that provides tip-and-ring reversal on answer for local calls.The RMR option applies a line reversal for each answered call originating from a line with this option. This option is used on hotel lines to indicate that a charge is due for a local call.

Remote Message Register for Non-Local Calls (RMT)

Option RMT provides tip-and-ring reversal on answer for calls other than local calls, for example, toll calls, operator-assisted calls, and direct-dialed calls. Option RMT provides an indication on the terminal end of the loop that a call from a line with option RMT has been answered. This option is used on hotel lines to indicate that a charge is due for a non-local call.

Residential Call Hold (RCHD)

Option RCHD allows an end-user to flash the switchhook during a call, dial an access code, and place the call on hold. The call is recognized once the line returns to an off-hook condition.

IBNLINES option STN (continued)

Restricted Sent Paid (RSP)

Option RSP is assigned to lines that have an LCC of Zero Minus Denied (ZMD) or Zero Minus Zero Plus Allowed (ZMZPA) assigned in table LINEATTR. This option outpulses the ANI information digit 7 (ANI information digit 2 in the case of ANI fail) plus the calling party's DN. This option supersedes the action caused by the setting of field HOT in table LINEATTR. This option can be used only if the Coinless Pay Station feature has been purchased.

Ring Again (RAG)

Option RAG permits the station user to be notified when the busy number becomes idle and automatically re-access the same number. The RAG Recall Timer (RAGTIM) specified in table CUSTSTN gives the length of time the station has to pick up the RAG recall. Option RAG is applicable only if the called station is in the same customer group.

Secondary Language (SL)

Option SL applies to a line that receives announcements in the language specified in field SECONDARY for parameter OFFICE_LANGUAGE in table OFCENG.

If this option is not assigned, a line receives announcements in the language specified in field PRIMARY for parameter OFFICE_LANGUAGE in table OFCENG.

This option is applicable only to the announcements associated with the Automatic Call Back (ACB), Automatic Recall (AR), Calling Number Delivery (CND), and Call Forwarding Remote Access (CFRA) features. See table RESFEAT (Residential Line Feature) for a description of Calling Number Delivery (CND).

Short Timed Release Disconnect (STRD)

Option STRD provides the capability to cancel Long Timed Release Disconnect (LTRD) on line-to-trunk calls. LTRD is used to keep a call connection up across the network for a specified amount of time after the called party has gone on-hook. The DMS switch determines to which calls LTRD is applied. If STRD is applied to a line, LTRD is disabled for that call. Option STRD affects line-to-trunk calls on the following trunk group types: ATC, intertoll (IT), SuperCAMA (SC), TOPS, and outgoing end office (T0).

Office parameter SHORT_TIMED_RELEASE_DISC_TIME in table OFCSTD controls STRD.

IBNLINES option STN (continued)

Single Line Variety Package (SLVP)

Option SLVP includes these services: SLVP Intercom, SLVP Transfer, and SLVP Hold. With these services, distinctive ringing patterns are available to alert specific persons or extensions.

Four access codes are defined by the operating company for use by SLVP. Three of these codes determine which distinctive ringing patterns are applied to the line when using the SLVP Intercom or SLVP Transfer service. The fourth access code is used for SLVP Hold.

Special Delivery Service (SDS)

The SDS option assigns the service(s) specified in fields BSYMODE and RNAMODE in table SDSINFO to a line. For more information on the services that can be specified using these fields, consult the Access to Messaging feature, RES00077 and the Enhanced Busy Call Return (EBCR) feature, RES00076. Option SDS and option SDSDENY cannot be assigned to the same line.

Special Delivery Service Deny (SDSDENY)

When assigned to a line, option SDSDENY prevents the service(s) specified in fields BSYMODE and RNAMODE in table SDSINFO from being offered on that line, even if customer group option SDS is assigned to a customer group of which the line is a member, or if the specified service(s) is offered office wide using Universal mode. For more information on the services that can be specified using fields BSYMODE and RNAMODE, consult the Access to Messaging feature, RES00077 and the Enhanced Busy Call Return (EBCR) feature, RES00076. Option SDSDENY and option SDS cannot be assigned to the same line.

Spontaneous Call Waiting Identification (SCWID)

Option SCWID identifies a waiting call to the end-user on a display while talking in a stable state to another party. SCWID is a RES option and must be entered using SERVORD. SCWID can be assigned to LCCs of RES, 1FR, and 1MR. Option SCWID can also be made compatible with an LCC of IBN with feature CLASS Multiline Variety Plan (MVP) and with LCCs of OWT and EOW with wide area telephone service (WATS) on RES.

When the last remaining display option is deleted from a line with option SCWID, SCWID must be deleted at the same time or must have already been removed. If option CWT is removed from a SCWID line, option SCWID must be removed first. A warning message notifies the operating company personnel to remove option SCWID first.

If line option SCWID is added to a line that subtends from a peripheral type that supports the CMR card but does not have it datafilled, a warning is output during the addition of the display option. Option SCWID can still be added to the line.

If the CMR is not in service at the time of call waiting, regular call-waiting tones are sent.

When option SCWID is added to a line that subtends from a peripheral type that does not support the CMR card, an error message is output indicating the peripheral type does not support the CMR card. As a result, the SCWID option is not added to the line.

Station Message Detail Recording (SMDR)

Option SMDR is available only in a switching unit that has the Station Message Detail Recording (SMDR) feature and field KEY in table CRSFMT (Call Record Stream Format) set to NTFMT.

This option is assigned to a line if details of all local calls originated by the line are to be recorded on AMA tape. All entries on the AMA tape are in the SMDR format.

This option can only be assigned in a switching unit that has the option SMDR_OFFICE equal to Y in table OFCOPT.

The number of lines that can have this option is dependent on the value of office parameter NO_OF_SMDR_REC_UNITS in table OFCENG.

Station Origination Restrictions Controller (SORC)

Option SORC allows the DN to apply a restriction level (0, 1, 2, 3, or 4) against another DN or a group of DNs in the same customer group. To group DNs, option SOR must be applied against an IBN line in table IBNLINES or against a Meridian business set (MBS) in table KSETLINE.

A level 0 restriction permits completion of all calls allowed by the network class of service (NCOS). A level 1 restriction allows completion of only intragroup calls and calls specified in an exception list. A level 2 restriction allows completion of only the intragroup calls. A level 3 restriction allows completion of only calls specified in an exception list. A level 4 restriction allows only 911 emergency calls.

Suspended Service (SUS)

Option SUS is assigned to lines that have originating and terminating service suspended.

IBNLINES option STN (continued)

Three-Way Calling (3WC)

Option 3WC enables the end-user on the assigned line to add another party to an existing connection for a three-way conference.

This option affects the value of office parameters NUMPERMEXT, NMULTIBLKS, and NO_OF_FTR_CONTROL_BLKS in table OFCENG.

When an IBN station is a hunt line, its hunt group and hunt group member number assignments are listed in tables HUNTGRP (Hunt Group) and HUNTMEM (Hunt Group Member), respectively.

Time and Charge Services on 1+ Calls (ATC)

Option ATC applies to lines with the time and charge option. With this option the NX1D prints the call details at a printer for all 1+ calls. Operating company personnel then calculate and phone the charges back to the end-user.

Toll Essential Service (TES)

Option TES applies to lines that are allowed access to the toll network when all other lines are denied access to it through the activation of toll network protection. All lines with option TES also have option ELN.

Uniform Call Distribution (UCD)

Option UCD permits distribution of calls evenly among a number of predetermined sets by dialing the UCD activation code followed by the UCD DN of the group. The line activating UCD must be in the same customer group as the UCD group. To deactivate UCD, the station dials the deactivation code.

Uniform Call Distribution Logged In Indication (UCDLI)

Option UCDLI provides the option of logged in indication for UCD agents with standard sets by applying stuttered dial tone to an agent when the agent goes off-hook. Option UCDLI has no sub-field requirements. Option UCDLI has no sub-field requirements. Additionally, the UCD option must already exist on the line that the option UCDLI is being added to. Similarly, the UCDLI option not existing on a line, is a prerequisite to deleting the UCD option.

VMEADENY

This option denies use of the access code for Voice Mail Easy Access feature. VMEA is a service offered to residential subscribers that provides an integrated access to a voice messaging service from an End Office (EO) by dialing an access code. Customers who have subscribed to a voice messaging service have the ability to directly access their voice mailboxes by dialing the access code from their home telephone set.

Who's Calling

The Who's Calling (WC) feature requests, records, and delivers a caller's name for lines defined as private or unavailable. The WC feature intercepts the incoming call and sends it to a service node (SN). The SN records the name of the caller and presents the name to the WC subscriber along with routing options.

Additional line features

See table IBNFEAT for additional line features that are available with the STN format.

Datafill

The following table lists the datafill for table IBNLINES option STN.

Field descriptions

Field	Subfield	Entry	Explanation and action
LEN		see explanation	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" in this document 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.
DNNO		0 to 6	Directory number number. This field specifies the number assigned to the DN that is being referenced on the LEN.
RESULT		see subfields	Result. This field consists of subfields SIGTYPE, FORMAT, IBNVAR, and OPTLIST.
	SIGTYPE	DP or DT	Signal type. This field specifies the type of pulsing expected: DP for dial pulse or DT for Digitone.
	FORMAT	STN	Format. This field specifies the format name STN (station) for an IBN or RES station.
	IBNVAR	see subfields	Integrated business network variable. This field consists of subfields LCC and DN.

IBNLINES option STN (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	LCC	IBN	Line class code. If the line is an IBN line, enter IBN and datafill refinements CUSTGRP, SUBGRP, NCOS, and SNPA. For a residential line or a coin line with residential features, enter 'IBN' and datafill refinement LNATTIDX. This datafill is done automatically, by the ONP, when the RES_TO_IBN_CONV flag is set to 'Y'.
	DN	numeric (vector of upto 15 digits)	Directory number. Enter the DN assigned to the IBN or RES station.
	CUSTGRP	alphanumeric	Customer group. Enter the code assigned to the customer group to which the IBN line is assigned.
	SUBGRP	0 to 7	Subgroup. Enter the subgroup within the customer group to which the IBN line is assigned.
	NCOS	0 to 511	Network class of service. Enter the NCOS number assigned to the IBN line.
	SNPA	numeric	Serving numbering plan area. Enter the serving NPA to which the IBN line is assigned.

IBNLINES option STN (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	LNATTIDX	alphanumeric (1 to 16 characters)	Line attribute index. Enter the line attribute index number, defined in table LINEATTR, to which the RES line is assigned. The index must have field LCC equal to 1FR, 1MR, ETW, OWT, INW, 2WW, EOW, CCF, CDF, CFD, CSP, ZMD, or ZMZPA, and field RESINFO equal to Y (yes). Fields CUSTGRP, SUBGRP, and NCOS must contain valid data. For 'RES to IBN' line conversion, the line attribute index (LNATTIDX), XLAPLAN and RATEAREA will be replaced by an appropriate: • Customer group (CUSTGRP) - taken from table CUSTENG • Subgroup (SUBGRP) • NCOS These details will be taken from the temporary table that was datafilled during XLAPLAN reformatting (see table XLAPLAN).
	XLAPLAN	alphanumeric (up to 16 characters)	Translation plan index. Enter the index into the XLAPLAN table.
	RATEAREA	alphanumeric (up to 16 characters)	Rate area index. Enter the index into the RATEAREA table.

IBNLINES option STN (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	OPTLIST	3WC, ACB, AMATEST, AR, ARDDN, ATC, CCSA, CCW, CDC, CHD, CLF, CNAB,CNDB, CNDBO, COD, COIN, COT, CRT, CRTDENY, CTW, CWD, CWI, CWO, CWR, CWT, CWTC, CWX, DCBI, DCBX, DCF, DCND, DCPK, DCPU, DCPX, DENYCWTC, DENYISA, DENYU3WC, DOR, DTM, EBO, EBX, ELN, FIG, FNT, FTS FTRGRP, GLTC, HLD, ICSDEACT, IICB, ILB, IMB, ISADEACT, IRR,LCDR, LDSA, LDSO, LDSR, LDST, LNR, LRS, MIGRATE, MSB, MSBI, NDC, NHT, NLT, NOCOLL, NOH, NTS_CID, TES, UCD, VMEADENY, WC, UCDLI	Option list. Enter the list of options that are assigned to the IBN station. Options must be separated from each other by a blank space. Refer to table 1 (format STN) and the pages following it for a description of each option.

Field descriptions

Field	Subfield	Entry	Explanation and action
	OPTLIST (continued)	NTS_DNID, ONI, PDO, PLP, PRI, PRK, RAG, RCHD, RMR, RMT, RSP, SCWID, SDS, SDSDENY, SL, SLVP, SMDR, SORC, STRD, SUS,	

Datafill example

The following examples show sample datafill for table IBNLINES option STN

In the first example, the first entry is for a RES line with an LCC of RES, assigned to line attribute 100, with option ACB. The second entry is for an IBN line, line class code IBN, the line is assigned to subgroup 0 of customer group BNRMC, network class of service number 0, home serving NPA 613, and has the Three-Way Conference (3WC) and FTS options

In the second and third examples, the new option IICB is created in the table after this option is assigned to the RES line.

MAP display example for table IBNLINES option STN

```
        LEN
          DNNO                        RESULT
_____________________________________________________________

HOST  02 0 00 01
              0   DT STN RES 4631023 403 416_PUB_403
L416_LATA1_400 416
                  $
```

IBNLINES option STN (continued)

MAP display example for table IBNLINES option STN (before assignment)

```
        LEN
          DNNO                    RESULT
_____________________________________________________________

HOST  01 0 00 05
              0   DT STN RES 3341005 80 403 (CWT) $
```

MAP display example for table IBNLINES option STN (after assignment)

```
        LEN
          DNNO                    RESULT
_____________________________________________________________

HOST  01 0 00 05
              0   DT STN RES 3341005 80 403 (CWT) (IICB) $
```

MAP display example for table IBNLINES option STN

```
        LEN
          DNNO                    RESULT
_____________________________________________________________

HOST  02 0 00 04
              0   DT STN IBN 3795008 RESGRP 0 3 308 (CWT)
                  (CWI)(CNDB)(ACB)(AR)$

RESGRP 0 3 - CUSTNAME, SUBGROUP and NCOS
NCOS - is taken from the appropriate RES entry (308_NPRT_3) in XLAPLAN table
```

Table history

SN06 (DMS)

Added CND and NOT conditional routes to table IBNLINES option STN for feature A00001207.

IBNLINES option STN (continued)

SN04 (DMS)

Conversion of RES lines to IBN lines (59037976) performed on the INACTIVE CPU during the One Night Process (ONP). The converted RES line tuples are updated.

MMP16

Added option IICB to field RESULT for activity 59032350.

MMP15

Added option COIN to subfield OPTLIST for activity 59022310.

NA013

Added the CRT and CRTDENY options for development activity 59012144.

Added the PDO option for development activity 59013430.

Added the WC option for development activity 59012655.

NA012

Development activity 59007050 introduces changes to field LNATTIDX of table IBNLINES. This field now accepts an alphanumeric string instead of an integer string

NA011

Added options CWTC and DENYCWTC.

Added fields XLAPLAN and RATEAREA.

APC10

Added option PRI to subfield OPTLIST.

APC009.1

Added options LRS and NOCOLL to subfield OPTLIST.

NA009

Added option SRA.

NA008

Increased the range of field LNATTIDX to 31 999.

NA007

Increased the range of field LNATTIDX to 4095.

Added option VMEADENY.

IBNLINES option STN (end)

NA006

Added DENYISA and ISADEACT.

Added option FTS.

Supplementary information

The next SERVORD commands are recommended for defining the converted options of IBN lines:

- SC:

  RES:ado $ <dn> sc1 sc2 $

  IBN:ado $ <dn> scs scl l30 $

- CFW:

  RES:ado $ <dn> cfw c nscr 2 $

  IBN:ado $ <dn> cfu y $

- CFDA to Voice Mail:

  RES:ado $ <dn> cfda n nscr 2 12 150 $

  IBN:ado <dn> cfd n 150 $

- CFDA to the 3rd subscriber:

  RES:ado $ <dn> cfda c nscr 2 12 $

  IBN:ado $ <dn> cfd p $

- CFBL to Voice Mail:

  RES:ado $ <dn> cfbl n nscr 2 152 $

  IBN:ado $ <dn> cfb n 152 $

- CFBL to the 3rd subscriber :

  RES:ado $ <dn> cfbl c nscr 2 $

  IBN:ado $ <dn> cfb p $

- CWT:

  RES:ado $ <dn> cwt $

  IBN:ado $ <dn> cwt cwi $

IBNMAP

Table name

ISDN Routing Map Table

Functional description

Table IBNMAP is a routing translation table that is accessed to alter the routing index for calls with integrated services digital network (ISDN) routing characteristics. Table IBNMAP cannot be accessed for plain ordinary telephone service (POTS) or Meridian Digital Centrex (MDC) translations.

Table IBNMAP is used to translate a routing index in table IBNRTE to a new routing index in table IBNRTE for the purpose of ISDN call routing translation.

During the process of ISDN call translation, table IBNMAP is entered before entering table IBNRTE. Table IBNMAP is entered only if the routing characteristic name (RCNAME) information is present in the call.

If table IBNMAP is entered and no RCNAME information is found in table IBNMAP, the new route index defaults to the original or basic route index in table IBNRTE. If the RCNAME information is found in table IBNMAP, the basic route is translated into a non-basic route that routes the call to ISDN treatment.

Datafill sequence and implications

The following tables must be datafilled before table IBNMAP:

- RCNAME
- IBNRTE

Table size

0 to 262 144 tuples

Data store is dynamically allocated for each tuple in table IBNMAP.

Datafill

The following table lists datafill for table IBNMAP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field is the key to the table and consists of subfields RCNAME and INDEX.
	RCNAME	alphanumeric (1 to 8 characters)	*Routing characteristic name* Enter the ISDN routing characteristic name that is defined in table RCNAME.
	INDEX	1 to 1023	*Basic routing index* Enter the route reference index of a basic routing list in table IBNRTE. A basic routing list is accessed if ISDN routing characteristics are not present. An entry outside this range is invalid.
NEWINDEX		1 to 1023	*Non-basic routing index* Enter the route reference index of a non-basic routing list in table IBNRTE. A non-basic routing list is accessed if ISDN routing characteristics are present. An entry outside this range is invalid.

Datafill example

The following example shows sample datafill for table IBNMAP.

MAP display example for table IBNMAP

```
          KEY NEWINDEX
_____________________________________________________

 64KNAME   1      100
  TNSPVT   1      201
```

IBNMAP2

Table name

ISDN Second Routing Map Table

Functional description

Table IBNMAP2 is a routing translation table that is accessed to alter the routing index for calls with integrated services digital network (ISDN) routing characteristics. This table cannot be accessed for plain ordinary telephone service (POTS) or Meridian Digital Centrex (MDC) translations.

Table IBNMAP2 is used to translate a routing index in table IBNRTE2 to a new routing index in table IBNRTE2 for the purpose of ISDN call routing translation.

During the process of ISDN call translation, table IBNMAP2 is entered before entering table IBNRTE2. Table IBNMAP2 is only entered if the routing characteristic name (RCNAME) information is present in the call.

If table IBNMAP2 is entered and the RCNAME information in the call is not found in table IBNMAP2, the new route index defaults to the original or basic route index in table IBNRTE2. If the RCNAME information is found in table RCNAME, the basic route is translated into a non-basic route that routes the call to ISDN treatment.

Datafill sequence and implications

Refer to table IBNMAP.

Table size

Refer to table IBNMAP.

Datafill

Refer to table IBNMAP.

Datafill example

Refer to table IBNMAP.

IBNMAP3

Table name

ISDN Third Routing Map Table

Functional description

Table IBNMAP3 is a routing translation table that is accessed to alter the routing index for calls with integrated services digital network (ISDN) routing characteristics. This table cannot be accessed for plain ordinary telephone service (POTS) or Meridian Digital Centrex (MDC) translations.

Table IBNMAP3 is used to translate a routing index in table IBNRTE3 to a new routing index in table IBNRTE3 for the purpose of ISDN call routing translation.

During the process of ISDN call translation, table IBNMAP3 is entered before entering table IBNRTE3. Table IBNMAP3 is only entered if the routing characteristic name (RCNAME) information is present in the call.

If table IBNMAP3 is entered and the RCNAME information in the call is not found in table IBNMAP3, the new route index defaults to the original or basic route index in table IBNRTE3. If the RCNAME information is found in table IBNMAP3, the basic route is translated into a non-basic route that routes the call to ISDN treatment.

Refer to table IBNMAP.

Datafill sequence and implications

Refer to table IBNMAP.

Table size

Refer to table IBNMAP.

Datafill

Refer to table IBNMAP.

Datafill example

Refer to table IBNMAP.

IBNMAP4

Table name

ISDN Fourth Routing Map Table

Functional description

Table IBNMAP4 is a routing translation table that is accessed to alter the routing index for calls with integrated services digital network (ISDN) routing characteristics. This table cannot be accessed for plain ordinary telephone service (POTS) or Meridian Digital Centrex (MDC) translations.

Table IBNMAP4 is used to translate a routing index in table IBNRTE4 to a new routing index in table IBNRTE4 for the purpose of ISDN call routing translation.

During the process of ISDN call translation, table IBNMAP4 is entered before entering table IBNRTE4. Table IBNMAP4 is only entered if the routing characteristic name (RCNAME) information is present in the call.

If table IBNMAP4 is entered and the RCNAME information in the call is not found in table IBNMAP4, the new route index defaults to the original or basic route index in table IBNRTE4. If the RCNAME information is found in table IBNMAP4, the basic route is translated into a non-basic route that routes the call to ISDN treatment.

Refer to table IBNMAP.

Datafill sequence and implications

Refer to table IBNMAP.

Table size

Refer to table IBNMAP.

Datafill

Refer to table IBNMAP.

Datafill example

Refer to table IBNMAP.

IBNRT2

Table name

IBN Second Route Table

Functional description

For a description of table IBNRT2 refer to table IBNRTE.

Datafill sequence and implications

See table IBNRTE.

Table size

See table IBNRTE.

Datafill

See table IBNRTE.

Datafill example

See table IBNRTE

Release history

NA017

Feature 59035336 introduces the Supergroup (SG) option.

IBNRT3

Table name

IBN Third Route Table

Functional description

For a description of table IBNRT3 refer to table IBNRTE.

Datafill sequence and implications

See table IBNRTE.

Table size

See table IBNRTE.

Datafill

See table IBNRTE.

Datafill example

See table IBNRTE.

Release history

NA017

Feature 59035336 introduces the Supergroup (SG) option.

IBNRT4

Table name

IBN Fourth Route Table

Functional description

For a description of table IBNRT4 refer to table IBNRTE.

Datafill sequence and implications

See table IBNRTE.

Table size

See table IBNRTE.

Datafill

See table IBNRTE.

Datafill example

See table IBNRTE.

Release history

NA017

Feature 59035336 introduces the Supergroup (SG) option.

IBNRTE

Table name

IBN Route Table

Overview

In BCS31, route indices for Meridian Digital Centrex (MDC) routing were quadrupled by duplicating IBNRTE in three tables: IBNRT2, IBNRT3, and IBNRT4. These tables have fields and functions identical to table IBNRTE.

With this approach, customer data administration is improved by segregating routing schemes to different tables according to their function. For example, private network translations are served by one table, on-net or equal access occupy a second table, and special services such as wide area telephone service (WATS) or data services occupy a third table.

To avoid unnecessary duplication of table descriptions for route tables IBNRT2, IBNRT3, and IBNRT4, a full table description is provided only for table IBNRTE. Refer to table IBNRTE for all IBN route table descriptions.

Functional description

Table IBNRTE consists of route lists identified by route reference index numbers.

Digit translation from 1 to 18 digits in table IBNXLA results in a route reference index into a pool of route lists. A route list consists of up to eight elements that are linked together, for example element 1 to element 2 to element 3. In most cases, the ultimate termination of a route element is a directory number (DN) that terminates on the switching unit or a trunk group from which an idle outgoing trunk is selected. If the DN is busy or no idle trunk is available, the system advances to the next element in the list. If the end of the list is reached and no idle trunk or idle DN is found, the call originator's controlling software is notified. For example, a line to local outgoing trunk is often given reorder tone.

> ***Note:*** The DN selector must only be used as the last route list element or as the only route list element.

If expensive route warning tone (ERWT) is applied to one or more route elements, circuits are required in table STN (Special Tone) with the fixed pseudocode ERWT. ERWT applies only to routes terminating on trunks. Although routes terminating on lines can prompt for expensive (EXP) during datafill, ERWT is not given if datafilled.

IBNRTE (continued)

If off-hook queuing applies to one or more route elements, circuits are required in table STN with a fixed pseudocode OHQT for the off-hook queuing tone.

Partitioned Table Editor feature

In DMS switch offices with the Partitioned Table Editor (PTE), the operating company can authorize a client to use PTE to edit specified tuples of table IBNRTE. Refer to the *Basic Translations Tools Guide* for more information on the PTE.

To access a tuple in table IBNRTE, the IBN route index (RTE) must be owned by the user.

For example, to locate datafill for table DATAOWNR, the client, CARLING, has access to the tuple that has a RTE (the key) of 4. No other tuple can be viewed by user CARLING unless tuples owned by other users are classified as public in table OWNER.

KEY	OWNER
IBNRTE4	CARLING

Restrictions

The following restrictions apply:

- Operating company clients can only enter T or SK in field RTETYPE when specifying conditional type routes (IBNRTSEL = CND).
- Operating company clients can only enter IBNRTE in field TABNAME when specifying T type routes (IBNRTSEL = T).

Access to this table by operating company clients is only allowed if the table privilege class assigned in table CUSTPROT matches the command class of the user defined by the PERMIT command.

Because addition of new tuples to this table creates new data, table access rights are read-only or change-only for operating company clients.

Refer to table OWNER for more information on the customer data change tables.

Note: It is possible to create an infinite loop through the datafill, which can cause call deaths and traps.

Unlike line translations, circular hunt configurations should not be set up in trunk routing. The following figure shows an example of the type of datafill to be avoided.

Note: The NA010 ISP Even Call Distribution feature allows use of super-group translations for ISDN primary rate interface (PRI) circular hunting. Refer to "ISP Even Call Distribution" in the ISDN translations section of the *Translations Guide* for more information on this feature.

Example of infinite loop in table IBNRTE

```
RTE  RTELIST
_____________________________________________________________
5 (S N N N N IBNTRK1) (T IBNRTE 6) $
6 (S N N N N IBNTRK2) (T IBNRTE 5) $
```

Wideband routing strategy

A wideband routing strategy handles routes selections for glare avoidance and seizure time minimization through table IBNRTE.

Two additional validation checks are imposed on selecting a route choice. Glare occurs when two simultaneous N X 64 call events originated from two end-to-end switch offices happen to choose at least one common DS-0 of a T1 in a wideband trunk group. For the DMS-100 switch, only ISDN PRA, IT-ISUP, and ATC-FGD-ISUP trunks are allowed to route N X 64 calls.

The WBBF data structure of a trunk group is searched only if the trunk group contains at least one T1 with enough idle DS-0s to accommodate a specific call.

Datafill sequence and meaning

Table SUPERTKG must be data-filled prior to this table.

If the entry for subfield IBNRTSEL is ARS, tables IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, and OFR4 must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is AFR, table TRIGINFO must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is CFT, tables CLLI and DIGMAN must be datafilled before table IBNRTE.

IBNRTE (continued)

If the entry for subfield IBNRTSEL is EOW, tables WATSAUTH, VIRTGRPS, DIGMAN, BANDSETS, and OCCINFO must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is DN, tables HNPACONT and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is IW, table VIRTGRPS must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is ISA, tables CLLI and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is LINE, tables HNPACONT and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is LOC, table LINEATTR must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is N, tables CLLI and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is OW and the RTETYPE is S, tables VIRTGRPS, ZONEORDR, CLLI, and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is OW and the RTETYPE is T, tables VIRTGRPS, ZONEORDR, IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, and OFR4 must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is OW and the RTETYPE is V, tables VIRTGRPS, ZONEORDR, and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is RX, tables NCOS, CUSTENG, DIGMAN, and RCNAME must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is S, table CLLI must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is SG, tables SUPERTKG and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is T, tables IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, OFR4, RRTE, TOPS, TOPSAMA, AOSS, and AOSSAMA must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is VFG, tables VIRTGRPS and DIGMAN must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is CND or NOT with subfield CNDSEL, tables COSMAP, TODHEAD, HNPACONT, CALLCHR, NARDATA, and SITE must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is CND or NOT with subfield RTETYPE T, tables IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, and OFR4 must be datafilled before table IBNRTE.

If the entry for subfield IBNRTSEL is CND or NOT with subfield RTETYPE IRTE, tables CTHEAD, PXHEAD, FAHEAD, OFCHEAD, ACHEAD, FTHEAD, AMHEAD, and NSCHEAD must be datafilled before table IBNRTE. These tables need to be datafilled if the value of subfield XLASYS is one of the following values: CT, PX, FA, OFC, AC, FT, AM, or NSC.

Table size

The maximum number of route lists is 1024.

Elements within a route list can consist of one or all the variations defined in the route list selector.

Route selectors

The available route selectors follow. They are detailed in separate subtables according to feature, for example, IBNRTE feature AC.

- AC
- ARS
- ATGS
- CFT
- CND
- DN
- EOW
- GBL
- IBNRX
- INS

IBNRTE (continued)

- ISA
- IW
- LINE
- LOC
- N
- NCLI
- NIL
- NOT
- NS
- OW
- QH
- RX
- S
- SG
- T
- TRMT
- VFG

Route options

The available route option is ATGS (alternate trunk group selection).

Table history

NA017

Addition of optional CALL TYPE field and subfields for route selector SG per feature activity 59035336.

SN04 (DMS)

Added selector ‘NS’ and global selector ‘GBL’ in all Universal Translations Routing tables (xxRTE) and in all IBN Translation Routing tables (OFRTx, IBNRTx) for feature 59028782.

NA014

Feature 59018273 added an OPTIONS subfield within the SG selector. In addition, an index to table DIGMAN is provided through the DMI subfield in the SG selector.

IBNRTE (continued)

MMP14

Feature 59018273 added an OPTIONS subfield within the SG selector. In addition, an index to table DIGMAN is provided through the DMI subfield in the SG selector.

NA013

Feature 59013383 adds the OPTIONS field with the ATGS option as the only value. This option has a MAX_ATMPT subfield with values ranging from 1 to 50.

NA012

Development activity 59007050 introduces changes to the LINEATTR field of selectors LW and LOC. This field now accepts an alphanumeric string instead of an integer string.

NA010

Added the following trunk group selection algorithms to the ALGORITHM subfield for the SG route selector based on ISP Even Call Distribution feature:

- CHCL (circular hunt in clockwise direction)
- CHCCL (circular hunt in counterclockwise direction)

Added reference to ISP Even Call Distribution feature under “Restrictions” section.

EUR008

Added SG route selector to the IBNRTSEL subfield.

APC009

Entry NCLI was added to the IBNRTE table based on the AU2393 (VPN Network CLI Enhancement) feature.

UK002

Entry NCLI was added to the IBNRTSEL subfield based on the AE1494 (VPN Network CLI Enhancement) feature.

BCS36

The following items from the AN0322 (Network Access Registers [NARS]) feature were added:

- entry NARS added to field CNDSEL for selectors CND and NOT
- subfield NARNAME added to selectors CND and NOT

IBNRTE (continued)

Feature AR0482 (DN Based Modification of NCOS and CUSTGRP) added entry IBNRX to subfield IBNRTSEL.

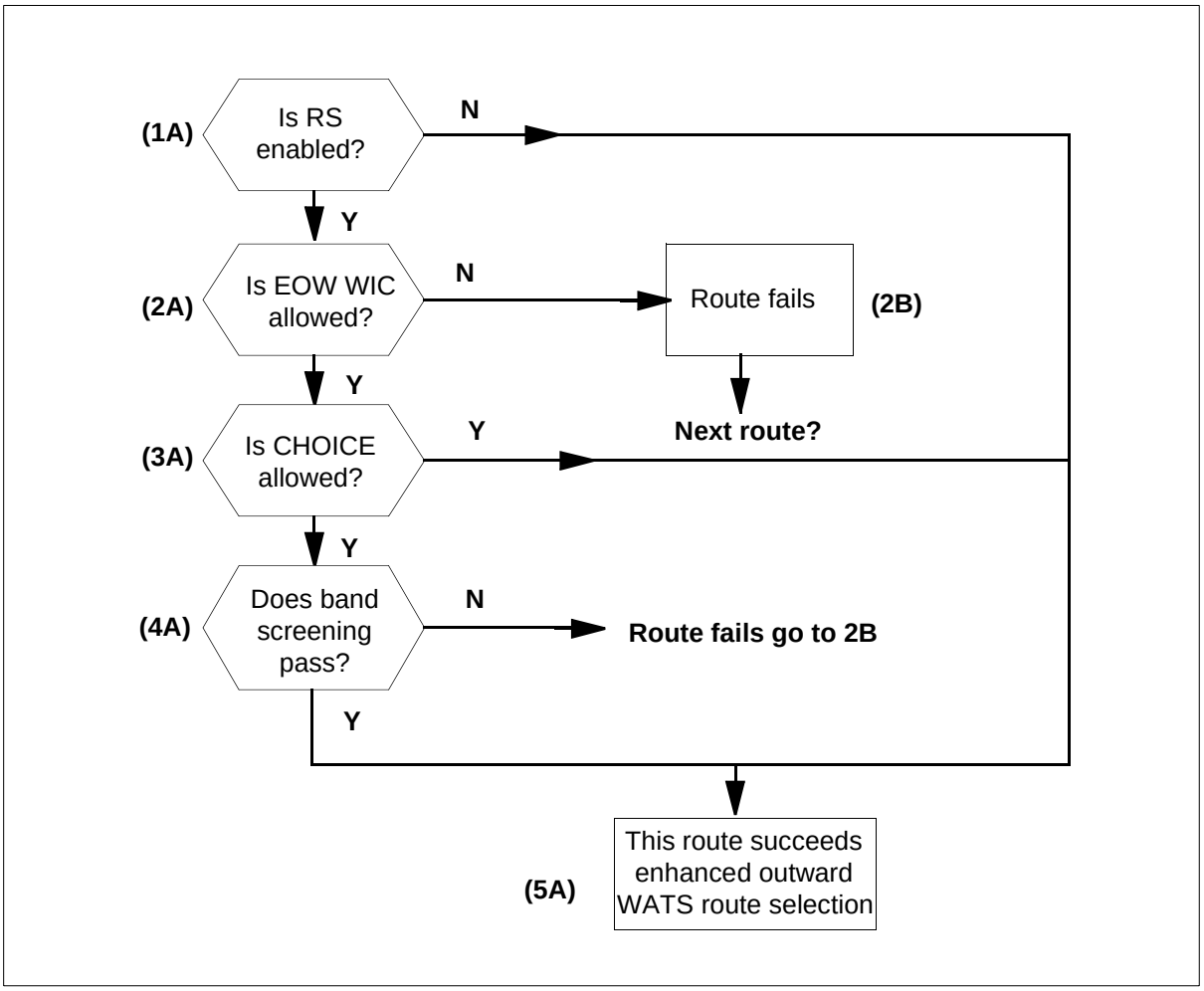
Additional information

This section provides information on datafilling table IBNRTE for specific applications, and product descriptive information related to table IBNRTE.

Route selection flow diagram

The following figure shows how the information in an EOW route element determines whether the route is allowed.

Route selection flowchart



Explanation of route selection flowchart

A number of decision control blocks jointly determine whether a route is selected.

The following descriptions explain the events that take place within each decision block.

1A: Is RS enabled?

The field RSENABLE in selector EOW is checked to see if automatic route selection (RS) is enabled. If route selection is enabled for this route, this route continues with the route selection procedure. If route selection is not enabled, this route is selected regardless.

2A: Is the EOW WIC allowed?

In all cases where route selection is enabled, WIC screening is performed. A check is made to verify that the WIC given in the current EOW route is also in the WIC list in table WATSAUTH. (The key into table WATSAUTH is provided by entry EWAUTH in the NET/GEN selector of table IBNXLA.) If WIC is found in table WATSAUTH, this route continues with the procedure. If table WATSAUTH has a WIC list datafilled, but the WIC is not found, the route fails.

If no WIC list is found in table WATSAUTH, the WIC in the EOW route is assumed. This occurs if the EWAUTH option is not used in table IBNXLA, or if no WIC list is specified for a WATSAUTH entry that has field CHOICE set to N.

Note: This check is done regardless of whether CHOICE is allowed.

2B: Route fails

When a route fails, an attempt is made to continue to the next route element in the route list, if one is available.

3A: Is CHOICE allowed?

Because it is not logical to perform route selection prior to routing to a facility that permits 10XXX dialing, this route succeeds if the CHOICE field in table WATSAUTH is equal to Y. If field CHOICE equals N, the selection procedure continues to try to verify the called band.

4A: Does band screening pass?

The called band needs verification against the BANDSET that is listed in the route element. The STS in the line attributes of the listed VFG is used in determining the called band in table WATSBAND. Then, table BANDSETS determines if the called band is allowed for the bandset listed in the EOW route.

If an entry in table WATSAUTH is associated with the call, the referenced bandset checks the validity of the route. This means that both table BANDSET

IBNRTE (end)

in EOW and the BANDSET in WATSAUTH are used to determine the route taken. If either check fails, this route fails.

5A: This route succeeds enhanced outward WATS route selection
If this route does not fail for any other reason (such as all the VFG resources are busy), the call continues into the retranslation procedure out of the VFG.

IBNRTE option ATGS

Option ATGS

The Alternate Trunk Group Selection feature adds the OPTIONS field to the IBNRTE table. This field includes the ATGS (alternate trunk group selection) option. The ATGS option has a MAX_ATMPT subfield with values ranging from 1 to 50.

Datafill

The table that follows lists datafill for the IBNRTE table with the ATGS option.

Field descriptions

Field	Subfield	Entry	Explanation and action
OPTIONS	ATGS	see subfield	*Options. The OPTIONS field with the ATGS option enables the Alternate Trunk Group Selection feature.*
	MAX_ATMPT	1–50	*Maximum attempts*. The MAX_ATMPT subfield shows the number of tries allowed to select a route.

Datafill example

The figure that follows shows sample datafill for the IBNRTE table with the ATGS option.

MAP display example for table IBNRTE option ATGS

```
TABLE: IBNRTE
                                                          RTELIST
RTE                                                        OPTIONS
-------------------------------------------------------------------------
911 (N N N N N E911OGES 0) (N N N N N AL5ESOG 0) $
                                                         (ATGS 2) $
```

IBNRTE selector AC

Attendant console

This route selector provides the ability to send a call to an attendant console (AC) in a chosen customer group and subgroup. The customer group and subgroup that are specified can be used to override those associated with the call.

Datafill

The following table lists datafill for table IBNRTE feature AC.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL, OVERRIDE, CUSTNAME, SUBGRP, and ICI.
	IBNRTSEL	AC	*IBN route selector* Enter AC.
	OVERRIDE	Y or N	*Override* Enter Y (yes) if the customer group and subgroup specified are always used; otherwise, enter N (no) if neither apply to the call.
	CUSTNAME	alphanumeric (up to 16 characters)	*Common group name* Enter the name of the customer group datafilled with Y in field CONSOLES in table CUSTHEAD.
	SUBGRP	0 to 7	*Subgroup* Enter the subgroup number to which the call is routed.
	ICI	0 to 255	*Incoming call identification* Enter the ICI that belongs to the call.

Datafill example

The following is an example of an attendant console route. A call taking this route is routed to customer group COMKODAK, subgroup 2, ICI 10.

Datafill example for table IBNRTE feature AC

```
RTE                                          RTELIST

_____________________________________________________

 12                            (AC Y COMKODAK 2  10)$
```

IBNRTE selector ARS

Automatic route selection

With this selector a user dials an authorization code (authcode) to overcome call blockage during automatic route selection (ARS). When that blockage occurs due to a lack of trunking facilities, the user is prompted for an authcode during call setup. After the caller dials an authcode, it is validated. The authcode's associated network class of service (NCOS) must be allowed for the ARS route list, in order for the call to route with the route list.

Note: The ARS route selector must always be the last route selector in a route list. Any route selectors placed after the ARS route selector are never reached.

Datafill sequence and implications

If the entry for field IBNRTSEL is ARS the tables that must be datafilled before table IBNRTE are IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, and OFR4.

Datafill

The following table lists the datafill for table IBNRTE.

Field descriptions for table IBNRTE feature ARS (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL, NCOSLIST, TREATMT, and ARSROUTE.
	IBNRTSEL	ARS	*IBN route selector* Enter ARS.
	NCOSLIST	0 to 511, (vector of up to 8 NCOSs), or $	*Network class of service list* Enter the NCOS for which routing with the specified route list is attempted. Enter up to eight NCOSs on one line, each separated by a space. Enter $ to terminate the vector if less than eight NCOSs are entered.

Field descriptions for table IBNRTE feature ARS (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TREATMT		0 to 63	*Treatment* Enter the treatment specified in table IBNTREAT used when the NCOS associated with the entered authcode for ARS does not appear in NCOSLIST.
ARSROUTE		see subfields	*Automatic route selection route* This field consists of subfields TABID and KEY.
TABID		IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 or OFR4	*Table identification* Enter the table name to which translation is routed. An entry outside of this range is invalid.
KEY		0 to 1023	*Key* Enter the table index for the specified entry in field TABID.

Datafill example

An example of datafill for IBN route selector ARS is shown below. If the NCOS associated with the authcode for ARS is 84 or 98, the call routes with route list 7 in table IBNRTE. Otherwise, the user is given treatment specified by entry number 0 in table IBNTREAT.

Datafill example for table IBNRTE feature ARS

```
RTE                                                RTELIST

_____________________________________________________________

  8                    (ARS 84 98 $  0 IBNRTE   7)$
```

IBNRTE selector CFT

Selector CFT

Route selector CFT can be used to indicate a list element. This route selector is identical to the functionality of the N selector.

Datafill

The following table lists datafill for table IBNRTE feature CFT.

Field descriptions for table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, OHQ, CBQ, EXP, CLLI, and DMI.
IBNRTSEL		CFT	IBN route selector. Enter CFT.
OHQ		Y or N	Off-hook queued. Enter Y (yes) if the common language location identifier (CLLI) can be off-hook queued; otherwise, enter N (no).
CBQ		Y or N	Call back queued. Enter Y if the CLLI can be call back queued; otherwise, enter N.
EXP		Y or N	Expensive. Enter Y if the route is marked expensive; otherwise, enter N. If Y is entered, then a burst of warning tone is given to the originating line. In the transit call no warning tone is given to the trunk.
MBG		N or Y	Multiswitch business group. Enter Y to specify that the trunk group is capable of handling multiswitch business group (MBG) service; otherwise, enter N and the routing remains the same.

Field descriptions for table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language identifier name. Enter the common language identifier name for the trunk group. ***Note:*** With the N selector no validation is performed on the CLLI entered. A DFIL135 log is produced when the CLLI is not an IBN trunk with SS7 signaling.
DMI		0 to 32 767	Digit manipulation index. Enter the index into table DIGMAN. Table DIGMAN modifies the digits outpulsed.

Datafill example

The following example shows datafill for route selector CFT.

Datafill example for table IBNRTE feature CFT

```
RTE                RTELIST
_____________________________________________________

301                (CFT N N N N      IBN70G      )$
301                (CFT N N N N        T120      )$
```

IBNRTE selector CND

Selector CND

- Always
- Time of day
- Class of service
- Call characteristic (digital data, satellite)
- MIGRATE
- Network access registers
- Random
- Site
- SNPA (Serving numbering plan area)

Datafill example

An example of datafill for route selector CND is shown below.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and Action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL, CONDITION, and CONDRTE.
IBNRTSEL		CND	*IBN route selector* Enter CND.
CONDITION		see subfields	*Condition* This field consists of subfields CNDSEL, TODNAME, TIMES, COSMAP, CALLCHR, and SITE.

IBNRTE selector CND (continued)

If a route list requires more than eight route elements, to link two route lists together, datafill field CNDSEL as follows.

IBNRTE selector CND (continued)

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and Action
CNDSEL		ALWAYS NARS COSMAP TOPEAXFR TOPEAALT TOPEACLS INTERLATA SITE TOD EA SNPA NRR RND CALLCHR MIGRATE	*Condition selector* Enter the condition selector required. If the route requires more than eight route elements to link two route lists together, enter ALWAYS. If the call is transferred to the route list or element specified, or if one of the times specified in field TIMES is compatible with one of table times specified in TIMEODAY enter TOD. Up to 14 of table times specified in TIMEODAY can be entered. No spaces are left between the times. If the call's ability to terminate is regulated (throttled) on a Meridian Digital Centrex (MDC) group, enter NARS. ***Note:*** NARS is a valid entry for table IBNRTE only. It appears in other routing tables such as OFRT, RTEREF, HNPACONT, and FNPACONT, but is not a valid entry for these tables. ***Note:*** The CND NRR option is not supported in GSM offices. If the call is transferred to the route list or element specified or if the NCOS assigned to the call passes the class of service screening enter COSMAP.

IBNRTE selector CND (continued)

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and Action
			If a call is transferred to the route list or element specified, or if the call characteristic specified is assigned in table CALLCHR enter CALLCHR. If a call is transferred to a route list or element based on the percentage specified on a random basis, enter RND. If the call is transferred to a route list or element based on the origination of the call, enter SITE. If the call is transferred to a route list or element based on the SNPA of the call enter SNPA.

CNDSEL = TOD

If the entry for field CNDSEL is TOD, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and Action
TODNAME		alphanumeric (1 to 16 characters)	*Time of day name* Enter the table name assigned to the entry in TIMEODAY to which translation routes.
TIMES		alphanumeric (up to 14 characters)	*Times* enter the times at which the transfer to another route list or element can occur. This vector can be up to 14 characters in length.

CNDSEL = NARS

If the entry for field CNDSEL is NARS, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and Action
NARNAME (BCS36-)		alphanumeric (1 to 16 characters) or NILNAR	*Network access register name* Enter the network access register (NAR) name from field NARNAME in table NARDATA, which specifies the conditional route for the call. Enter NILNAR to specify the use of the network class of service (NCOS) or customer group NAR.

CNDSEL = COSMAP

If the entry for field CNDSEL is COSMAP, datafill the following subfields.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
COSMAP		alphanumeric (up to 8 characters)	*Class of service map* Enter the table name of the entry in COSMAP that contains the NCOS mapping upon which the transfer is dependent.

CNDSEL = CALLCHR

If the entry for field CNDSEL is CALLCHR, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
CALLCHR		DIGDATA SAT	*Call characteristic* Enter the characteristic of the call upon which transfer is dependent. DIGDATA is for routing on digital facilities. SAT indicates the call has been previously routed over a satellite link.

CNDSEL = MIGRATE

Use condition MIGRATE if translation proceeds as specified in field CONDRTE unconditionally.

IBNRTE selector CND (continued)

This condition occurs when the terminator has the MIGRATE option. Translation does not proceed unconditionally.

Datafill field CNDSEL as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CNDSEL	MIGRATE	Enter MIGRATE if the call is to be transferred to a route list or element based on the assignment of the MIGRATE line option to the terminating DN.

CNDSEL = RND

If the entry for field CNDSEL is RND, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
PERCENT		0 to 100	*Percent* Enter the percentage of calls affected.

CNDSEL = SITE

If the entry for field CNDSEL is SITE, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
SITE		alphanumeric (up to 8 characters)	*Site* Enter the table name of the site that must be datafilled.

CNDSEL = SNPA

If the entry for field CNDSEL is SNPA, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
SNPA_CND_RTE		alphanumeric	*Serving numbering plan area conditional route* Enter the valid SNPA conditional route which is desired.

CNDSEL = EA

If the entry for field CNDSEL is EA, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
EA_CND_RTE		INTNL, PIC, CAC	*Equal access conditional route* Enter the equal access conditional route.

CNDSEL = TOPEACLS

If the entry for field CNDSEL is TOPEACLS, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
TOP_CND_RTE		alphanumeric	*Top conditional route* Enter the top conditional route.
CONDRTE		see subfields	*Conditional route* This field consists of subfields RTETYPE, RTEREF, SKIPNUM, EXTRTEID, TABNAME, and INDEX.

IBNRTE selector CND (continued)

If the call is transferred to another route list in the same table, then datafill fields RTETYPE and RTEREF as follows:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		ST	*Route type* Enter ST as the route type.
RTEREF		0 to 1023	*Route reference number* Enter the route reference number. It must be a greater number in the same table, to which translation transfers when condition is met.

If a call skips to another route element within the same route list, then complete fields RTETYPE and SKIPNUM as follows.

13Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		SK	*Route type* Enter SK as the route type.
SKIPNUM		0 to 7	*Skip number* Enter the number of elements to skip within the same route list, to which translation is routed when condition is met.

If the call is transferred to another route list in any route table, then datafill fields RTETYPE and EXTRTEID as follows.

14 Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		T	*Route type* Enter T as the route type.
EXTRTEID		see subfields	*External route identifier* This field consists of subfields TABNAME and INDEX.

14 Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
TABNAME		OFRT IBNRTE IBNRT2 IBNRT3 IBNRT4 OFR2 OFR3 OFR4	*Table name* Enter the table name to which translation has to transfer when condition is met. An entry outside this range is invalid.
INDEX		0 to 1023	*Route reference index* Enter the table route reference index number in the route to which translation transfers when the condition is met.

Datafill example

Example 1

This is an example of extending a route list that requires more than eight route elements. The last element in the route list contains the conditional selector ALWAYS and transfers to a higher route list in same table.

Datafill example for table IBNRTE selector CND

```
RTE                                          RTELIST

_____________________________________________________

  1                        (CND  ALWAYS   ST   25)$
```

IBNRTE selector CND (continued)

Example 2

If the call passes class of service when the class of service mapping MAP1 is performed on its NCOS or time-of-day NCOS, then skip three elements in the route list. Otherwise, go to the next element in the route list.

Datafill example for table IBNRTE selector CND

```
RTE                                          RTELIST
______________________________________________________
  2                 (CND  COSMAP   MAP1   SK    3)$
```

Example 3

If this call has previously been over a satellite link, go to route list 35 in table OFRT. Otherwise, go to the next element in the route list.

Datafill example for table IBNRTE selector CND

```
RTE                                          RTELIST
______________________________________________________
  5            (CND  CALLCHR   SAT  T   OFRT   35)$
```

Example 4

If this is a data call using ESN signaling and must be routed over specific digital facilities, go to the route list 36 in table OFRT. Otherwise go to the next element in route list.

Datafill example for table IBNRTE selector CND

```
RTE                                                RTELIST

_____________________________________________________________

  6          (CND  CALLCHR  DIGDATA   T OFRT   36)$
```

Example 5

If the time is equal to table times specified in TIMEODAY for routes 4 and F for time of day name CUST01, skip one element in the route list.

Datafill example for table IBNRTE selector CND

```
RTE                                                RTELIST

_____________________________________________________________

 28                (CND  TOD  CUST01  4F  SK   1)$
```

Example 6

This is an example of a call distributed equally to two trunk groups.

Datafill example for table IBNRTE selector CND

```
TABLE IBNRTE
_____________________________________________________________

520 (CND MIGRATE SK 2)(DN 214 520 4)(CND ALWAYS SK 1)(T OFRT 895) $
```

IBNRTE selector CND (continued)

Example 7

This is an example of calls distributed over more than two route lists.

Datafill example for table IBNRTE selector CND

```
RTE                                                RTELIST

_____________________________________________________________

  1 (CND RND 10 ST 2) (CND RND  10 ST 3) (CND RND 10 ST 4)$
```

IBNRT2 (first RND) gets 10% of the calls. IBNRT3 (second RND) gets 10% of the remainder that did not go to the first route. IBNRT4 gets another 10% of the remainder and so on. In absolute percentage, IBNRT3 gets 9% of the original calls (10% of 90% of the original calls).

Example 8

This is an example of calls that are routed based on the origination.

Datafill example for table IBNRTE selector CND

```
RTE                                                RTELIST

_____________________________________________________________

1 (CND SITE HOST ST 2)(CND SITE REM1ST 3)(CND SITE REM2ST4)$
2 (S N N N GROUP0) (S N N N GROUP1) (S N N N GROUP2)$
3 (S N N N GROUP1) (S N N N GROUP0) (S N N N GROUP2)$
4 (S N N N GROUP2) (S N N N GROUP0) (S N N N GROUP1)$
```

Route element 1 sends the call on route list 2 if the call origination is on HOST, on route list 3 if the call is on site REM1, and on route list 4 if on site REM2.

Example 9

An example of datafill for table IBNRTE, along with conditional selector MIGRATE follows:

IBNRTE selector CND (end)

MAP display example for table IBNRTE selector CND

```
TABLE IBNRTE
_____________________________________________________________________________

520 (CND MIGRATE SK 2)(DN 214 520 4)(CND ALWAYS SK 1)(T OFRT 895) $
```

Table history

SN06 (DMS)

Added CND and NOT conditional routes to table IBNRTE selector CND for feature activity A00001207.

IBNRTE selector DN

Selector DN

Route selector DN (directory number) is required when dialed digits are converted into a DN that terminates on the switching unit. It specifies whether or not expensive route warning tone (ERWT) is applied.

Datafill

The following table lists datafill for table IBNRTE selector DN.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, SNPA, OFCCODE, EXP, and DMI.
IBNRTSEL		DN	IBN route selector. Enter DN.
SNPA		numeric	Serving NPA. Enter the serving NPA of the DN to which the call is terminated.
OFCCODE		numeric (0 to 7 digits)	Office code. Enter the officecode of the DN to which the call is terminated.
EXP		N or Y	Expensive. Enter N (no). ERWT cannot be applied to a line.
DMI		numeric (0 to 32 767)	Digit manipulation index. Enter the index into table DIGMAN.
STNLEN		numeric (1 to 8)	Station length. Used to identify the station code length of the terminating agent.

Datafill example

The following example shows a single-element route list with route reference index 2 and the selector DN. All calls to this route list are terminated on DN 613-226-2311. The last four digits are defined in table DIGMAN index 0. The station length is 4. No ERWT is provided.

IBNRTE selector DN (end)

Datafill example for table IBNRTE selector DN

```
RTE                          RTELIST
_____________________________________________________
2                           ( DN 613 226 N 0 4)     $
```

Selector EOW

The EOW selector is used for the MDC Enhanced WATS feature which allows the operating company to choose different interexchange carriers to handle their OUTWATS calls.

The EOW route selector provides the following capabilities:

- It screens the wide area telephone service (WATS) traffic coming through the route and directs the traffic through different virtual facility groups (VFG) depending on the carrier and called band, by specifying a carrier and a band set in the route. This route is then screened for the authorization to route particular WATS traffic.
- It routes calls to a VFG for retranslation. All routes that use the EOW route selector are forced to route to a VFG for retranslation, billing, and imposing limits on the WATS traffic originating from a customer group.
- It treats the call as an MDC Enhanced WATS call. As long as the VFG has a line attribute in table LINEATTR with a line class code of EOW, the call is treated as an Enhanced WATS call during retranslation out of the VFG.
- It provides an Enhanced WATS route that can be included in a list of routes using automatic route selection (ARS).
- It provides a billing band number that can be different depending on the route taken. Note that this band number is used for billing, but is not used in any way for band screening.

The carrier for an MDC Enhanced WATS call is known as a WIC (WATS interexchange carrier). The WIC is determined in the first leg of translations prior to retranslating out of the VFG. The EOW selector designates a WIC for retranslations to use. The line and group primary interexchange carriers (PIC) do not affect the choice of a WIC.

IBNRTE selector EOW (continued)

Datafill

The following table lists datafill for table IBNRTE selector EOW.

Field descriptions for table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL, OHQ, CBQ, EXP, WIC, BANDSET, RSENABLE, BAND, VFG, and DMI.
IBNRTSEL		EOW	*IBN route selector* Enter EOW.
OHQ		Y or N	*Off-hook queuing* Enter Y (yes) if off-hook queuing is allowed on this route. Otherwise, enter N (no).
CBQ		Y or N	*Call back queuing* Enter Y if call back queuing is allowed on this route. Otherwise, enter N.
EXP		Y or N	*Expensive* Enter Y if this route is considered an expensive route. Otherwise, enter N.
WIC		alphanumeric (1 to 16 characters)	*Enhanced WATS interexchange carrier* This is the interexchange carrier that is allowed for this route. Enter a carrier name from table OCCINFO.
BANDSET		alphanumeric (1 to 8 characters)	*Band set* This is the key into table BANDSETS that is used in conjunction with the WIC and the called digits to determine if this route is allowed. Enter the name of a band set from table BANDSETS.
RSENABLE		Y or N	*Route selection enable* Enter Y or N to indicate whether or not route selection screening should be performed for this route.

Field descriptions for table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BAND		0 to 126	*Band* This is the band number that appears in the billing record generated for the call as it routes out of the VFG. This band is not used for band screening.
VFG		alphanumeric (1 to 6 characters)	*Virtual facility group* Enter the name of an VFG from table VIRTGRPS. This is the VFG that is used for retranslation.
DMI		1 to 32 767, 0	*Digit manipulation index* This field is used to specify a digit manipulation index for the route. This is used as a key into table DIGMAN and modifies the called number digits. Note that band screening is performed prior to using the DMI. If no digit manipulation is required, enter 0 (zero).

Datafill example

An example of datafill for two route lists that use the EOW selector is shown below. Route 10 contains one EOW route element in the route list. Route 11 shows part of a route list with three EOW elements in the list.

Datafill example for table IBNRTE selector EOW

```
RTE                                              RTELIST

_____________________________________________________________

 10 (EOW N N N   CARR1   INTRALAT N 101  EOV6   0)$
 11 (EOW N N N   CARR1     GLOBAL Y   1  EOV1   0) (EOW N N N   CARR2
 10THRU15 Y   3  EOV2   0) (EOW N N N   CARR4   10THRU29 Y   4  EOV4
 0)$
```

IBNRTE selector IBNRX

Datafill

The following table lists datafill for table IBNRTE selector IBNRX.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfield IBNRTSEL.
IBNRTSEL		IBNRX	*IBN route selector* Enter IBNRX.

Datafill example

An example of datafill for the IBNRX selector is shown below.

Datafill example for table IBNRTE selector IBNRX

```
RTE                                                    RTELIST

_____________________________________________________________

300                                                    (IBNRX)$
```

IBNRTE selector INS

Selector INS

This selector is used to insert an element into the route list. This selector is only used for editing stored tuples in the list. The element is inserted immediately ahead of the element that is replaced with INS. The replaced element is restored and new data is prompted for the element inserted.

IBNRTE selector ISA

Selector ISA

The Uniform Outpulsing (UOP) Enhancement feature includes the routing of Integrated-services Access (ISA) calls. This feature allows the host application to derive a 10-digit DN for UOP/ISA calls that have a dialing number of seven digits or less.

Selector ISA (Integrated-services Access) allows rerouting of calls using ISA. Without the ISA feature, calls between two switches of different call types require that each have its own trunk group. With the ISA feature, calls of different call types can coexist on the same trunk group. The call type is defined once for each route.

Datafill

The following table describes field names, subfield names, and valid data ranges for Table IBNRTE, selector ISA with UOP/ISA enhancements.

Field descriptions for Table IBNRTE using the UOP/ISA Enhancement Feature (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, OHQ, CBQ, and EXP.
	RTESEL	ISA	IBN route selector. Enter ISA with the line (L) selector only. Or enter ISA with the variable (V) selector and the L (line) route selector. Either route selector scenario must be entered.
	CONNTYPE	D	Connection type. System logic does not use this field. Enter D to satisfy table control. An entry outside of this range is invalid.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code in Table CLLI where translation routes.
	DMI	0 to 32,767	Digit manipulation index. Enter a value that corresponds to the tuple from Table DIGMAN that provides digit manipulation commands.

Field descriptions for Table IBNRTE using the UOP/ISA Enhancement Feature (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CANCNORC	Y or N	Cancel normal charge. Enter Y if the type of call is a direct dial (DD) call and the charge is canceled. Otherwise, enter N. .
	TENDIG_ REQD	Y or N	Ten digits required. Enter Y, so that the host application can determine if a ten digit DN should be derived. Otherwise, enter N. Enter N, if the host application can use UOP to manipulate and outpulse the dialed number to 7 digits.

Datafill example

The following example shows datafill specific to Uniform Outpulsing with the ISA route and the UOP route selector.

The Uniform Outpulsing enhancement feature extends the ability of the route selector UOP/ISA to the Integrated Business Networks (IBN) routing tables.This feature adds field TENDIG_REQD to Tables IBNRTX, which includes Tables IBNRTE, IBNRT2, IBNRT3, and IBNRT4.

Note: A value, other than NIL, must be placed in field DMI.

Datafill example for Table IBNRTE selector ISA

```
RTE                                                RTELIST
_____________________________________________________________

 11                          ( UOP D MTRLPQ0201T0 1000 N N) $
 55       ( ISA N N N PRIIBNT2NTOG1 PUB NONE N N 1001) $
```

IBNRTE selector ISA (continued)

The following table describes field names, subfield names, and valid data ranges for Table IBNRTE, selector ISA.

Field descriptions for Table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, OHQ, CBQ, and EXP.
ISALOG		ISA	IBN route selector. Enter ISA.
OHQ		Y or N	Off-hook queuing. Enter Y (yes) if off-hook queuing is required for ISA routing. Otherwise, enter N (no). ISDN PRI trunks do not support OHQ, enter N.
CBQ		Y or N	Call back queuing. Enter Y if call back queuing is required for ISA routing. Otherwise, enter N. ISDN PRI trunks do not support CBQ, enter N.
EXP		Y or N	Expensive. Enter Y if expensive route and expensive route warning tone is applied. Otherwise, enter N.
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in Table CLLI to which translation has to route.
CALLTYPE		TIE, INWATS, WATS, FX, PVT, PUB, LDS, or ASDS	Call type. Enter the ISA call type used to determine which call type throttling is used.

If WATS is entered for CALLTYPE, datafill fields ZONE, NPI and DMI.

Conditional datafill for Table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ZONE		0 to 9, A, B, C, or AUTO	OUTWATS zone. Enter the OUTWATS zone number included in the NSF selector.
NPI		E164, PVT, or UNKNOWN	Number plan identifier. Enter the number plan identifier which is required. Field NPI cannot be datafilled as UNKNOWN.

IBNRTE selector ISA (continued)

Conditional datafill for Table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DMI		0 to 31999	Digit manipulation. Enter the digit manipulation index used for called party number modification prior to transmission.
CARRIER		alphanumeric (1 to 16 characters) or $	Enter a valid carrier name from Table OCCINFO to indicate interLATA OUTWATS. Enter $ to indicate intraLATA OUTWATS.

If PUB is entered for CALLTYPE, datafill fields OATYPE, TNS, NPOS and DMI.

Conditional datafill for Table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
OATYPE		NONE, OP, or OM	Operator access type. Enter the type of operator access that is required on this call.
TNS		0 to 999, N, or C	Transit network. Enter the transit network number that is requested in the SETUP message. If no TNS is required, enter N. If the TNS is determined from the calls originator, enter C.
NPOS		Y or N	Number identification. Enter Y if no calling number identification is required. Enter N if calling number identification is required for ONI or ANI-failure calls from SC/TOPS trunks. The default is N.
DMI		0 to 31999	Digit manipulation. Enter the digit manipulation index used for called party number modification prior to transmission.

IBNRTE selector ISA (end)

If LDS and ASDS is entered for CALLTYPE, datafill fields NPI and DMI.

Conditional datafill for Table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
NPI		E164, PVT, or UNKNOWN	Number plan identifier. Enter the number plan identifier which is required. Field NPI cannot be datafilled as UNKNOWN.
DMI		0 to 31999	Digit manipulation. Enter the digit manipulation index used for called party number modification prior to transmission.

Datafill example

The following example shows datafill for an INWATS ISA route with a DMI index of 122.

On-hook queuing and callback queuing are applicable. The CLLI is BNRCENT. Expensive route warning tone is also applicable. Call back queuing is allowed for the route element.

Datafill example for Table IBNRTE selector ISA

```
RTE                                                RTELIST
_____________________________________________________________

013             (ISA Y Y Y   BNRCENT INWATS   122)$
```

Table history

CCM15

Release 15 introduces field TENDIG_REQD in Tables IBNRTX. When field TENDIG_REQD is set to Y, the host application derives the 10-digit DN. The host application then manipulates and outpulses the 10-digit DN, not the DN that was dialed.

IBNRTE selector IW

Selector IW

This selector is required when the call is INWATS to the customer group.

Datafill

The following table lists datafill for table IBNRTE selector IW.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL, LINEATTR, NXX, VFG, and DMI.
IBNRTSEL		W	*IBN route selector* Enter IW.
LINEATTR		alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute of the virtual line being terminated on. It is used to get the charge class and serving NPA of the line.
NXX		numeric (table of 3 digits)	*NXX Code* Enter the NXX code of the virtual line being terminated on. This is required in case the billing number provided by the virtual facility group (VFG) is less than seven digits.
VFG		alphanumeric (1 to 6 characters)	*Virtual facility group* Enter the name of the VFG. The VFG is of the incoming IBN type and specifies the billing number and customer group, being entered.
DMI		0 to 32767	*Digit manipulation index* Enter the index into table DIGMAN, used to retranslate the call to the desired destination. Enter 0 (zero) if not required.

IBNRTE selector IW (end)

Datafill example

An example of datafill for a single element route list with route reference index 3 and the IW selector is shown below.

The line attribute for the INWATS line is 5, and the NXX is 226.

The VFG and the DIGMAN index are INWATS and 6 respectively.

Datafill example for table IBNRTE selector IW

```
RTE                                              RTELIST

_____________________________________________________________

  3                     (IW    5 226 INWATS     6)$
```

IBNRTE selector LINE

Selector LINE

Route selector LINE is required when dialed digits are converted into a ten-digit directory number (DN) that terminates on the switching unit, and complicated outpulsing or tone detection is required.

To support option AUDBLRNG, an option list has been added. The reformatting capability is currently not supported for tables using old table control. This capability is provided in BCS33.

Datafill

The following table lists the datafill for table IBNRTE selector LINE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, SNPA, CO_CODE, DEFG_DIGS, IDGTIME, DMI, and OPTIONS.
IBNRTSEL		LINE	IBN route selector. Enter LINE.
SNPA		numeric	Serving NPA. Enter the serving NPA of the DN to which the call is terminated.
CO_CODE		numeric (table of 3 digits)	NXX Code. Enter the three-digit NXX code of the DN to which the call is terminated.
DEFG_DIGS		numeric (4 digits)	DEFG digits. Enter the four DEFG digits of the DN to which the call is terminated.
IDGTIME		0 to 63	Inter-digital timing. Enter the inter-digital timing in 10 ms intervals.

IBNRTE selector LINE (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DMI		0 to 32 767	Digit manipulation index. Enter the index into table DIGMAN that stores the outpulsing and tone detection data.
OPTIONS		AUDBLRNG or JAPANDID	Options. This is a vector where either AUDIBLE RING or JAPAN DID can be entered. When the JAPAN DID option is entered, the direct inward dialing functionality is performed. The JAPAN DID option is not compatible with the AUDIBLE RING option. The following message is displayed when an attempt is made to datafill both options: `JAPAN DID and AUDIBLE RING are incompatible options.` ***Note:*** For dump and restore, the options list must be datafilled with a $ to indicate the end of the options list. This applies when restoring BCS32 or later loads.

If JAPANDID is datafilled in field OPTION, subfield PASTIMER must be datafilled.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
PASTIMER		0 to 63	Primary answer signal timer. This field contains a number between 0 and 63 that represents primary answer signal timing in milliseconds. A value of 0 causes no timing to occur. In this case, physical ringing is applied indefinitely until either the PABX provides the primary answer or the originator abandons the call.

IBNRTE selector LINE (end)

Datafill example

The following example shows sample datafill for table IBNRTE selector LINE.

All calls to this route list are terminated on DN 613-621-1235. The interdigital timing is 4 ms. The outpulsing and tone detection data defined in table DIGMAN index number 4.

MAP display example for table IBNRTE selector LINE

```
RTE                RTELIST
_____________________________________________________________
5                ( LINE 613 621 1235  4  4 AUDBLRNG)   $
```

IBNRTE selector LOC

Selector LOC

With this selector the user specifies that routing terminates on a specific location in the customers network.

Datafill

The following table lists datafill for table IBNRTE selector LOC.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
LINEATTR		alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute number.
LOCNCODE		vector of up to 5 digits	*Location code* Enter a customer specific location code.

Datafill example

An example of possible datafill for selector LOC is shown below.

Datafill example for table IBNRTE selector LOC

```
RTE                                              RTELIST

_____________________________________________________________

 13                                    (LOC   65 15642)$
```

IBNRTE selector N

Selector N

IBNRTE selector N is required when the digits outpulsed are not identical to the digits dialed—for example, prefixing or deletion of digits.

The digits prefixed or deleted are defined in table DIGMAN.

This route selector specifies whether or not the route is call back queue-able, off-hook queue-able or both, and expensive route warning tone is applied.

Dump and restore

With subsequent BCS upgrades, field MBG automatically sets to N (no).

Datafill

The following table lists datafill for table IBNRTE selector N.

Field descriptions for table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, OHQ, CBQ, EXP, CLLI, and DMI.
IBNRTSEL		N	IBN route selector. Enter N.
OHQ		Y or N	Off-hook queuing. Enter Y (yes) if off-hook queuing is allowed on this route. Otherwise, enter N (no).
CBQ		Y or N	Call back queuing. Enter Y if call back queuing is allowed on this route. Otherwise, enter N.
EXP		Y or N	Expensive. Enter Y if an expensive route warning tone is applied. Otherwise, enter N.
MBG		Y or N	Multiswitch business group. Enter Y if the trunk group is capable of handling multiswitch business group (MBG) service; otherwise, enter N and the routing remains the same.

IBNRTE selector N (end)

Field descriptions for table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to which translation is routed.
DMI		0 to 32 767	Digit manipulation index. Enter the index into table DIGMAN that changes the digits outpulsed.

Datafill example

The following example shows datafill for an intermediate route element with the selector N.

Off-hook and call back queuing are allowed. Expensive route warning tone is applied.

The trunk group has table code BNRCENT assigned in the CLLI. The digits prefixed or deleted are defined in index number 8 in table DIGMAN.

Datafill example for table IBNRTE selector N

```
RTE                    RTELIST
_____________________________________________________________

13                   ( N Y Y Y Y       BNRCENT     8)    $
```

IBNRTE selector NIL

Selector NIL

This selector allows deletion of elements from the route list. This selector is only used for editing the route list and is not stored in the list. When the IBNRTSEL field of the required element is replaced with NIL, the element is deleted.

Datafill

Field names, subfield names, and valid data ranges for table IBNRTE, selector NIL, are described below.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfield IBNRTSEL.
IBNRTSEL		NIL	*IBN route selecto* Enter NIL.

IBNRTE selector NOT

Selector NOT

This route selector is required for negative conditional branching.

This route selector is the opposite of route selector CND. It allows a call to skip to another route list within the same table, skip a number of elements within the same route list or transfer to a route list in a different route table, based on whether the call meets a certain condition.

The condition is dependent upon the value of one of the following parameters:

- time of day
- class of service
- call characteristic

The following condition selectors are not used with route selector NOT: Always, Random, and Site. They are only used with route selector CND.

Field descriptions

Field names, subfield names, and valid data ranges for table IBNRTE, selector NOT, are described below.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*RouteList* This field consists of subfields IBNRTSEL, CONDITION, and CONDRTE.
IBNRTSEL		NOT	*IBN route selector* Enter NOT.

IBNRTE selector NOT (continued)

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
CONDITION		see subfields	*Condition* This field consists of subfield CNDSEL. CALLCHR and RRL. An entry outside of this range is invalid.
CNDSEL		ALWAYS NARS COSMAP TOPEAXFR TOPEAALT TOPEACLS INTERLATA SITE TOD EA SNPA NRR RND CALLCHR RRL MIGRATE	*Condition selector* Enter the condition selector required. If the call's ability to terminate is regulated (throttled) on a Meridian Digital Centrex (MDC) group, enter NARS. ***Note:*** NARS is a valid entry for table IBNRTE only. It appears in other routing tables such as OFRT, RTEREF, HNPACONT, FNPACONT, but is not a valid entry for these tables. If the call is not transferred to the route list or element specified, or if one of the times specified in field TIMES is compatible with table time specified in TIMEODAY, enter TOD. If the call is transferred to the route list or element specified, or if the NCOS assigned to the call does not pass the class of service screening, enter COSMAP. If a call is transferred to the route list or element specified, or if the call does not have the call characteristic specified, enter CALLCHR. If the call is transferred to the route list or element specified, or if the call does not have route restriction level specified, enter RRL.

IBNRTE selector NOT (continued)

If the entry for field CNDSEL is NARS, datafill the following subfields.

Conditional datafill for table IBNRT

Field	Subfield or refinement	Entry	Explanation and action
NARNAME (BCS36-)		alphanumeric (1 to 16 characters) or NILNAR	*NetworkAccessRegisterName* Enter the network access register (NAR) name from field NARNAME in table NARDATA, which specifies the conditional route for the call. Enter NILNAR to specify the use of the network class of service (NCOS) or customer group NAR.

If the entry for field CNDSEL is TOD, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
TODNAME		alphanumeric	*Time of day name* Enter the name assigned to the entry in table TIMEODAY to which translation is routed.
TIMES		alphanumeric (up to 14 characters)	*Times* Enter the times at which the transfer to another route list or element cannot occur.

If the entry for field CNDSEL is COSMAP, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
CNDSEL		COSMAP	*Condition selector* Enter COSMAP as the type of condition tested.
COSMAP		alphanumeric	*Class of service map* Enter the name of the entry in table COSMAP that contains the NCOS mapping upon which the transfer is dependent.

IBNRTE selector NOT (continued)

If the entry for field CNDSEL is CALLCHR, datafill the following subfields.

Call characteristics are listed in table CALLCHR.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
CNDSEL		CALLCHR	*Condition selector* Enter CALLCHR as the type of condition tested.
CALLCHR		alphanumeric	*Call characteristic* Enter the name of the entry in table CALLCHR that contains the characteristic upon which the transfer is dependent.

If the entry for field CNDSEL is RRL, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RRL		0 to 3	*Route restriction level* Enter the route restriction level.

If the entry for field CNDSEL is SITE, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
SITE		alphanumeric (up to 8 characters)	*Site* Enter the table name of the site that must be datafilled.

IBNRTE selector NOT (continued)

If the entry for field CNDSEL is SNPA, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
SNPA_CND_ RTE		alphanumeric	*Serving numbering plan area conditional route* Enter the valid SNPA conditional route which is desired.

If the entry for field CNDSEL is EA, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
EA_CND_RTE		INTNL, PIC, CAC	*Equal access conditional route* Enter the equal access conditional route.

If the entry for field CNDSEL is TOPEACLS, datafill the following subfield.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
TOP_CND_ RTE		alphanumeric	*TopConditionalRoute* Enter the top conditional route.

If the entry for field CNDSEL is RND, datafill the following subfields.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
PERCENT		0 to 100	*Percent* Enter the percentage of calls affected.
CONDRTE		see subfields	*Conditional route* This field consists of subfields RTETYPE, TREREF, SKIPNUM, EXTRTEID, TABNAME, and INDEX.

IBNRTE selector NOT (continued)

If call is transferred to another route list in the same table, datafill fields RTETYPE and RTEREF as follows:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		ST	*Route type* Enter ST as the route type.
RTEREF		0 to 1023	*Route reference number* Enter the route reference number. It must be a higher number than that found in table to which it is translated to when the condition is not met.

If the call skips to another route element within the same route list, complete fields RTETYPE and SKIPNUM as follows:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		SK	*Route type* Enter SK as the route type.
SKIPNUM		0 to 7	*Skip number* Enter the number of elements to skip within the same route list that translation is routed to when condition is not met.

If a call is transferred to another route list in any route table, datafill fields RTETYPE and EXTRTEID as follows:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETYPE		T	*Route type* Enter T as the route type.
EXTRTEID		see subfields	*External route identifier* This field consists of subfields TABNAME and INDEX.

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
TABNAME		OFRT IBNRTE IBNRT2 IBNRT3 IBNRT4 OFR2 OFR3 OFR4	*Table name* Enter the table name to which translation transfers when condition is not met. An entry outside of this range is invalid.
INDEX		0 to 1023	*Route reference index* Enter table route reference index number in the route to which translation transfers when condition is met.

Use condition MIGRATE if translation proceeds as specified in field CONDRTE unconditionally.

This condition occurs when the terminator has the MIGRATE option. The translation does not proceed unconditionally.

Datafill field CNDSEL as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CNDSEL	MIGRATE	Enter MIGRATE if the call is to be transferred to a route list or element based on the assignment of the MIGRATE line option to the terminating DN.

Datafill example

Example 1

In the first tuple, if the call does not pass class of service when the class of service mapping MAP1 is performed on its NCOS/Time of Day NCOS, it skips three elements in the route list. Otherwise, it goes to the next element in the route list.

In the second tuple, the call is throttled using the network access register (NAR) condition selector to route the call to NARGRP1.

IBNRTE selector NOT (continued)

Datafill example for table IBNRTE selector NOT

```
RTE                                          RTELIST
_____________________________________________________

 28                (NOT   COSMAP   MAP1   SK   1)$
 12                    (CND       NARS   NARGRP1)$
```

Example 2

If this call has not previously been transmitted over a satellite link, go to route list 35 in table OFRT. Otherwise, route directly to treatment.

Datafill example for table IBNRTE selector NOT

```
RTE                                          RTELIST
_____________________________________________________

  5             (NOT  CALLCHR SAT   T   OFRT  35)$
```

Example 3

If the time is not equal to the times specified in table TIMEODAY for routes 4 and F for time of day name CUST01, then skip one element in the route list.

Datafill example for table IBNRTE selector NOT

```
RTE                                        RTELIST
_____________________________________________________

 28                (NOT TOD  CUST01  4F  SK   1)$
```

Example 4

An example of datafill for table IBNRTE, along with the unconditional selector MIGRATE follows.

IBNRTE selector NOT (end)

MAP display example for table IBNRTE selector NOT

```
TABLE IBNRTE
_____________________________________________________________________________

520 (CND MIGRATE SK 2)(DN 214 520 4)(CND ALWAYS SK 1)(T OFRT 895) $
```

Table history

SN06 (DMS)

Added CND and NOT conditional routes to table IBNRTE selector NOT for feature activity A00001207.

IBNRTE selector OW

Selector OW

IBNRTE route selector OW (OUTWATS) is required when call is OUTWATS from a customer group. This route can translate directly to one of the following options:

- a code in table CLLI
- another route list in table IBNRTE
- other types of route tables
- a virtual facility group

Use of route selector OW causes the call to index into table ZONEORDR, using the SNPA that is associated with the call. For details on the SNPA, refer to table HNPACONT.

This route selector specifies whether or not the route element has the following capabilities:

- call back
- off hook
- queuing
- expensive route warning tone

If the route is translated into a code in table CLLI, complete fields RTE and RTELIST as follows.

Datafill example

The following table describes field names, subfield names, and valid data ranges for table IBNRTE, selector OW.

Conditional datafill for table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, OHQ, CBQ, EXP, ZONE, ROUTE, and DMI.
IBNRTSEL		OW	IBN route selector. Enter OW.

Conditional datafill for table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OHQ		Y or N	Off-hook queuing. Enter Y (yes) if off-hook queuing is allowed on this route. Otherwise, enter N (no).
CBQ		Y or N	Call back queuing. Enter Y if call back queuing is allowed on this route. Otherwise, enter N.
EXP		Y or N	Expensive. Enter Y if an expensive route and expensive route warning tone is applied. Otherwise, enter N.
ZONE		0 to 13	OUTWATS zone. Enter the OUTWATS zone number for the virtual circuit. The zone for which the call is destined must be valid in this zone (see table ZONEORDR) to use the route.
ROUTE		see subfields	Route. This field consists of subfields RTETYPE and CLLI.
RTETYPE		S, V, or T	Route type. Enter the route type.

If the entry for field RTETYPE is S, datafill the following subfields:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (up to 16 characters)	Common language location identifier. Enter the code that is assigned in table CLLI to which translation is routed.
DMI		0 to 32 767	Digit manipulation index. Enter the index into table DIGMAN which converts the digits dialed into digits that can be used for POTS OUTWATS translations.

IBNRTE selector OW (continued)

If the entry for field RTETYPE is T, datafill the following subfields:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
EXTRTEID		see subfields	External route identifier. This field consists of subfields TABNAME and INDEX.
TABNAME		IBNRTE, OFRT, IBNRT2, IBNRT3, IBNRT4, OFR2, OFR3, or OFR4	Table name. Enter the table name to which translation is routed. An entry outside of this range is invalid.
INDEX		0 to 1023	Key. Enter the index into the specified table.

If the entry for field RTETYPE is V, datafill the following subfields:

Conditional datafill for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
VFG		alphanumeric (1 to 6 characters)	Virtual facility group. Enter the name of the virtual facility group to which translation is routed. Final route is defined by the translation based on digits in the called number and the DIGMAN index specified.
DMI		0 to 32 767	Digit manipulation index. Enter the index into table DIGMAN that converts the digits dialed into one that can be used for POTS OUTWATS translations.

Datafill example

Example 1

The following example shows datafill for an intermediate element in a route list for an OUTWATS call that routes directly to the trunk group assigned table code BNRCENT in the CLLI.

Expensive route warning tone is applicable. Off-hook and callback queuing are allowed for the route element.

The OUTWATS zone is 2. The POTS OUTWATS DN is defined in index 2 of table DIGMAN.

Datafill example for table IBNRTE selector OW

```
RTE                         RTELIST
_____________________________________________________
                          (OW   Y Y Y  2 S   BNRCENT     2)
```

Example 2

The following example shows datafill for an intermediate element in a route list for an OUTWATS call that routes to an entry in table VIRTGRP.

Expensive route warning tone is applicable but off-hook and callback queuing are not allowed for the route element.

The OUTWATS zone is 4. The POTS OUTWATS DN is defined in index 1 of Table DIGMAN.

Datafill example for table IBNRTE selector OW

```
RTE                          RTELIST
_____________________________________________________
                           (OW   N N Y  4 V    OWATS     1)
```

Example 3

The following example shows datafill for a final element in a route list for an OUTWATS call that routes to route reference index number 2 in table OFRT.

Expensive route warning tone is not applicable, but off-hook and callback queuing are allowed for the route element.

Datafill example for table IBNRTE selector OW

```
RTE                    RTELIST
_____________________________________________________
                     (OW   Y Y N  3 T      OFRT     2)   $
```

IBNRTE selector QH

Selector QH

This selector is required when a route list contains low-tariff and high-tariff routes. Any route list element after the queue head (QH) is considered more expensive than the one before the QH. This is used with call back and off-hook queuing to separate the low-tariff and high-tariff elements. The off-hook queuing waiting time associated with the route list is also required. If there is no expensive route, the last element in the route list must have this selector.

Datafill

Field names, subfield names, and valid data ranges for table IBNRTE, selector QH, are described below.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL and OHQWT.
IBNRTSEL		QH	*IBN route selector* Enter QH.
OHQWT		0 to 90	*Off-hook queuing waiting time* Enter the time in seconds for the off-hook queuing time.

Datafill example

An example of datafill for a route element with the selector QH. Any route list element after the QH is considered more expensive than the one before the QH is shown below.

The off-hook queuing time is 15 s.

Datafill example for table IBNRTE selector QH

```
RTE                                                RTELIST

_____________________________________________________________

       (QH 15)
```

IBNRTE selector RX

Selector RX

Selector RX (retranslate) is chosen when retranslation of dialed digits is required and new digits are specified in table DIGMAN.

The value RC (routing characteristics) allows the operating company to alter the routing characteristics of a call for retranslation. This option is only applicable to an ISDN call. The routing characteristics are specified in table RCNAME.

Datafill

The following table describes the field names, subfield names, and valid data ranges for table IBNRTE, selector RX.

Conditional datafill for table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, CUSTNAME, SUBGRP, NCOS, and DMI.
IBNRTSEL		RX	IBN route selector. Enter RX.
CUSTNAME		alphanumeric	Customer group name. Enter the code that is assigned to the customer group datafilled in table CUSTHEAD.
SUBGRP		0 to 7	Subgroup. Enter the customer group subgroup number.
NCOS		0 to 511	Network class-of-service number. Enter the network class-of-service number used for the retranslation environment.
DMI		0 to 32 767	Digit manipulation index. Enter the index into the digit manipulation table (DIGMAN) that contains the new called number.

Conditional datafill for table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTION		RC or $	Option. Enter RC for routing characteristics specified for ISDN calls. Enter a dollar sign ($) if no option is needed.
RCNAME		alphanumeric	RC name. Enter the routing characteristics name that is specified in table RCNAME.

Datafill example

The following example shows datafill for an intermediate route element of a route list that converts the digits dialed to NCOS number 2 of subgroup 0 for the customer group that has the code BNRMC assigned in table CLLI. (The outpulsed new number is defined in index number 3 in table DIGMAN.)

Datafill example for table IBNRTE selector RX

```
RTE                                                    RTELIST
_____________________________________________________________

   (  RX  BNRMC 0   2     3 $)
```

IBNRTE selector S

Selector S

This selector is required when the digits dialed are the digits outpulsed.

This route selector can specify whether or not the route element is call back or off-hook queue-able, and if expensive route warning tone is applied.

Dump and restore

With subsequent BCS upgrades, field MBG automatically sets to N (no).

Datafill

Field names, subfield names, and valid data ranges for table IBNRTE, selector S, are described below.

1Field descriptions for table IBNRTE (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields, IBNRTSEL, OHQ, CBQ, EXP, and CLLI.
IBNRTSEL		S	*IBN route selector* Enter S.
OHQ		Y or N	*Off-hook queuing* Enter Y if off-hook queuing is allowed on this route. Otherwise, enter N.
CBQ		Y or N	*Call back queuing* Enter Y if an expensive route and expensive route warning tone is applied. Otherwise, enter N.
EXP		Y or N	*Expensive* Enter Y if an expensive route and expensive route warning tone is applied. Otherwise, enter N.

1Field descriptions for table IBNRTE (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MBG		Y or N	*Multiswitch business group* Enter Y if the trunk group is capable of handling MBG service; otherwise, enter N and the routing remains the same.
CLLI		alphanumeric (up to 16 characters)	*Common language location identifier* Enter the code assigned in table CLLI to which translation is routed.

Datafill example

An example of datafill for a single element route list with route reference number 1 and the S selector is shown below.

The route element is not call back or off-hook queue-able and expensive route warning tone is not applied.

Datafill example for table IBNRTE selector S

```
RTE                                              RTELIST

_____________________________________________________________

  1                        (  S N N N N    BNRCENT)$
```

IBNRTE selector SG

Selector SG

Route selector SG allows selection of a trunk group from the groups in table SUPERTKG (Super Trunk Group). Table SUPERTKG joins up to 220 ISDN primary rate interface (PRI) trunk groups (defined in table TRKGRP) together into super-groups.

Use route selector SG under the following conditions:

- There are a large number of trunk groups assigned to the same dialed number (for example, to an Internet service provider [ISP]).
- There are long hold times.
- Trunks are used only for outgoing calls.

To use route selector SG, enter SG in table IBNRTE subfield IBNRTSEL. Selector SG has five subfields: ALGORITHM, ATTEMPTS, SUPERTKG_NAME, OPTIONS, and CALLTYPE.

For even call distribution across trunk groups defined in super-groups, use the following selection algorithms together:

- CHCL super-group selection algorithm in table IBNRTE with SG_CWCTH selection algorithm in table TRKGRP
- CHCCL super-group selection algorithm in table IBNRTE with SG_CCWCTH selection algorithm in table TRKGRP

Datafill

The following table lists the datafill for table IBNRTE selector SG.

Field descriptions

Field	Subfield	Entry	Explanation and action
RTE		1 to 1023 or blank	IBN route reference index. This field indicates the route reference number assigned to the route list.
RTELIST		see subfield	Route list. This field includes subfield IBNRTSEL.
	IBNRTSEL	SG	IBN route selector. This subfield indicates the route selector. Enter SG (super-group) and datafill subfields ALGORITHM, ATTEMPTS, SUPERTKG_NAME, OPTIONS and CALLTYPE.

IBNRTE selector SG (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	ALGORITHM	CHCL, CHCCL, CYC, RND	Algorithm. This subfield indicates the selection algorithm for trunk groups defined in table SUPERTKG. Enter one of the following values: • Enter CHCL for circular hunting in the clockwise direction. • Enter CHCCL for circular hunting in the counterclockwise direction. • Enter CYC for cyclical hunting. For each call routed through the super-group, the switch selects the trunk group after the last searched trunk group to search in sequence. • Enter RND for random hunting. For each call routed through the super-group, the switch randomly selects the first trunk group to search.
	ATTEMPTS	numeric (1 to 220)	Maximum number of search attempts. This subfield indicates the maximum number of trunk groups to search for a free trunk member. For ALGORITHM settings CHCL and CHCCL, set subfield ATTEMPTS to a value less than or equal to 50. This recommended limit reduces real-time use during searches in the 220 possible trunk groups in table SUPERTKG. The following warning message displays if the ATTEMPTS value exceeds 50 for ALGORITHM setting CHCL or CHCCL: `Warning : Recommended ATTEMPTS value for CHCL and CHCCL is 50` ***Note:*** The recommended ATTEMPTS value of 50 is based on a total of 23 B-channels in each trunk group. With non-facility associated signaling, reduce the ATTEMPTS value so that the total number of B-channels searched in a super-group does not exceed 1150.

IBNRTE selector SG (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	SUPERTKG_NAME	alphanumeric (1 to 16 characters)	Super-group name. This subfield indicates the super-group name from table SUPERTKG.
	OPTIONS	OPTION	Enter up to two options. The DMI option can be datafilled twice in a single tuple and both options will be displayed at the time of confirmation. However, the last DMI option entered is displayed when the tuple is listed.

IBNRTE selector SG (end)

Field descriptions

Field	Subfield	Entry	Explanation and action
	DMI	numeric (1 to 32 766)	Manipulation of called number characteristics. Enter DMI and the index number into table DIGMAN. This option allows the called number characteristics to be manipulated by the action of table DIGMAN. Table DIGMAN can, for example, specify that certain digits are replaced by other digits during translations.

Field descriptions

Field	Subfield	Entry	Explanation and action
	CALLTYPE	PUBlic, PriVaTe, WATS, ASDS, LDS, Foreign eXchange, TIE, INWATS	Call Type. This subfield allows for switching of routing call-types on an as-needed basis. • Enter PUB for public routing of calls Operator Access Type (OATYPE) has options (NONE, 0M, 0P). Transit Network Selector (TNS) has values (0 to 999, N, C). NPOS has values N, Y. • Enter PVT for private routing of calls. Facility Number (FACNUM) has values 0 to 1023. Numbering Plan Indicator (NPI) has values E164 and PVT. • Enter WATS for WATS routing of calls. Zone is ZONE_TYPE. Numbering Plan Indicator (NPI) has values E164 and PVT. CARRIER IS VECTOR OF UP TO 1 IC_INC_CARRIER_NAME'S. • Enter ASDS for ASDS routing of calls. Numbering Plan Indicator (NPI) has values E164 and PVT. • Enter LDS for LDS routing of calls. Numbering Plan Indicator (NPI) has values E164 and PVT. • Enter FX for foreign exchange routing of calls. Facility Number (FACNUM) has values 0 to 1023. Numbering Plan Indicator (NPI) has values E164 and PVT. • Enter TIE for TIE routing of calls. Facility Number (FACNUM) has values 0 to 1023. Numbering Plan Indicator (NPI) has values E164 and PVT. • Enter INWATS for INWATS routing of calls. Facility Number (FACNUM) has values 0 to 1023. Numbering Plan Indiator has values E164 and PVT.

Datafill examples

The figure that follows shows sample datafill for table IBNRTE selector SG.

MAP display example for table IBNRTE selector SG

```
RTELIST                                                    OPTIONS
-------------------------------------------------------------------
100      (SG RND 3 ISP4GRP1 $) (SG CYC 10 ISP4GRP2 $) $
```

In the route shown in the example that follows, subfield ALGORITHM is set to CHCL (clockwise circular hunting). The maximum number of search attempts (subfield ATTEMPTS) is 10.

MAP display example for table IBNRTE selector SG

```
RTELIST                                                    OPTIONS
-------------------------------------------------------------------
150                              (SG CHCL 10 ISP4GRP1 $) $
```

In the example that follows, subfield DMI (digit manipulation) is set to 1010. Translations continues with table DIGMAN, in which index value 1010 indicates a tuple that performs digit deletion, insertion, or replacement.

MAP display example for table IBNRTE selector SG

```
RTELIST                                                OPTIONS
-------------------------------------------------------------
200                ( SG CYC 10 KINCAID (DMI 1010) $ )$
```

Release history

NA017

Feature 59035336 introduces the CALLTYPE option.

IBNRTE selector T

Selector T

This selector type is required if translation has to route to another route list in table IBNRTE or another route.

Datafill

Field names, subfield names, and valid data ranges for table IBNRTE, selector T, are described below.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		0 to 1023	*IBN route reference index* Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	*Route list* This field consists of subfields IBNRTSEL and EXTRTEID.
IBNRTSEL		T	*IBN route selector* Enter T.
EXTRTEID		see subfields	*External route identifier* This field consists of subfields TABID and KEY.
TABID		IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 OFR4 OFRT RRTE TOPS or TTL4	*Table identifier* Enter the table name to which translation is routed. An entry outside this range is invalid.
KEY		0 to 1023	*Key* Enter the index into the specified table. If the entry for field TABID is TTL4 the entry for this field is between 0 and 7.

IBNRTE selector T (end)

Datafill example

An example of datafill for the last element in a route list with selector T is shown below.

Translation routes to route list 10 in table OFRT.

Datafill example for table IBNRTE selector T

```
RTE                                              RTELIST

_____________________________________________________________

                                    (  T     OFRT   10)$
```

IBNRTE selector TRMT

Selector TRMT

This selector is required if the operating company wants the switch to direct the call to treatment while routing. Prior to the addition of the TRMT selector, the switch could direct the call to tones or announcements. This would result in treatment calls not getting incremented against a specific treatment, and the call originators is not being notified with the appropriate cause value. This selector is used for ISDN and ISDN user part (ISUP) originators where the cause value is deemed important.

Datafill

The following table lists datafill for table IBNRTE selector TRMT.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTETRMT		alphanumeric (up to 4 characters)	*Route treatment* Enter the treatment the switch has selected to route the call.

Datafill example

An example of datafill for selector TRMT is shown below.

Datafill example for table IBNRTE selector TRMT

```
RTE                                          RTELIST

_____________________________________________________

  1                                    (TRMT   BNCI)$
```

Selector VFG

Selector VFG (virtual facility group) implements virtual tie trunks, virtual central office (CO) trunks, virtual inter-group trunks and other types of virtual trunks. It also actuates retranslation. The type of translation (POTS, IBN) is determined by the incoming type of VFG.

Any route that routes through a VFG and that can be queued for, must provide table OHQ, CBQ, and EXP booleans (Y or N). Queuing is allowed on size VFGs only. Queuing of type VFGs is not provided, because queuing for both ends of a trunk causes excessive glare.

The result of queuing for a VFG is the same as queuing for a trunk, and is activated by the caller in exactly the same manner. The caller must not be able to distinguish between queuing for a trunk and queuing for a VFG.

The following are some of the ways to have translation route calls to VFGs:

- Use the network selector OWT in table IBNXLA.
- Use table DN to route the call to a route list.
- Use the open-ended numbering plan through the TTTR and TTTT selectors.
- Use table ROUTE selector in IBNXLA.
- Use a network selector, such as PVT or DOD, with an STS dedicated to the customer group.

CAUTION

Option CBQ cannot be used for customer groups using trunks with selectors TTTR or TTTT

Customer groups with CBQ option cannot use trunk groups with table IBNXLA selector TTTR or TTTT.

IBNRTE selector VFG (continued)

Datafill

The following table describes field names, subfield names, and valid data ranges for table IBNRTE, selector VFG.

Field descriptions for table IBNRTE

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	IBN route reference index. Enter the route reference number that is assigned to the route list.
RTELIST		see subfields	Route list. This field consists of subfields IBNRTSEL, OHQ, CBQ, EXP, VFG, and DMI.
IBNRTSEL		VFG	IBN route selector. Enter VFG.
OHQ		Y or N	Off-hook queuing. Enter Y (yes) if off hook queuing is required for the virtual facility group. Otherwise, enter N (no).
CBQ		Y or N	Call back queuing. Enter Y if call back queuing is required for the virtual facility group. Otherwise, enter N.
EXP		Y or N	Expensive. Enter Y if an expensive route and expensive route warning tone is applied. Otherwise, enter N.
VFG		alphanumeric (1 to 6 characters)	Virtual facility group. Enter the name of the VFG to which translation routes. Final route is defined by the translation, based on digits in the called number and the DIGMAN index that is specified.
DMI		0 to 32 767	Digit manipulation index. Enter the index into table DIGMAN. This index is used to convert the dialed digits to a new set of digits which are then retranslated to route the call to the desired destination.

Datafill example

The following example shows datafill for the use of a virtual intergroup trunk from IBN customer MERL to IBN customer HURL, that exists in the same switching unit.

The access code for customer HURL is 31.

IBNRTE selector VFG (end)

Table IBNXLA is datafilled with the selector ROUTE, and routes table call to IBNRTE index 10.

Table VIRTGRP with KEY = TIETRK has INCTYPE = IBN, and CUSTCLLI = HURL.

Table IBNRTE has a single element route list with route reference index 10 and the selector VFG.

Off-hook and call back queuing are allowed, and expensive route warning tone is applied.

The VFG and the DIGMAN index are TIETRK and 0 (no digit manipulation) respectively.

Datafill example for table IBNRTE selector VFG

```
RTE                          RTELIST
_____________________________________________________________

10                        ( VFG Y Y Y TIETRK     0)      $
```

IBNSC

Table name

IBN Speed Calling List Table

Functional description

Table IBNSC stores information for each number of an integrated business network (IBN) station, data unit or P-phone speed calling list, or for each number of a data unit or P-phone automatic dial list.

Table IBNSC requires no datafill, it is automatically datafilled as the speed calling codes or automatic dial key numbers are programmed by the subscriber using his telephone set. This table is required for journal file records and for dump and restores.

For customer groups without option AMBISC assigned in table CUSTSTN, the speed calling codes that can be assigned are as follows:

- Stations with the Speed Calling Short (SCS) feature are allowed speed calling codes 0 to 9.
- Stations with the Speed Calling Long (SCL) feature are allowed speed calling codes 00 to 99.
- Stations with 30 (L30) speed calling numbers are allowed speed calling codes 00 to 29.
- Stations with 50 (L50) speed calling numbers are allowed speed calling codes 00 to 49.
- Stations with 70 (L70) speed calling numbers are allowed speed calling codes 00 to 70.

If the customer group has option AMBISC assigned in table CUSTSTN, the field code can only be equal to one of the following values:

- Stations with the SCS feature are allowed speed calling codes 2 through 7. The stations are not permitted to store numbers against codes 0, 1, 8, and 9.
- An attempt to program abbreviation codes 0, 1, 8, or 9 results in negative acknowledgement (NACK) treatment.
- Stations with the SCL feature have access to abbreviation codes 20 through 70. These stations are not permitted to store numbers against codes 00 to 19. Entries in table IBNSC for abbreviation codes 20 through 70 are stored in tuples whose key numbers are 00 through 49.
- Stations with 30 (L30) speed calling numbers are allowed speed calling codes 20 to 49.

- Stations with 50 (L50) speed calling numbers are allowed speed calling codes 20 to 70.
- The maximum number of speed calling codes is 50. L70 (70) speed calling numbers are not allowed.
- An attempt to program abbreviation codes 00 to 19 results in NACK treatment.

The maximum number of speed call lines available on a DMS SuperNode switch are listed in the following table.

Maximum number of speed call lines on DMS SuperNode switch

Speed List	Maximum
Speed calling short	65520
Speed calling long (30 numbers)	16384
Speed calling long (50 numbers)	8192
Speed calling long (70 numbers)	8192
Speed calling long (100 numbers)	1024

For the assignment of a speed calling short or long list to an IBN station, see table IBNFEAT.

Note: For the assignment of a speed calling short or long list or an automatic dial list to a data unit or P-phone station user, see table KSETFEAT.

Datafill sequence and meaning

The following tables must be datafilled before table IBNSC:

- CUSTSTN
- LENLINES

Table size

0 to 200 000 tuples

IBNSC (continued)

Datafill

The following table lists datafill for table IBNSC.

Field descriptions for table IBNSC (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
IBNSCKEY		see subfields	*Integrated business network speed calling key* This field consists of subfields LEN, DF, and CODE.
	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. 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.
	DF	AUD, SCL, or SCS	*Feature* This subfield contains AUD for a automatic dial list for a P-phone or data unit, or SCL for a long speed calling list, or SCS for a short speed calling list for an integrated business network (IBN) station, data unit or P-phone.

Field descriptions for table IBNSC (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	CODE	0 to 99	*Code* This subfield contains the speed calling code, either 0 to 9 for a short list, 0 to 99 for a long list or the logical key number, 2 to 70, of a P-phone or data unit. Indicated values outside of this range are not valid. All entries outside of the range indicated for this field are invalid.
RESULT		numeric (up to 30 digits)	*Integrated business network speed calling code digits* This field contains the digits of the destination number that is associated with the speed calling code of a IBN station or the speed calling or logical key number of a P-phone or data unit.

Datafill example

An example of datafill for table IBNSC is shown below.

The example shows the data that appears in the table when the abbreviation codes shown in the following table are programmed by the station.

Items 1, 3, 5, and 7 are examples for a station set that has the asterisk (*) and octothorpe (#) buttons. The digit 4 is the STAR equivalent.

Items 1, 2, 5, and 6 are for a switch that has option AMBISC assigned in table CUSTSTN.

The option AMBISC in table CUSTSTN includes a subfield OVERRIDE. The OVERRIDE subfield is set to true to override a feature selector or replace selector in table IBNXLA.

Items 3, 4, 7, and 8 are for a switch that does not have option AMBISC assigned in table CUSTSTN.

Abbreviation codes for table IBNSC (Sheet 1 of 2)

Line	Dials		Dials	Item
7224000	74	Receives SDT	25000#	1
7224000	74	Receives SDT	25000	2

IBNSC (continued)

Abbreviation codes for table IBNSC (Sheet 2 of 2)

Line	Dials		Dials	Item
7224000	*74	Receives SDT	796211234#	3
7224000	474	Receives SDT	796211234	4
7224000	75	Receives SDT	206000#	5
7224000	75	Receives SDT	206000	6
7224000	*75	Receives SDT	2496211235	7
7224000	475	Receives SDT	2496211235	8

Item 9 is for a business set which has key 3 assigned to the Automatic Dial (AUD) feature. The station presses key 9, dials the number 96211345, and presses the AUD key for the second time.

MAP display example for table IBNSC

```
                        IBNSCKEY                     RESULT
_____________________________________________________________

HOST  00 0 02 10     SCS  2                            5000
HOST  00 0 02 10     SCS  7                        96211234
HOST  00 0 02 10     SCL 00                            6000
HOST  00 0 02 10     SCL 20                            6000
HOST  00 0 02 10     SCL 24                        96211235
HOST  00 0 03 10     AUD 09                        96211345
HOST  01 0 10 09     SCL L100                      83351100
```

Table history

MMP14

The range of the IBN Speed Call list entry in field CODE is changed from 0 to 70 to 0 to 99 for line option SCL.

NA008

The description of subfield OVERRIDE for the option AMBISC in table CUSTSTN is added.

NA007

Increase the limit of MDC lines with the speed calling short (SCS) option to 65,520.

NA004

Field RESULT has been increased from 24 digits to 30 digits.

IBNTREAT

Table name

IBN Treatment Table

Functional description

Table IBNTREAT routes Integrated Business Network (IBN) lines, incoming or two-way trunks to tones, announcements, or lamps on the attendant consoles.

A maximum of 64 treatment numbers can be assigned to each customer group.

The assignment of treatment numbers is flexible and can be assigned to suit operating company requirements.

Table IBNTREAT has a two-part key consisting of the name assigned to the customer group and the IBN treatment number.

Treatments can be assigned to:

- Vacant codes in table IBNXLA. See option VACTRMT in table CUSTHEAD and translation selector FLEXI in tables IBNXLA and XLANAME.
- Calls to attendant if all attendant queue registers are busy. See field CQOVTRMT in table SUBGRP.
- Calls to members of a Do Not Disturb (DND) group if the feature is activated. See field DIVERSN in table DNDSCHED.
- For lines, incoming (or incoming sides of two-way) trunk groups that attempt to access outgoing (or outgoing sides of a two-way) trunk groups and fail line or alternate line screening. See fields LSCINCPT and ALSCINCP in the formats in table TRKGRP that have trunk group types IBNTI and IBNT2.
- Calls to a P-phone with feature Make Set Busy (MSB), if the feature is activated. See option MSB in table CUSTSTN.
- OUTWATS (outward wide area telephone service) calls that are out of zone. See field INVZNFLX in the format in table IBNXLA that has translation selector NET and network type OWT.
- Calls with an invalid authorization or account code. See option ACR in table CUSTHEAD.
- A key and lamp on the attendant position or from one to eight tones and announcements.

If a call is routed to a treatment in table IBNTREAT and the table is not datafilled, the call is routed to treatment NACK in the appropriate treatment table. An IBN treatment can be routed to one of the treatments listed in table TMTCNTL.

For the data requirements for the variations of data, see the applicable sections of the description for field RTESEL and refinements on the following pages.

Field NOIBNTMT in table CUSTENG specifies the number of IBN treatments required for the customer group. It is recommended that the value of field NOIBNTMT in table CUSTENG be set to the required number of IBN treatments for the customer group. This saves changing the data at a later date.

If feature BC 1459 (Partitioned Table Editor) is present in the switch, the ownership of each tuple in this table is defined in tables DATAOWNR and OWNTAB.

The entries in table DATAOWNR that are applicable to this table are those that have CUSTGRP datafilled in field TABNAME and the value of field CUSTGRP in table IBNTREAT datafilled in field CUSTNAME.

Datafill sequence and implications

The following tables must be datafilled before table IBNTREAT:

- CLLI
- CUSTHEAD
- CUSTSTN
- IBNRTE
- OFRT
- TRKGRP(IBNTI)
- TRKGRP(IBNT2)

Table size

Memory is automatically allocated for 64 treatments for each assigned customer group.

IBNTREAT (continued)

Datafill

The following table lists datafill for table IBNTREAT.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric (up to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
IBNTRTMT		0 to 63	*Integrated Business Network treatment number* Enter the treatment number.
ITDATA		see subfields	*Integrated Business Network treatment data* This field consists of subfields LOG and RTESEL.
	LOG	Y or N	*Log* Enter Y (yes) if a printout of trunk or line message 138 is required each time translation is routed to the treatment. Otherwise, enter N (no).
	RTESEL	C, NONE, S, T, or TRMT	*Route selector* Enter C for treatments that are to be routed to a key and lamp on the attendant console. The incoming call identification (ICI) code assigned in fields ACKEY and ICI in table FNMAP to the key and lamp on the attendant console to which translation has to route is required for input. Datafill refinement ICI.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	RTESEL (continued)		The value of NONE is not accepted as datafill on input. It is generated internally by table control only if internal data inconsistency is detected. Any attempt to enter NONE results in the following error message: `"NONE" CANNOT BE DATAFILLED. IT IS RESERVED FOR SYSTEM USE ONLY.` Any IBNTREAT tuple with RTESEL set to NONE must be deleted at the dump and restore. Enter S for treatments that only require one route element. If an all paths busy to the announcement is encountered or the announcement or tone times out, then translation routes to reorder treatment in the appropriate treatment table. Datafill refinement CLLI. Enter T for treatments that require from two to eight routes. The codes for the tones and announcements for the two to eight routes are stored in one of the route lists in a routing table. If the route list exhausts, translation routes to reorder treatment in the appropriate treatment table. Datafill refinement TABID. Enter TRMT for IBN treatments that route to one of the treatments in table TMTCNTL. Datafill refinement TRMTID.
	ICI	8, 26 to 254	*Incoming call identification code* If the entry in subfield RTESEL is C, datafill this refinement. Enter the ICI code assigned to the key and lamp on the attendant console for this treatment. Any entry outside the range of indicated values for this field is invalid.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* If the entry in subfield RTESEL is S, datafill this refinement. Enter the code assigned in table CLLI to the tone or announcement to which translation has to route.

IBNTREAT (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TABID	IBNRT2, IBNRT3, IBNRT4, IBNRTE, OFR2, OFR3, OFR4, OFRT, RRTE, or TTL4	*Table name* If the entry in subfield RTESEL is T, datafill this refinement. Enter the routing table name to which translation has to route and datafill refinement KEY. Any entry outside the range indicated for this field is invalid.
	KEY	0 to 1023	*Key* Enter the number assigned to the route list in the routing table to which all calls have to be routed.
	TRMTID	alphabetic(4 characters)	*Treatment identifier* If the entry in subfield RTESEL is TRMT, datafill this refinement. Enter the treatment identifier from table TMTCNTL to which the call has to be routed.

Datafill example

An example of datafill for table IBNTREAT is shown below.

The first tuple shows treatment number 3, which routes to the key and lamp on the attendant console that is assigned to incoming call identification code number 35 in field ICI in table FNMAP.

The second tuple is an example of treatment number 2, which belonged to customer group BNRNI that has been removed from the switching unit.

The third tuple is an example of treatment number 1, which routes to the tone that is represented by code T120 in field CLLI in table CLLI.

The fourth tuple is an example of treatment number 2, which routes to route reference index number 25 in field RTE in table OFRT.

The fifth tuple is an example of treatment number 7, which routes to treatment VACT in field TREATMT in subtable TMTCNTL. This is the treatment number assigned to option VACTRMT in table CUSTHEAD.

IBNTREAT (end)

Datafill example for table IBNTREAT

CUSTGRP	IBNTRTMT	ITDATA
BNRMC	3	N C 35
BNRN1	2	N NONE
BNRMC	1	N S T120
BNRMC	2	N T OFRT 25
BNRMC	7	N TRMT VACT

Table history

BCS36

Dump and restore procedure was added.

Supplementary information

This section provides information on dump and restore procedures for table IBNTREAT.

Dump and restore procedures

Any IBNTREAT tuple with subfield RTESEL set to NONE must be deleted at the dump and restore.

IBNXLA

Table name

IBN Translation

Note: This table is not used by elements running on GSF call processing software. For GSF agents, table XLA contains information similar to table IBNXLA. For more information on table XLA, refer to the appropriate module in this document.

Functional description

Table IBNXLA stores the data for the digit translation of calls from the following sources:

- Integrated Business Network (IBN) station
- attendant console
- incoming trunk
- incoming side of a two-way IBN trunk group
- Integrated Services Digital Network (ISDN) line

Each tuple defines a translator. Each translator is assigned a 1 to 8-alphanumeric character name. This name is assigned in table XLANAME (Translator Names). One to 18 digits can be translated.

For one or more digits for which no datafill is provided, translation automatically defaults to the IBN treatment specified in field VACTRMT of table CUSTHEAD (Customer Group Head).

Note: To keep misdialed IBN calls from completing, assign the Residential Enhanced Services (RES) subscriber a thousands group (in table TOFCNAME [Terminating Office Name]) that is not the same as the IBN subscriber.

For related information, refer to table XLANAME in this document.

IBNXLA (continued)

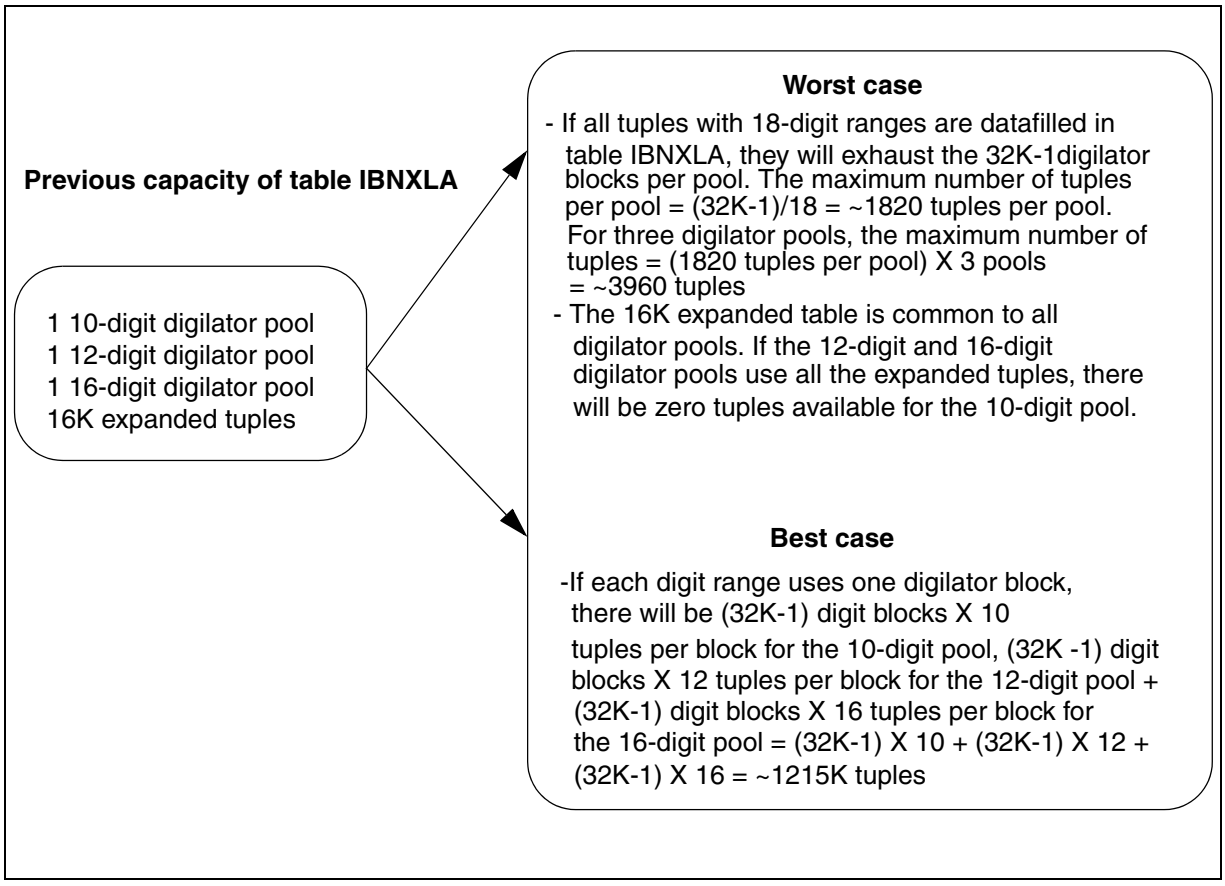
Capacity enhancement

The Table IBNXLA Expansion feature increases the capacity of table IBNXLA by

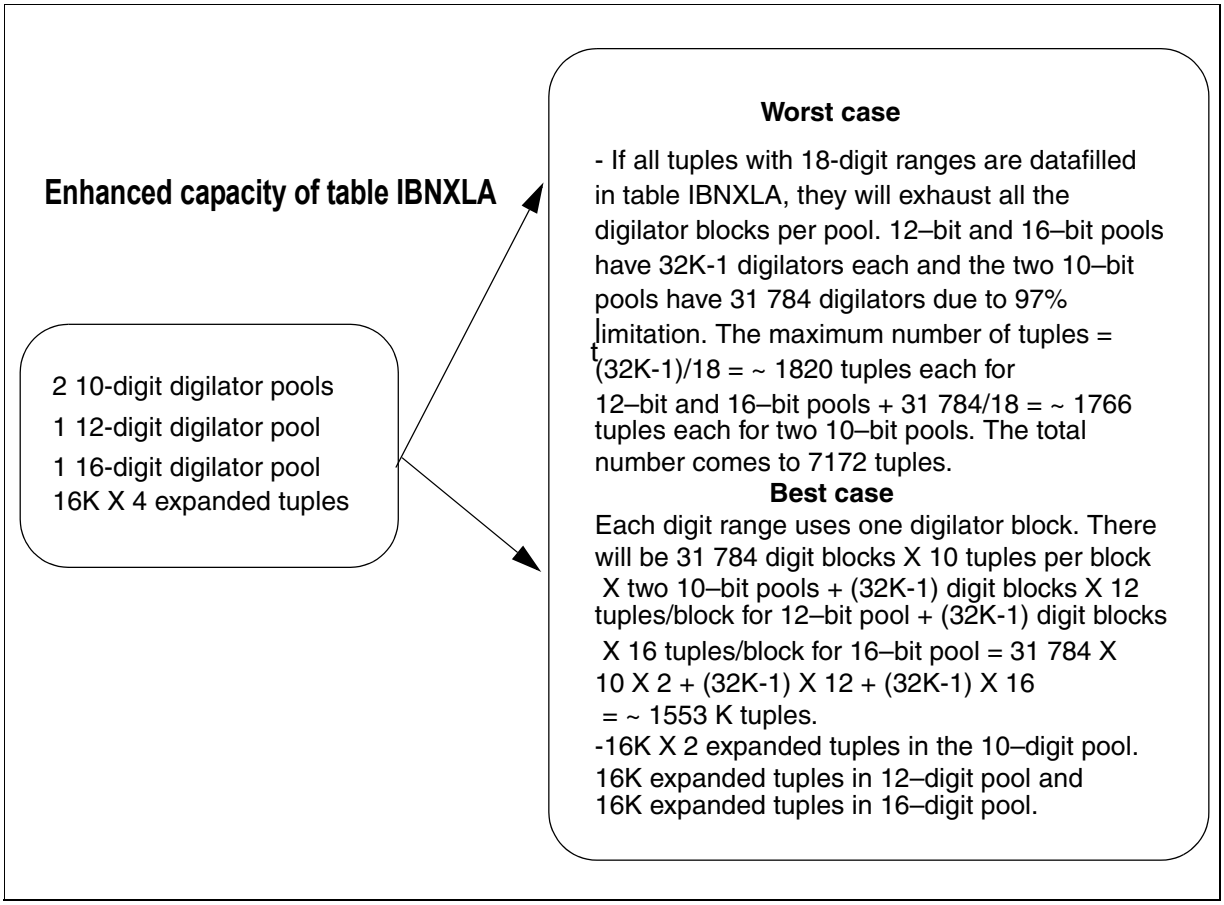
- providing an additional 10-digit digilator pool
- quadrupling the internal expanded table from one block of 16K to four blocks of 16K each

The gain in storage capacity depends on the dial plan of the customer. The following figures show a range for the maximum number of tuples because the number of tuples depends on the datafill that the customer provisions for table XLANAME and table IBNXLA.

The following figure shows the previous capacity of table IBNXLA.



The following figure shows the enhanced capacity of table IBNXLA.



RES and POTS digit collection

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

For a call from an Attendant Console, a 10 second post dial delay (PDD) can occur. This delay occurs when the number of digits dialed is less than the max field in translations. Digit collection timers that reduce PDD do not apply to the Attendant Console and cannot affect the default 10 second timeout.

IBNXLA (continued)

Translators

The six types of translators follow:

- customer group
- feature
- flash
- preliminary
- tandem tie trunk route
- octothorpe (#)

Customer group translator

The customer group translator defines the regular digit translation for IBN stations, attendant consoles, and incoming sides of two-way IBN trunk groups that are assigned to the customer group.

The customer group translator is mandatory. One translator is required for each customer group. The name that is assigned to this translator is defined in field CUSTXLA of table CUSTHEAD.

Each customer group can be assigned an octothorpe (#) translator, if required. The name that is assigned to the customer group octothorpe translator is defined in option OCTXLA of table CUSTHEAD.

If the meanings of the access codes with an octothorpe (#) as a leading control digit for some IBN stations are different from those specified in the customer group octothorpe translator, a second translator can be specified. The second translator is defined in the network class of service (NCOS) numbers that are assigned to the IBN stations in table NCOS.

The translation name (field XLANAME) is assigned in the customer group or NCOS tables for IBN stations and incoming or incoming side of two-way IBN trunk groups that have access to the access code.

Field ACR (account code required) can be set to Y only if the customer group has option ACCT (account code capability) assigned in table CUSTHEAD.

Feature translator

Each customer group can be assigned a feature translator, if required. The name that is assigned to the customer group feature translator is defined in table CUSTHEAD. Each digit or digits for which no datafill is provided in the customer group feature translator automatically defaults as a speed calling access code. Each digit or digits for which datafill is provided cannot be used as speed calling digits.

The feature translator is optional but can be used if one or more access codes for a Digitone station has a star (*) as the first digit of the access code.

If the only codes that require a star (*) as a leading control digit are speed calling codes, a feature translator is not required.

If an IBN station or attendant console has one or more access codes with a star (*) as a leading control character, and these codes are different from those specified in the customer group feature translator, then the different codes can be specified in a second feature translator. The name that is assigned to the second translator is specified in field FEATXLA of option XLAS in the NCOS number that is assigned to the IBN stations, the attendant consoles, or both. For assignment of the NCOS number, see table NCOS.

If no datafill (a digit or digits) is provided in table NCOS, translation automatically defaults to the customer group feature translator that is defined in table CUSTHEAD.

Flash translator

Up to three flash translators can be provided:

- star (*)
- digits
- octothorpe (#)

Flash translators are required if a station in the talking state flashes, dials digits, and the call is rerouted, for example, when a call is transferred to an attendant. The attendant console has a special key and lamp for transferring calls to the attendant.

These flash translators are used before the normal NCOS and customer group translators are used. Flash translators are assigned to NCOS numbers in table NCOS with option FLSHXLA. For assignment of NCOS numbers, see table NCOS.

Preliminary translator

The preliminary translator is optional. If the pretranslation of digits or a call to one or more of the access codes is different from the routes that are specified in the customer group translator, this translator can be used. Each customer group can be assigned a preliminary translator.

Preliminary translators can be used to restrict direct outward dial and attendant access codes.

IBNXLA (continued)

The name that is assigned to the customer group preliminary translator is defined in option PREMXLA in table CUSTHEAD.

If no datafill is provided, for example a digit or digits, in the customer group preliminary translator, translation automatically defaults to the customer group translator.

If either an IBN station, attendant console, incoming IBN trunk group or incoming side of a two-way IBN trunk group has one or more access codes that are routed differently from the routes that are specified in the customer group or customer group preliminary translator, then codes that are different can be specified in a second preliminary translator. The name that is assigned to this translator is specified in field PREMXLA of option XLAS in the NCOS number assigned to the IBN stations, attendant consoles, or incoming side of a two-way IBN trunk group.

If the switching unit has the Electronic Switched Network (ESN) information feature, preliminary translators are required for incoming and the incoming side of two-way IBN trunk groups that require special protocols, for example ESN protocols.

Tandem tie trunk route translator

A tandem tie trunk route translator is required to reduce trunk time-outs. By specifying the minimum and maximum number of digits for each set of digits dialed after the tandem tie trunk route access code, trunk time-outs are reduced.

Octothorpe translator

The octothorpe (#) translator is optional. If the access code for a Digitone station has an octothorpe as a leading control digit, the octothorpe translator can be used.

Group intercom (GIC) dialing that uses the octothorpe as the equivalent must not use the octothorpe translator or translators access code because translation defaults to group intercom.

The Abbreviated Dialing feature is accessed by using the octothorpe translator to permit POTS dialing. The octothorpe translator is not assignable through the Service Order System (SERVORD). The following restrictions apply to the octothorpe translator: no distinctive ringing, no operational measurements (OM), and no special codes for Station Message Detail Recording (SMDR).

Field XLANAME entry variations

The entry variations for field XLANAME of table IBNXLA are listed in the following table.

Table XLANAME entries

Feature	Long name
AMBI	Ambiguous code dialing version I
AMBIG	Ambiguous code dialing version II
ATT	Attendant access
ATTO	Access to attendant in other customer group or subgroup
BC	Bearer capability
CUTTD	Cut-through Dialing
CWD	Dial Call Waiting
CRT	Call Redirect
DOD	Direct Outward Dial
ESN	Electronic Switched Network
EXTN	Extension selector
FEAT	Features
FLEXI	Route to IBN Treatment table
FTR	Refinable translation result
GEN	General network selector
GIC	Group intercom
IAG23	Two- or three-digit station numbers
IAGRP	Interagent group
LNPTST	Local Number Portability Test Call
LOC	Location selector
LPACT	Loudspeaker Paging Answerback activation
LSPKP	Loudspeaker

IBNXLA (continued)

Table XLANAME entries

Feature	Long name
MBG	Multiswitch business group
N	Set prefix fence
NET	Networks
NFAEXPL	Network facility explicit access
NMP	No modem pool
NRSO	Network outbound modem pooling
NSC	Network Speed Calling
OCT	Octothorpe equivalent
OWT	OUTWATS
PND	Prefix NRS default
PNO	Prefix NRS outbound
PNRS	Prefix network outbound modem pool
PROTO	ESN network information signals
PVT	Private network
REPL	Digits dialed to be replaced
ROUTE/L	Route specifying the location
ROUTE/S	Route directly to CLLI table
ROUTE/T	Route to Office or IBN Route table
SFMT	Switch format
SLE	Selective list editing
SPDC	Speed Calling access code
SRNG	Station ringer
STAR	Star
TRMT	Route to Office, Line, or Trunk Treatment tables

Table XLANAME entries

Feature	Long name
TTTR	Tandem tie trunk route
TTTT	Tandem tie trunk termination
VMX	Voice message exchange

Datafill sequence and implications

Observe the following sequence requirements when datafilling table IBNXLA:

- By datafilling table FNMAP prior to table IBNXLA, the incoming call identification code is assigned to the attendant access key and lamp in the attendant console.
- Field SECOND_DIAL_TONE and field SDT must be set to Y if the incoming or the incoming side of two-way IBN trunk groups requires a second dial tone after the receipt of one or more digits. If the IBN stations require second dial tone after the receipt of two or more digits, the second dial tone fields must be set to Y.
- If the incoming or the incoming side of two-way IBN trunk groups requires second dial tone on seizure, enter Y in field DTI of table TRKGRP for trunk group types IBNTI or IBNT2.
- If IBN stations require second dial tone after the receipt of one digit, enter Y in field DTONE of table DIGCOL for the IBN stations.
- If access code restriction applies to an IBN station, the code restriction level for the IBN station is defined in option CRL of the IBN station's NCOS number.
- NCOS translations are not supported in ESA mode by any remote peripheral type including all RSC, RLCM, and AccessNode types.
- Customer groups with NCOS datafill, and which are serviced by a remote peripheral, will be unable to make call if the remote peripheral enters ESA mode.
- The codes to which restrictions apply are defined in table CODEBLK.
- The numbering plan areas (NPA) in table CODEBLK must be checked prior to adding option CRL, because an NPA entered in table CODEBLK inhibits the use of that NPA.
- If feature BC1459 (Partitioned Table Editor) is available in the software, then ownership of each tuple in table IBNXLA is defined in tables DATAOWNR and OWNTAB.

IBNXLA (continued)

- The entries in table DATAOWNR that are applicable to table IBNXLA have the entry XLANAME in field TABNAME and the same entry in field XLANAME of table IBNXLA.
- The entry in table OWNTAB that is applicable to table IBNXLA is the entry that has the datafill IBNXLA in field TABNAME.
- In table CUSTENG, a customer group can be datafilled as one of three types: PRIVATE, PUBLIC, or FAMILY:
  - — For a PRIVATE customer group, features are allowed only within the boundary of the customer group.
  - — For a PUBLIC customer group, features are allowed whenever the originator's translation data is such that the call between originator and the terminator is intragroup. For the call to be intragroup, the domain of the terminator must be public. If the domain of the terminator is private, the call is intragroup if the originator belongs to the same private group or family. The value of field INTRAGRP must be set to Y for intragroup calls.
  - — For a FAMILY customer group, additional information about the family is datafilled in table CUSTFAM. This data includes a family name and a family type. The family type can be either PUBLIC or PRIVATE:
    - – For a FAMILY customer group of type PUBLIC, features are allowed whenever the originator's data is set such that the call is intragroup.
    - – For a FAMILY customer group of type PRIVATE, features are allowed within the combined boundaries of the set of customer groups belonging to the family. For the call to be intragroup, the domain of the terminator must be public. If the domain of the terminator is private, the call is intragroup if the originator belongs to the same private group or family. The value of field INTRAGRP must be set to Y for intragroup calls.
- A valid network access register (NAR) name must be datafilled in table NARDATA for Meridian Digital Centrex (MDC) call termination control (throttling).
- When Local Number Portability (LNP) is disabled on the originating switch, LNP Test Call can not be initiated even if option LNPTST is assigned to a 1FR RES line and a Feature Access Code for LNP Test Call is datafilled in table IBNXLA.
- Enter datafill in table IBNXLA before activating the Call Forward to Announcement (CFTANN)/Call Forward to Operator (CFO) option.

Table size

Memory is allocated dynamically.

The DBLOCKS command in the DMS monitor (DMSMON) process at a MAP terminal is used to check the digit set count of table IBNXLA. The DBLOCKS command shows the number of sets of digits being used, the number of sets of digits allocated, the percentage used, and how much memory remains.

Datafill

The following table lists fields for table IBNXLA.

Field descriptions

Field	Subfield	Entry	Explanation and action
Key		see subfields	Key. This field consists of subfields XLANAME and DGLIDX.
	XLANAME	vector (1 to 8 characters)	Translator name. Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	Digilator index. Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: • 9 digits 0 to 9C • digits 0 to 9 and B to CF • digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	Result. This field consists of subfield TRSEL, ACR, SMDR, and FEATURE. ***Note:*** NET GEN option RES is mutually exclusive with NET GEN option LATTR. Table control procedures for table XLANAME enforces exclusivity.

IBNXLA (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	TRSEL	AMBI, AMBIG, ATT, ATTO, CUTTD, EXTN, FEAT, FLEXI, FTR, IAG23, IAGRP, MCCS, N, NET, NSC, OCT, PROTO, REPL, ROUTE, SFMT, SLE, SRNG, STAR, TRMT, TTTR, TTTT	Translator selector. Enter the translation selector. ***Note:*** The remaining subfields appear when TRSEL=FEAT.
	ACR	Y or N	Account code entry. Enter Y (yes) if an account code entry is required for all calls to the special feature access code. Enter N (no) when the feature is equal to SCPL or SCPS (see field FEATURE).

Field descriptions

Field	Subfield	Entry	Explanation and action
	SMDR	Y or N	Station message detail recording. Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. This field has no effect and no SMDR record is produced for features that do not originate calls. For dump and restore purposes, an N must be datafilled after the SMDR field if field TRSEL is datafilled with NET, ROUTE, TTTR, AMBI, EXTN, CUTTD, or FEAT. The Station Message Detail Recording fields SMDR and SMDRB [TRKSEL=NET] can only be set to Y if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT. SMDR bills each leg of the call. The option must be turned on in IBN translations to generate SMDR billing. Turning on the option for one leg of the call does not carry over to another leg of the call. Facility groups (VFG) for routing SMDR must be turned on for the leg of the call that requires billing and must be routed through IBN translations. Neither SMDR nor SMDRB can be turned on for calls from plain ordinary telephone service (POTS) VFGs.

IBNXLA (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	FEATURE	ACBA, ACBD, ACCT, ACDLGA, ACDLGD, ACDNRA, ACDNRD, ACRJA, ACRJD, ARA, ARD, ASRI, ASRO, AUTH, CALLACT, CCW, CDCL, CFBC, CFBEC, CFBEP, CFBIC, CFBIP, CFBP, CFDC, CFDEC, CFDEP, CFDIC, CFDIP, CFDP, CFDPRING, CFKC, CFKP, CFRA, CFWC, CFWP, CHD, CIDSDLV, CIDSSUP, CISA, CMG, CMGRACT, CMGRCTRL, CMGRDACT, CMWIRA, CMWIRD, CNAB, CNB, CNDA, CNDB, CNDD, CNNB, CNND, CONF, COT, CPU, CRA, CRDA, CRDS, CRR, CSCWID, CSMICTRL, CWTACT, CWTDEACT, DCP, DNDACT, DNDDEACT, DPRKS, DRCW, EBO, EWAC, HLD, ICMSG, ICSCTRL, INSTALL, ISACTRL, LDSA, LNPTST, LNR, LOOP, LPANS, MCH, MHLA, MHLC, MMLK, MMUL, MSBA, MSBD, MSGCTRL, NFAIMPL, NFRA, OBS, OCBACT, OCBDACT, OCBINT, PF, PRKR, PRKS, PRLA, PRLC, PRNRA, PRNRD,	Feature. Enter the associated feature when TRSEL=FEAT.

Field descriptions

Field	Subfield	Entry	Explanation and action
	FEATURE (continued)	PRV, PVN, RAG, RBACK, RDISA, RLS, RMICTRL, SACBA, SACBD, SCA, SCF, SCMSG, SCPS, SCPL, SCRJ, SDNID, SIMRING, SLHOLD, SLVPD1, SLVPD2, SLVPD3, SOR, SPP, TAFAS, TVDS, U3WC, UCDA, UCDD, UCDNSA, UCDNSD, USAID, UVMD, UVMR, VCFTST, VMEA, VOWIN, VOWOUT, VOWPCC, VOWROUT, WML, WUCRA, WUCRD, WUCRIN	

Datafill example

The following example shows sample datafill for table IBNXLA.

MAP display example for table IBNXLA

```
KEY                                RESULT
_____________________________________________________________________
RXCFN 77   FEAT N N DNDACT
RXCFN 78   FEAT N N DNDDEACT
```

Supplementary information

This section provides information on datafilling table IBNXLA for specific applications and product descriptive information related to table IBNXLA.

ACBA

The ACBA (Automatic Call Back Activation) function enables the end user to activate the ACB (Automatic Call Back) feature. ACB allows the end user to redial the last call. If the called line is idle and the class of service is

IBNXLA (continued)

permissible, call setup is attempted. If the called line is busy, the call is queued and call completion is attempted when both parties are idle.

The ACB feature is similar to the Ring Again feature, except it is deployed in the public network. The calling and called party can be served by the same switch (intranode) or a different one (internode). Internode ACB requires a Common Channel Signaling 7 (CCS7) signaling system to communicate between the originating and terminating nodes.

ACBD

The ACBD (Automatic Call Back Deactivation) function enables the caller to deactivate the ACB feature request.

ACCT

The ACCT (Account Code) option is assigned to the access code that an MDC station dials when the station voluntarily enters an account code.

ACDLGA

The ACDLGA (Automatic Call Distribution Login Activation) function allows an ACD agent using a 500/2500 set to log in to an ACD position. If activation is successful, confirmation tone is given.

ACDLGD

The ACDLGD (Automatic Call Distribution Login Deactivation) function allows an ACD agent using a 500/2500 set to log out from an ACD position. If deactivation is successful, confirmation tone is given.

ACDNRA

The ACDNRA (Automatic Call Distribution Not Ready Activation) function allows an ACD agent using a 500/2500 set to activate the ACD Not Ready mode. If activation is successful, confirmation tone is given.

ACDNRD

The ACDNRD (Automatic Call Distribution Not Ready Deactivation) function allows an ACD agent using a 500/2500 set to deactivate the ACD Not Ready mode. If deactivation is successful, confirmation tone is given.

ARA

The ARA (Automatic Recall Activation) function enables the caller to activate the Automatic Recall feature, which allows the caller to recall the last station that was called. If the called line is idle and the class of service is permissible, then call setup is attempted. If the called line is busy, then the call is queued and call completion is attempted when both parties are idle.

The calling and called party can be served by the same switch (intranode) or a different one (internode). Internode ACB requires the CCS7 signaling system to communicate between the originating and terminating nodes.

ARD

The ARD (Automatic Recall Deactivation) function enables the caller to deactivate the AR feature request.

ASRI

The ASRI (Automatic Set Relocation In) function takes a set back into service following relocation.

ASRO

The ASRO (Automatic Set Relocation Out) function takes a set out of service for relocation.

AUTH

The AUTH (Authorization Code) option is assigned to the access code that the MDC station dials when the station voluntarily enters an authorization code.

BC

The BC (Bearer Capability) option assigns a bearer capability to an ISDN call.

CCW

The CCW (Cancel Call Waiting) feature allows the station user to prevent, for the duration of a call, any incoming calls to wait on the line. The incoming calls are given the destination busy treatment. When the line goes idle, CCW is automatically deactivated.

CCW can be activated prior to placing a call or after the connection has been established. To activate CCW prior to placing a call, the access code for CCW is dialed. When the 0.3 s confirmation tone is received, the destination number can be dialed. To activate CCW after connection is established, a 500/2500 station flashes the hook, puts the call on hold and dials the CCW access code. After the 0.3 s confirmation tone is received, the original connection is established. To activate CCW when connection has been established, the operating company's business sets require pressing a conference, call transfer, or 3WC key.

Operational measurements are provided on the number of CCW activations and the number of call-waits denied due to CCW being in effect on the destination line.

IBNXLA (continued)

CDCL

The CDCL (Code Calling) feature is assigned to the access code that an IBN station must dial to access customer-provided code calling equipment.

CFBC

The CFBC (CF Busy Cancellation) function allows a user to cancel Call Forward Busy feature using an access code if field CFBCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the user. Confirmation tone is always given, regardless of whether IECFB (Internal External Call Forward Busy) is active.

CFBEC

The CFBEC (CF Busy External Cancellation) function allows a caller to cancel external Call Forward Busy feature using an access code if the field CFBCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the user. Confirmation tone is always given regardless of whether CFB is active.

CFBEP

The CFBEP (CF Busy External Programming) function allows a user to activate external Call Forward Busy feature using an access code if the field CFBCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) and the user has the internal or external Call Forward Busy feature. If field CFBCNTL is set to P, then special dial tone is given and the user dials the forward-to DN (one or two four-digit entries). If activation is successful, confirmation tone is given. If IECFB is already active, NACK treatment is given. The user then has to deactivate IECFB and restart the activation sequence again.

CFBIC

The CFBIC (CF Busy Internal Cancellation) function allows a user to cancel internal Call Forward Busy feature using an access code if the field CFBCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the user. Confirmation tone is always given regardless of whether IECFB is active.

CFBIP

The CFBIP (CF Busy Internal Programming) function allows a caller to activate Internal Call Forward Busy feature using an access code if the field CFBCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) and the user has the IECFB (Internal External Call Forward Busy) feature. If CFBCNTL is set to P, special dial tone is given and the user dials the forward-to DN (1 to 24 digits). If activation is successful, confirmation tone is given. If IECFB is already active, NACK treatment is

given. The user must then deactivate IECFB and start the activation sequence again.

CFBP

The CFBP (CF Busy Programming) function allows a caller to activate Call Forward Busy feature using an access code if the field CFBCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the user. If field CFBCNTL is set to P, then special dial tone is given and the caller dials the forward-to DN (1 to 2 four-digit entries). If activation is successful, confirmation tone is given. If IECFB is already active, NACK treatment is given. The caller must then deactivate IECFB and start the activation sequence again.

CFDC

The CFDC (CF Don't Answer Cancellation) function allows a caller to cancel Call Forward Don't Answer feature using access code if the field CFDCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the caller. Confirmation tone is always given regardless of whether CFD is active.

CFDEC

The CFDEC (CF Don't Answer External Cancellation) function allows a user to cancel EDFD (External Call Forward Don't Answer) feature using access code if the field CFDCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the user. Confirmation tone is always given regardless of whether IECFD is active.

CFDEP

The CFDEP (CF Don't Answer External Programming) function allows a user to activate External Call Forward Don't Answer feature using an access code if the field CFDCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) and the user has the internal external Call Forward Don't Answer feature. If field CFDCNTL is set to P, special dial tone is given and the caller dials the forward-to DN (one or two four-digit entries). If activation is successful, confirmation tone is given. If IECFD is already active, NACK treatment is given. The user must then deactivate IECFD and start the activation sequence again.

CFDIC

The CFDIC (CF Don't Answer Internal Cancellation) function allows a caller to cancel Internal Call Forward Don't Answer feature using access code if field CFDCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the caller. Confirmation tone is always given regardless of whether IECFD is active.

IBNXLA (continued)

CFDIP

The CFDIP (CF Don't Answer Internal Programming) function allows a caller to activate IECFD (Internal External Call Forward Don't Answer) feature using an access code if the field CFDCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) and the caller has the Internal External Call Forward Don't Answer feature. If CFDCNTL is set to P, special dial tone is given and the user dials the forward-to DN (one or two four-digit entries). If activation is successful, confirmation tone is given. If IECFD is already active, NACK treatment is given. The caller must then deactivate IECFD and start the activation sequence again.

CFDP

The CFDP (CF Don't Answer Programming) function allows a caller to activate CFD (Call Forward Don't Answer) feature using access code if the field CFDCNTL in tables IBNFEAT or KSETFEAT is set to F (fixed) or P (programming) for the caller. If field CFDCNTL is set to P, special dial tone is given and the caller dials the forward-to DN (one or two four-digit entries). If activation is successful, confirmation tone is given. If CFD is already active, NACK treatment is given. The user must then deactivate CFD and start the activation sequence again.

CFDPRING

The CFDPRING (Subscriber Programmable Ringing on CFDA) option allows CFDA subscribers to control the number of rings heard at their stations before an incoming call is forwarded to another DN. Field FEATURE of table IBNXLA with selector FEAT must be datafilled with CFDPRING, and subfield RINGCTRL of table IBNFEAT feature CFDVT (Call Forwarding Do Not Answer Variable Timer) must be datafilled with PRGRING for activation.

CFKC

The CFKC (CF per Key Cancellation) function allows a user to cancel Call Forward Universal feature on a per key basis using access code if field CFUIOPT in table KSETFEAT is set to CFK. If cancellation is successful, confirmation tone is given.

CFKP

The CFKP (CF per Key Programming) function allows a user to activate Call Forward Universal feature on a per key basis using access code if field CFUIOPT in table KSETFEAT is set to CFK. If activation is successful, confirmation tone is given.

CFOP

The CFOP (Call Forward to Operator Cancellation) function is assigned to the access code that an IBN station with the CFO feature must dial to deactivate/activate the CFO feature.

CFOXLA

The call obtains the CFOXLA (CFO translation) name from table ISERVOPT and then enters IBN translation. The call then uses this translator name and the operator route number as the key to select the tuple from the IBNXLA table. If there is no operator route datafill for the operator route number in table IBNXLA, the call takes the default route in table XLANAME for CFOXLA translator.

CFRA

The CFRA (CF Remote Access) feature allows the call to activate CFRA when the DISA (direct inbound system access) DN is dialed and an announcement is given asking for the type of DISA or access required.

CFTANN

The call obtains the CFTANN (Call Forward to Announcement) translation name from table ISERVOPT and then enters IBN translation. The call then uses this translator name and the announcement number as the key to select the tuple from the IBNXLA table.

CFTANNC

The CFTANNC (Call Forward to Announcement Cancel) is assigned to the access code that an IBN station with the CFTANN feature must dial to deactivate the CFTANN feature.

CFTANNP

The CFTANNP (Call Forward To Announcement Programming) function is assigned to the access code that an IBN station with the CFTANN feature must dial to activate the CFTANN feature. When the station dials the code, the station receives the second dial tone. The station then enters the announcement number to which the calls are forwarded. If programming is successful, a confirmation tone is given. If programming is unsuccessful, NACK treatment is applied. To attempt programming again, the station user must deactivate the CFTANN feature and start the programming sequence again.

CFTODACT

The CFTODACT (Call Forward Time of Day Activation) feature enables the subscriber to activate the CFTOD (Call Forward Time of Day) feature to forward calls to different DN (directory numbers) depending on the time of day, day of week, or day of year.

IBNXLA (continued)

CFTODDEACT

The CFTODDEACT (Call Forward Time of Day Deactivation) feature enables the subscriber to disable the CFTOD feature.

CFTOVRACT

The CFTOVRACT (Call Forward Time of Day Override Activation) feature enables the subscriber to change the call forwarding instructions activated with the CFTODACT feature. This feature allows the subscriber to override the call routing pattern provided by the CFTOD feature to forward to the forwarding DN of the next CFTOD time slot, based on the TODNAME. When the next CFTOD time period begins, the override deactivates, and the call proceeds as defined in the CFTOD tables.

CFTOVRDACT

The CFTOVRDACT (Call Forward Time of Day Override Deactivation) feature enable the subscriber to cancel the CFTOD override instructions provided by the CFTOVRACT feature.

CFWC

The CFWC (CF Cancel) function is assigned to the access code that an IBN station with the Call Forward feature must dial to deactivate the Call Forward feature.

CFWP

The CFWP (CF Programming) function is assigned to the access code that an IBN station with the Call Forward feature has to dial to activate the Call Forward feature. When station dials the code, the station receives second dial tone. The station then enters the number to which calls are forwarded.

CHD

The CHD (Call Hold) feature is assigned to the access code that an MDC station with the CHD feature must dial to activate the feature. This feature permits the end user to hold a call for any length of time, provided that neither party goes off-hook. The end user can then make another call or instigate another task, such as speed call programming. Reactivation of CHD returns the original held call.

CIDSDLV

The CIDSDLV (Caller ID Delivery and Suppression Delivery) feature enables the subscriber to deliver the originator's name and number according to each call. This feature is the equivalent of the CNND (Calling Name and Number Delivery) CLASS feature. This feature applies to ISDN BRI sets only, and is datafilled by SERVORD.

CIDSSUP

The CIDSSUP (Caller ID Delivery and Suppression Suppression) feature enables the subscriber *to block the delivery* of the originator's name and number for each call. This feature is the equivalent of the CNNB (Calling Number Name Blocking) CLASS feature. This feature applies to ISDN BRI sets only, and is datafilled by SERVORD.

CMG

The CMG (Call Management Group) feature allows the end user to apply call hold and call answer functionalities.

CMGRACT

The CMGRACT (Call Management Group Activation) feature allows the end user to activate simultaneous ringing functionality on the CMG line.

CMGRCTRL

The CMGRCTRL (Call Management Group Control) feature allows the end user to toggle simultaneous ringing functionality on the CMG line.

CMGRDACT

The CMGRDACT (Call Management Group Deactivation) feature allows the end user to deactivate simultaneous ringing functionality on the CMG line.

CMWIRA

The CMWIRA (CLASS Message Waiting Indicator Ringing Activation) access code allows the user with CMWI (CLASS Message Waiting Indicator) feature to receive a ring burst whenever their set receives a message waiting notification. This allows the user to receive audible warning together with the visual aspect of message notification.

CMWIRD

The CMWIRD (CLASS Message Waiting Indicator Ringing Deactivation) access code deactivates the ringing notification of message waiting indication. The user continues to receive visual indication of message waiting but with no audible signal.

CNB

The CNB (Calling Number Blocking) feature allows any CNDB (Calling Number Delivery Blocking) line option or CNDB customer group option to suppress the DN (directory number) from being displayed for each call.

CNDA

The CNDA (Calling Number Delivery Activation) function allows an end user with CND SUSP (subscription usage-sensitive pricing) to activate CND for the

IBNXLA (continued)

line. The end user must have option CND SUSP that generates an AMA (automatic message accounting) record for every delivery of a calling number with option CNDAMA datafilled in table IBNLINES. Option CNDA enables the line to receive and display calling number information. The SUSP entry in table AMAOPTS must be set to on to activate option CND SUSP. CND for the office must also be turned on in table RESOFC. If activation of CNDA is successful, an announcement (if datafilled) or a confirmation tone is given. CND SUSP, CNAMD SUSP, and DDN SUSP share the same activation code. The same access codes used for RES and IBN CND SUSP activation are used for ISDN CND and RND (Redirecting Number and Reason Delivery) SUSP. The CNDA feature is also used for ISDN CND.

CNDB

The CNDB (Calling Number Delivery Blocking) function allows the end user with option CNDB assigned to the line to suppress or unsuppress the DN from being displayed to the terminating line depending on the setting of the default suppression status against the end user's line. Option CNDB toggles the suppression status for each call. If the default status of the line is suppress, CNDB unsuppresses the DN availability for the particular call.

CNDD

The CNDD (Calling Number Delivery Deactivation) function allows end users with option CND SUSP to deactivate CND for the line. The end user must have option CND SUSP that generates an AMA record for every delivery of a calling number with option CNDAMA datafilled in table IBNLINES. Option CNDD stops the receipt and display of the calling number information and the generation of AMA records if CND SUSP is activated. CND SUSP, CNAMD SUSP, and DDN SUSP share the same deactivation code. The same access codes used for RES and IBN CND deactivation are used for ISDN CND and RND SUSP. The CNDD feature is also used for ISDN CND.

CNNB

The CNNB (Calling Number Name Blocking) function allows any line option CNDB or CNDB customer group option to suppress its DN and name from being displayed for each call.

CNU

The CNU (Calling Number Unblock) feature allows the subscriber to choose when to display DN information. The CNU feature is automatically available to a subscriber if option CNDB is assigned to either

- the line
- the customer group

CPU

The CPU (Call Pickup) feature is assigned to the access code that an MDC station with the Call Pickup feature dials when the station answers an incoming call to another station in a preset pickup group.

CRA

The CRA (Call Request Activation) function is assigned to the access code that an MDC station with the CAR (Call Request) feature dials to request the called station. This called station can either be busy or not answer.

Register CARRATT of OM group MWTCHAR is incremented for each attempt to activate message waiting by dialing the call request access code.

Register CARFAIL of OM group MWTCAR is incremented for each failure to activate all requests due to feature restrictions including the situation in which the terminator has option CXR (for call exempt).

The originator is routed to feature not allowed (FNAL) treatment.

Register CAROVFL of OM group MWTCAR is incremented for each failure to activate all requests due to overflow of software resources provided by office parameters NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, and NO_OF_LARGE_FTR_DATA_BLKS in table OFCENG.

The number of call requests that can be activated at any time depends on the availability of software resources provided by office parameters NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS, FTRQAGENTS, FTRQSIZE, and NO_OF_FTR_CONTROL_BLKS in table OFCENG.

CRDA

The CRDA (Call Request Delete All) function is assigned to the access code that an MDC station with the CAR feature dials to delete all call requests, including messages placed on the lines. This access code is dialed by the requester.

Register CARTDACT of OM group MWTCAR is incremented for each attempt to remove call request or requests by the requester, by dialing the CRDA access code.

IBNXLA (continued)

CRDS

The CRDS (Call Request Delete Specific) function is assigned to the access code that an IBN station with the CAR feature dials with the DN of the requestee to delete a specific call request that the user placed. This is dialed by the requestor.

Register CARODACT of OM group MWTCAR is incremented for each attempt to remove call request or requests by the requestor, by dialing the CRDS access code.

Register CARDOVFL of OM group MWTCAR is incremented for each failure to deactivate call request by dialing the CRDS access code, that was due to overflow of software resources provided by office parameter NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, and NO_OF_LARGE_FTR_DATA_BLKS in table OFCENG.

The number of call requests that can be deactivated at any time depends on the availability of software resources provided by office parameters NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_DATA_BLKS, FTRQAGENTS, FRTQSIZE, and NO_OF_FTR_CONTROL_BLKS in table OFCENG.

CRR

The CRR (Call Request Retrieval) feature is assigned to the access code that an IBN station with the CAR feature dials to retrieve a call request placed on the line by another party who wishes to call back. If successful, the person who placed the call request receives a call.

Register CARRETRV of OM group MWTCAR is incremented for each attempt to retrieve a call request.

Register CARRFAIL of OM group MWTCAR is incremented for each failure to retrieve a call request due to feature interaction.

The originator is routed to Feature Not Allowed (FNAL) treatment or to busy if requestor is busy.

Register CARROVFL of OM group MWTCAR is incremented for each failure to retrieve a call request due to overflow of software resources provided by office parameters NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, and NO_OF_LARGE_FTR_DATA_BLKS in table OFCENG.

The number of call requests that can be retrieved at any time depends on the availability of software resources provided by office parameters NO_OF_SMALL_FTR_DATA_BLKS, NO_OF_MEDIUM_FTR_DATA_BLKS, NO_OF_LARGE_FTR_DATA_BLKS, FTRQAGENTS, FTRQSIZE and NO_OF_FTR_CONTROL_BLKS in table OFCENG.

CRT

The CRT (Call Redirect) feature provides residential end users with the ability to transfer calls to a pre-defined routing DN. The transfer occurs when the subscriber flashes and dials an access code during an established two-party call. Successful CRT feature activation routes the subscriber to a confirmation treatment defined by the operating company.

To add the CRT feature to table IBNXLA, datafill CRT in the FTR_TYPE field. Next, datafill the CRT routing DN for the selected customer group in the ROUTING_DN field. Last, datafill Y or N in the BILLING field to allow or not allow usage sensitive billing for non-subscribed CRT users.

CSCWID

The CSCWID (Cancel Spontaneous Call Waiting Identification) function allows a caller to activate and deactivate RES and Centrex features. A tuple in table IBNXLA is required to define the activation code for CSCWID. This activation code is definable on a customer group and there is no recommended value. Once the subscriber has dialed the activation code, the dial tone is reapplied and the calling number can be dialed. CSCWID is controlled for each office by the SCWID tuple in table RESOFC.

CSMI

The CSMI (Call Screening, Monitoring, and Intercept) feature is one of a group of features belonging to VMNSS (Voice Message Network Services). This group of features enhances voice messaging services by improving incoming call management and message handling for residential and small business end users.

CSMI is offered to residential and Centrex end users and allows the monitoring and interception of messages that are being handled by a NBAS (Network-Based Answering Service).

CONF

The CONF (Station Controlled Conference) feature is assigned to the access code that an IBN with the CNF line feature must dial to activate or add on a party to the conference. The maximum number of conferees allowed on the call is defined in table IBNFEAT in the entry for the controlling station.

IBNXLA (continued)

COT

The COT (Customer Originated Trace) feature gives the caller the ability to trace the last incoming call. The trace generates an output report through the log subsystem. Information about possibly malicious calls is made available to the operating company, though not to the caller who initiated the trace.

CWD

The CWD (Dial Call Waiting) feature is assigned to the access code that an IBN station with CWD has to dial to activate the feature.

Register CWDATT of OM group CALLWAIT is incremented for each attempt to call wait by the originator by dialing the call waiting access code.

This feature can also be used in conjunction with Preset Conference and Meet-me Conference features. For releasing a party from the call, see FEAT RLS.

DCP

The DCP (Directed Call Pickup) feature is assigned to the access code that an IBN station with DCBI (Directed Call Pickup Barge-in) feature must dial followed by the DN of the ringing station to activate either feature. A special tone is given after the dialing of the DCP activation code. The station then dials the extension number of the ringing line to pick up the call.

DNDACT

A subscriber can dial the DNDACT feature access code to activate Do Not Disturb.

Table DNDSCHED begin and end times will interact with DNDACT and DNDDEACT feature access codes. If a subscriber's line has Do Not Disturb as a result of a DNDACT access code, it can be deactivated by an end time in table DNDSCHED.

DNDDEACT

A subscriber can dial the DNDDEACT feature access code to deactivate Do Not Disturb.

Table DNDSCHED begin and end times will interact with DNDACT and DNDDEACT feature access codes. If a subscriber's line has Do Not Disturb active as a result of a begin time in table DNDSCHED, the subscriber can dial the DNDDEACT feature access code to deactivate DND.

DPRKS

The DPRKS (Directed Call Park) feature is assigned to the access code that an IBN station with the DCPK feature must dial to park a call against another directory number.

DRCW

The DRCW (Distinctive Ringing/Call Waiting) feature allows a line with DRCW option to gain access to the screen list editing function to add, delete, or modify the DRCW list and to activate or deactivate DRCW.

EBO

The EBO (Executive Busy Override) feature is assigned to the access code that an IBN station with the EBO option dials to activate the executive busy override feature. IBN stations with the EBX option are exempt from override attempts on it.

ECWTP

The ECWTP (Enhanced Call Waiting Programming) option is assigned to an access code that an IBN station must dial to access the programming menu for the ECWT feature. The ECWTP access code is assigned to the customer group that the subscriber belongs.

GIC

The GIC (Group Intercom via Access Code) function specifies the digits that an IBN station must dial to invoke Group Intercom by access code.

HLD

The HLD (Permanent Hold) feature is assigned to the access code that an IBN station with a 500/2500 set and the option HLD has to dial to hold any active call without an attendant's assistance.

ICSCTRL

The ICSCTRL (In-Call Service Control) feature allows an end user to activate and deactivate the EBCR (Enhanced Busy Call Return) service across different calls. The ICSCTRL feature assigns option ISCDEACT (In-Call Service Deactivation) to the line. The ICSDEACT option deactivates EBCR for calls originated from that line. If the switch assigns option ICSDEACT to the line, remove the option and activate EBCR.

INTPIC

The INTPIC (International Primary InterLATA Carrier) feature allows EAEO (Equal Access End Offices) subscribers to presubscribe to an international call carrier, independent of the selected interLATA call carrier. To enable the International PIC feature, datafill option INTPIC in the OPTION field in table

IBNXLA (continued)

IBNXLA. Then, datafill the name of the desired international carrier in the CARRIER field, and datafill Y or N in the CHOICE field to allow or disallow the choice for CAC (Carrier Access Code) dialing.

Option EA must also be assigned in table IBNXLA for option INTPIC to function.

Note: World Zone 1 calls do not use option INTPIC; they use option PIC to choose a carrier.

LDSA

Each RES customer group requiring access to the long distance signal activation/deactivation feature access code must have an entry in table IBNXLA for *49 (or 1149).

The LDSA (Long Distance Signal Activation) option allows temporary activation/deactivation of LDS on a per-line basis by one of the following methods:

- The subscriber dials the LDSA feature activation code (*49 or 1149). The code acts as a toggle: if option LDSA is provisioned on the line, *49 deactivates it; otherwise, it activates the option.
- The operating company activates or deactivates option LDSA using table editor or SERVORD.

Note: LDSA can be added to a line only if the line already has the option LDSO (long distance signal option) assigned or if option LDSO is being added at the same time.

LNR

The LNR (Last Number Redial) feature is assigned to the access code that an IBN station must dial to activate Last Number Redial feature.

LOOP

The LOOP (Data Looparound) activation code connects the data unit transmit path to its receiver path in the central office. A data unit line must dial this activation code to activate data transmission testing, for example continuity and error rate.

LPACT

The LPACT (Loudspeaker Paging Answerback Activation) function allows the activation of LPA (Loudspeaker Paging Answerback). When table IBNXLA contains LPACT, the feature is associated with an access code (DGLIDX) that

a user dials to activate LPA. A user can enter the LPACT access code from an attendant console, EBS (electronic business set), or a 500/2500 station.

LPANS

The LPANS (Loudspeaker Paging Answerback Access) function is assigned to the access code that allows a user in an MDC group to answer the loudspeaker paging request for the Loudspeaker Paging Answerback feature.

LSPKP

The LSPKP (Loudspeaker) feature is assigned to the access code for gaining access to a loudspeaker paging unit that is interfaced with a line card. This feature permits stations and attendants to summon a particular person over speakers located throughout the customer's premises.

The paging equipment interfaces to the DMS switch by a line card, for example, NT2X18, that can be served by an RLM (remote line module). The line must be datafilled in table IBNLINES only. If loudspeaker paging unit is interfaced with a trunk card, see translation selector ROUTE.

MADO

The MADO (Meridian Asynchronous Data Option) feature is assigned to the access code that an M2000 digital telephone equipped with MADO self-test must dial to activate the self-test.

MCCS

The MCCS (Mechanized Calling Card Service) allows a caller on the PSTN to access the carrier network and use a calling card to make national or international public calls according to regulatory requirements. The calling card number is validated using a database within the switch. The AMA billing record generated allows the carrier to charge against the calling card number. The access code of the caller is identified and translated dependent on the datafill in table IBNXLA.

MCH

The MCH (Malicious Call Hold) feature allows a user to hold an incoming malicious call so that the call can be traced to the originating party. If both the calling and called parties are on the same switch, the entire connection is held until the called party releases the call. If the call is on an incoming trunk, the connection is held back to the incoming trunk. Activation of the feature generates a log report. The two-digit code used in office parameter CLF_ACCESS_CODE in table OFCVAR cannot be used in two-digit dialing or as a feature access code in table IBNXLA.

IBNXLA (continued)

MHLA

The MHLA (MADN Hold Activation) function is assigned to the access code that a MADN (multiple appearance directory number) using a 500/2500 set must dial to activate the MADN Hold feature. This feature allows a MADN line to hold an incoming MADN call that is in the talking state without the assistance of the attendant.

MHLC

The MHLC (MADN Hold Cancellation) feature is assigned to the access code that a MADN using a 500/2500 set must dial to deactivate the MADN Hold feature.

MMLK

The MMLK (Meet-Me Lock) function enables the controller of a Meet-Me Conference call to lock the conference against incoming calls. This feature is available only if field CONFTYPE in table MMCONF is of type FLASHONLY, CODEONLY, CNF6ADDON, or CODEADDON.

MMUL

The MMUL (Meet-Me Unlock) function enables the controller of a Meet-Me Conference call to unlock the conference to incoming calls. This feature is available only if field CONFTYPE in table MMCONF is of type FLASHONLY, CODEONLY, CNF6ADDON, or CODEADDON.

MSBA

The MSBA (Make Set Busy Activation) function is assigned to the access code that an IBN station, using 500/2500 set or a private business line of a business set with MSB (Make Set Busy) or MSBI (Make Set Busy Intragroup) features must dial to activate either feature. This activation code is also used by business set DN appearances when MSB or MSBI feature is not assigned to a vacant key.

MSBD

The MSBD (Make Set Busy Deactivation) function is assigned to the access code that an IBN station using 500/2500 set or a private business line of a business set with MSB or MSBI (Make Set Busy Intragroup) features must dial to deactivate either feature. This deactivation code is also used by business set DN appearances when MSB or MSBI is not assigned to a vacant key.

MSGCTRL

The MSGCTRL (Message Control) feature allows an end user to activate and deactivate the Access to Messaging service across different calls. The MSGCTRL feature assigns option MSGDEACT (Message Deactivation) to the line. The MSGDEACT option deactivates Access to Messaging for calls

originated from that line. If the switch assigns option MSGDEACT to the line, remove option MSGDEACT and activate Access to Messaging.

NMP

The NMP (No Modem Pool) function is assigned to the access code that allows a DU user with the OMP NDO (outbound modem pool with NRS default outbound) option assigned in table KSETFEAT to dial as prefix digits to circumvent the process of reserving an OMP.

NRSO

The NRSO (Network Outbound Modem Pooling) function provides the ability to a customer with multiple sites to establish a centralized modem pool on one of the systems. Data subscribers on any of the other systems can then route to the serving switch over a digital trunk. Outbound modem pooling is invoked for termination to a far-end modem facility.

PF

The PF (Power Feature) feature allows for activation of the Power Feature for name programming to allow the caller with general user display to change the name associated with the DN. It also gives the user the capability to change the name for others if an administrator is datafilled in table KSETFEAT.

Note: Before assigning this feature to a new customer group, make sure that the customer group tuple exists in table CUSTNTWK.

PND

The PND (Prefix NRS Default) function is assigned to the access code that an ISDN or data unit user dials before dialing the DN to request a default outbound modem pool resource datafilled for the line in table KSETFEAT with the NRS feature. The modem pool is automatically inserted after the far end has answered.

PNO

The PNO (Prefix NRS Outbound) function is assigned to the access code that a data unit user dials before dialing the DN to request an outbound modem pool resource other than the default datafilled for the line in table KSETFEAT.

PRK

The PRK (Call Park) function is assigned to the access code that an MDC station with option PRK dials to park a call against the DN.

IBNXLA (continued)

PRKR

The PRKR (Call Park Retrieve) function is assigned to the access code that an MDC station with the DCPK (Directed Call Park) or PRK (Call Park) feature dials to retrieve a call that is parked against the DN.

If the line has option DCPK, to retrieve a call the MDC station dials the DN of any MDC station in the system where the call is parked and dials the security code (if required), in addition to dialing the PRKR access code.

PRLA

The PRLA (Privacy Release Activation) function is assigned to the access code that a MADN with SCA (single calling arrangement) using a 500/2500 set must dial to activate the Privacy Release feature. This feature allows a number of MADN lines and an external party. A maximum of 30 parties can be added to a single connection.

PRLC

The PRLC (Privacy Release Cancellation) function is assigned to the access code that a MADN with SCA (single calling arrangement) using a 500/2500 set must dial to deactivate the Privacy Release feature.

PRV

The PRV (Privacy) feature allows the active MADN SBA (single bridge arrangement) member to prevent other idle members of the MADN group from bridging in after the call is in a stable state. Any member who tries to bridge in receives audible treatment and is locked out.

PVN

The PVN (Private Virtual Network) is used if enhanced DISA (EDISA) is activated and requires private virtual network access.

RAG

The RAG (Ring Again) feature is assigned to the access code that an IBN station with the Ring Again feature has to dial, if the called party within the same customer group is busy and the calling party receives RGA ringing if the called party becomes idle. After the calling line goes off-hook, the called party is rung and the calling party hears audible ringback.

RDISA

The RDISA (Regular Direct Inward System Access) feature allows the caller to activate regular DISA when the DISA DN is dialed and an announcement is given asking for the type of DISA or access required.

SCA

The SCA (Selective Call Acceptance) feature allows a line with SCA to gain access to the screen list editing function to add, delete or modify the SCA list and to activate or deactivate SCA.

SCF

The SCF (Selective Call Forward) feature allows a line with SCF to gain access to the screen list editing function to add, delete, or modify the SCF list and to activate or deactivate SCF.

SCPL

The SCPL (Speed Call Program Long) feature is assigned to the access code that an IBN station with the Speed Calling Long feature must dial to add or delete a number from its speed call list.

SCPS

The SCPS (Speed Call Program Short) feature is assigned to the access code that an IBN station with Speed Calling Short feature must dial to add or delete a number from its speed call list.

SCRJ

The SCRJ (Selective Call Rejection) feature allows a line with SCRJ to gain access to the screen list editing function to add, delete or modify the SCRJ list and to activate or deactivate SCRJ.

SIMRING

The SIMRING (Simultaneous Ringing) feature allows a line with SIMRING to gain access to the screen list editing function to add, delete, or modify the SIMRING NPMDN list and to activate/deactivate SIMRING.

SLHOLD

The SLHOLD (Residential Call Hold) feature accepts RCHD access codes as a line option for residential lines. Refer to office parameter SLVP_RCHD_TIMER in table OFCVAR for this option.

SLVPD1, SLVPD2, SLVPD3

The SLVPD1, SLVPD2, SLVPD3 (Single Line Variety Package) feature modifies table IBNXLA to accept SLVP access codes as a line option for residential lines.

SOR

The SOR (Station Origination Restrictions) option allows a subscriber or attendant to activate the Station Origination Restrictions feature using an access code for specified DNs or groups of DNs that reside in the same

IBNXLA (continued)

customer group. To group DNs, the SOR option must be applied against an IBN line in table IBNFEAT or against a business set in table KSETFEAT.

The caller who applies the restriction must have the SORC option applied against their line in either table IBNLINES or table KSETLINE. The attendant who applies the restriction must have option SORC applied against a console key in table FNMAP.

The customer group of the caller or attendant who activates a restriction against a line must have the SOR option datafilled for the group in table CUSTSTN.

A level 0 restriction permits all calls allowed by the NCOS (network class of service) to complete. A level 1 restriction allows only intragroup calls and calls specified in an exception list to complete. A level 2 restriction allows only the intragroup calls to complete. A level 3 restriction allows only calls specified in an exception list to complete. A level 4 restriction only allows 911 emergency calls to complete.

Exception lists and the number of SOR groups permitted for each customer group are datafilled in table SORLIST.

SPDC

The SPDC (Speed Calling Access Code) feature specifies the digits that an IBN station has to dial to invoke speed calling by access code.

TAFAS

The TAFAS (Trunk Answer from Any Station) option is assigned to the access code that an IBN station must dial to answer an incoming call type when the TAFAS alerting device sounds.

TVDS

The TVDS (Verification from Designated Station) feature is assigned to the access code that allows operating company personnel to select and access individual trunks of a trunk group for transmission quality testing purposes. TVDS can be activated from a 2500 telephone set or an ETS (electronic telephone set) that has been assigned the appropriate NCOS (network class of service). TVDS can be used to test any CO or tie trunk that uses DP, MF, or Digitone signaling. It cannot be used to test LAMA (local automatic message accounting), CAMA, TSPS, FX, toll-completing, intertoll, WATS, verification trunks, or special trunks, such as paging, dictation, or RAN trunks.

U3WC

The U3WC (Three-way Calling - Usage Sensitive) feature is 3WC (three-way calling) with the following changes: an optional access code (*71 or 1171) is entered for U3WC activation; a billing record is generated each time the U3WC feature is activated; and a separate U3WC register group is created for operational measurement data. U3WC is designed to support RES and POTS lines.

U3WC feature operates in the same manner as the 3WC feature. The subscriber must be in a stable two-party call to activate the U3WC feature. The first switch-hook flash is used to invoke the U3WC feature, then the subscriber receives a special dial tone, and an access code is entered, if required. Next, the directory number of the add-on party is dialed, and the second switch-hook flash establishes the three-way call.

UCCD

The UCCD (Uniform Call Distribution Deactivation) function is assigned to the access code that an IBN station with the UCD feature dials to deactivate the UCD mode of operation.

UCDA

The UCDA (Uniform Call Distribution Activation) function is assigned to the access code that an IBN station with the UCD feature dials to deactivate the UCD mode of operation.

After the IBN station receives special dial tone, the IBN station must dial the UCD directory number of the UCD group to which the station is attached.

UCDNSA

UCDNSA (Uniform Call Distribution Night Service Activation) allows any logged-in UCD agent to activate night service for that UCD group with the UCDNS option.

UCDNSD

UCDNSD (Uniform Call Distribution Night Service Deactivation) allows any logged-in UCD agent to deactivate night service for that UCD group with the UCDNS option.

VMX

The VMX (Voice Message Exchange) option specifies the digits that an IBN station has to dial for the message waiting indication command code.

VOWIN

VOWIN indicates the VOW Login feature.

IBNXLA (continued)

VOWOUT

VOWOUT indicates the VOW Logout feature.

VOWPCC

VOWPCC indicates the VOW Passcode Change feature.

VOWROUT

VOWROUT indicates the VOW Remote Logout feature.

WML

The WML (Warmline) feature specifies the access code dialed by a member of an MDC group to activate, deactivate or change the WML feature on the set. When a tuple with this feature is added or changed in table IBNXLA, the access code is compared against office parameter WML_ACCESS_CODE in table OFCVAR. If the two codes do not match, a warning message occurs.

Screening list editing (SLE) commands for SLE and the recommended Bellcore code are listed in the following table.

Screening list editing commands

Command	Explanation	Bellcore
NILCMD	Nil command	
LISTADD	List command	# or 12
LISTDEL	List deletion	* or 11
LISTREV	List review	1
DELETE	Delete list entry	07
DELALL	Delete all entries	08
DELPRIV	Delete all private	09
ACTIVATE	Activate service	
DEACTIVATE	Deactivate service	
CHGSTATUS	Change status	3
PROGRDN	Program remote DN	
QSERVICE	Query service	
CANCEL	Cancel command	

Screening list editing commands

Command	Explanation	Bellcore
LASTDN	Last DN	01
EXTN	Extension	02
NEXTDN	Next entry	
FIRSTDN	First entry	
PREVDN	Previous entry	
CURRDN	Current entry	
HELP	Help	0

Error messages

You can receive the following error messages:

```
XLANAME DOES NOT EXIST
```

Reason: The tuple is about to write to table IBNXLA, but the translator name cannot be located in table XLANAME.

Action: Enter the translator name in table XLANAME.

```
NO DIGILATOR ID EXISTS FOR XLANAME.
```

Reason: The tuple is about to write to table IBNXLA, but the translator name has not allocated the required store in table XLANAME.

Action: Re-enter the translator in table XLANAME.

Table history

SN07 (DMS)

DNDACT (DND Activation) and DNDDEACT (DND Deactivation) added as new FEATURE options to support activity A00002196.

Added values VOWIN, VOWOUT, VOWPCC and VOWROUT to subfield FEATURE for feature A00002011, Virtual Office Worker.

IBNXLA (continued)

MMP16

Added entries OCBACT, OCBDACT and OCBINT to subfield FEATURE for feature 59032661.

Added entry WUCRIN to subfield FEATURE for feature 59027710.

NA014

Development activity 59015840 enhances the capacity of table IBNXLA by

- providing an additional 10-digit digilator pool
- quadrupling the internal expanded table size from 1 block of 16 K to 4 blocks of 16 K each

NA013

Development activity 59012144 introduced selector call redirect (CRT).

Development activity 59012192 introduced the LNP option.

MMP12

Added CFTANN/CFO option.

NA012

Development activity 59007050 introduces changes to field LINEATTR of selectors NET, DOD, GEN, MBG, LOC, ESN, OWT, SFMT and ROUTE. This field now accepts an alphanumeric string instead of an integer string.

Removed XXTRIG information.

NA011

Added CNDA and CNDD access codes for use by the ISDN feature Redirecting Number and Reason Delivery (RND) for ISDN CFW.

APC010

Added feature ECWTP to the range of values for the FEATURE field.

EUR009

Added feature MCCS to the range of values for the FEATURE field.

NA010

Added feature names CMG, CMGA, CMGRCTRL, CMGRACT, and CMGRDACT, SIMRING, MSGCTRL, and ICSCTRL to range of values for the FEATURE field.

APC009

Added entry CNU to field FEATURE.

NA009

Added the NET GEN option RES to support Cost of Ownership Reduction, RES translation simplification.

Added entry RES to field FEATURE. Added a note for entry CNU that indicates CNU is APC market only. Table IBNXLA has been updated for the NA011 release of this document. This update was made in response to Problem Resolution System (PRS) request for the NA009 time frame.

NA008

Added the ISDN BRI Caller ID Delivery and Suppression (CIDS) features CIDSSUP and CIDSDLV, which store access codes in table IBNXLA.

NA007

Added Local Number Portability Test Call (LNPTST) entry.

CNA07

Added description of the International Primary InterLATA Carrier feature.

EUR005

Added options DMI and INSNNG to selectors DOD and NET, and added option ENTRYID to selector MONA.

NA005

Added descriptions of options Advanced Intelligent Network (AIN) and Long Distance Signal Activation (LDSA).

NA004

Added description of features UCDNSA and UCDNSD, which were omitted when introduced in BCS34.

NA002

Added description of option Subscriber Programmable Ringing (SPRING) on Call Forward Do Not Answer (CFDA).

CSP02

Added explanation about RES and POTS digit collection.

SOR

The SOR (Station Origination Restrictions) option allows a subscriber or attendant to activate the Station Origination Restrictions feature using an access code for specified DNs or groups of DNs that reside in the same customer group. To group DNs, the SOR option must be applied against an IBN line in table IBNFEAT or against a business set in table KSETFEAT.

The caller who applies the restriction must have the SORC option applied against their line in either table IBNLINES or table KSETLINE. The attendant who applies the restriction must have option SORC applied against a console key in table FNMAP.

The customer group of the caller or attendant who activates a restriction against a line must have the SOR option datafilled for the group in table CUSTSTN.

A level 0 restriction permits all calls allowed by the NCOS (network class of service) to complete. A level 1 restriction allows only intragroup calls and calls specified in an exception list to complete. A level 2 restriction allows only the intragroup calls to complete. A level 3 restriction allows only calls specified in an exception list to complete. A level 4 restriction only allows 911 emergency calls to complete.

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The TAFAS (Trunk Answer from Any Station) option is assigned to the access code that an IBN station must dial to answer an incoming call type when the TAFAS alerting device sounds.

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IBNXLA (continued)

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U3WC feature operates in the same manner as the 3WC feature. The subscriber must be in a stable two-party call to activate the U3WC feature. The first switch-hook flash is used to invoke the U3WC feature, then the subscriber receives a special dial tone, and an access code is entered, if required. Next, the directory number of the add-on party is dialed, and the second switch-hook flash establishes the three-way call.

UCCD

The UCCD (Uniform Call Distribution Deactivation) function is assigned to the access code that an IBN station with the UCD feature dials to deactivate the UCD mode of operation.

UCDA

The UCDA (Uniform Call Distribution Activation) function is assigned to the access code that an IBN station with the UCD feature dials to deactivate the UCD mode of operation.

After the IBN station receives special dial tone, the IBN station must dial the UCD directory number of the UCD group to which the station is attached.

UCDNSA

UCDNSA (Uniform Call Distribution Night Service Activation) allows any logged-in UCD agent to activate night service for that UCD group with the UCDNS option.

UCDNSD

UCDNSD (Uniform Call Distribution Night Service Deactivation) allows any logged-in UCD agent to deactivate night service for that UCD group with the UCDNS option.

VMX

The VMX (Voice Message Exchange) option specifies the digits that an IBN station has to dial for the message waiting indication command code.

WML

The WML (Warmline) feature specifies the access code dialed by a member of an MDC group to activate, deactivate or change the WML feature on the set. When a tuple with this feature is added or changed in table IBNXLA, the access code is compared against office parameter WML_ACCESS_CODE in table OFCVAR. If the two codes do not match, a warning message occurs.

Screening list editing (SLE) commands for SLE and the recommended Bellcore code are listed in the following table.

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DELALL	Delete all entries	08
DELPRIV	Delete all private	09
ACTIVATE	Activate service	
DEACTIVATE	Deactivate service	
CHGSTATUS	Change status	3
PROGRDN	Program remote DN	
QSERVICE	Query service	
CANCEL	Cancel command	
LASTDN	Last DN	01
EXTN	Extension	02
NEXTDN	Next entry	
FIRSTDN	First entry	
PREVDN	Previous entry	

IBNXLA (end)

Screening list editing commands

Command	Explanation	Bellcore
CURRDN	Current entry	
HELP	Help	0

Error messages

You can receive the following error messages:

```
XLANAME DOES NOT EXIST
```

Reason: The tuple is about to write to table IBNXLA, but the translator name cannot be located in table XLANAME.

Action: Enter the translator name in table XLANAME.

```
NO DIGILATOR ID EXISTS FOR XLANAME.
```

Reason: The tuple is about to write to table IBNXLA, but the translator name has not allocated the required store in table XLANAME.

Action: Re-enter the translator in table XLANAME.

IBNXLA feature RMI

Remote Message Indicator

Remote Message Indicator (RMI) modifies table IBNFEAT as follows:

- Feature translator `RMICTRL' is added to define the access codes that RMI subscribers enter to activate and deactivate RMI on their line.
- A FEAT format tuple is added in order to create a feature translator. The FEAT format tuple contains the digit sequence which represents an RMI
- Control feature name `RMICTRL' is added to the range of values for the FEATURE field of IBNXLA.

A star flash translator, that equates a digit sequence with the star (*) key, must be defined if the RMI access code is to be entered from a dial pulse phone set. This translator is independent of the RMI feature access code translation and is normally already provided for the translation of other feature access codes.

Datafill

The following table lists the datafill for table IBNXLA feature RMI.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
Key		see subfields	Key. This field consists of subfields XLANAME and DGLIDX.
	XLANAME	RESXLA	Translator name. Enter the name that is assigned to the translator.
	DGLIDX	97	Digilator index. Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows:
			9 digits 0 to 9
			C digits 0 to 9 and B to C
			F digits 0 to 9 and B to F

IBNXLA feature RMI (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	Result. This field consists of subfield TRSEL, ACR, SMDR, and FEATURE.
	TRSEL	FEAT	Translator selector. Enter the translation selector FEAT.
	ACR	N	Account code entry. Enter Y (yes) if an account code entry is required for all calls to the special feature access code. Enter N (no) when the feature is equal to SCPL or SCPS (see field FEATURE).

IBNXLA feature RMI (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SMDR	N	Station message detail recording. Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. This field has no effect and no SMDR record is produced for features that do not originate calls. For dump and restore purposes, an N must be datafilled after the SMDR field if field TRSEL is datafilled with NET, ROUTE, TTTR, AMBI, EXTN, CUTTD, or FEAT. The Station Message Detail Recording fields SMDR and SMDRB [TRKSEL=NET] can only be set to Y if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT. SMDR bills each leg of the call. The option must be turned on in IBN translations to generate SMDR billing. Turning on the option for one leg of the call does not carry over to another leg of the call. For example, when using virtual Facility groups (VFG) for routing SMDR must be turned on for the leg of the call that requires billing and must be routed through IBN translations. Neither SMDR nor SMDRB can be turned on for calls from plain ordinary telephone service (POTS) VFGs.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
FEATURE		RMICTRL	Value RMICTRL is added to the range of values for the FEATURE field of table IBNXLA. There is no default.

Datafill example

The following example shows sample RMI datafill for table IBNXLA. In this figure, RESXLA is the name of a feature translator for a group of RES customer group, 97 is the digit sequence assigned to the RMICTRL access code, RMICTRL is the name of the RMI activation/deactivation feature.

MAP display example for table IBNXLA feature RMI

```
KEYRESULT
_____________________________________________________________

RESXLA   97  FEAT  N  N  RMICTRL
```

IBNXLA feature U3WC

Three-way calling - usage sensitive (U3WC)

The translation selector U3WC is designed to support RES lines. This feature is three-way calling (3WC) with the following changes:

- optional access code (*71 or 1171) is entered for U3WC activation
- billing record is generated each time the U3WC feature is activated
- separate U3WC register group was created for Operational Measurement data

Datafill

The following table lists the datafill for table IBNXLA selector U3WC.

Datafilling table IBNXLA (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field consists of subfields XLANAME and DSLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA feature U3WC (continued)

Datafilling table IBNXLA (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	Result. This field consists of subfields TRSEL, ACR, SMDR, and FEATURE.
	TRSEL	FEAT	Translation selector. Enter the translation selector FEAT.
	ACR	Y or N	Account code entry. Enter Y (yes) if an account code entry is required for all calls to the special feature access code. Otherwise, enter N (no). Enter N when the feature is equal to SCPL or SCPS (see field FEATURE).
	SMDR	Y or N	Station message detail recording. Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate call this field has no effect and no SMDR record is produced. The Station Message Detail Recording fields (SMDR and SMDRB [TRKSEL = NET]) can only be set to Y if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT. SMDR bills each leg of the call. The option must be turned on in table IBNXLA to generate SMDR billing. Turning on the option for one leg of the call, does not carry over to another leg of the call. For example, when using virtual facility groups (VFG) for routing, SMDR must be turned on for the leg of the call that requires billing and must be routed through table IBNXLA. Neither SMDR nor SMDRB can be turned on for calls originating from (POTS) VFGs.
	FEATURE	U3WC	Feature. Enter U3WC.

IBNXLA feature U3WC (end)

Datafill example

The following example shows sample datafill for table IBNXLA selector U3WC.

MAP display example for table IBNXLA selector U3WC

```
TABLE: IBNXLA
          KEY
                                                RESULT
-------------------------------------------------------------
     NTIXLA     71                  FEAT N Y U3WC
```

IBNXLA

Universal Voice Messaging

Functional description

Table IBNXLA stores the data for the digit translation of calls from an Integrated Business Network (IBN) station, an attendant console, an incoming, or an incoming side of a two-way IBN trunk group.

Each tuple is called a translator. Each translator is assigned a one- to eight-character alphanumeric name. This name is assigned in table XLANAME.

One to 18 digits can be translated.

For one or more digits for which no datafill is provided, translation automatically defaults to the IBN treatment specified in field VACTRMT in table CUSTHEAD.

For related information, refer to table XLANAME.

Translators

Six types of translators are listed below:

- customer group
- feature
- flash
- preliminary
- tandem tie trunk route
- octothorpe (#)

Feature translator

Each customer group can be assigned a feature translator if required. The name that is assigned to the customer group feature translator is defined in table CUSTHEAD. Each digit or digits for which no datafill is provided in the customer group feature translator, automatically defaults as a speed calling access code. Each digit or digits for which datafill is provided cannot be used as speed calling digits.

The feature translator is optional but can be used if one or more access codes for a Digitone station has a star (*) as the first digit of the access code.

IBNXLA feature UVM (continued)

If the only codes that require a star as a leading control digit are speed calling codes, then a feature translator is not required.

If an IBN station or attendant console has one or more access codes with a star as a leading control character that are different from those specified in the customer group feature translator, then the different codes can be specified in a second feature translator. The name that is assigned to this translator is specified in field FEATXLA of option XLAS in the NCOS number that is assigned to the IBN stations, the attendant consoles or both. For assignment of the network class of service (NCOS) number see table NCOS.

If no datafill (a digit or digits) is provided in table NCOS then translation automatically defaults to the customer group feature translator that is defined in table CUSTHEAD.

Table size

Memory is allocated dynamically.

The command DBLOCKS in the BCS monitor (BCSMON) process at a MAP terminal is used to check the digit set count of table IBNXLA. It shows the number of sets of digits being used, the number of sets of digits allocated, the percentage used, and how much memory remains.

The format with translation selector FEAT is required in a feature translator if the digit or digits dialed are the access code for one of the features listed in field FEATURE.

Datafill

The following table lists the datafill for table IBNXLA feature UVM.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	Digilator index. Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows:

IBNXLA feature UVM (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action	
			MAXDIG value	IBNXLA digilator values
			9	Digits 0 to 9
			C	Digits 0 to 9 and B to C
			F	Digits 0 to 9 and B to F
			The allowable digit range for table IBNXLA digilator values is determined for each translator	
RESULT	TRSEL	FEAT	Translation selector. Enter FEAT.	
	ACR	Y or N	Account code entryEnter Y (yes) if an account code entry is required for all calls to the special feature access code. Otherwise, enter N (no). Enter N when the feature is equal to SCPL or SCPS (see field FEATURE).	

IBNXLA feature UVM (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SMDR	Y or N	Station message detail recordingEnter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate call this field has no effect and no SMDR record is produced. The Station Message Detail Recording fields (SMDR and SMDRB [field TRKSEL set to NET]) can only be set to Y if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT. SMDR bills each leg of the call. The option must be turned on in IBN translations to generate SMDR billing. Turning on the option for one leg of the call, does not carry over to another leg of the call. For example, when using virtual facility groups (VFG) for routing, SMDR must be turned on for the leg of the call that requires billing and must be routed through IBN translations. Neither SMDR nor SMDRB can be turned on for calls originating from plain ordinary telephone service (POTS) VFGs.
	FEATURE	UVMD or UVMR	Feature. Enter UVMD for Universal Voice Messaging Deposit, or UVMR for Universal Voice Messaging Retrieve.

Datafill example

The following example shows sample datafill for table IBNXLA feature UVM.

IBNXLA feature UVM (end)

MAP display example for table IBNXLA feature UVM

```
KEY
                          RESULT
_____________________________________________________________
RESXLA              99    FEAT N Y UVMD
RESXLA              98    FEAT N Y UVMR
```

IBNXLA selector AMBI

Ambiguous code dialing version 1 (AMBI)

The translation selector AMBI is required if the digit or digits dialed represent an attendant access code; for example, 0 or the first digit or digits dialed for an extension number dialing (0XXXX). This form of ambiguous dialing is limited.

See selector AMBIG for more flexibility and capability.

The data that this format takes is a combination of the ATT and the EXTN selectors, plus a number field (NOAMBDGS) indicating how many ambiguous digits there are.

Datafill

The following table lists the datafill for table IBNXLA selector AMBI.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*TrabslatorName* Enter the name assigned to the translator.
	DGLIDX	alphanumeric (vector of up to 18 characters)	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector AMBI (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NOAMBDGS, ICI, SMDR, INTRAGRP, SNPA, OFCCODE, DIGINEXT, and FILLDIGS.
	TRSEL	AMBI	*Translator selector* Enter the translation selector AMBI.
	NOAMBDGS	numeric (1 to 4)	*Number of ambiguous digits* This entry must be less than the entry in field DIGINEXT. Any entry outside the range indicated for this field is invalid.
	ICI	numeric (0 to 255)	*Incoming call identification code* Enter the ICI code assigned to the attendant access code.
	SMDR	Y or N	*Station message detail recording* Enter Y (yes) if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N (no) if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call this field has no effect and no SMDR record is produced.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the numbering plan area (NPA) to which the block of station numbers is assigned.

IBNXLA selector AMBI (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	OFCCODE	numeric (0 to 7 digits)	*Central office code* Enter the office code to which the block of extension numbers is assigned.
	DIGINEXT	numeric (2 to 5)	*Digits in extension* Enter the number of digits required for station number 2, 3, 4, or 5. Any entry outside the range indicated for this field is invalid.
	FILLDIGS	numeric (vector of up to 7 digits)	*Fill digits* This is a vector of up to seven digits. The entry of $ indicates no fill digits.
	SFMM	numeric (0 to 30)	*Station fence, minimum, maximum.* Station fence in the digit position in the called number from which the station code starts. Min. and max. values are used for limits on the length of the dialed digits. All three fields have a 0 - 30 range. When the number of dialed digits is less than the min. value, the call is routed to partial dial treatment. When the number is greater than the max. value, an attempt is made to route the call ignoring the excess digits; failing this, the call is routed to vacant treatment.

Datafill example

The examples of digits 0 and 34 used as ambiguous codes are shown below. On their own, they are attendant access codes. They can also be used for extension number dialing, for example, 0XXXX or 34XXX.

The translator name is BNCT and the block of station numbers 00000 to 09999 or 34000 to 34999 belongs to office code 722 in serving NPA 613. The station_fence values are 2, 3, and 9.

Station message detail recording is required for calls to these set of station numbers.

IBNXLA selector AMBI (end)

MAP display example for table IBNXLA selector AMBI

```
                          KEY
                                  RESULT
_____________________________________________________________________________
   BNCT                   0
                                 AMBI 1 1 Y N 613 722 5 10 (SFMM 2 3 9)$
```

IBNXLA selector AMBIG

Ambiguous code dialing version II (AMBIG)

The translation selector AMBIG allows ambiguity in the dialing plan depending not only on the initial digit dialed but also on the total number of digits dialed.

This feature assigns two different translator names if the initial digits are ambiguous and the ambiguity can only be resolved by the number of digits dialed. One translator name (SHORTXLA) is used when the number of digits dialed is less than or equal to a certain value in field MAXSHDIG. The other translator name (LONGXLA) is used when the number of digits dialed is greater than that specified value in field MAXSHDIG.

The end of dialing indication can either be an octothorpe (#) for Digitone lines or an interdigit time-out for Digitone or dial pulse lines.

Table DIGCOL is used to indicate to the peripheral module what action to take based on the first digit dialed for a given digit collect name as specified in either table CUSTHEAD or NCOS. Selector AMBIG allows short or long timing between digits for a specified number of digits. Table DIGCOL must be datafilled correctly when using the AMBIG translation to ensure that a short interdigit time-out exists after the feature access codes have been dialed. Otherwise, there is a long wait (10 s) in order to resolve the ambiguity.

Note: Attendent Consoles with selector Ambig datafill, do not use the table DIGCOL, instead the time duration for dialing is set by a hardcoded statement in Module ACSET which sets the duration to 10 secs.

Datafill

The following table lists datafill for table IBNXLA selector AMBIG.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

IBNXLA selector AMBIG (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Resul* This field consists of subfields TRSEL, SHORTXLA, MAXSHDIG, and LONGXLA.
	TRSEL	AMBIG	*Translator selector* Enter the translation selector AMBIG.
	SHORTXLA	alphanumeric (1 to 8 characters)	*Short translator name* Enter the translator name used if the number of digits dialed is less than or equal to that specified in field MAXSHDIG.
MAXSHDIG		0 to 15	*Maximum short digits* Enter the maximum number of digits in the short digit string.
LONGXLA		alphanumeric (1 to 8 characters)	*Long translator name* Enter the translator name used if the number of digits dialed is more than that specified in field MAXSHDIG.

IBNXLA selector AMBIG (end)

Datafill example

The following examples show ambiguous dialing. 1X and 1XX are feature codes and 1XXXX is extension dialing.

If three or less digits are dialed, translator name CXDKS is used with field TRSEL = FEAT.

If four or more digits are collected, translator name CXDKL is used with field TRSEL = EXTN.

MAP display example for table IBNXLA selector AMBIG

```
                    KEY
                                                     RESULT
---------------------------------------------------------------
 CXDK                  1
                                        AMBIG CXDKS 3 CXDKL
 CXDKS               121
                                               FEAT N N CPU
 CXDKS               122
                                               FEAT N N CHD
 CXDKS               123
                                               FEAT N N LNR
 CXDKL                 1
                                     EXTN N N N 613 721 5 $
```

Attendant access (ATT)

The translation selector ATT is required if the digit or digits dialed represent the attendant access code. The attendant to which calls are terminated is assigned to the originator's customer group and subgroup unless the Night Service feature is invoked.

By datafilling table FNMAP the incoming call identification code is assigned to the attendant access key and lamp in the attendant console functional key.

If a peg count of station to attendant access code calls is required, assign the incoming call identification code number 1 to the attendant access.

Datafill

The following table lists the datafill for table IBNXLA selector ATT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector ATT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL and ICI.
	TRSEL	ATT	*Translation selector* Enter the translation selector ATT.
	ICI	0 to 255	*Incoming call identification code* Enter the ICI code assigned to the attendant access code.

Datafill example

An example of datafill for the attendant access digit 0 for a customer group translator with the name BNCT is shown below. The incoming identification code is 1.

MAP display example for table IBNXLA selector ATT

```
                          KEY
                                                  RESULT
---------------------------------------------------------
  BNCT                     0
                                                   ATT 1
```

Access to attendant in other customer group or subgroup (ATTO)

The translation selector ATTO is required if the digit or digits that are dialed represent an attendant access code and the attendant belongs to another subgroup or customer group.

The incoming call identification code assigned to the key and lamp in table FNMAP for the attendant consoles must belong to the appropriate customer group and subgroup.

Datafill

The following table lists the datafill for table IBNXLA selector ATTO.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector ATTO (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, CUSTNAME, SUBGRP, ICI, and INTRAGRP.
	TRSEL	ATTO	*Translation selector* Enter the translation selector ATTO.
	CUSTNAME	alphanumeric	*Customer group name* Enter the name of the customer group that is datafilled with field CONSOLES = Y in table CUSTENG and also datafilled in table CUSTCONS.
	SUBGRP	0 to 7	*Subgroup number* Enter the subgroup number of the customer group to which the attendants are assigned.

IBNXLA selector ATTO (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	ICI	0 to 255	*Incoming call identification code* Enter the ICI code that is assigned to this type of call.
	INTRAGRP	Y or N	*Intragroup* Enter Y (yes) for calls in the same customer group. Otherwise, enter N (no).

Datafill example

An example of datafill for the preliminary translator for the IBN stations belonging to subgroup 1 of customer group BNRMC is shown below. The translator name used in the example is BNPT, the dialed digits, 114, routes the calls to the key and lamp that are assigned to field ICI code 35, of one of the attendant consoles that is assigned to subgroup 1 of customer group BNRMC.

The call is intragroup.

MAP display example for table IBNXLA selector ATTO

```
                         KEY
                                                                  RESULT
_______________________________________________________________________
   BNPT                 114
                                                       ATTO BNRMC 1 35 Y
```

IBNXLA selector CUTTD

Cut-through Dialing (CUTTD)

The translation selector CUTTD is used for the Cut-through Dialing feature. Digits dialed after activation of the access code are processed by the feature and are not subject to translation by DMS. An outgoing trunk (POTS or IBN trunk) is seized when the activation code is dialed and the rest of the dialed digits are outpulsed while call progression tones are passed back to the originator.

The trunks used for cut-through dialing must have field IPULSTYP in table TRKSGRP datafilled with DP (dial pulse).

Datafill

The following table lists the datafill for table IBNXLA selector CUTTD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* *IBNXLA digilator values* 9 Digits 0 to 9C Digits 0 to 9 and B to CF Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, CLLI, SMDR, and INTRAGRP.

IBNXLA selector CUTTD (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	CUTTD	*Translation selector* Enter the translation selector CUTTD.
	CLLI	alphanumeric	*Common language location identifier* Enter the CLLI of the trunk group over which the cut-through dialing call is routed.
	SMDR	Y or N	*Station message detail recording* Enter Y (yes) if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N (no) if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call this field has no effect and no SMDR record is produced.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.

Datafill example

An example of an access code of translator BPNF CUTTD activation code is shown below. The access code is 88, the trunk through which this feature is activated is CUTTHRUDIAL, and SMDR is required.

The call is not intragroup.

MAP display example for table IBNXLA selector CUTTD

```
                    KEY
                                                      RESULT
----------------------------------------------------------------
  BNPF              88
                                     CUTTD CUTTHRUDIAL Y N Y
```

IBNXLA selector EXTN

Extension selector (EXTN)

The translation selector EXTN is used for abbreviated dialing, single station numbers, or blocks of two- to seven-digit station numbers. The digit dialed does or does not require an added prefix digit or digits.

Unless specifically required, the same set of station numbers cannot be duplicated in different customer groups.

This selector must be used if the Call Park feature is used.

Note: EXTN dialing from an MDC customer group to a Residential Enhanced Services (RES) line is not possible.

Datafill

The following table lists the datafill for table IBNXLA selector EXTN.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	numeric (vector of up to 18 digits)	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector EXTN (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, SMDR, INTRAGRP, SNPA, NNX, DIGINEXT, SFMM, and FILLDIGS.
	TRSEL	EXTN	*Translation selector* Enter the translation selector EXTN.
	SMDR	Y or N	*Station message detail recording* Enter Y (yes) if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N (no) if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call this field has no effect and no SMDR record is produced.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is intragroup. Otherwise, enter N.
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the destination numbering plan area (NPA).
	OFCCODE	numeric (0 to 7 digits)	*Central office code* Enter the destination office code.
	DIGINEXT	numeric (1 to 7)	*Digits in extension* Enter the number of digits in the extension number.
	FILLDIGS	numeric (vector of up to 7 digits)	*Fill Digits* This is a vector of up to seven digits. The entry of $ indicates no fill digits.

IBNXLA selector EXTN (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SFMM	numeric (0 to 30)	*Station fence, minimum, maximum.* Station fence in the digit position in the called number from which the station code starts. Min. and max. values are used for limits on the length of the dialed digits. All three fields have a 0 - 30 range. When the number of dialed digits is less than the min. value, the call is routed to partial dial treatment. When the number is greater than the max. value, an attempt is made to route the call ignoring the excess digits; failing this, the call is routed to vacant treatment.
EXTNOPT		see subfields	*Extension options* Consists of subfield SETCDN.
	SETCDN	Datafill	*Set called number* Sets the generic independent called number party name (CDNNAME) for routing based on parameters contained in the called number. Enter SETCDN to set the called number name to the value defined in subfield CDNNAME.
	CDNNAME	alphanumeric (0 to 8 characters)	*Called number name* The name that the called number is to be set to using the SETCDN option. This must be a valid CDNNAME from table CDNCHAR.

Datafill example

An example of datafill for table IBNXLA, translation selector EXTN, is shown below.

This is an example of the digits 24111 passed on to this translator converted to directory number (DN) (613) 722 4111. The number of digits in the extension is five. SMDR is required, there is no variable call detail recording, and it is not an intragroup call. The station_fence values are 0, 3, and 7.

The five-digit extension number 24111 is translated to (613) 722-4111 and routed to table DNINV.

IBNXLA selector EXTN (end)

MAP display example for table IBNXLA selector EXTN

```
KEY
                                    RESULT
---------------------------------------------------------------------
NTCT                       2
                                  EXTN Y N 613 722 5 $ (SFMM 1 3 7) $
```

IBNXLA selector FEAT

Feature (FEAT)

The format with translation selector FEAT is required in a feature translator if the digit or digits dialed are the access code for one of the features listed in subfield FEATURE.

Datafill

The following table lists the datafill for table IBNXLA selector FEAT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field includes subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	Digilator index. Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The acceptable values for the digilator part of DGLIDX of table IBNXLA are as follows: MAXDIG value — IBNXLA digilator values 9 — digits 0 to 9 C — digits 0 to 9 and B to C F — digits 0 to 9 and B to F The acceptable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	Result. This field includes subfields TRSEL, ACR, SMDR, and FEATURE.
	TRSEL	FEAT	Translation selector. Enter the translation selector FEAT.

IBNXLA selector FEAT (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ACR	Y or N	Account code entry. Enter Y (yes) if an account code entry is required for all calls to the special feature access code. Otherwise, enter N (no). Enter N when the feature is equal to SCPL or SCPS (see subfield FEATURE).
	SMDR	Y or N	Station message detail recording. Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate call this field has no effect and no SMDR record is produced. The Station Message Detail Recording fields (SMDR and SMDRB [TRKSEL= NET]) can only be set to Y if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT. SMDR bills each leg of the call. The option must be turned on in IBN translations to generate SMDR billing. Turning on the option for one leg of the call does not carry over to another leg of the call. For example, when using virtual facility groups (VFG) for routing, SMDR must be turned on for the leg of the call that requires billing and must be routed through IBN translations. Neither SMDR nor SMDRB can be turned on for calls originating from plain ordinary telephone service (POTS) VFGs.
	FEATURE	see following table	Feature. See the following table.

IBNXLA selector FEAT (continued)

Valid entry values for subfield FEATURE

The following table lists the valid entry values and expansions for subfield FEATURE of table IBNXLA.

Valid entry values and entry value expansions for subfield FEATURE (Sheet 1 of 6)

Entry	Explanation
ACBA	Automatic Call Back Activation
ACBD	Automatic Call Back Deactivation
ACCT	Account Code
ACDLGA	ACD Login Activation
ACDLGD	ACD Login Deactivation
ACDNRA	ACD Not Ready Activation
ACDNRD	ACD Not Ready Deactivation
ACRJA	Anonymous Caller Rejection Activation
ACRJD	Anonymous Caller Rejection Deactivation
ARA	Automatic Recall Activation
ARD	Automatic Recall Deactivation
ASRI	Automatic Set Relocation In
ASRO	Automatic Set Relocation Out
AUTH	Authorization Code
CALLACT	Call Logging Activation
CCW	Cancel Call Waiting
CDCL	Code Calling
CFBC	Call Forward (CF) Busy Cancellation
CFBEC	CF Busy External Cancellation
CFBEP	CF Busy External Programming
CFBIC	CF Busy Internal Cancellation
CFBIP	CF Busy Internal Programming

Valid entry values and entry value expansions for subfield FEATURE (Sheet 2 of 6)

Entry	Explanation
CFBP	CF Busy Programming
CFDC	CF Don't Answer Cancellation
CFDEC	CF Don't Answer External Cancellation
CFDEP	CF Don't Answer External Programming
CFDIC	CF Don't Answer Internal Cancellation
CFDIP	CF Don't Answer Internal Programming
CFDP	CF Don't Answer Programming
CFDPRING	CF Don't Answer Subscriber Programmable Ring
CFKC	CF per Key Cancellation
CFKP	CF per Key Programming
CFRA	CF Remote Access
CFWC	CF Cancel
CFWP	CF Programming
CHD	Call Hold
CIDSDLV	Caller ID Delivery and Suppression Delivery (ISDN only)
CIDSSUP	Caller ID Delivery and Suppression Suppression (ISDN only)
CISA	Cancel In-Session Activation
CMG	Call Management Group
CMGRACT	Call Management Group Activation
CMGRCTRL	Call Management Group Control
CMGRDACT	Call Management Group Deactivation
CMWIRA	CLASS Message Waiting Indicator Ringing Activation
CMWIRD	CLASS Message Waiting Indicator Ringing Deactivation
CNAB	Calling Name Delivery Blocking

IBNXLA selector FEAT (continued)

Valid entry values and entry value expansions for subfield FEATURE (Sheet 3 of 6)

Entry	Explanation
CNB	Calling Number Blocking
CNDA	Calling Number Delivery Activation
	Note: The CNDA activation code is also used for the ISDN CND feature.
CNDB	Calling Number Delivery Blocking
CNDD	Calling Number Delivery Deactivation
	Note: The CNDD activation code is also used for the ISDN CND feature.
CNNB	Calling Number Name Blocking
CNND	Calling Number Name Delivery
CONF	Station Controlled Conference
COT	Customer Originated Trace
CPU	Call Pickup
CRA	Call Request Activation
CRDA	Call Request Delete All
CRDS	Call Request Delete Specific
CRR	Call Request Retrieval
CSCWID	Cancel Spontaneous Call Waiting Identification
CSMICTRL	Call Screening, Monitoring and Intercept Control
CWTACT	Call Waiting Activation
CWTDEACT	Call Waiting Deactivation
DCP	Directed Call Pickup
DPRKS	Directed Call Park
DRCW	Distinctive Ringing/Call Waiting
EBO	Executive Busy Override

Valid entry values and entry value expansions for subfield FEATURE (Sheet 4 of 6)

Entry	Explanation
EWAC	Enhanced Walkaway
HLD	Permanent Hold
ICMSG	Intentional Call Messenger
ICSCTRL	In Call Service Control
INSTALL	Power Features Installer Translations Data
ISACTRL	In-Session Activation Control
LDSA	Long Distance Signal Activation
LNPTST	Local Number Portability Test Call
LNR	Last Number Redial
LOOP	Data Looparound
LPANS	Loudspeaker Paging Answerback Access
MCH	Malicious Call Hold
MHLA	MADN Hold Activation
MHLC	MADN Hold Cancellation
MMLK	Meet-me Lock
MMUL	Meet-me Unlock
MSBA	Make Set Busy Activation
MSBD	Make Set Busy Deactivation
MSGCTRL	Message Control
NFAIMPL	Network Facility Implicit Access
NFRA	Network Facility Remote Access
OBS	ACD Observe Agent
PF	Power Feature
PRKR	Call Park Retrieve

IBNXLA selector FEAT (continued)

Valid entry values and entry value expansions for subfield FEATURE (Sheet 5 of 6)

Entry	Explanation
PRKS	Calls Parked
PRLA	Privacy Release Activation
PRLC	Privacy Release Cancellation
PRNRA	Periodic Ring Notification Activated
PRNRD	Periodic Ring Notification Deactivated
PRV	Privacy
PVN	Private Virtual Network
RAG	Ring Again
RBACK	Ring Back to E911 Callers
RDISA	Regular Direct Inward System Access
RLS	Station Controlled Conference
RMICTRL	Remote Message Indicator Control
SACBA	Subscriber-activated Call Blocking Activated
SACBD	Subscriber-activated Call Blocking Deactivated
SCA	Selective Call Acceptance
SCF	Selective Call Forwarding
SCMSG	Standard Calll Messenger
SCPL	Speed Call Program Long
SCPS	Speed Call ProgramSshort
SCRJ	Selective Call Rejection
SDNID	Secondary Directory Number Identification
SIMRING	Simultaneous Ringing
SLHOLD	Residential Call Hold
SLVPD1	Single Line Variety Package 1

Valid entry values and entry value expansions for subfield FEATURE (Sheet 6 of 6)

Entry	Explanation
SLVPD2	Single Line Variety Package 2
SLVPD3	Single Line Variety Package 3
SOR	Station Origination Restrictions
SPP	Station-programmable PIN
TAFAS	Trunk Answer from any Station
TVDS	Truck Verification from Designated Station
U3WC	Three-way Calling - Usage Sensitive
UCDA	Uniform Call Distribution Activation
UCDD	Uniform Call Distribution Deactivation
UCDNSA	UCD Night Service Activation
UCDNSD	UCD Night Service Deactivation
USAID	Speech Activated Intelligent Dialing Universal Access
UVMD	Universal Voice Messaging Deposit
UVMR	Universal Voice Messaging Retrieve
VCFTST	Virtual Call Framework Test
VMEA	Voice Mail Easy Access
WML	Warm Line
WUCRA	Wake-up Call Reminder Activated
WUCRD	Wake-up Call Reminder Deactivated

Datafill examples

The access code that is dialed by the stations for the Call Pickup feature is 3112 for dial pulse and *112 for digitone stations.

The star (*) deletes automatically from digit translation.

IBNXLA selector FEAT (continued)

To convert digit 3 to a star (*) for dial pulse stations, see the description for subtable IBNXLA selector STAR.

Station Message Detail Recording (SMDR) is not available at present, so either Y or N can be entered without any effect.

The activation and deactivation codes for features ACRJA and ACRJD are added to table IBNXLA so that the ACRJ activation and deactivation digits are identified. There is no recommended value for the activation and deactivation codes.

The value SPP indicates the feature access code for station programmable personal identification number (PIN). SPP enables enhanced PIN security by allowing end users to change the CFRA PIN from the base station through the feature access code. SPP is optional on a customer group basis. SPP users are not allowed to enter a new PIN number that equals the old PIN. The SPP user must wait for announcement prompts to enter digits for PIN feature access code, current, new, and re-entered PIN entries.

Assigning an access code to field DGLIDX (digilator index) allows public safety answering point (PSAP) agents to press the access code and invoke the Ring Back feature. These access codes can be any numeric value as defined by the field DGLIDX, excluding 10 through 16 that are reserved for selective transfer, but must not conflict with codes used for other features. Recommended values are in the range of 70 through 99. This prevents the Ring Back feature access code from conflicting with cells for Speed Calling Short List (0 to 9) or Speed Calling Long List (00 to 69).

To activate the Automatic Call Distribution (ACD) observe agent from a 500/2500 set, the user must dial the appropriate Observe Agent (OBS) feature activation code datafilled in table IBNXLA. If the activating set does not have the option OBS datafilled, the caller receives feature not allowed (FNAL) treatment.

If the activating set does have the option OBS datafilled, the user receives a dial tone. The ACD observe feature occurs at this point, with the following exceptions:

- The user does not receive any visual indications as to the current state of the feature.
- Since the user cannot select the agent to follow by means of feature BC1531 (ACD Agent Key), the enhanced OBS capabilities do not apply.

- The user cannot re-enter a selection mode at any time.
- Instead of pressing the ACD GAG (call agent) key to enter conference mode and the OBS key to return to monitor mode, the 500/2500 set user must flash to toggle between the two modes. A flash during suspend mode is ignored.

The following example shows sample datafill for table IBNXLA selector FEAT.

MAP display example for table IBNXLA selector FEAT

```
                    KEY
                                                   RESULT
___________________________________________________________
BNFT                112
                                            FEAT N N    CPU
BNFT                112
                                            FEAT N N  ACRJA
BNFT                112
                                            FEAT N N  ACRJD
BNFT                112
                                            FEAT N N    SPP
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for features SACBA, SACBD, and SDNID.

MAP display example for table IBNXLA selector FEAT

```
                    KEY
                                                   RESULT
___________________________________________________________
RESXLA              92
                                            FEAT N N  SACBA
RESXLA              93
                                            FEAT N N  SACBD
RESXLA              79
                                            FEAT N N  SDNID
CXT1                79
                                            FEAT N N  SDNID
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for feature XXTRIG.

IBNXLA selector FEAT (continued)

The XXTRIG feature provides the Intelligent Network (IN) with the XX triggering capability, which instigates a query to the Switching Control Point (SCP) database as a direct result to the feature access code XX dialing.

MAP display example for table IBNXLA selector FEAT

```
                      KEY
                                                      RESULT
 ------------------------------------------------------------
   FTCOMM             77
                                            FEAT N N  XXTRIG
   FTCOMM             88
                                            FEAT N N  XXTRIG
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for features WUCRA and WUCRD.

MAP display example for table IBNXLA selector FEAT

```
                      KEY
                                                      RESULT
 ------------------------------------------------------------
   CX50B              67
                                            FEAT N N   WUCRA
   CX50B              68
                                            FEAT N N   WUCRD
   RES1               65
                                            FEAT N N   WUCRA
   RES1               66
                                            FEAT N N   WUCRD
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for features PRNRA, PRNRD, UCDNSA, and UCDNSD.

IBNXLA selector FEAT (continued)

MAP display example for table IBNXLA selector FEAT

```
                          KEY
                                                    RESULT
--------------------------------------------------------------
  RXCFNXXX                43
                                              FEAT N N   PRNRA
  RXCFNXXX                44
                                              FEAT N N   PRNRD
  TST1                    77
                                              FEAT N N  UCDNSA
  TST1                    78
                                              FEAT N N  UCDNSD
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for features DMCT and CALLACT.

MAP display example for table IBNXLA selector FEAT

```
                          KEY
                                                    RESULT
--------------------------------------------------------------
  CSDK                   144
                                              FEAT N N    DMCT
  CXT1                    78
                                              FEAT N N CALLACT
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for feature LDSA.

MAP display example for table IBNXLA selector FEAT

```
                          KEY
                                                    RESULT
--------------------------------------------------------------
  CSDK                   49
                                              FEAT N N    LDSA
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for feature EWAC.

IBNXLA selector FEAT (continued)

MAP display example for table IBNXLA selector FEAT

```
                          KEY
                                                      RESULT
 ---------------------------------------------------------------
   BNRFEAT               49
                                            FEAT N N    EWAC
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for feature U3WC.

MAP display example for table IBNXLA selector FEAT

```
                          KEY
                                                      RESULT
 ---------------------------------------------------------------
   RXCFNXXX              71
                                            FEAT N N    U3WC
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for feature VMEA.

MAP display example for table IBNXLA selector FEAT

```
                          KEY
                                                      RESULT
 ---------------------------------------------------------------
   RESXLA                11
                                                       STAR
 RESXLA                  95
                                             FEAT N N  VMEA
```

The following example shows possible datafill for table IBNXLA with TRSEL = FEAT for feature SIMRING.

IBNXLA selector FEAT (end)

MAP display example for table IBNXLA selector FEAT

```
                         KEY
                                                  RESULT
_____________________________________________________________________
   RXCFNXXX              88                    FEAT N N SIMRING
```

Table history

NA011

Added option EWAC.

NA010

Added option SIMRING.

APC009.1

Call Forward to Operator adds options CFOP and CFOC.

Call Forward to Annoucement adds options CFTANNP and CFTANNC.

NA008

Added note that feature translators CNDA and CNDD are also used for ISDN CND and added feature translators CIDSSUP and CIDSDLV for the ISDN CIDSSUP and CIDSDLV features.

NA007

Added option ICSCTRL.

Added option VMEA.

NA006

Added option CISA and ISACTRL.

NA005

Added option CSMICTRL, a feature translator that defines the access code used to control the CSMI feature.

NA002

Added options LDSA and CFDPRING.

IBNXLA selector FLEXI

Route to IBN treatment table (FLEXI)

The translation selector FLEXI is required for the following calls:

- calls to a digit or digits in a preliminary feature translator that are routed to one of the treatment numbers in table IBNTREAT
- calls to an unassigned digit or digits in a customer translator that are routed to one of the treatment numbers in table IBNTREAT, and the treatment number is different from the one specified in field VACTRMT in table CUSTHEAD

Table IBNTREAT can route calls either to a code in the common language location identifier (CLLI), table OFRT or IBNRTE, or to a key and lamp on an attendant console, by an incoming call identification code.

Datafill

The following table lists the datafill for table IBNXLA selector FLEXI.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector FLEXI (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL and FLEX_INTCPT.
	TRSEL	FLEXI	*Translation selector* Enter the treatment translation selector FLEXI.
	FLEX_INTCPT	0 to 63	*Flexible intercept* Enter the treatment number in table IBNTREAT to which all calls are routed.

Datafill example

An example of datafill for the customer translator BNCT is shown below. In the example, all calls with leading digits 121 are routed to IBN treatment number 6 in table IBNTREAT.

MAP display example for table IBNXLA selector FLEXI

```
                         KEY
                                                              RESULT
--------------------------------------------------------------------
   BNCT                 121
                                                             FLEXI 6
```

IBNXLA selector FTR

Refinable translation result (FTR)

The format with translation selector FTR is used to implement the following options and features:

- Advanced intelligent network (AIN)
- Bearer capability (BC)
- Call Redirect (CRT)
- Dial Call Waiting (CWD)
- Group Intercom (GIC)
- Loudspeaker Paging Answerback activation (LPACT)
- Loudspeaker (LSPKP)
- Network facility explicit access (NFAEXPL)
- No modem pool (NMP)
- Network outbound modem pooling (NRSO)
- Prefix network outbound modem pool (PNRS)
- Prefix NRS default (PND)
- Prefix NRS outbound (PNO)
- Speed Calling access code (SPDC)
- Voice message exchange (VMX)

Refer to the description of each option or feature elsewhere in this document. Each option or feature requires you to specify the number of activation code digits in subfield NO_ACCODE_DIGITS. Other datafill may be required, depending on the option or feature being datafilled.

IBNXLA selector FTR - type AIN

Advanced intelligent network (AIN)

The translation selector FTR with feature result translation type (FTRTYPE) AIN is used to support AIN R0.1 public office dialing plan (PODP) feature code triggers for 1FR and 1MR RES lines in IBN customer groups.

The PODP feature code trigger provides a means for querying the SCP when a vertical service code (feature code) is dialed by a PODP user.

Using this option, when a customer dials a vertical service code, for example, *nn or #nn, the SSP detects it at the Information Analyzed trigger detection point, sends a query to the SCP, and waits for the SCP to send a response.

The vertical service code can start with a number, an asterisk (*), or octothorpe (#), followed by one to six digits.

No conflicts should exist between PODP and customized dialing plan (CDP) access codes. A feature code that is used by a RES group for the CDP feature code trigger should not also be used by any member of the same group for the PODP feature code trigger.

If the first digit used in a PODP access code is the same as the first digit in a CDP access code, the RTP selector in table DIGCOL should be used to report digits individually to the CC.

Table IBNXLA can only be used to define group-based feature codes. A feature code that applies to all RES lines in an office would have tobe datafilled for all RES groups in the office.

The PODPFEAT trigger can be assigned to individual RES lines that are supported by other AIN originating triggers. Triggers can be assigned to individual lines using table IBNXLA, SERVORD, or the MAPCI tool AINMKRES. The PODPFEAT trigger is established using tables TRIGGRP and TRIGDIG.

IBNXLA selector FTR - type AIN (continued)

Datafill

The following table lists the datafill for table IBNXLA selector AIN.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	numeric (0 to 7)	*Number of activation code digits* Enter the number of digits in the activation code.

IBNXLA selector FTR - type AIN (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	FTRTYPE	AIN	*Feature result translation type* Enter AIN for Advanced intelligent network and complete subfield QUERYAFT.
	QUERYAFT	IMMED, VAR, NORM, or FIXED	*Query pattern* Enter IMMED if no digits are required. Enter VAR if a variable number of digits are required. Digit collection can end with entry of # or time-out. Enter NORM if digits of a normal dialing plan are required. Enter FIXED if a fixed number of digits is required, and complete subfield FIXED.
	FIXED	numeric (1 to 32)	*Fixed digits* Enter the number of digits required.

Datafill example

The following example shows sample datafill for table IBNXLA selector AIN.

In the first tuple, the vertical service code is *23 and XLANAME RXCFN is a feature translator for RES lines.

In the second tuple, the vertical service code is #345 and XLANAME RESOCT is a feature translator for RES lines.

In the third and fourth tuples, the vertical service codes are 113 and 78412 and XLANAME RXCMN200 is a customized translator for RES groups.

IBNXLA selector FTR - type AIN (end)

MAP display example for table IBNXLA selector AIN

```
                          KEY
                                                         RESULT
____________________________________________________________________
   RXCFN                   23
                                   FTR 2 AIN IMMED
   RESOCT                 345
                                   FTR 3 AIN NORMAL
   RXCMN200               113
                                   FTR 4 AIN VAR
   RXCMN200             78412
                                   FTR 5 AIN FIXED 4
```

IBNXLA selector FTR - type BC

Bearer Capability (BC)

The translation selector FTR with feature result translation type BC allows the operating company to assign a BC to a call for an ISDN call by dialing the access code before dialing any addressing information. The access code for BC is deleted from the dialed digits and translation then commences at table RTECHAR.

If the line already has a BC other than the default and attempts to activate the BC feature, the line receives feature not allowed (FNAL) treatment.

Datafill

The following table lists the datafill for table IBNXLA selector BC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Ke* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector FTR - type BC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	BC	*Feature result translation type* Enter BC for bearer capability.
BCNAME		alphanumeric (1 to 16 characters)	*Bearer capability name* Enter a BC name defined in table BCDEF.

Datafill example

The following example for table IBNXLA selector BC. shows the access code 45 of translator CXDK used for BC. The BC name is 64KDATA.

The number of access code is 2.

MAP display example for table IBNXLA selector BC

```
                         KEY
                                                         RESULT
--------------------------------------------------------------------
   CXDK                   45
                                                  FTR 2 BC 64KDATA
```

IBNXLA selector FTR - type CRT

Call Redirect (CRT)

The translation selector Call Redirect (CRT) stores the CRT routing and billing option for a customer group. The CRT feature provides residential subscribers with the ability to transfer calls to a pre-defined routing DN. The transfer occurs when the subscriber flashes and dials an access code during an established two-party call. Successful CRT feature activation routes the subscriber to a confirmation treatment defined by the operating company.

All subscribers in a customer group use the same CRT access code. Each customer group can support one or more access codes. Create an access code of 1 to 18 digits. The DGLIDX subfield defines the access code. Either an asterisk (*) or an octothorp (#) activates the CRT feature.

To add the CRT feature to table IBNXLA, datafill CRT in the FTR_TYPE field. Next, datafill the CRT routing DN for the selected customer group in the ROUTING_DN field. Finally, datafill Y or N in the BILLING field to allow or disallow usage sensitive billing for non-subscribed CRT users.

Datafill

The table that follows lists datafill for table IBNXLA selector CRT.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned for the access code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *IBNXLA digilator values*

IBNXLA selector FTR - type CRT (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			Digits 0 to 9 Digits 0 to 9 and B to C Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTR_TYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTR_TYPE	CRT	*Feature result translation type* Enter CRT for call redirect.
ROUTING_DN		numeric (7 to 30 digits) or $	*CRT routing DN* Enter the CRT routing DN number for the selected customer group. $ indicates that the routing DN is the Call Forward DN provisioned on the CRT controller's set.
BILLING_OPTION		Y or N	*Billing option* Enter Y (yes) to select usage sensitive billing when members of the selected customer group activate the CRT feature. Enter N (no) if no recording is required.

Datafill example

The figure that follows shows sample datafill for table IBNXLA selector CRT.

MAP display example for table IBNXLA selector CRT

```
                    KEY
                                                        RESULT
_________________________________________________________________
STARXLA             9                   FTR 1 CRT 6136200011 Y
```

IBNXLA selector FTR - type CWD

Dial Call Waiting (CWD)

The translation selector FTR with feature result translation type CWD allows an IBN station to dial and activate the Call Waiting feature.

Datafill

The following table lists the datafill for table IBNXLA selector CWD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTR_TYPE.
	TRSEL	FTR	*Translations selector* Enter the translation selector FTR.

IBNXLA selector FTR - type CWD (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NO_ACCODE_ DIGITS	0 to 7	*Number of account code digits* Enter the number of digits in the account code.
	FTR_TYPE	CWD	*Feature type* Enter CWD for Dial Call Waiting.

Datafill example

The following example shows sample datafill for table IBNXLA selector CWD.

MAP display example for table IBNXLA selector CWD

```
                    KEY
                                                    RESULT
--------------------------------------------------------------
WARK                  76
                                                FTR 2   CWD
```

IBNXLA selector FTR - type GIC

Group Intercom (GIC)

The translation selector FTR with feature result translation type GIC allows an IBN station to invoke Group Intercom by an access code.

Datafill

The following table lists the datafill for table IBNXLA selector GIC .

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.

IBNXLA selector FTR - type GIC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digit* Enter the number of digits in the activation code.
	FTRTYPE	GIC	*Feature result translation type* Enter GIC for Group Intercom.

Datafill example

The following example shows sample datafill for table IBNXLA selector GIC .

MAP display example for table IBNXLA selector GIC

```
                        KEY
                                                       RESULT
 ____________________________________________________________________
   WARK                  79
                                                  FTR 2   GIC
```

IBNXLA selector FTR - type LPACT

Loudspeaker Paging Answerback activation (LPACT)

The translation selector FTR with feature result translation type LPACT allows the activation of Loudspeaker Paging Answerback (LPA) feature. The user can enter the access code for selector LPACT from one if three devices:

- attendant consoles
- electronic business sets
- 500/2500 stations

The attendant activates the LPA feature by dialing the LPA activation code. If an idle LPA resource is available, the resource is reserved and its index is displayed at the attendant console. If no resource is available, reorder is returned to the attendant and a connection to the paging equipment is attempted. If a talking path is available and established, the destination (DEST) lamp lights, and the attendant can page. If no path is available or the paging equipment is busy, the busy tone is returned.

After the attendant pages, the attendant can control or release control of the page call.

To control the answerback to the page call, the attendant presses the release DEST key and waits for the paged party to answer. Pressing the release DEST key releases the paging equipment line and the caller is held on the source side of the loop. The loop that received the incoming call is busy until the page is answered. The attendant can answer other calls, and reconnect to the calling party at any time.

To answer the page call, the paged party dials the LPA access code (LPANS) from any non-attendant console line in the customer group. Ringing is given to the paged party and recall tone is given to the attendant. The attendant presses the LOOP key to connect to the paged party. When they connect, the attendant can release the active loop and the calling party is transferred to the paged party.

If the paged party does not answer the page call, the attendant can page again or disconnect the calling party. To repage, the attendant presses the LOOP key of the calling party to connect them to the paging equipment to reissue the page call.

If the attendant does not want to control the answerback, the attendant presses the RELEASE key after paging to park the incoming call against the LPA resource. The loop idles and can be used for incoming or outgoing calls.

IBNXLA selector FTR - type LPACT (continued)

To answer the page call, the page party dials the answerback access code and is connected directly to the parked caller. If the paged party does not answer the page, the parked call times out and recall tone is given to the attendant. When the time-out occurs, the LPA feature automatically deactivates.

The electronic business set (EBS) station user activates the LPA feature by pressing the FLASH key, also known as the three-way calling key or call transfer key, and then dialing the LPA activation access code.

The EBS stationA is checked to see if it has a display unit. A display unit searches for an idle LPA resource. The user checks LPA availability, on the display unit and searches for an idle LPA resource paging equipment and pages. If no resource is idle, reorder tone is returned to the user.

If there is no display unit on the EBS set, there is no search for an idle LPA resource. The user receives dial tone and must enter an index that is used to find an idle resource. If this index corresponds to an idle resource, the user connects to the paging equipment and can page.

After paging, the user can control the page call or release control of the page.

To control the page call, the user presses the FLASH key to disconnect from the paging equipment and reconnect to the caller. The pager and caller wait for the page to answer and their lines remain busy and no calls can be received by these lines.

To answer the call, the paged party dials the LPA access code and a three-port conference circuit is established among the calling party, paging party and paged party. The calling and paging parties are given a short tone burst notifying them of the new connection. A speech path is made between the paging party and paged parties and the calling party is placed on hold. The paging party can then use three-way calling to form a conference, or call transfer to transfer the call to the paged party.

If the paged party does not answer the page, the paging party can either disconnect to cancel the feature or flash to attempt to reconnect to the paging equipment. If the equipment is busy, a busy tone is given. If the equipment is idle, the page can be made as before.

To release control of the page call, the EBS user hangs up after paging, this signals a request to park the calling party against the LPA resource. The user is disconnected from the paging equipment. The calling party is given ringback while waiting for the paged party to dial the answerback code.

IBNXLA selector FTR - type LPACT (continued)

If the paged party dials the answerback access code, the paged party connects directly to the calling party. If the paged party does not answer, then a recall timer expires and the paging party is rerung cancelling the LPA activation.

The 500/2500 station user activates the LPA feature by flashing and then dialing the LPA activation access code, followed by any needed zoning information. After the zoning digits, the user is prompted with a dial tone to enter an index digit that is used to find an LPA resource. If the LPA resource is busy, then busy tone is returned to the user. The system does not search for an idle LPA resource. If an LPA resource is idle, the user connects to the paging equipment and issues the page. After the user pages, the user can control the page call or release control.

To control the page call, the user flashes to disconnect from the paging equipment and to connect to the calling party. The user and the calling party wait for the paged party to answer the page. The lines remain busy and are prevented from receiving calls, and the user and calling party hear ringing.

To release control of the page call, the user hangs up, this causes the call to be parked against the LPA resource.

To answer a page call, the paged party follows the answerback sequence that EBS paged parties follow.

Datafill

The following table lists the datafill for table IBNXLA selector LPACT.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

IBNXLA selector FTR - type LPACT (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.

IBNXLA selector FTR - type LPACT (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	FTRTYPE	LPACT	*Feature result translation type* Enter LPACT for Loudspeaker Paging Answerback activation.
	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.

For all line types

For all line types, datafill the addtional subfields described below.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LTGRP	ISDN ISDNOA LCME or OAM	*Logical terminal group* Enter the name of a group of logical terminals. For ISDN terminals, the name of the group is ISDN.
	LTNUM	1 to 1022	*Logical terminal number* Enter a number that identifies a logical terminal within the group.

IBNXLA selector FTR - type LPACT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ZONEDIGS	0 to 18	*Zone digits* Enter the number of zone digits which the user dials following the access code, and which are outpulsed in DTMF format to the paging equipment. Specify 0 (zero) for single zone paging system.
	TWC	Y or N	*Three way calling allowed* Enter N (no) if three-way calling (TWC) is not required. Otherwise, enter Y (yes).

Datafill example

The following example shows sample datafill for table IBNXLA selector LPACT.

MAP display example for table IBNXLA selector LPACT

```
                         KEY
                                                                RESULT
 ----------------------------------------------------------------------
   CXT3                   40
                                  FTR 2 LPACT HOST 00 00 03 02 1 Y $
```

IBNXLA selector FTR - type LSPKP

Loudspeaker (LSPKP)

The translation selector FTR with feature result translation type LSPKP permits access to paging equipment that interfaces with a DMS by a line card. Only format STN (from Table IBNLINES) is allowed.

Access to this feature is limited to IBN stations, attendants, and IBN trunks that are telephony agents that are subject to IBN translation. POTS lines have no direct access but direct inward system access (DISA) can be used, if available, to gain access to the loudspeaker paging (LSPKP).

The terminating restriction code (TRC) and the denied incoming (DIN) can be used to restrict external parties such as stations of other customer groups, POTS lines using DISA, or calls incoming by non-intragrp IBN trunks, from gaining access. The paging line can be assigned DIN and only those external lines or trunks with the correct TRC are allowed access.

The following information is required for selector LSPKP:

- access code
- number of access digits that must be deleted
- line equipment number (LEN) of the loudspeaker line
- number of zone digits outpulsed
- whether the feature can be used in a three-way call

Datafill

The following table lists the datafill for table IBNXLA selector LSPKP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digit* Enter the number of digits in the activation code.
	FTRTYPE	LSPKP	*Feature result translation type* Enter LSPKP for Loudspeaker.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	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.
	ZONEDIGS	0 to 18	*Zone digits* Enter the number of zone digits that the user dials following the access code, and that are outpulsed in DTMF format to the paging equipment. Enter 0 (zero) for single zone paging system.
	TWC	Y or N	*Three-way calling allowe* *d*This specifies whether access to the paging equipment is allowed as the second leg of a three-way call.

Datafill example

Although DMS does not screen the zone digits, the datafill can be arranged so that only certain zone digits are acceptable.

Example 1

The following example shows that any zone digit is allowed after the access code 1234 is dialed.

The paging equipment interfaces to DMS by line HOST 00 1 03 02.

Access to the paging equipment is allowed as the second leg of a three-way call.

MAP display example for table IBNXLA selector LSPKP

```
                          KEY
                                                                    RESULT
_____________________________________________________________________________
   WARK                  1234
                                        FTR 4 LSPKP HOST 00  1 03 02 1 Y $
```

Example 2 and 3

The following examples show the zones that can be dialed by including the zone digit in the access code. Only zones 7 and 8 are allowed.

MAP display example for table IBNXLA selector LSPKP

```
                          KEY
                                                                    RESULT
_____________________________________________________________________________
   WARK                 12347
                                        FTR 4 LSPKP HOST 00  1 03 02 1 Y $
   WARK                 12348
                                        FTR 4 LSPKP HOST 00  1 03 02 1 Y $
```

IBNXLA selector FTR - type NFAEXPL

Network facility explicit access (NFAEXPL)

The translation selector FTR with feature result translation type NFAEXPL is used to datafill access codes for explicit access for network facilities.

Datafill

The following table lists the datafill for table IBNXLA selector NFAEXPL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.

IBNXLA selector FTR - type NFAEXPL (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	NFAEXPL	*Feature result translation type* Enter NFAEXPL for network facility explicit access.
	EXPLTKGP	alphanumeric (1 to 16 characters)	*Explicit trunk group* Enter the trunk group over which an explicit connection is made (after dialing the access code). The trunk group chosen must already be datafilled in table TRKGRP with an entry NFA for GRPTYPE.
	EXPL_SC	0 to 9, *, or # (up to 5 characters)	*Explicit service code* Enter the service code outpulsed over the network facility access (NFA) explicit access.

Datafill example

Examples of possible datafill for selector FTR with FTRTYPE NFAEXPL are shown below.

MAP display example for table IBNXLA selector NFAEXPL

```
                    KEY
                                                         RESULT
-------------------------------------------------------------------
  NFAXLA1            44
                                  FTR 2 NFAEXPL NFATKGP1 9999
  NFAXLA1           145
                                  FTR 3 NFAEXPL NFATKGP3  145
```

IBNXLA selector FTR - type NMP

No modem pool (NMP)

The translation selector FTR with feature result translation type NMP is assigned to the access code that allows a data unit (DU) user, with the OMP NDO (outbound modem pool with NRS default outbound) option assigned in table KSETFEAT, to dial prefix digits to circumvent the process of reserving an outbound modem pool (OMP).

A modem pool is only required by the DU if analog facilities are used in the transmission path or the DU is communicating with analog devices, such as voice frequency modems. DUs with the OMP NDO option always have a modem pool reserved. If the call is connected directly to another DU or routed over a digital trunk to another DU where end-to-end T-link protocol can be successfully processed, then allocating a modem pool is redundant and it is deallocated.

DU users dialing the NMP prefix digits before the called DN digits bypasses the selection of a modem pool and the call is routed as a normal call. Since the outbound modem pool is not selected, the resource lamp on the DU does not flash.

DU users without the default NRS assigned dialing this prefix are routed to feature not allowed (FNAL) treatment.

Datafill

The following table lists the datafill for table IBNXLA selector NMP.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

IBNXLA selector FTR - type NMP (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, FTRTYPE, and SDT.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	NMP	*Feature result translation type* Enter NMP for no modem pool.
	SDT	Y or N	*Second dial tone* Enter Y (yes) if the second dial tone is required. Otherwise, enter N (no).

IBNXLA selector FTR - type NMP (end)

Datafill example

The following example shows sample datafill for table IBNXLA selector NMP.

The access code is 2 and a second dial tone is required.

MAP display example for table IBNXLA selector NMP

```
                         KEY
                                                         RESULT
_______________________________________________________________
   PXDK                   30
                                                   FTR 2 NMP Y
```

IBNXLA selector FTR - type NRSO

Network outbound modem pooling (NRSO)

The translation selector FTR with feature result translation type NRSO provides the ability, to a customer with multiple sites, to establish a centralized modem pool on one of the systems. Data subscribers on any of the other systems can route to the serving system over a digital trunk. Outbound modem pooling is invoked for termination to a far-end modem facility.

Datafill

The following table lists the datafill for table IBNXLA selector NRSO.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, FTRTYPE, and SDT.

IBNXLA selector FTR - type NRSO (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	NRSO	*Feature result translation type* Enter NRSO for network outbound modem pooling.
	SDT	Y or N	*Second dial tone* Enter Y (yes) if second dial tone is required. Otherwise, enter N (no).
	NRSGROUP	alphanumeric (1 to 16 characters)	*NRS group* Enter the NRS group common language location identifier (CLLI) datafilled in table RESGROUP that is used as the outbound resource group.

Datafill example

The following example shows activation of the network outbound modem pooling option. In this example, the access code 31 of translator CXDK is used for NRSO. The outbound resource group CLLI is DATAOG. The number of activation code digits is 2, and second dial tone is required.

MAP display example for table IBNXLA selector NRSO

```
                          KEY
RESULT
---------------------------------------------------------------------
   CXDK                    31
                                                  FTR 2 NRSO Y DATAOG
```

IBNXLA selector FTR - type PND

Prefix NRS default (PND)

The translation selector FTR with feature result translation type PND is assigned to the access code that an ISDN or data unit user dials before dialing the DN to request a default outbound modem pool resource datafilled for table KSETFEAT with the NRS feature. The modem pool is automatically inserted after the far end has answered.

The following information is required:

- the number of access code digits
- whether the second dial tone is required

Datafill

The following table lists the datafill for table IBNXLA selector PND.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector FTR - type PND (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, FTRTYPE, and SDT.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the activation code.
	FTRTYPE	PND	*Feature result translation type* Enter PND for prefix NRS default.
	SDT	Y or N	*Second dial tone* Enter Y (yes) if second dial tone is required. Otherwise, enter N (no).

Datafill example

The following example shows sample datafill for table IBNXLA selector PND.

The number of access code is 2 and second dial tone is required.

MAP display example for table IBNXLA selector PND

```
                          KEY
                                                           RESULT
--------------------------------------------------------------------
   PXDU                    77
                                                       FTR 2 PND Y
```

Prefix NRS outbound (PNO)

The translation selector FTR with feature result translation type PNO allows a data unit user to select an outbound modem pool by dialing the access code associated with the modem pool type. The user overrides the default outbound modem pool datafilled for table KSETFEAT using the NRS selector. The prefix NRS method of modem pooling has the advantage of allowing the user to connect to many types of modem equipment depending on the terminator. This allows the user to call different host computers that use a variety of modems over analog facilities.

The following information is required:

- the number of access code digits
- whether the second dial tone is required
- the CLLI of the outbound modem pool datafilled in table RESGROUP

Datafill example

The following table lists the datafill for table IBNXLA selector PNO.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9

IBNXLA selector FTR - type PNO (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			C Digits 0 to 9 and B to C F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, FTRTYPE, and SDT.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	PNO	*Feature result translation type* Enter PNO for prefix NRS outbound.
	SDT	Y or N	*Second dial tone* Enter Y (yes) if second dial tone is required. Otherwise, enter N (no).
	NRSGROUP	alphanumeric (1 to 16 characters)	*NRS group* Enter the NRS group CLLI datafilled in table RESGROUP that is used as the outbound resource group.

IBNXLA selector FTR - type PNO (end)

Datafill example

The following example shows the access code 77 of translator PXDU used for PNO. The outbound resource group CLLI is BELL212.

The number of access code is 2 and second dial tone is required.

MAP display example for table IBNXLA selector PNO

```
                         KEY
                                                             RESULT
___________________________________________________________________
  PXDU                    77
                                                FTR 2 PNO Y BELL212
```

IBNXLA selector FTR - type PNRS

Prefix network outbound modem pool (PNRS)

The selector FTR - type PNRS is required if the call originator wishes to select an outbound modem pool other than the default pool assigned by the DMS-100 Family switch. An outbound modem pool can be assigned Network Resource Selector (NRS) prefix digits that can be dialed directly from a subscribers data unit.

Datafill

The following table lists the datafill for table IBNXLA selector PNRS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, FTRTYPE, and SDT.

IBNXLA selector FTR - type PNRS (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	PNRS	*Feature result translation type* Enter PNRS for prefix network outbound modem pool.
	SDT	Y or N	*Second dial tone* Enter Y (yes) if second dial tone is required. Otherwise, enter N (no).
	NRSGROUP	alphanumeric (1 to 16 characters)	*NRS group* Enter the NRS group CLLI datafilled in table RESGROUP that is used as the outbound resource group.

Datafill example

The following example shows sample datafill for table IBNXLA selector PNRS.

MAP display example for table IBNXLA selector PNRS

```
                    KEY
                                                  RESULT
--------------------------------------------------------
  PXDK                30
                                     FTR 2 PNRS Y BELL212
```

IBNXLA selector FTR - type SPDC

Speed Calling access code (SPDC)

The translation selector FTR with feature result translation type SPDC allows an IBN station to invoke speed calling by an access code.

Datafill

The following table lists the datafill for table IBNXLA selector SPDC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, and FTRTYPE.
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.

IBNXLA selector FTR - type SPDC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NO_ACCODE_ DIGITS	0 to 7	*Number of activation code digits* Enter the number of digits in the activation code.
	FTRTYPE	SPDC	*Feature result translation type* Enter SPDC for the Speed Calling access code.

Datafill example

An example of access code 78 assigned for Speed Calling is shown below. The translator name is WARK and the activation code is 2.

MAP display example for table IBNXLA selector SPDC

```
                         KEY
                                                       RESULT
_________________________________________________________________
  WARK                    78
                                                     FTR 2 SPCD
```

IBNXLA selector FTR - type VMX

Voice message exchange (VMX)

The translation selector FTR with feature result translation type VMX is required if the three digits dialed are entered in a preliminary translator and represent a message waiting indication command code.

Datafill

The following table lists the datafill for table IBNXLA selector VMX.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* his field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, FTRTYPE, MWITYPE, and, DGSTOCOL.

IBNXLA selector FTR - type VMX (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	FTR	*Translation selector* Enter the translation selector FTR.
	NO_ACCODE_ DIGITS	3	*Number of access code digits* Enter the number of digits in the message waiting indication command code. Any entry outside the range indicated for this field is invalid.
	FTRTYPE	VMX	*Feature result translation type* Enter VMX for voice message exchange.
	MWITYPE	MWION orMWIOFF	*Message Waiting indication type* Enter MWION if the digits dialed are a Message Waiting indication ON command code. Enter MWIOFF if the digits dialed are a Message Waiting indication OFF command code.
	DGSTOCOL	0 to 7	*Digits to collect* Enter the number of digits collected after the message waiting indication code is received.

Datafill example

The following example shows sample datafill for table IBNXLA selector VMX.

MAP display example for table IBNXLA selector VMX

```
            KEY
                                                   RESULT
_______________________________________________________
   VMX                    057
                                      FTR 3 VMX MWION 7
```

IBNXLA selector IAG23

Two- or three-digit station numbers (IAG23)

The translation selector IAG23 is required if the digit or digits dialed are the leading digit or digits of a block of two- or three-digit station numbers.

The selector EXTN must be used.

Datafill

The following table lists the datafill for table IBNXLA selector IAG23.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

IBNXLA selector IAG23 (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* *IBNXLA digilator values* 9 Digits 0 to 9 C Digits 0 to 9 and B to C F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, SMDR, SNPA, NNX, DIGINEXT, DDIGIT, and EDIGIT.

IBNXLA selector IAG23 (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	IAG23	*Translation selector* Enter the translation selector IAG23.
	SMDR	Y or N	*Station message detail recording* Enter Y (yes) if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N (no) if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR record is produced.
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the NPA to which the block of extension numbers is assigned.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NNX	numeric (3 digits)	*Central office code* Enter the NNX code to which the block of extension numbers is assigned.
	DIGINEXT	2 or 3	*Digits in extension* Enter the number of digits required for the station number. Any entry outside the range indicated for this field is invalid.
	DDIGIT	numeric or N (1 character)	*Ddigit* Enter the D digit that is assigned to the block of station numbers.
	EDIGIT	numeric or N (1 character)	*Edigit* If the stations only have two-digit extension numbers, enter the E digit assigned to the block of station numbers. Otherwise, for three-digit extension numbers, enter 0 (zero).

Datafill example

An example of datafill for a set of three-digit station numbers 200 to 299 in a customer group translator BTCT is shown as the first tuple below. The block of station numbers belongs to NNX code 870 in serving NPA 514 and the D

IBNXLA selector IAG23 (end)

digit for the station number 2. The number of digits in the extension is 3 and the E digit is 0.

Station Message Detail Recording (SMDR) is required for all calls from a customer group station or attendant console to any of the stations in the set of station numbers.

MAP display example for table IBNXLA selector IAG23

```
 KEY
                                                     RESULT
 ____________________________________________________________
 BTCT                    2
                               IAG23 Y 514 870 3 2 0
```

An example of datafill for a set of two-digit station numbers 20 to 29 in a customer group translator NTCA is shown as the second tuple below. The set of station numbers belongs to NNX code 269 in serving NPA 403 and the D E digits are 2 3. SMDR is not required for all calls to this set of station numbers. The number of digits in the extension is 2.

MAP display example for table IBNXLA selector IAG23

```
KEY
                                                     RESULT
____________________________________________________________
NTCA                    2
                               IAG23 N 403 269 2 2 3
```

IBNXLA selector IAGRP

Interagent Group (IAGRP)

The translation selector IAGRP is required for 4 to 6 digit station-to-station extension dialing.

Datafill

The following table lists the datafill for table IBNXLA selector IAGRP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

IBNXLA selector IAGRP (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value IBNXLA digilator values* 9 Digits 0 to 9 C Digits 0 to 9 and B to CF F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, SMDR, SNPA, NNX, DIGINEXT, DDIGIT, and EDIGIT.

IBNXLA selector IAGRP (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	IAGRP	*Translation selector* Enter the translation selector IAGRP.
	SMDR	Y or N	Station message detail recording Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N (no) if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR is produced.
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the NPA to which the block of extension numbers is assigned.

IBNXLA selector IAGRP (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	NNX	numeric (3 digits)	*Central office code* Enter the NNX code to which the block of extension numbers is assigned.
	DIGINEXT	1 to 7	*Digits in extension* Enter the number of digits required for the station number. Any entry outside the range indicated for this field is invalid.

Datafill example

An example of datafill for selector IAGRP is shown below.

MAP display example for table IBNXLA selector IAGRP

```
KEY
                                                 RESULT
--------------------------------------------------------
BTCT                    2
                              IAGRP Y 514 870 3
```

IBNXLA selector MCCS

Mechanized Calling Card Service (MCCS)

The MCCS (Mechanized Calling Card Service) allows a caller on the PSTN to access the carrier network and use a calling card to make national or international public calls according to regulatory requirements. The calling card number is validated using a database within the switch. The AMA billing record generated allows the carrier to charge against the calling card number. The access code of the caller is identified and translated dependent on the datafill in table IBNXLA.

Datafill

The following table lists the datafill for table IBNXLA selector MCCS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.

IBNXLA selector MCCS (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* *IBNXLA digilator values* 9 Digits 0 to 9 C Digits 0 to 9 and B to C F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector MCCS (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, SMDR, SNPA, NNX, DIGINEXT, DDIGIT, and EDIGIT.
	TRSEL	MCCS	*Translation selector* Enter the translation selector MCCS.

Datafill example

An example of datafill for selector MCCS is shown below.

MAP display example for table IBNXLA selector MCCS

```
KEY
                                                     RESULT
-------------------------------------------------------------
BTCT                    2
                                    MCCS
```

IBNXLA selector N

Set prefix fence (N)

The translation selector N is required for a preliminary translator to set the prefix fence. A prefix fence is required if one or more digits are prefix digits and are not translated by digit translation.

Datafill example

The following table lists the datafill for table IBNXLA selector N.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector N (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	N	*Translation selector* Enter the translation selector N.
	NOPREDIG	1 to 25	*Number of prefix digits* Enter the number of prefix digits that are deleted for digit translation. Any entry outside the range indicated for this field is invalid.

Datafill example

An example of datafill for a preliminary translator with the name BNPT is shown below. In the example, if a station dials the prefix 1 with the code 911, the prefix digit 1 is deleted from the digit translation and the call is routed as if the code 911 was dialed.

MAP display example for table IBNXLA selector N

```
                    KEY
                                                     RESULT
_____________________________________________________________
  BNPT             1911
                                                        N 1
```

IBNXLA selector NET

Networks

The translation selector NET is required if the digit or digits dialed are the access code for one of the following options or features:

- Direct Outward Dial (DOD)
- Electronic Switched Network (ESN)
- General network selector (GEN)
- Location selector (LOC)
- Intra-LATA Primary Identification Code (LPIC)
- Meridian digital centrex (MDC) enhanced wide area telecommunications service (EWATS) for intraLATA primary interLATA carrier (PIC)
- Multiswitch business group (MBG)
- OUTWATS (OWT)
- Private network (PVT)

Datafill

The following table lists the datafill for table IBNXLA selector NET.

Datafilling table IBNXLA (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.

IBNXLA selector NET (continued)

Datafilling table IBNXLA (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value IBNXLA digilator values* 9 Digits 0 to 9 9C Digits 0 to 9 and B to CF 9 Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, VCDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, OPTION, LINEATTR, AUTHKEY, and NETRPTOPT.
	TRSEL	NET	*Translation Selector* Enter the translation selector NET.
	ACR	Y or N	*Account Code Entry* This subfield specifies whether an account code is required.
	SMDR	Y or N	*Station Message Detail Recording* This subfield specifies whether SMDR is required.
	NO_ACCODE_DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the general network access code.
	SECOND_DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.

IBNXLA selector NET (continued)

Datafilling table IBNXLA (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name assigned to the block of data in table DIGCOL for digit collection for IBN lines.
	CRL	Y or N	*Code restriction level* Enter Y if code restriction levels apply. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	NETTYPE	GEN	*Network type* Enter the network type GEN.
	OPTION	LATTR, EWAUTH	*Option* This subfield specifies the feature assigned to a line. For the line attribute index, enter LATTR. For MDC EWATS calls, enter EWAUTH.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute index to be used.
	AUTHKEY	alphanumeric (1 to 8 characters)	*Authorization key* Enter the name of an authorization key. The name must be a valid AUTHKEY name from table WATSAUTH during MDC enhanced OUTWATS translators.

IBNXLA selector NET (end)

Datafilling table IBNXLA (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT	NARS or DMI	*Network routing option* Enter the name of a network routing option. To enable the network acess register (NAR) routing option, enter NARS. To permit the manipulation of dialed digits during translation, enter DMI (digit manipulation index). If none, enter $.
		LNP	The LNP option is used to allow NET ESN or NET PVT calls to be eligible to encounter the LNP trigger. ***Note:*** LNP is a valid selector for the NET selector only if the ESN or PVT sub-selector is chosen.

Datafill example for table IBNXLA

The following example shows sample datafill for table IBNXLA selector NET.

MAP display example for table IBNXLA selector NET

```
IBNXLA   KEY                              RESULT
_____________________________________________________________

NTIXLA   123 NET N Y 3 Y POTS N N GEN (LATTR 6) (EWAUTH IBNTST) $
```

IBNXLA selector NET - type DOD

Direct Outward Dial (DOD)

The translator selector NET with network type DOD is required if the digit or digits dialed represent the DOD access code.

The number of digits in the access code is automatically deleted from the digits translated or outpulsed.

A separate entry in table IBNXLA is defined for 911 service. The entry for 911 is datafilled to route 911 calls as required for the customer group. For example, 911 may be routed to the public dial plan using a Net Gen selector or to a specified route using the route selector in table IBNXLA. The additional entry for 911 service does not interfere with providing a second dial tone for 9+ calls to the public dial plan and does not suffer a delay in processing 911 calls. If a second dial tone is to be provided after dialing 9 for access to the public dial plan, a second dial tone is also provided after dialing the 9 for 911. In addition, the field for the second dial tone in the tuple datafilled for 911 should also be set to Y.

Datafill example

The following table lists the datafill for table IBNXLA selector DOD.

1Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values*

IBNXLA selector NET - type DOD (continued)

1Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
			9 Digits 0 to 9 C Digits 0 to 9 and B to C F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, SMDRB, LINEATTR, TOLLREST, and NETOPTNS.
	TRSEL	NET	*Translation selector* Enter the translation selector NET.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required because the Direct Outward Dial access code that is specified in field DGLIDX is dialed. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR record is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the DOD access code.

IBNXLA selector NET - type DOD (continued)

1Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	SECOND DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	DGCOLNM	COL, NDGT, POTS, RES, or RPT	*Digit collection name* Enter the name, assigned to the block of data in the table DIGCOL for digit collection for IBN lines.
	CRL	Y or N	*Code restriction level* Enter Y if code restriction levels apply to DOD calls. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if calls are for the same customer group. Otherwise, enter N.
	NETTYPE	DOD	*Network type* Enter the network type DOD.
	SMDRB	Y or N	*Station message detail recording* Enter Y if only chargeable calls that dial the DOD access code are recorded. Otherwise, enter N. An entry in field SMDR affects the outcome of an entry of N in this field. SMDRB is turned on if SMDR is required for billable calls. SMDRB must be turned on and the call must be billable for that leg of the call to generate SMDR for toll calls. Turning the option on for the first leg of the call does not generate a record, even if the second leg of the call is the billable leg. ***Note:*** If routing through virtual facility groups (VFG), SMDRB must be turned on for the leg of the call requiring SMDR and the call must also be billable for that leg.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute that is assigned to the DOD access code.

IBNXLA selector NET - type DOD (continued)

1Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	TOLLREST	NONE, TDN, or TDV	*Toll restriction* Specify the call restrictions that are applicable to direct dial (DD) and operator assisted (OA) type calls. If calls are diverted to treatment TDND (toll denied) in the line, office or trunk treatment tables, enter TDN. If calls are diverted to the key and lamp on the attendant console assigned to incoming call identification code number 8 (intercept), enter TDV. This field is listed as TOLL_RESTRICTION on the switch.
	NETOPTNS (BCS36-)	see subfields	*Network options* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type DOD (continued)

1Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT (BCS36-)	NARS	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. ***Note:*** To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect: • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect:

IBNXLA selector NET - type DOD (continued)

1Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT BCS36-)	DMI	*Digit manipulation index* Enter DMI to permit the manipulation of dialed digits during translation. Datafill refinement DIGMAN_INDEX. The digit operations performed by this option are done after the removal of access code digits as specified in field NO_ACCODE_DIGITS. When the DMI option is used, index validation is not performed by table DIGMAN. ***Note:*** Network routing option DMI is incompatible with network routing option INSNNG.
	DIGMAN_ INDEX	numeric (0 to 32767)	*Digit manipulation index* If network routing option DMI is selected, enter a number to serve as a key to table DIGMAN. Digit manipulation is performed as specified by the corresponding tuple in table DIGMAN. An entry of 0 indicates no digit manipulation.
	NETRTOPT (BCS36-)	INSNNG	*Insert national numbering group* Enter INSNNG to permit the prefixing to the translating number of a specified number of digits from an originator's DN and optionally, a trunk access digit. This option applies to local (non-trunk) agents. Datafill refinements INSNNG_PREFIX and TRUNK_ACCESS_DIG. The digit operations performed by this option are done after the removal of access code digits as specified in field NO_ACCODE_DIGITS. ***Note:*** Network routing option INSNNG is incompatible with network routing option DMI.

IBNXLA selector NET - type DOD (continued)

1Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	INSNNG_ PREFIX	numeric (0 to 11)	*National numbering group prefix digits* If network routing option INSNNG is selected, enter the number of leading digits that are copied from the originator's DN and are prefixed to the translating number. If public network formatting is datafilled for the originator in table DNGRPS, the DN is formatted prior to being used to obtain prefix digits.
	TRUNK_ ACCESS_DIG	alphanumeric (0 to 9 or N)	*National numbering group trunk access digits* If network routing option INSNNG is selected, enter the trunk access digit (0 to 9) to be prefixed to the translating number after the INSNNG_PREFIX function has been completed. Enter N if no trunk access digit is to be prefixed.
	NARNAME (BCS36-)	alphanumeric (1 to 16 characters)or NILNAR	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. ***Note:*** If a NARS option is not assigned in table NCOS or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.

IBNXLA selector NET - type DOD (end)

Datafill example

An example of datafill with the outward dial (+9) code for a customer group translator BNCT is shown below. The following conditions apply to the datafill example:

- No account code entry is required.
- Second dial tone is required for incoming and the incoming side of two-way IBN trunk groups.
- Regular (POTS) digit collection is required after receiving the DOD access code.
- No code restriction limit is set.
- Intragroup calls are not allowed.
- Only chargeable calls are station message detail recorded.
- The line attribute for message network calls is 12.
- No toll restrictions apply.
- The network access register specified is NARGRP2.

The second datafill example shows how the outward dial (9+) code for customer group CNX2 allows centrex dial plans that use 9+ as access to the public dial plan to dial 911 for emergency access as well as 9+911. The number of access code digits must be set to 0 for the 911 entry.

MAP display examples for table IBNXLA selector DOD

```
                         KEY
                                                               RESULT
 ____________________________________________________________________
   BNCT                    9
                     NET N N 1 Y POTS N N DOD Y 12 NONE NARS NARGRP2
```

```
                       KEY
                                                               RESULT
 ____________________________________________________________________
   CXN2               911
             NET N N 0 Y POTS Y N DOD (LATTR 136) (EA CARR1 Y 0) $ $
```

IBNXLA selector NET - type ESN

Electronic Switched Network (ESN)

The number of digits in the access code is automatically deleted from the digits translated or outpulsed.

A separate entry in table IBNXLA is defined for 911 service. The entry for 911 is datafilled to route 911 calls as required for the customer group. For example, 911 may be routed to the public dial plan using a Net ESN selector or to a specified route using the route selector in table IBNXLA. The additional entry for 911 service does not interfere with providing a second dial tone for 9+ calls to the public dial plan and does not suffer a delay in processing 911 calls. If a second dial tone is to be provided after dialing 9 for access to the public dial plan, a second dial tone is also provided after dialing the 9 for 911. In addition, the field for the second dial tone in the tuple datafilled for 911 should also be set to Y.

Datafill

The following table lists the datafill for table IBNXLA selector ESN.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C

IBNXLA selector NET - type ESN (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, SMDRB, LINEATTR, and NETOPTNS.
	TRSEL	NET	*Translation selector* Enter the translation selector NET.
	ACR	Y or N	*Account code entry* Enter Y if an account code entry is required because the ESN access code specified in field DGLIDX is dialed. Otherwise, enter N if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR record is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the ESN access code.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.

IBNXLA selector NET - type ESN (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DGCOLNM	POTS	*Digit collection name* Enter the name POTS that is assigned to the block of data in table DIGCOL for digit collection for IBN lines.
	CRL	Y or N	*Code restriction level* Enter Y if code restriction levels apply to ESN calls. Otherwise enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	NETTYPE	ESN	*Network type* Enter the network type ESN.
	SMDRB	Y or N	*Station message detail recording* Enter Y if only chargeable calls that dial the ESN access code are recorded. Otherwise, enter N. If N is entered, either no calls or all calls are recorded depending on what is entered for the SMDR field.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute that is assigned to the ESN access code.
	NETOPTNS (BCS36-)	see subfields	*Network options* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type ESN (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT (BCS36-)	NARS	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. ***Note 1:*** NCOS translations are not supported in ESA mode by any remote peripheral type including all RSC and RLCM types. Customer groups with NCOS datafill, and which are serviced by a remote peripheral, will be unable to make call if the remote peripheral enters ESA mode. ***Note 2:*** The originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in tbale CUSTENG. • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG

IBNXLA selector NET - type ESN (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
		LNP	The LNP option is used to allow NET ESN or NET PVT calls to be eligible to encounter the LNP trigger. ***Note:*** LNP is a valid selector for the NET selector only if the ESN or PVT sub-selector is chosen.
	NARNAME (BCS36-)	alphanumeric (1 to 16 characters)	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling.

Datafill example

An example of datafill for the ESN (+6) access code for customer group translator BNCT is shown below. This example is datafilled in accordance with the following requirements:

- No account code entry is required.
- Second dial tone is required for incoming and the incoming side of two-way IBN trunk groups.
- Regular (POTS) digit collection is required after receiving the ESN access code.
- No code restriction limit is set.
- Intragroup calling is not allowed.
- Only chargeable calls are station message detail recorded.
- The line attribute for electronic switching network calls is 13.
- The network access register specified is NARGRP2.

A second example of datafill with the outward dial (9+) code for customer group CNX2 to allow centrex dial plans that use 9+ as access to the public dial plan to dial 911 for emergency access as well as 9+911 is also shown below. The number of access code digits must be set to 0 for the 911 entry.

IBNXLA selector NET - type ESN (end)

MAP display example for table IBNXLA selector ESN

```
                          KEY
                                                               RESULT
_____________________________________________________________________
   BNCT                     6
                           NET N N 1 Y POTS N N ESN Y 13 NARS NARGRP2
```

```
                        KEY
                                                               RESULT
_____________________________________________________________________
   CXN2                   911
              NET N N 0 Y POTS Y N ESN (LATTR 136) (EA CARR1 Y 0) $ $
```

The translation selector NET with network type ESN is required if the digit or digits dialed represent the ESN access code.

IBNXLA selector NET - type GEN

General network selector (GEN)

The translation selector NET with the network type GEN supports outward wide area telephone service (OUTWATS), enhanced OUTWATS (EOW), equal access, Toll Denial, Toll Divert preservation of prefix digits, and digit verification translation. The OUTWATS and Toll Denial and Toll Divert features are identical in function as those under the NET selector.

All WATS traffic must be routed using the NET GEN selector.

If the equal access option of this selector is used, the equal access end office carrier tables (OCCNAME and OCCINFO) must be datafilled first.

Note: The enhanced WATS features have no effect on existing WATS features. An office that does not have equal access features continues to use existing WATS features.

A virtual facility group (VFG) must be used for the options EA, OW, and EWAUTH.

A separate entry in table IBNXLA is defined for 911 service. The entry for 911 is datafilled to route 911 calls as required for the customer group. For example, 911 may be routed to the public dial plan using a NET GEN selector or to a specified route using the route selector in table IBNXLA. The additional entry for 911 service does not interfere with providing a second dial tone for 9+ calls to the public dial plan and does not suffer a delay in processing 911 calls. If a second dial tone is to be provided after dialing 9 for access to the public dial plan, a second dial tone is also provided after dialing the 9 for 911. In addition, the field for the second dial tone in the tuple datafilled for 911 should also be set to Y.

IBNXLA selector NET - type GEN (continued)

Restrictions

The following restrictions apply when using the general network selector.

- The LATTR or RES option must always be present.
- Both INVEAFLX and INVZNFLX treatments must be the same.
- Some of the options in the GEN network selector are incompatible. These incompatibilities are shown in the following table.

Incompatible options

	TDN / TDV	SMDRB	RTE	OW	SPF	RES	ESN	EWAUTH
LATTR						X		
TDN/TDV		X		X			X	
SMDRB	X			X				
EA								
RTE								X
OW	X	X						X
SPF								
ESN	X							
EWAUTH			X	X	X			
LPIC								

Note: Incompatible options are indicated by each X.

IBNXLA selector NET - type GEN (continued)

Datafill

The following table lists the datafill for table IBNXLA selector GEN.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* *IBNXLA digilator values* 9 Digits 0 to 9 C Digits 0 to 9 and B to C F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, and OPTION.
	TRSEL	NET	*Translation selector* Enter the translation selector NET.

IBNXLA selector NET - type GEN (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required if the general network access code specified in field DGLIDX is dialed. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call this field has no effect and no SMDR is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the general network access code.
	SECOND_DIAL _TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name assigned to the block of data in table DIGCOL for digit collection for IBN lines.
	CRL	Y or N	*Code restriction level* Enter Y if code restriction levels apply. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.

IBNXLA selector NET - type GEN (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NETTYPE	GEN	*Network type* Enter the network type GEN.
	OPTION	EA, ESN, EWAUTH, LATTR, LOGNET, LPIC, NIL, OW, PVN, RES, RTE, SPF, or TOLL	*Option* Enter one or more of the following options: • For the equal access option, enter EA. • For the ESN call type (no class of service screening), enter ESN. • For MDC enhanced WATTS calls, enter EWAUTH. • For calls into the public environment, enter LATTR and the LINEATTR index that the translating agent uses when the line enters the public environment. • For RES line agents, enter RES instead of the LATTR option so that the RES agent's current LINEATTR index gets used when the line enters the public environment. • For the intraLATA carrier IPIC, enter LPIC. • For the log network, enter LOGNET. • For deleting an unwanted entry in while prompt mode, enter NIL. • For IBN OUTWATS calls, enter OW. • For private virtual network calls, enter PVN. • For routing of calls, enter RTE. • For saving the prefix digits dialed or inserted by the EA translator (PIC), which is required for either outpulsing or retranslation, enter SPF. • For toll restriction, enter TOLL. Datafill field NETOPTNS on page to complete the datafill for network type GEN.

IBNXLA selector NET - type GEN (continued)

OPTION = LATTR

If the value of subfield OPTION is LATTR, datafill refinement LINEATTR as described below and datafill field NETOPTNS on page .

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute index to be used.

OPTION = TOLL

If the value of subfield OPTION is TOLL, datafill refinements RESTRICTION and SMDRB as described below, and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RESTRICTION	TDN, TDV, NONE	*Restriction* Enter TDN if the call is toll denied, TDV if the toll call is diverted to the attendant, or NONE if no toll restriction applies.
	SMDRB	Y or N	*Station message detail recording* Enter Y if chargeable calls are recorded. Otherwise, enter N.

IBNXLA selector NET - type GEN (continued)

OPTION = EA

If the value of subfield OPTION is EA, datafill refinements PIC, CHOICE, and INVEAFLX as described below, and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	PIC	alphanumeric or NLC	*Preferred inter-lata carrier* Enter the invalid flexible intercept number. If the call cannot be made through this carrier, the call is sent to treatment.
	CHOICE	Y or N	*Choice* Enter Y if the caller is allowed to dial a 10XXX prefix to choose a carrier manually. Otherwise, enter N. An entry value of N blocks all EA calls that are translated to route to any carrier other than the one specified in the PIC field. This includes calls with a 10XXX prefix.
	INVEAFLX	0 to 63	*Invalid flexible intercept number* Enter the invalid flexible intercept number. If the call cannot be made through this carrier, the call is sent to treatment.

IBNXLA selector NET - type GEN (continued)

OPTION = RTE

If the value of subfield OPTION is RTE, datafill refinement EXTRTEID as described below and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	EXTRTEID	see subfields	*External route identifier* This field consists of subfields TABNAME, KEY and INDEX.
	TABNAME	IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 or OFR4	*Table identifier* Enter table translation routing, IBNRTE, IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, or OFR4. The table size for tables OFRT, OFR2, OFR3, and OFR4 is 0 to 1023. When datafilling these tables, it is highly important to stress table impact of old control. The customer must not begin datafilling the table or tables with index 1023. This allocates store for the entire table or tables. The most efficient and conservative way to use these tables is to add the data sequentially. This means that less memory is required if the customer datafills the table or tables starting with index one (1). Any entry outside the range indicated for this field is invalid.
	KEY	0 to 1023	*Key* Enter the index selected.
	INDEX	0 to 1023	*Index* Enter the index number.

IBNXLA selector NET - type GEN (continued)

OPTION = LPIC

If the value of subfield OPTION is LPIC, datafill refinement IPIC, TABID, and KEY as described below, and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IPIC	alphanumeric	*Intra-lata carrier* Enter the intra-LATA carrier name.
	TABID	IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 or OFR4	*Table identifier* Enter table translation routing, IBNRTE, IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, or OFR4. The table size for tables OFRT, OFR2, OFR3, and OFR4 is 0 to 1023. When datafilling these tables, it is highly important to stress table impact of old control. The customer must not begin datafilling the table or tables with index 1023. This allocates store for the entire table or tables. The most efficient and conservative way to use these tables is to add the data sequentially. This means that less memory is required if the customer datafills the table or tables starting with index one (1). Any entry outside the range indicated for this field is invalid.
	KEY	0 to 1023	*Key* Enter the index number.

IBNXLA selector NET - type GEN (continued)

OPTION = OW

If the value of subfield OPTION is OW, datafill refinements ZONE and INVZNFLX as described below, and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ZONE	0 to 9, AUTO, A, B, or C	*Zone* Enter the zone for which this call is screened. Enter AUTO if the table zone number is the zone that is specified in OUTWATS zone for the foreign numbering plan area (FNPA) of the called number.
	INVZNFLX	0 to 63	*Invalid zone flexible intercept number* Enter the treatment to which out-of-zone calls are routed.

OPTION = PVN

If the value of subfield OPTION is PVN, datafill refinement DIALPLAN as described below and datafill field NETOPTNS on page .

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DIALPLAN	UNIFORM or VAR	*Dial option* Enter the dial plan for the private virtual network (PVN) access code. Any entry outside the range indicated for this field is invalid.

The UNIFORM dial plan for PVN calls is as follows:

- On-NET calls:

on-NET to on-NET	RXX + XXX
on-NET to PVN attendant	0 or RXX + XXX (special attendant number)

- Off-NET calls:

on-NET to off-NET	1 + NPA + NXX + XXXX
IDDD	011 + CC + NN (attendant number)

where

R
is 2 to 9

X
is 0 to 9

CC
is the country code

NN
is the national number

DIALPLAN = VAR

If the value of subfield DIALPLAN is VAR, datafill refinement DIGCOUNT as described below and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DIGCOUNT	1 to 15	*Digit count* Enter a number between 1 and 15 to represent the digit count.

OPTION = EWAUTH

If the value of subfield OPTION is EWAUTH, datafill refinement AUTHKEY described below and datafill field NETOPTNS in the 13th table.

IBNXLA selector NET - type GEN (continued)

Option EWAUTH is used by the MDC feature AF1096 (Enhanced WATS) in feature package NTXE96AA (Enhanced MDC WATS).

If EWAUTH is used as an option, table WATSAUTH must be datafilled first.

If option EWAUTH is used, the option LATTR must also be datafilled. Do not use the option EWAUTH in conjunction with options RTE, OW, or SPF.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	AUTHKEY	alphanumeric (1 to 8 characters)	*Authorization key* Enter the name of an authorization key. The name must be valid AUTHKEY name from table WATSAUTH. This field is used to point to table WATSAUTH during MDC Enhanced OUTWATS translators.

OPTION = LOGNET

If the value of subfield OPTION is LOGNET, datafill refinement NETNAME as described below and datafill field NETOPTNS in the 13th table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NETNAME	PUBLIC	*Network name* Enter the network name.

OPTION = RES

NET GEN option RES uses the LINEATTR index of the RES line when the line enters the public environment.

Note: NET GEN option RES is incompatible with option LATTR.

IBNXLA selector NET - type GEN (continued)

All options

For all options, datafill field NETOPTNS as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NETOPTNS (BCS36-)	see subfields	*Network options* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type GEN (continued)

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT (BCS36-)	NARS	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. *Note:* To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect: • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NARNAME(BCS36-)	alphanumeric (1 to 16 characters)or NILNAR	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. A NAR group name must be entered if ESN, PVN, OW, or EWAUTH are datafilled in field OPTION. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. NILNAR can be entered if EA, LATTR, LOGNET, LPIC, NIL, RTE, SPF, or TOLL is datafilled in field OPTION. ***Note:*** If a NARS option is not assigned in table NCOS or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.

Datafill example

The following example shows sample datafill for table IBNXLA selector GEN.

MAP display example for table IBNXLA selector GEN

```
                        KEY
                                                                    RESULT
_____________________________________________________________________________
   CXT1                    9
      NET N Y 1 Y NDGT N Y GEN LATTR 0 EA CARRA Y 0 LPIC CARRB NARS
NILNAR $
```

An example of possible datafill for table IBNXLA with options LATTR and PVN is shown below.

IBNXLA selector NET - type GEN (end)

```
                         KEY
                                                        RESULT
____________________________________________________________________
   CXDK                    8
         NET N Y 1 Y POTS N Y GEN LATTR 55 PVN VAR 4 NARS NARGRP2 $
```

Another example of datafill with the outward dial (9+) code for customer group CNX2 to allow centrex dial plans that use 9+ as access to the public dial plan to dial 911 for emergency access as well as 9+911 is also shown below. The number of access code digits must be set to 0 for the 911 entry.

```
                       KEY
                                                        RESULT
____________________________________________________________________
   CXN2                  911
           NET N N 0 Y POTS Y N GEN (LATTR 136) (EA CARR1 Y 0) $ $
```

IBNXLA selector NET - type GEN option INTPIC

International Primary Carrier (INTPIC)

The translation selector INTPIC allows Equal Access End Office (EAEO) subscribers to presubscribe to an international call carrier, independent of the selected interLATA call carrier. To enable the International Primary Carrier feature (called International PIC throughout the rest of this description), add the selector INTPIC to table IBNXLA.

International PIC uses two levels of IBN translators: PRELIMINARY and CUSTOMER GROUP. If the dialed digits are not found in the PRELIMINARY translator, then the CUSTOMER GROUP translator is searched. The selector INTPIC can be assigned to each of these translators.

Option EA must also be assigned in table IBNXLA for selector INTPIC to function.

Note: World Zone 1 calls do not use option INTPIC; they use option PIC to choose a carrier.

Datafill

The following table lists the datafill for table IBNXLA selector INTPIC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field consists of subfield XLANAME.
RESULT			Result.
OPTION		INTPIC	Option. Enter INTPIC for the International PIC feature.
	CARRIER	alphanumeric (up to 16 characters)	Carrier name. Enter the selected international carrier. A list of valid carrier names is found in table OCCNAME.
	CHOICE	Y or N	Choice. Enter Y or N to allow or disallow the choice for Carrier Access Code (CAC) dialing.

Datafill example

The following example shows sample datafill for table IBNXLA selector INTPIC.

IBNXLA selector NET - type GEN option INTPIC (end)

MAP display example for table IBNXLA selector INTPIC

```
          KEY
                                RESULT
_____________________________________________________________
CTX       10
NET Y Y N 0 Y POTS N N GEN(LATTR 42)(EA CARR1 Y 0)(INTPIC
CARR2 Y) $ $
```

IBNXLA selector NET - type LOC

Location selector (LOC)

The translation selector NET with network type LOC is required to incorporate the location code into the dialed digits, if the location code and the dialed digits are decoupled.

Datafill

The following table lists the datafill for table IBNXLA selector LOC.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*TranslatorName* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector NET - type LOC (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, LINEATTR, MAXDIGS, and NETOPTNS. Refer to subtable IBNXLA selector GEN for more information.
	TRSEL	NET	*Translation selector* Enter the translation selector NET.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required if the general network access code specified in field DGLIDX is dialed. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features thAt do not originate a call, this field has no effect and no SMDR is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the general network access code.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name assigned of the block of data in table DIGCOL for digit collection for IBN lines.

IBNXLA selector NET - type LOC (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	CRL	Y or N	*Code restriction level* Enter Y if code restriction levels apply. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	NETTYPE	LOC	*Network type* Enter the network type LOC.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute.
	MAXDIGS	0 to 18	*Maximum digit* Enter a number between 0 and 18 to represent the maximum digit count.
	NETOPTNS (BCS36-)	see subfields	*Network options* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type LOC (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT BCS36-)	NARS	*Network routing option*Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. ***Note:*** the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect:

IBNXLA selector NET - type LOC (end)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NARNAME (BCS36-)	alphanumeric (1 to 16 characters) or NILNAR	*Network access register name*Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. ***Note:*** If a NARS option is not assigned in table NCOS or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.

Datafill example

The following example shows sample datafill for table IBNXLA selector LOC.

MAP display example for table IBNXLA selector LOC

```
                    KEY
                                                            RESULT
________________________________________________________________________
  KEY1                32
                      NET N Y 2 N NDGT N Y LOC 0 15 NARS NARGRP2
```

IBNXLA selector NET - type MBG

Multiswitch Business group (MBG)

The translation selector NET with network type MBG supports an access code followed by the direct inward number (DID) number of the terminator. A customer group can access a network based on MBG trunking without defining a set of location codes and routing directory numbers. Table BGLOCN is no longer necessary because the digits following the access code can be processed correctly by the plain ordinary telephone service (POTS).

Datafill

The following table lists the datafill for table IBNXLA selector MBG.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector NET - type MBG (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, LINEATTR, and NETOPTNS. Refer to subtable IBNXLA selector GEN for more information.
	TRSEL	NET	*Translation selector* Enter the translation selector NET.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required if the general network access code specified in field DGLIDX is dialed. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features thAt do not originate a call, this field has no effect and no SMDR is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the OUTWATS access code.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name assigned of the block of data in table DIGCOL for digit collection for IBN lines.
	CRL	Y or N	*Code restriction level* Enter Y if code restriction levels apply. Otherwise, enter N.

IBNXLA selector NET - type MBG (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	NETTYPE	MBG	*Network type* Enter the network type MBG.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute.
	NETOPTNS (BCS36-)	see subfields	*Network options* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type MBG (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT (BCS36-)	NARS	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG ***Note:*** To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect:

IBNXLA selector NET - type MBG (end)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NARNAME (BCS36-)	alphanumeric (1 to 16 characters)or NILNAR	*Network access register name*Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. ***Note:*** If a NARS option is not assigned in table NCOS or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.

Datafill example

The following example shows sample datafill for table IBNXLA selector MBG.

MAP display example for table IBNXLA selector MBG

```
                         KEY
                                                          RESULT
---------------------------------------------------------------------
   KEY1                   33
                             NET N Y 2 N NDGT N Y MBG 0 NARS NARGRP2
```

IBNXLA selector NET - type OWT

OUTWATS (OWT)

The translation selector NET with network type OWT is required if the digit or digits dialed represent an outbound wide area telephone service (OUTWATS) access code.

There is a maximum of 13 zones: 0 to 9, and A, B, and C. The billing code for zones A, B, and C show zones 11, 12, and 13 respectively.

If the entry for field OWATZONE is AUTO, the zone is chosen from table OWATZONE for the digits dialed.

Datafill

The following table lists the datafill for table IBNXLA selector OWT.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector NET - type OWT (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, LNATTR, OWATZONE, INVZNFLX, EXRTEID, and NETOPTNS.
	TRSEL	NET	*Translation selector* Enter the translation selector NET.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required because the OUTWATS access code that is specified in field DGLIDX is dialed. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call this field has no effect and no SMDR is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the OUTWATS access code.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.

IBNXLA selector NET - type OWT (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name that is assigned to the block of data in table DIGCOL for digit collection for the IBN lines.
	CRL	Y or N	*Code restriction level* Enter Y if the code restriction levels apply to this access code. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	NETTYPE	OWT	*Network type* Enter the network type OWT.
	LNATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute that is assigned to the OUTWATS access code.
	OWATZONE	0 to 9, A, B, C or AUTO	*Outwats zone* Enter the OUTWATS zone for which this call is screened. Enter AUTO if the zone number is the zone that is specified in table OWATZONE for the foreign numbering plan area (FNPA) of the called number.
	INVZNFLX	0 to 63	*Zone flexible intercept* Enter the IBN treatment in table IBNTREAT to which out-of-zone calls are routed.
	EXTRTEID	see subfields	*External route identifier* This field consists of subfields TABID and KEY.

IBNXLA selector NET - type OWT (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TABID	IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 orOFR4	*Table identifier* Enter the table name to which translation is routed: IBNRTE, IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, or OFR4. The table size for tables OFRT, OFR2, OFR3, and OFR4 is 0 to 1023. When datafilling these tables the customer must not begin datafilling the table or tables with index 1023. This allocates store for the entire table or tables. The most efficient and conservative way to use these tables is to add the data sequentially. This means that less memory is required if the customer datafills the table or tables starting with index one (1). An entry outside of this range is invalid.
	KEY	0 to 1023	*Key* Enter the index number.
	NETOPTNS (BCS36-)	see subfields	*NetworkOptions* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type OWT (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT (BCS36-)	NARS	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG ***Note:*** To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect:
	NARNAME (BCS36-)	alphanumeric (1 to 16 characters)	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling.

Datafill example

An example of datafill for OUTWATS zone 2 with an access code of 118 for a customer group translator BNCT is shown below. No account code entry is required. Second dial tone is not required after dialing the access code. Regular (POTS) digit collection is required after receiving the OUTWATS access code. The translation selector is NET and the number of access code is

IBNXLA selector NET - type OWT (end)

3. No code restriction limit is set. The call is not intragroup. The line attribute for OUTWATS zone 2 calls is 14. The OUTWATS zone is 2. The treatment number in table IBNTREAT to which out of zone calls are routed is 4. Calls are routed to route index number 5 in table IBNRTE.

MAP display example for table IBNXLA selector OWT

```
                     KEY
                                                       RESULT
_________________________________________________________________
  BNCT               118
         NET N N 3 N POTS N N OWT 14 2 4 IBNRTE 5 NARS NARGRP2 $
```

IBNXLA selector NET - type PVT

Private network (PVT)

The translation selector NET with network type PVT is required if the digit or digits that are dialed are the access code to a private network.

Datafill

The following table lists the datafill for table IBNXLA selector PVT.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — IBNXLA digilator values 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, DGCOLNM, CRL, INTRAGRP, NETTYPE, STS, ORIGSOURCE, SCRNCLASS and NETOPTNS.

IBNXLA selector NET - type PVT (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	NET	*Translation selector* Enter the translation selector NET.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required. Otherwise, enter N (no).
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console is directed to any station in the block or station numbers that are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call this field has no effect and no SMDR is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code* Enter the number of digits in the access code. The access code is automatically deleted from the digits outpulsed.
	SECOND_DIAL _TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name that is assigned to the block of data in table DIGCOL for the digit collection from IBN stations.
	CRL	Y or N	*Code restriction limit* Enter Y if code restriction limits are applicable to private network calls. Otherwise, enter N.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	NETTYPE	PVT	*Network type* Enter the network type PVT.

IBNXLA selector NET - type PVT (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	STS	numeric	*Serving translation scheme* Enter the table number that is assigned in the home NPA control to the serving translation scheme to which translations has to route.
	ORIGSOURCE	LCL or NLCL	*Originating source* Enter the origination source of the call: LCL (local) or NLCL (non-local). This field is called ORIG_SOURCE on the switch.
	SCRNCLASS	NSCR	*Screening class* If class of service screening is required, enter the name of the appropriate class of service screening subtable. Otherwise, enter NSCR.
	NETOPTNS(BCS36-)	see subfields	*Network options* This field consists of subfields NETRTOPT and NARNAME.

IBNXLA selector NET - type PVT (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NETRTOPT(BCS36-)	NARS	• *Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG ***Note:*** To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect:
		LNP	The LNP option is used to allow NET ESN or NET PVT calls to be eligible to encounter the LNP trigger. ***Note:*** LNP is a valid selector for the NET selector only if the ESN or PVT sub-selector is chosen.
	NARNAME(BCS36-)	alphanumeric (1 to 16 characters)	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling.

Datafill example

An example of datafill for a private network with access code 116 for a customer group translator with the name BNCT is shown below. Second dial tone is required after dialing the three-digit access code. After the access code regular POTS digit collection is required for IBN lines. The translation selector is NET and station message detail recording and variable call detail recording are not required. Code restriction limit is not applicable. The call is not intragroup. The private network is given a pseudo serving NPA of 001. The originating source is local (LCL) and no class of service screening (NSCR) is required. The ABC digits of all seven-digit calls have a code type HRTE in the table HNPACODE for serving NPA 001. The ABC digits of all ten-digit calls have a code type FRTE in the table HNPACODE for serving NPA 001.

MAP display example for table IBNXLA selector PVT

```
                     KEY
                                                        RESULT
_______________________________________________________________
  BNCT               116
            NET N N 3 Y POTS N N PVT 001 LCL NSCR NARS NARGRP2 $
```

IBNXLA selector NSC

Network Speed Calling (NSC)

The translation selector NSC is required if the digit or digits dialed represent the access code of a set of data in table REPLNAME that is assigned to Network Speed Calling feature.

Calls that require retranslation (for example, calls via a Virtual Facility Group) cannot be routed to make a Network Speed Call.

Datafill

The following table lists the datafill for table IBNXLA selector NSC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, and REPLNAME.
	TRSEL	NSC	*Translation selector* Enter the translation selector NSC.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code* Enter the number of digits in the access code. The access code is automatically deleted from digits translated in table REPLNAME.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y (yes) if second dial tone is required. Otherwise, enter N (no).
	REPLNAME	alphanumeric (1 to 16 characters)	*Replace name* Enter the name that is assigned to the block of data in table REPLNAME that contains the NSC numbers accessible through this access code.

Datafill example

An example of datafill for translation name BNCT for the access code 115 that gives access to a block of NSC numbers in table REPLNAME that have the name BNRMC1 is shown below.

The number of access code digits is 3.

Second dial tone is required.

IBNXLA selector NSC (end)

MAP display example for table IBNXLA selector NSC

```
                    KEY
                                                   RESULT
---------------------------------------------------------------
  BNCT              115
                                            NSC 3 Y BNRMC1
```

Octothorpe equivalent (OCT)

The translation selector OCT is used if the digit or digits dialed by a 500 set are equal to the # (octothorpe) button on the 2500 sets. The Last Number Redial (LNR) feature can be activated by pressing the # on 2500 sets that in turn activates the 500 sets.

Datafill

The following table lists the datafill for table IBNXLA selector OCT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the one-to-eight-character name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

IBNXLA selector OCT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfield	*Result* This field consists of subfield TRSEL.
	TRSEL	OCT	*Translation selector* Enter the translation selector OCT.

Datafill example

The following example shows sample datafill for table IBNXLA selector OCT.

MAP display example for table IBNXLA selector OCT

```
                    KEY
                                                    RESULT
--------------------------------------------------------------
  BNCT                3
                                                      OCT
```

ESN network information signals (PROTO)

The translation selector PROTO is required if the entry is one of the seven Electronic Switched Network (ESN) information signal formats, and it is only applicable to the incoming or the incoming side of a two-way IBN trunk group.

The formats are described below. The plus (+) sign is used for legibility purposes only.

The ESN protocol format 5 cannot be mixed on the same incoming or incoming side of a two-way IBN trunk group as format 1 through 4.

Format 1

CALL TYPE + ESN NCOS + CALLED NUMBER

This format is used for a standard network call. It is typically outpulsed by an ESN main to an ESN node in dual-tone multifrequency (DTMF).

Format 2

CALL TYPE + TCOS + CALLED NUMBER

This format is used for a standard network call. It is typically outpulsed by an ESN node to an ESN main in DTMF.

Format 3

CALL TYPE + SUBCALL TYPE + QUEUE ID NUMBER

This format is used for coordinated call back queuing (CCBQ). It is typically outpulsed by an ESN main to the serving ESN node in DTMF.

The serving ESN node can offer CCBQ if no intermachine trunks (IMT) are available between it and the next node to complete the call.

The format is outpulsed by the ESN main station if a wink is received from the node and the station that is served by the ESN main station activates call back queuing (CBQ).

The format is also outpulsed by the serving ESN node to the ESN main DTMF when an intermatching trunk becomes available to serve the ESN main stations CBQ request.

Format 4

CALL TYPE + SUBCALL TYPE + ESN NCOS + CALLED NUMBER

IBNXLA selector PROTO (continued)

This format is used if the originator is permitted coordinated call back queuing (CCBQ) or to limit the number of satellite links in a given connection.

It is outpulsed from an ESN main station to an ESN node and between ESN nodes. In the case of satellite link control, it is also outpulsed by an ESN node to an ESN main station.

If CCBQ, format 4 is outpulsed at call setup and identifies that the originating station is permitted CCBQ. If an outgoing trunk is not available at the node to complete the call, then the node sends a wink to the main station. If the station accepts the CCBQ, the main station responds by sending format 3. This format is not outpulsed if the originator is an attendant or if the station is not permitted CCBQ.

If the connection is made by satellite link control, format 4 is outpulsed at call setup and informs the next ESN switching unit that a satellite trunk is already involved in the connection. The next ESN switching unit must not use another outgoing satellite trunk to complete the call.

Format 5

CALLED NUMBER 1 + TCOS

This format is used for outpulsing by an ESN node to another ESN node. It is also outpulsed by an ESN node to an ETN PBX. It is also received by an ESN node from an ETN PBX. In the case of an ETN PBX, the type of inpulsing can be DP or DTMF.

The called number one is seven digits in length if the call is on-NET and ten digits if the call is off-NET. ESN assumes all local calls, special numbers and IDDD calls are always rerouted at the first node, (the seven- and ten-digit format for on- and off-NET calls, respectively).

The ESN network class of service (NCOS) is two digits in length, and the value can be from 00 to 15 inclusive. The ESN NCOS is not the same as the DMS-100 or SL-100 NCOS.

TCOS is one digit in length and can have a value from 0 to 7 inclusive.

Queue ID number is two digits in length.

Format 6

This is reserved for future use.

Format 7

CALL TYPE + SUBCALL TYPE + NCOS (TCOS) + CALLED NUMBER

This format is used for datapath signaling for outpulsing by an ESN main station to ESN node, between ESN nodes and by an ESN node to ESN main station. The data call type is interpreted by successive switches to maintain digital data connectivity. One method of interpretation is to utilize conditional routing, based on the presence (or absence) of digital data as the call characteristics. ESN allows customers to combine both data and voice over the same digital trunk groups to give them the highest efficiency of use but the trunks that are used must be digital for data call type.

Each satellite link used for a data call adds a certain amount of delay in the call. The satellite link control format is used to tell the next switch that a satellite trunk is already involved in the connection. This allows the customer to control whether another outgoing satellite trunk can be used to complete the call.

The call and subcall types for formats 1 to 4 (not 5) and 7 are shown in the following table.

Call and subcall types (Sheet 1 of 2)

Call type	Subcall type	Title
1		Standard network class of service (from a main to a node)
2		Standard network class of service (from a node to a main)
3	1	Coordinated call back queuing allowed
3	2	Coordinated call back queuing call back
3	3	Coordinated call back queuing offer accepted
4	1	Satellite traveling class of service
4	2	Satellite coordinated call back queuing allowed
4	3	Satellite coordinated call back queuing allowed
7	1	Data with coordinated call back queuing allowed
7	2	Data with NCOS (main to node, node to node)
7	3	Data to TCOS (node to main)
7	4	Data by satellite with CCBQ allowed

IBNXLA selector PROTO (continued)

Call and subcall types (Sheet 2 of 2)

Call type	Subcall type	Title
7	5	Data by satellite with NCOS
7	6	Data by satellite with TCOS

Main is an SL-1 PBX that performs no tandeming of ESN traffic but can carry tributary PBX traffic.

Node is a switching unit onto which a number of main PBXs are homed.

If a protocol consists of a fixed length call number followed by protocol digits, for example, FLD TCOSxxx, field MAXDIGS can be used to reduce post-dial delays by setting both fields MINDIGS and MAXDIGS to the total number of digits that is received. This is most beneficial for DP trunks because DP signaling provides no mechanism (other than time-out) for indicating the end of dialing. Protocol digits that follow the called number cannot be interpreted until inpulsing is complete.

Inpulsing is considered complete if any of the following conditions are met:

- time-out occurs
- an explicit end of dialing is received (for example, # in DTMF)
- the number of digits received equals the value of field MAXDIGS

The choice of values for fields MINDIGS and MAXDIGS depends on the associated PACMAN program specified by the field PMI.

If the PACMAN program uses a FLD TCOSxxx command, then choose for field MINDIGS a value that is equal to or greater than, the number of protocol digits plus the number of access code digits. Specify a suitably large value, for example, 25 for the value of field MAXDIGS.

If the PACMAN program uses a FLD TCOSxxx command, then choose for field MINDIGS a value that is equal to or greater than, the number of protocol digits plus the number of access code digits and the maximum length of the called number. If the called number can have any length, specify the largest possible value, for example, 25, so that the # or time-out determines the length of the called number. Specify a suitably large value, for example, 25, for the value of field MAXDIGS.

IBNXLA selector PROTO (continued)

Datafill

The following table lists the datafill for table IBNXLA selector PROTO.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, PMI, NO_ACCODE_DIGITS, MINDIGS, and MAXDIGS.
	TRSEL	PROTO	*Translation selector* Enter the translation selector PROTO.
	PMI	0 to 255	*Protocol manipulation index* Enter the protocol manipulation index of the program invoked.

IBNXLA selector PROTO (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* If the first digit in field DGLIDX is a call type (format 1 to 4, and 7) enter the number of digits specified in field DGLIDX. If field DGLIDX contains the first digit of the called number (format 5), enter 0 (zero).
	MINDIGS	1 to 25	*Minimum digits* Enter the minimum number of digits that must be collected in order that all the protocol digits can be collected. If format is 1 to 4 the minimum number of digits is equal to the number of digits defined for the format to ensure that all the digits in the ESN NCOS field have been invoked. If the format is 5, the minimum number of digits must be equal to 25, to ensure that the TCOS digit has been collected before the PACMAN program is invoked. Any entry outside the range indicated for this field is invalid.
	MAXDIGS	1 to 25	*Maximum digits* Enter the maximum number of digits that are collected. Enter 25 if field MAXDIGS does not apply. Any entry outside the range indicated for this field is invalid.

Datafill example

An example of an IBN translator ESN1 with an example of each of the call and subcall types (format 1 to 4) and an IBN translator ESN2 with an example of the call number (format 5) is shown below. The first digit of the called number can be 0 to 9. One entry is required for each of the digits 0 to 9.

IBNXLA selector PROTO (end)

MAP display example for table IBNXLA selector PROTO

```
                          KEY
                                                             RESULT
-------------------------------------------------------------------
   ESN                      1
                                             PROTO 13  1 3  25 $
   ESN1                     2
                                             PROTO 13  1 2  25 $
   ESN1                    31
                                             PROTO 13  2 4  25 $
   ESN1                    41
                                             PROTO 11  2 4  25 $
   ESN1                    42
                                             PROTO 12  2 3  25 $
   ESN1                    43
                                             PROTO 11  2 4  25 $
   ESN2                     0
                                             PROTO 14  0 25 25 $
   ESN2                     1
                                             PROTO 14  0 25 25 $
   ESN2                     2
                                             PROTO 14  0 25 25 $
   ESN2                     3
                                             PROTO 14  0 25 25 $
   ESN2                     4
                                             PROTO 14  0 25 25 $
   ESN2                     5
                                             PROTO 14  0 25 25 $
   ESN2                     6
                                             PROTO 14  0 25 25 $
   ESN2                     7
                                             PROTO 14  0 25 25 $
   ESN2                     8
                                             PROTO 14  0 25 25 $
   ESN2                     9
                                             PROTO 14  0 25 25 $
```

IBNXLA selector REPL

Digits dialed to be replaced (REPL)

The translation selector REPL is required if the digit or digits dialed are replaced in their entirety by the digits specified in the datafill. Up to 16 digits can be specified as replacement digits.

This format also allows the operating company to alter the routing characteristics of a call for ISDN retranslation by specifying option RC (routing characteristics).

Datafill

The following table lists the datafill for table IBNXLA selector REPL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL, CONTINUE, REPLCODE, and OPTION.
	TRSEL	REPL	*Translation selector* Enter the translation selector REPL.
	CONTINUE	Y or N	*Continue* Enter Y (yes) if translation continues with the next translator in the normal sequence. Enter N (no) if translation does not continue but restarts from the beginning based on the user's network class of service (NCOS) and customer translator (as if the user has dialed the replaced digits).
	REPLCODE	numeric (1 to 16 digits)	*Replacement code* Enter the digit or digits that replace the digits dialed.
	OPTION	RC	*Option* Enter RC if a new routing characteristic is required for ISDN retranslation and datafill refinement RCNAME.
	RCNAME	alphanumeric (1 to 8 characters)	*Routing characteristics name* Enter the RC name defined in table RCNAME.

Datafill example

An example of replacing digits in a preliminary translator BNPT is shown below.

If the access code 113 is dialed, it is replaced by the five-digit station number 58742 and translation continues to the next sequence.

IBNXLA selector REPL (end)

MAP display example for table IBNXLA selector REPL

```
                  KEY
                                                    RESULT
-------------------------------------------------------------

     BNPT          113
                                        REPL Y   58742   $
```

Route specifying the location (ROUTE/L)

The translation selector ROUTE with field ROUTE_SUBSEL equal to L enables the operating company to select a route by specifying the location of the destination switch. If this tuple is encountered in the translations, table BGLOCN is accessed, the routing directory number (DN) of the specified location is extracted, and the plain ordinary telephone service (POTS) translator is invoked using that routing DN to select a route. Field LINEATTR is used to select a specific POTS translator.

Datafill

The following table lists the datafill for table IBNXLA selector ROUTE/L.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, MINDIGS, MAXDIGS, DGCOLNM, INTRAGRP, ROUTE_SUBSEL, LINEATTR, LOCNCODE, and RTEOPTNS.

IBNXLA selector ROUTE/L (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	ROUTE	*Translation selector* Enter the translation selector ROUTE.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required for all calls to the access code. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR is produced.
	NO_ACCODE_DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the access code. The access code are automatically deleted from the digits outpulsed.
	SECOND_DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Enter N if second dial tone is not required.
	MINDIGS	1 to 25	*Minimum digits* Enter the minimum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	MAXDIGS	1 to 25	*Maximum digits* Enter the maximum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	DIGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name assigned to the block of data in the block of data in table DIGCOL for the digit collection for IBN lines.

IBNXLA selector ROUTE/L (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.
	ROUTE_SUBSEL	L	*Route subselector* Enter the common language location identifier (CLLI) selector L.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute.
	LOCNCODE	vector of up to 5 digits	*Location code* Enter the location code.
	RTEOPTNS	see subfields	*Route options* This field consists of subfields NETRTOPT and NARNAME.
	NETRTOPT	see subfields	*Network routing option* Datafill subfields as described below.

IBNXLA selector ROUTE/L (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NARS	Datafill	*Network access register* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Entering NARS enables call throttling control using the translation NAR group instead of the NCOS group or the customer group. • *Note:* To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect: • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG
	NARNAME	alphanumeric (1 to 16 characters)or NILNAR	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. ***Note:*** If a NARS option is not assigned in table NCOS or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DMI	Datafill	*Digit manipulation index* Enter DMI to permit the manipulation of dialed digits during translation. Datafill refinement DIGMAN_INDEX. The digit operations performed by this option are done after the removal of access code digits as specified in field NO_ACCODE_DIGITS. When the DMI option is used, index validation is not performed by table DIGMAN. ***Note:*** Network routing option DMI is incompatible with network routing option INSNNG.
	DIGMAN_INDEX	numeric (0 to 32767)	*Digit manipulation index* If network routing option DMI is selected, enter a number to serve as a key to table DIGMAN. Digit manipulation is performed as specified by the corresponding tuple in table DIGMAN. An entry of 0 indicates no digit manipulation.
	SETCDN	Datafill	*Set called number* Sets the generic independent called number party name (CDNNAME) for routing based on parameters contained in the called number. Enter SETCDN to set the called number name to the value defined in subfield CDNNAME.
	CDNNAME	Alphanumeric (0 to 8 characters)	*Called number name* The name that the called number is to be set to using the SETCDN option. This must be a valid CDNNAME from table CDNCHAR.

Datafill example

The following example shows sample datafill for table IBNXLA selector ROUTE/L.

IBNXLA selector ROUTE/L (end)

MAP display example for table IBNXLA selector ROUTE/L

```
                      KEY
                                                             RESULT
_____________________________________________________________________
   KEY1                   32
           ROUTE N Y 2 N 3 15 NDGT Y L 0 257 NARS NARGRP2 DMI 45 $
```

Route directly to CLLI table (ROUTE/S)

The translation selector ROUTE with field ROUTE_SUBSEL equal to S is required if the digit or digits dialed represent the access code of an outgoing or two-way trunk group and translation routes directly to table CLLI (for example, when no digit deletion or prefixing is required).

The number of access code digits are automatically deleted from the digits outpulsed.

Datafill

The following table lists the datafill for table IBNXLA selector ROUTE/S.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* *IBNXLA digilator values* 9 Digits 0 to 9C Digits 0 to 9 and B to CF Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, MINDIGS, MAXDIGS, DGCOLNM, INTRAGRP, ROUTE_SUBSEL, CLLI, and RTEOPTNS.
	TRSEL	ROUTE	*Translation selector* Enter the translation selector ROUTE.

IBNXLA selector ROUTE/S (continued)

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account code entry is required for all calls to the access code. Otherwise, enter N (no).
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR is produced.
	NO_ ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the access code. The access code are automatically deleted from the digits outpulsed.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	MINDIGS	1 to 25	*Minimum digits* Enter the minimum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	MAXDIGS	1 to 25	*Maximum digits* Enter the maximum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	DIGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection name* Enter the name assigned to the block of data in the block of data in table DIGCOL for the digit collection for IBN lines.
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group. Otherwise, enter N.

IBNXLA selector ROUTE/S (continued)

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ROUTE_ SUBSEL	S	*Route subselector* Enter the common language location identifier (CLLI) selector S.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the CLLI code to which the translation routes.
	RTEOPTNS	see subfields	*Route options* This field consists of subfields NETRTOPT and NARNAME.
	NETRTOPT	see subfields	*Network routing option* Datafill subfields as follows.

IBNXLA selector ROUTE/S (continued)

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	NARS	Datafill	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Enter NARS to enable call throttling control using the translation NAR group instead of the NCOS group or the customer group. • *Note:* To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect: • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG ***Note:*** To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect:

IBNXLA selector ROUTE/S (continued)

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	NARNAME	alphanumeric (1 to 16 characters)or NILNAR	*Network access register name* Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. ***Note:*** If a NARS option is not assigned in table NCOS or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.
	DMI	Datafill	*Digit manipulation index* Enter DMI to permit the manipulation of dialed digits during translation. Datafill refinement DIGMAN_INDEX. The digit operations performed by this option are done after the removal of access code digits as specified in field NO_ACCODE_DIGITS. When the DMI option is used, index validation is not performed by table DIGMAN. ***Note:*** Network routing option DMI is incompatible with network routing option INSNNG.
	DIGMAN_ INDEX	numeric (0 to 32767)	*Digit manipulation index* If network routing option DMI is selected, enter a number to serve as a key to table DIGMAN. Digit manipulation is performed as specified by the corresponding tuple in table DIGMAN. An entry of 0 indicates no digit manipulation.

IBNXLA selector ROUTE/S (continued)

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	SETCDN	Datafill	*Set called number* Sets the generic independent called number party name (CDNNAME) for routing based on parameters contained in the called number. CDNNAME and outgoing characteristics are set in table CDNCHAR. Refer to this table for more information. Enter SETCDN to set the called number name to the value defined in subfield CDNNAME.
	CDNNAME	Alphanumeric (0 to 8 characters)	*Called number name* The name that the called number is to be set to using the SETCDN option. This must be a valid CDNNAME from table CDNCHAR.

Datafill example

An example of the datafill for a customer group translator BNCT and access code 144 that routes directly to a code in table CLLI follows. This example is in accordance with the following requirements:

- The digits dialed are outpulsed, excluding the access code that is automatically deleted.
- No account code entry is required.
- All calls to access code 144 from customer group station or attendant console are recorded in the Station Message Detail Recording (SMDR) format.
- The number of access code digits is 3 and second dial tone is not required.
- The minimum and maximum number of digits including access code are 6 and 14 respectively.
- After dialing the access code, the digit collection for IBN lines is in accordance with a set of data in table DIGCOL with the name BRAM.
- The call is not intragroup and routes directly to the code BNRCENT in table CLLI.
- The NAR group is NARGRP2

IBNXLA selector ROUTE/S (end)

MAP display example for table IBNXLA selector ROUTE/S

```
                    KEY
                                                         RESULT
---------------------------------------------------------------------
   BNCT             144
         ROUTE N Y 3 N 6 14 BRAM N S   BNRCENT  NARS NARGRP2      $
```

IBNXLA selector ROUTE/T

Route to Office or IBN Route table (ROUTE/T)

The translation selector ROUTE with field ROUTE_SUBSEL equal to T is required if the digit or digits dialed represent the access code of an outgoing or two-way trunk group and translation routes to a code in table CLLI through tables OFRT or IBNRTE for digit deletion or prefixing.

The number of access code digits is automatically deleted from the digits outpulsed.

Datafill

The following table lists the datafill for table IBNXLA selector ROUTE/T.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: *MAXDIG value* — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, MINDIGS, MAXDIGS, DGCOLNM, INTRAGROUP, TABCLLI, ROUTE_SUBSEL, TABID, KEY and RTEOPTNS.

IBNXLA selector ROUTE/T (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	ROUTE	*Translation selector* Enter the translation selector ROUTE.
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account entry is required for all calls to the access code. Enter N (no) if no account code entry is required.
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR is produced.
	NO_ ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the access code. The access code is automatically deleted from the digits outpulsed.
	SECOND_ DIAL_TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	MINDIGS	1 to 25	*Minimum digits* Enter the minimum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	MAXDIGS	1 to 25	*Maximum digits* Enter the maximum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	DIGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection* Enter the name assigned to the block of data in table DIGCOL for the digit collection for IBN lines.
	INTRA_ GROUP	Y or N	*Intragroup* Enter Y if the call is intragroup. Otherwise, enter N.

IBNXLA selector ROUTE/T (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	ROUTE_ SUBSEL	T	*Route subselector* Enter table name selector T.
	TABID	IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRTOFR2OFR3orOFR4	*Table identifier* Enter the table to which translation has to route: Office (OFRT), IBN Route (IBNRTE), IBNRT2, IBNRT3, IBNRT4, OFR2, OFR3, or OFR4. The table size for tables OFRT, OFR2, OFR3, and OFR4 is 0 to 1023. When datafilling these tables, the customer must not begin datafilling the table or tables with index 1023. This allocates store for the entire table or tables. The most efficient and conservative way to use these tables is to add the data sequentially. This means that less memory is required if the customer datafills the table or tables starting with index one (1). Any entry outside the range indicated for this field is invalid.
	KEY	1 to 1023	*Key* Enter the route reference index number in the Office or IBN Route Table to which translation routes. Any entry outside the range indicated for this field is invalid.
	RTEOPTNS	see subfields	*Route options* This field consists of subfields NETRTOPT and NARNAME.
	NETRTOPT	see subfields	*Network routing option* Datafill subfields as described below.

IBNXLA selector ROUTE/T (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	NARS	NARS	*Network routing option* Enter NARS to enable the network access register (NAR) routing option. The NAR routing option regulates the termination of (throttles) Meridian Digital Centrex (MDC) calls. Calls are throttled when the maximum number of simultaneous calls for the assigned NAR group is exceeded. Enter NARS to enable call throttling control using the translation NAR group instead of the NCOS group or the customer group. • *Note:* To ensure translation-controlled throttling of outgoing calls, the following conditions must be in effect: • the originating agent customer group must have NARS datafilled in field OPTIONS in table CUSTENG and Y datafilled in field NARACT in table CUSTENG • if the originating agent NCOS group has NAR datafilled in field OPTIONS in table NCOS, Y must be datafilled in field NARACT in table NCOS • a valid NAR name must be datafilled in field NARNAME in table IBNXLA, in field NAROUT in table NCOS, or in field NAROUT in table CUSTENG
	NARNAME	alphanumeric (1 to 16 characters)or NILNAR	*Network access register name*Enter a NAR group name from key field NARNAME in table NARDATA to apply the characteristics of that NAR group to translation-controlled call throttling. Enter NILNAR to apply the default NAR name datafilled in field NAROUT in table NCOS. ***Note:*** If a NARS option is not assigned in table NCOS, or NILNAR is datafilled in field NAROUT in table NCOS, the default NAR name datafilled in field NAROUT in table CUSTENG is used for throttling. If NILNAR is also datafilled in field NAROUT in table CUSTENG, call throttling does not occur because a valid NAR is not specified.

IBNXLA selector ROUTE/T (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DMI	Datafill	*Digit manipulation index* Enter DMI to permit the manipulation of dialed digits during translation. Datafill refinement DIGMAN_INDEX. The digit operations performed by this option are done after the removal of access code digits as specified in field NO_ACCODE_DIGITS. When the DMI option is used, index validation is not performed by table DIGMAN. ***Note:*** Network routing option DMI is incompatible with network routing option INSNNG.
	DIGMAN_INDEX	numeric (0 to 32767)	*Digit manipulation index* If network routing option DMI is selected, enter a number to serve as a key to table DIGMAN. Digit manipulation is performed as specified by the corresponding tuple in table DIGMAN. An entry of 0 indicates no digit manipulation.
	SETCDN	Datafill	*Set called number* Sets the generic independent called number party name (CDNNAME) for routing based on parameters contained in the called number. CDNNAME and outgoing characteristics are set in table CDNCHAR. Refer to this table for more information. Enter SETCDN to set the called number name to the value defined in subfield CDNNAME.
	CDNNAME	Alphanumeric (0 to 8 characters)	*Called number name* The name that the called number is to be set to using the SETCDN option. This must be a valid CDNNAME from table CDNCHAR.

Datafill example

The access code is automatically deleted. No account code entry or Station Message Detail Recording (SMDR) is required. The number of access code digits is 3 and a second dial tone is required. The minimum and maximum number of digits including access code are 6 and 14 respectively. After dialing the access code, the digit collection for IBN lines is in accordance with a block

IBNXLA selector ROUTE/T (end)

of data in table DIGCOL with the name BNRC. The call is not intragroup and routes to the code BNRC in table CLLI by route reference index number 14 in table OFRT. The NAR group is NARGRP2.

An example for a customer group translator BNCT and access code 119 that routes to route reference index 14 in table OFRT for the deletion of the first digit received after the access code follows:

MAP display example for table IBNXLA selector ROUTE/T

```
                    KEY
                                                           RESULT
---------------------------------------------------------------------
  BNCT              119
        ROUTE N N 3 Y 6 14 BNRC N T   OFRT  14 NARS NARGRP2    $
```

IBNXLA selector SFMT

Switch format (SFMT)

The translation selector SFMT is used to support the DMS packet handler translation. SFMT indicates a change in the address format and provides the information whether to further translate a call or route the call.

Datafill

The following table lists the datafill for table IBNXLA selector SFMT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, MINDIGS, MAXDIGS, ESC_DIGITS, and XLA_ROUTE.

IBNXLA selector SFMT (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	SFMT	*Translator selector* Enter the translation selector SFMT.
	MINDIGS	0 to 25	*Minimum digits* Enter a number between 0 and 25 to represent the minimum digits.
	MAXDIGS	0 to 25	*Maximum digits* Enter a number between 0 and 25 to represent the maximum digits.
	ESC_DIGITS	0 to 25	*Escape code digits* Enter a number between 0 and 25 to represent the escape code digits.
	XLA_OR_ ROUTE	X or R	*Translation or route* Enter either X (translation) or R (route).

XLA_OR_ROUTE = X

If the value of subfield XLA_OR_ROUTE is X, datafill refinement LINATTR as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LINATTR	alphanumeric (1 to 16 characters)	*Line attribute* Enter the line attribute.

IBNXLA selector SFMT (continued)

XLA_OR_ROUTE = R

If the value of subfield XLA_OR_ROUTE is R, datafill refinement TAB_CLLI as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TAB_CLLI	T or S	*Common language location identifier* Enter T (table) to route the call to a specific table. Enter S (specific) to route to a specific CLLI.

TAB_CLLI = T

If the value of field TAB_CLLI is T, datafill refinements TABID and KEY as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TABID	IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 or OFR4	*Table identification* Enter the table to which the call routes. Any entry outside the range indicated for this field is invalid.
	KEY	0 to 1023	*Key* Enter a number between 0 and 1023 to represent the key.

IBNXLA selector SFMT (end)

TAB_CLLI = S

If the value of field TAB_CLLI is S, datafill refinement CLLI as described below.

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 name to which the call routes.

Datafill example

The following example shows sample datafill for table IBNXLA selector SFMT.

MAP display example for table IBNXLA selector SFMT

```
                      KEY
                                                             RESULT
---------------------------------------------------------------------
   CXDK                 3
                                   SFMT 7  16 1  X 1023          $
   CXDK                 3
                                   SFMT 7  16 1  R  S  BNRCENT   $
```

IBNXLA selector SLE

Selective list editing (SLE)

The translation selector SLE defines SLE command codes for list editing and management of screening lists. A screening list exists for each call screening service. If the directory number (DN) of the originator matches a DN in the list, appropriate action is taken depending on the service. The supported call screening services are shown below.

- selective call rejection (SCRJ)
- selective call acceptance (SCA)
- distinctive ringing/call waiting (DRCW)

Datafill

The following table lists the datafill for table IBNXLA selector SLE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector SLE (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator.
RESULT		see subfields	*Result* This field consists of subfields TRSEL, SLESEL, SLECOM, and SLETRANS.
	TRSEL	SLE	*Translator selector* Enter the translation selector SLE.
	SLESEL	C or T	*Sle selector* Entry T must be used in table XLANAME to specify the default (secondary) translator used if access code cannot be found for the SLE primary translator. Otherwise, enter C.
	SLECOM	alphanumeric	*Sle command* Enter the SLE command defined for the access code. This field is only valid if the entry for the field SLESEL is C. SLECOM is shown on the switch as SLE_COMMAND.
	SLETRANS	alphanumeric	*Sle translator* Enter the secondary translator name for the SLE. This field is only valid if entry for field SLESEL is T and can only be datafilled in table XLANAME. SLETRANS is shown on the switch as SLE_TRANS.

IBNXLA selector SLE (end)

Datafill example

The following example shows sample datafill for table IBNXLA selector SLE.

MAP display example for table IBNXLA selector SLE

```
                        KEY
                                                          RESULT
 ________________________________________________________________

 BELL1              01
                                    SLE C  LASTDN          $
 BELL1              02
                                    SLE C  CTX_EXTN        $
 BELL1              07
                                    SLE C  DELETE          $
 BELL1              08
                                    SLE C  DELALL          $
 BELL1              09
                                    SLE C  DELPRIV         $
 BELL1              11
                                    SLE C  LISTDEL         $
 BELL1              12
                                    SLE C  LISTADD         $
 BELL1              3
                                    SLE C  CHGSTATUS       $
 BELL2              0
                                    SLE C  HELP            $
 BELL2              1
                                    SLE C  LISTREV         $
```

MAP display example for table XLANAME

```
  XLANAME
                                                         DEFAULT
 MAXDIG
 ________________________________________________________________
   BELL1                                      SLE T BELL2
  9
```

Station ringer (SRNG)

The translation selector SRNG is required if the digit or digits dialed represent the access code for the station ringer test.

Datafill

The following table lists the datafill for table IBNXLA selector SRNG.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* his field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator
RESULT		see subfields	*Result* This field consists of subfields TRSEL and NOACCODE.

IBNXLA selector SRNG (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRSEL	SRNG	*Translation selector* Enter the station ringer translation selector SRNG.
	NOACCODE	0 to 7	*Number of access code digits* Enter the number of digits in the station ringer access code.

Datafill example

The following example shows sample datafill for table IBNXLA selector SRNG.

MAP display example for table IBNXLA selector SRNG

```
        KEY
                                                    RESULT
________________________________________________________________
    BNCT                     117
                                          SRNG 3          $
```

Star (STAR)

The translation selector STAR is required if the digit or digits specified is the digit or digits on a dial phone that equate to the star (*) button on a Digitone phone.

If the translation selector is STAR, translation advances to the feature translator assigned to the customer group or as an option to the Integrated Business Network (IBN) station's network class of service (NCOS) number.

For features that can have a star as the leading control digit, see translation selector FEAT.

Datafill

The following table lists the datafill for table IBNXLA selector STAR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F

IBNXLA selector STAR (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			The allowable digit range for table IBNXLA digilator values is determined for each translator
RESULT		see subfield	*Result* This field consists of subfield TRSEL.
	TRSEL	STAR	*Translation selector* Enter the translation selector STAR.

Datafill example

The following example shows sample datafill for table IBNXLA selector STAR, for customer group translator BNCT. The digit 3 is equivalent to the star (*) on a Digitone phone.

MAP display example for table IBNXLA selector STAR

```
                    KEY
                                               RESULT
-------------------------------------------------------
   BNCT              3
                                                STAR
```

Route to Office, Line, or Trunk Treatment tables (TRMT)

The translation selector TRMT is required if a digit or digits in a preliminary or feature translator routes to one of the treatments in the Office, Line, or Trunk Treatment tables. It is also required for a customer group translator, if a digit or digits dialed are routed to a treatment, in the Office, Line, or Trunk Treatment tables that is different from the treatment defined in field VACTRMT in table CUSTGRP.

Datafill

The following table lists the datafill for table IBNXLA selector TRMT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator

IBNXLA selector TRMT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RESULT		see subfields	*Result* This field consists of subfields TRSEL and TRMT.
	TRSEL	TRMT	*Translation selector* Enter the treatment translation selector TRMT.
	TRMT	alphanumeric (4 characters)	*Treatment* Enter the table treatment in the line, local or office treatment to which all calls with digit or digits equal to field DGLIDX are routed.

Datafill example

An example of datafill for a customer group translator BNCT is shown below. In the example the digits 120 are routed to the unassigned directory number treatment (UNDT) in the Line, Office, or Trunk Treatment tables.

MAP display example for table IBNXLA selector TRMT

```
              KEY
                                                  RESULT
----------------------------------------------------------
   BNCT                 120
                                          TRMT    UNDT
```

Tandem tie trunk route (TTTR)

The translation selector TTTR is required if the digit or digits dialed represent the access code of a private tandem tie trunk route.

If efficient digit collection from incoming trunks is required, in most cases the minimum and maximum digit values must be set to number of access code digits plus one. This causes the incoming trunk to report the first digit it receives after the access code, and continue the translation in the translator that is specified.

This translator determines how many more digits are required, and in most cases avoids unnecessary time-outs in trunk digit collection.

CAUTION

Selector TTTR cannot be used for customer groups with Call Back Queuing (CBQ)

Customer groups with CBQ option specified in tables IBNRTE or CUSTSTN cannot use trunk groups with IBNXLA selector TTTR.

CAUTION

If a route is used to receive forwarded calls, do not use the TTTR selector

Discontinue use of the TTTR selector for routes that require calls forwarded over them. The TTTR selector was developed originally to address the older dial-repeating tie trunk networks, where one uses several access codes to get from node to node in the network, and as such must be replaced by more up to date translations schemes.

IBNXLA selector TTTR (continued)

Datafill

The following table lists the datafill for table IBNXLA selector TTTR.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9 C — Digits 0 to 9 and B to C F — Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator
RESULT		see subfields	*Result* This field consists of subfields TRSEL, ACR, SMDR, NO_ACCODE_DIGITS, SECOND_DIAL_TONE, MINDIGS, MAXDIGS, DGCOLNM, INTRAGRP, EXTRTEID, TABID, KEY, and XLANAME.
	TRSEL	TTTR	*Translation selector* Enter the translation selector TTTR.

IBNXLA selector TTTR (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	ACR	Y or N	*Account code entry* Enter Y (yes) if an account entry is required for all calls to the access code. Otherwise, enter N (no).
	SMDR	Y or N	*Station message detail recording* Enter Y if all calls from a customer group station or attendant console to any station in the block of station numbers are recorded. Enter N (no) if no recording is required. ***Note:*** If field SMDR is set to Y, only the feature that originates a call is SMDR recorded. For features that do not originate a call, this field has no effect and no SMDR is produced.
	NO_ACCODE_ DIGITS	0 to 7	*Number of access code digits* Enter the number of digits in the access code. The access code is automatically deleted from the digits outpulsed.
	SECOND_DIAL _TONE	Y or N	*Second dial tone* Enter Y if second dial tone is required. Otherwise, enter N.
	MINDIGS	1 to 25	*Minimum digits* Enter the minimum number of digits, including access code that are collected. Any entry outside the range indicated for this field is invalid.
	MAXDIGS	1 to 25	Maximum digits Enter the maximum number of digits including access code that are collected. Any entry outside the range indicated for this field is invalid.
	DGCOLNM	alphanumeric (1 to 8 characters)	*Digit collection* Enter the name assigned to the block of data in table DIGCOL for the digit collection required for IBN lines after the receipt of the access code.

IBNXLA selector TTTR (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	INTRAGRP	Y or N	*Intragroup* Enter Y if the call is for the same customer group; otherwise, enter N.
	EXTRTEID	see subfields	*External route identifier* This field consists of subfields TABID and KEY.
	TABID	IBNRTE IBNRT2 IBNRT3 IBNRT4 OFRT OFR2 OFR3 or OFR4	*Table identifier* Enter the table to which translation has to route: Office (OFRT), IBN Route (IBNRTE), IBNRT2, IBNRT3, IBNRT4, OFR2, OFR3, or OFR4. The table size for tables OFRT, OFR2, OFR3, and OFR4 is 0 to 1023. When datafilling these tables the customer must not begin datafilling the table or tables with index 1023. This allocates store for the entire table or tables. The most efficient and conservative way to use these tables is to add the data sequentially. This means that less memory is required if the customer datafills the table or tables starting with index one (1). Any entry outside the range indicated for this field is invalid.
	KEY	1 to 1023	*Key* Enter the route reference index number in the Office or IBN Route table to which translation is routed. Any entry outside the range indicated for this field is invalid.
	XLANAME	alphanumeric	*Translator name* Enter the name of the translator that translates the digits that are dialed after the access code.

Datafill example

An example for a customer group translator BNCT and access code 8, that routes to route reference index 12 in table IBNRTE is shown below. The access code is automatically deleted.

IBNXLA selector TTTR (end)

No account code entry or Station Message Detail Recording (SMDR) is required.

The number of access code digits is 1 and second dial tone is required.

The minimum and maximum number of digits including access code is set to 2 to reduce time-out on digit collection.

After dialing the access code the digit collection for IBN lines is in accordance with a block of data in table DIGCOL with the name BNRC.

The call is intragroup.

The call advances to the translator with the name CENT for further digit analysis.

MAP display example for table IBNXLA selector TTTR

```
             KEY
                                                    RESULT
________________________________________________________________
  BNCT                    8
       TTTR N N 1 Y 2  2  BNRC  Y   IBNRTE   12   CENT
```

IBNXLA selector TTTT

Tandem tie trunk termination (TTTT)

The translation selector TTTT is required to specify the minimum and maximum number of digits following the access code of the tandem tie trunk route and is required to reduce time-outs on digit collection.

The route to which the call advances is defined in the associated tandem tie trunk route entry.

CAUTION
Selector TTTT cannot be used for customer groups with Call Back Queuing (CBQ)
Customer groups with CBQ option specified in tables IBNRTE or CUSTSTN cannot use trunk groups with IBNXLA selector TTTT.

Datafill

The following table lists the datafill for table IBNXLA selector TTTT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields XLANAME and DGLIDX.
	XLANAME	alphanumeric (1 to 8 characters)	*Translator name* Enter the name assigned to the translator.
	DGLIDX	vector of up to 18 digits	*Digilator index* Enter the digit or digits assigned as an ambiguous code. The range of this field depends on field MAXDIG in table XLANAME. The DGLIDX can accept overdecadic digits. The allowable values for the digilator portion of DGLIDX of table IBNXLA are as follows: MAXDIG value — *IBNXLA digilator values* 9 — Digits 0 to 9

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			C Digits 0 to 9 and B to C F Digits 0 to 9 and B to F The allowable digit range for table IBNXLA digilator values is determined for each translator
RESULT		see subfields	*Resul* *t*This field consists of subfields TRSEL, MINDIGS, MAXDIGS, and INTRAGRP.
	TRSEL	TTTT	*Translation selector* Enter the translation selector TTTT.
	MINDIGS	1 to 25	*Minimum digits* Enter the minimum number of digits following the access code that are collected. Any entry outside the range indicated for this field is invalid.
	MAXDIGS	1 to 25	*Maximum digits* Enter the maximum number of digits following the access code that are collected. Any entry outside the range indicated for this field is invalid.
	INTRAGRP	Y or N	*Intragroup* Enter Y (yes) if a call is for the same customer group. Otherwise, enter N (no).

Datafill example

An example of a tandem tie trunk termination translator CENT and the digit 2 is shown below. The digit 2 is the leading digit of four-digit station numbers. The minimum and maximum number of digits are 4. The call is not intragroup.

IBNXLA selector TTTT (end)

MAP display example for table IBNXLA selector TTTT

```
                KEY
                                                   RESULT
-------------------------------------------------------------
  CENT                  2
                                             TTTT  4  4 N
```

ICIDATA

Table name

Incoming Call Identification Data Table

Functional description

Table ICIDATA provides for flexible night service and the key and lamp display for each incoming call identification (ICI) number.

Flexible night service provides attendant programing of night service routes for each ICI assigned to a customer group.

Night service-fixed is a subfeature of night service-flexible. A night service route can be programmed by the attendant using a dedicated key or a wild card key.

Any attendant, regardless of subgroup, can program night service routes. Any number of attendants can program the night service routes provided that their console has the night service program key.

Only high-order ICI traffic can be programmed to night service routes. High-order ICI traffic does not include recall don't answer, recall camp on, recall call waiting, and interposition calling. Once night service is in effect, station restrictions are checked before a call is presented to a night station.

> ***Note:*** Using ICI code 1 (one) with the nught service feature allows calls to be routed to the night service destination.

If the user does not use the flexible night service feature, the programming key is not assigned to the console.

Activation and deactivation of night service depends on the state of the night service lamp for subgroup 0 (zero) in each customer group.

All ICI categories that are eligible for attendant console programming must be included in table ICIDATA. ICI categories can be added or deleted only by using table control. If an attendant attempts to program an ICI category not included in the table, or if attendant night service programming is not allowed for that ICI, the attendant receives 2 s of reorder tone.

Activation and deactivation of the night service routes can only be controlled by the consoles in subgroup 0. Night service is active when the night lamp of subgroup 0 is on. Night service is off when the night service lamp is off.

ICIDATA (continued)

Table ICIDATA contains

- all the ICI codes for a customer group
- a field containing up to seven alphanumeric characters for key and lamp display (KLD) purposes
- options for emergency service purposes
- options for night service purposes

Night service option ATTPRG enables attendant console programming. Night service option NSDIGS enables the night service forwarded directory number (DN) capability.

When night service is active, calls to the attendants are forwarded according to the data in table ICIDATA. If the calling party has an attendant assisted network class of service (NCOS), it is used for translation purposes. If the calling party does not have an NCOS datafilled (for example, calls originating from outside the customer group), the NCOS in field EXTNCOS in table CUSTHEAD is used for translation purposes.

If users wish to route stations to announcement, this can be done by appropriate datafill.

Night service routes cannot be routed to ICIs in the same customer group.

The emergency option alerts all attendants in a customer group to the presence of an emergency call, even if the attendants are active on a call, in the position busy state, in night service, or programming a feature.

An enqueued call is an emergency call if the enqueued call's ICI is an emergency ICI, that is, with field OPTION datafilled with EMERG.

The maximum number of emergency ICIs is five. Emergency ICIs apply to the whole customer group. It is recommended that only customer-specifiable ICIs (26 to 254) be datafilled as emergency ICIs.

Sounding of the audible tone for emergency calls is controlled by option EMAL in table SUBGRP.

ICI codes 0 to 25 are reserved for special functions.

ICI codes 26 to 254 are job dependant and can be assigned by the operating company.

Table Table , "Key and lamp assignments" on page -859 shows the key and lamp assignments for the ICI features. These features must be assigned to the ICIs listed in the table. The abbreviated feature names recommended for the attendant console display are also indicated.

Key and lamp assignments

ICI	Name	Feature
1	DIALO	Attendant
2	NOANSRC	Don't answer recalls
3	CMPONRC	Camp on recall
4	CWAITRC	Call waiting recall
5	CFW	Call forward to attendant
6	CFWNOAN	Call forward don't answer to attendant
7	CFWBUSY	Call forward busy to attendant
8	INTECPT	Intercept
9	SERIAL	Serial call
12	CONF	Conference call recall
13	DND	Do not disturb
1 4	DISA	Direct inward system access
1 5	MWINDRT	Message waiting indirect ICI
1 6	MWDRCT	Message waiting direct ICI
2 5	DIRECT	Direct ICI

ICI codes can only be assigned to customer groups listed in table CUSTCONS. For any particular customer group, the maximum number of ICI codes depends on the value of option ICINUM in table CUSTCONS.

The largest acceptable value of ICI code is the value of ICINUM plus 25. That is, if a customer group specified ICINUM as 10, then the highest ICI code number for the customer group is 35.

ICIDATA (continued)

Datafill sequence and implications

The following tables must be datafilled before table ICIDATA.

- CUSTCONS
- CUSTHEAD

Table size

The maximun number of customer groups is 4096; the size of table ICIDATA is up to 256 ICI codes per customer group.

Memory allocation for each customer group is the value of option ICINUM specified in table CUSTCONS plus 25.

Datafill

The following table lists datafill for table ICIDATA.

Field descriptions for table ICIDATA (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*ICIDATA key* This key field consists of subfields CUSTGRP and ICICODE.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	ICICODE	0 to 255	*Incoming call identification code* Enter the incoming call identification code.
NAME		alphanumeric (1 to 7 characters), $, or _	*Key and lamp display name* Enter the name assigned to the specified ICI code in the specified customer group for the KLD at the attendant console. The following characters can be entered: A to Z, 0 to 9, and _ (underscore). An _ appears on the display as a blank. When listing at the maintenance and administration position (MAP) an imbedded _ appears as an _ and a trailing _ appears as a blank. If no key and lamp display is required, enter $. When listing an empty name (entered as $), it appears as $.

Field descriptions for table ICIDATA (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS		see subfields (vector of up to 6 multiples)	*Options* Enter the list of options and associated subfields that are assigned to subfield ICICODE. Each option and its subfield are separated by a blank space. Datafill up to six options and associated subfields. If less than six options are required, end the list with a $ (dollar sign). If an option is not provided, then no input for that option is required. Enter EMERG if the ICI code is an emergency ICI.
OPTIONS (continued)			Enter ATTPRG for night service number attendant programmable if the attendant can program the night service number assigned to the ICI code. Enter NSDIGS for night service number if the ICI code has a night service number and datafill refinement DIGITS.
	DIGITS	numeric (1 to 18 digits)	*Digits* If the entry in field OPTIONS is NSDIGS, datafill this refinement. Enter the night service number assigned to the ICI code.

Datafill example

An example of datafill for table ICIDATA is shown below.

For tuple 1, when customer group BNRMC has night service active, all calls to the attendant ICI (number 1), are routed to DN 727-8999. The night service route is attendant programmable and the KLD name is DIAL0.

For tuple 2, ICI 34 is for emergency calls and when night service is active all calls are routed to DN 727-4118. The night service route is attendant programmable and the KLD is PRECF0.

ICIDATA (end)

MAP display example for table ICIDATA

```
      KEY      NAME
                                                    OPTIONS
_____________________________________________________________________

BNRMC   1     DIAL0
                                (ATTPRG )(NSDIGS 7678998)$
BNRMC  34    PRECF0
                      ( EMERG )(ATTPRG )(NSDIGS 7274118)$
```

ICNTRY

Table name

GTOPS International Country INW and DA Operator Table

Functional description

Table ICNTRY contains information that is unique to a particular country. This information is used by the Global Traffic Operator Position System (GTOPS) for inward (INW) and directory assistance (DA) dialing. See table IALTRE for related information.

The following restrictions apply

- the maximum number of entries is 512
- a country cannot be deleted from this table if there is an entry in either table IFORDA or table IFORINW for that country
- table IALTRTE must be datafilled before any alternate routes can be added to this table

Datafill sequence and implications

Table IALTRTE must be datafilled before table ICNTRY

Table size

0 to 512 tuples

Datafill

The following table lists datafill for table ICNTRY

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CNTRCODE		numeric (vector of up to 18 digits)	Country code key. Enter a country code datafilled in table CCTR. This is the key field to table ICNTRY.
CNTRNAME		A to Z, 0 to 9, and _ (vector of up to 12 characters)	Country name. Enter the name of the country associated with the country code. The end of the name is marked by a blank. This name is displayed on the operator screen when a foreign number is entered by the operator, using either the KP CLG or the FOR (keypulse foreign) keys. A blank is displayed for the _ (underscore) at the operator (or incharge or assistance) screen.

ICNTRY (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
DIRRTE		see subfield	Direct route. This field consists of subfield DIRRTE.
	DIRRTE	Y or N	Direct route selector. Enter Y if a direct route to the country is available. Datafill subfields INWTYPE and DATYPE. Enter N if a direct route to the country is not available; the first alternate route displays when the operator attempts to outpulse to the country using the FOR key.
	INWTYPE	see subfields	Inwards type. This field consists of subfields INWTYPE and NUMBER.
	INWTYPE	COUNTRY, CITY, or NONE	Inwards type selector. Enter COUNTRY if there is only one INW number for this country and datafill refinement NUMBER. Enter CITY if there is more than one INW number for this country and datafill refinement NUMBER. Enter NONE if there are no INW numbers for this country.
	NUMBER	up to 18 digits	Inwards number. Enter the INW number if the entry in field INWTYPE is COUNTRY or CITY. Enter the default INW number if the entry in field INWTYPE is CITY. Leave blank if the entry in field INWTYPE is NONE.
	DATYPE	see subfields	Directory assistance type. This field consists of subfields DATYPE and NUMBER.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DATYPE	COUNTRY, CITY, or NONE	Directory assistance type selector. Enter COUNTRY if there is only one DA number for this country and datafill refinement NUMBER. Enter CITY if there is more than one DA number for this country and datafill refinement NUMBER. Enter NONE if there are no DA numbers for this country.
	NUMBER	up to 18 digits	Directory assistance number. Enter the DA number if the entry in field DATYPE is COUNTRY or CITY. Enter the default DA number if the entry in field DATYPE is CITY. Leave blank if the entry in field DATYPE is NONE.
ARTELIST		1 to 128 (vector of up to 6 routes)	Alternate route list. Enter the alternate route numbers. Each alternate route must be datafilled in table IALTRTE. At least one alternate route must be entered if there is no direct route to the country.
FALSESUP		Y or N	False supervision. Enter Y to indicate that false supervision is to be expected from the country. False supervision results in the following • SUP appears on the operator screen after the CLD called number to tell the operator to wait for an answer. • The system then waits for the operator to depress the ST TMG (start timing) key to start timing the call. Otherwise, enter N.
TIMEDIFF		see subfields	Time difference. This field consists of subfields SENSE and TIME.

ICNTRY (end)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SENSE	MINUS, ZERO, or PLUS	Sense. Enter ZERO if there is no time difference between the country and the GTOPS. Enter MINUS or PLUS if there is a time difference between the country and the GTOPS and datafill refinement TIME.
	TIME	1 to 12	Time difference. Enter the time difference in hours between the country and the ITOPS if the entry in subfield SENSE is MINUS or PLUS. Leave blank if the entry in subfield SENSE is ZERO.

Datafill example

The following example shows sample datafill for table ICNTRY.

MAP display example for table ICNTRY

```
            CNTRCODE     CNTRNAME
                                                        DIRRTE
                                 ARTELIST FALSESUP TIMEDIFF
-------------------------------------------------------------
                33       FRANCE
Y COUNTRY               33151 COUNTRY                    33161
                         (  1) (  2)$        N  PLUS  5
             43          AUSTRIA
Y    CITY             43522151    CITY                43522161
                                    $        N  PLUS  5
```

IDBCLASS

Table name

GTOPS International Delay Call Database Keyed Values Table

Functional description

In the Global Traffic Operator Position System (GTOPS) details of international calls that cannot be processed immediately are preserved in a delay call database to be used when the call is eventually processed. Refer to table IALTRTE for additional information.

In the process of entering a call into the international delay call database the operator enters a class number from 0 to 99. This class number is an index into table IDBCLASS where the operating company defines for each class number

- a screen display of up to 10 characters
- which party, calling or called, is to be outpulsed first when the call returns automatically from the database
- if the call is queued on an outgoing route

Datafill sequence and implications

Table IALTRTE must be datafilled before table IDBCLASS.

Table size

0 to 99 tuples

Datafill

The following table lists datafill for table IDBCLASS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
IDBCLASS		0 to 99	Database class number. Enter the number the operator keys in using the DB CLASS key.
SCRNDISP		alphanumeric (1 to 10 characters)	Screen display. Enter the database class display that will appear on the screen.

IDBCLASS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FIRSTCON		CALLING or CALLED	Party to outpulse first. Enter the party to be outpulsed first when the call returns automatically from the database.
ROUTE		Y or N	Route queued calls. Enter Y (yes) if the call is stored into the ITOPS call database as a call queued on an outgoing route. Enter N (no) if the call is to be recalled after a specified time has elapsed.

Datafill example

The following example shows sample datafill for table IDBCLASS.

MAP display example for table IDBCLASS

```
CLASSNUM   SCRNDISP FIRSTCON ROUTE
_____________________________________________________

       1      DELAY  CALLING     N
      10  MESSENGER   CALLED     N
      20 NO_CIRCUIT  CALLING     N
      30  NO_PERSON   CALLED     N
      40 RTE_QUEUED   CALLED     Y
```

IFORDA

Table name

GTOPS International Country-City DA Operator Table

Functional description

Table IFORDA contains the directory assistance (DA) numbers based on country and city codes.

For related information, refer to table IALTRTE.

Datafill sequence and implications

Table CCTR must be datafilled before table IFORDA.

Table size

0 to 4096 tuples

Datafill

The following table lists datafill for table IFORDA.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DAKEY		see subfields	Country-city key. This field is the key to the table and consists of subfields CNTRCODE and CITYCODE.
	CNTRCODE	0 to 999	Country code. Enter a country code known to table CCTR. A country cannot be entered in this table unless the appropriate field in table ICNTRY is filled in to indicate that there are directory assistance (DA) numbers on a city basis for this country. This is the first of two keys into this table.

IFORDA (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CITYCODE	0 to 99999	City code. Enter a city code. This is the second of the two keys into this table.
NUMBER		0 to 9 (up to 15 digits)	Country-city DA number. Enter the digits to outpulse for DA in this city. The digits outpulsed are: CNTRCODE + CITYCODE + DA number

Datafill example

The following example shows sample datafill for table IFORDA.

MAP display example for table IFORDA

```
      DAKEY                NUMBER
 ________________________________________________________________
   43    523             43523141
```

IFORINW

Table name

GTOPS International Country-City INW Operator Table

Functional description

Table IFORINW contains the INW (Inwards) numbers based on country and city codes.

For related information, refer to table IALTRTE.

Datafill sequence and implications

Table CCTR must be datafilled before table IFORINW.

Table size

0 to 4096 tuples

Datafill

The following table lists datafill for table IFORINW.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
INWKEY		see subfields	Country-city key. This field consists of subfields CNTRCODE and CITYCODE.
	CNTRCODE	0 to 999	Country code. Enter a country code known to table CCTR. A country cannot be entered in this table unless the appropriate field in table ICNTRY is first datafilled to indicate that there are INW numbers on a city basis for this country. This is the first of two keys into this table.
	CITYCODE	0 to 99999	City code. Enter a city code. This is the second of the two keys into this table.
NUMBER		up to 15 digits	Country-city INW number. Enter the digits to outpulse for Inwards operator in this city. The digits outpulsed are: CNTRCODE + CITYCODE + INW Number

IFORINW (end)

Datafill example

The following example shows sample datafill for table IFORINW.

MAP display example for table IFORINW

INWKEY		NUMBER
43	523	43523141

ATTENTION
This table applies to new or modified content for SN07 (DMS) that is valid through the current release.

IHEADDR (International Head Table Dump and Restore)

Datafill sequence and implications

Datafill is not manually added. Datafill is added only through dump and restore based on the tuples in the International Routing head tables.

The tables are as follows: CTHEAD, PXHEAD, FAHEAD, OFCHEAD, FTHEAD, ACHEAD, NSCHEAD, AMHEAD, CCHEAD, CTYHEAD, NNHEAD and VPNHEAD.

Table size

IHEADER stores one tuple for each tuple in each of the head tables.

Datafill

Datafill is only automatically added during dump and restore.

Datafill example

The following example shows sample datafill for table IHEADDR:

MAP display example for table IHEADDR

```
>add
> KEY:{IHEADER_KEY}
>MAXIDX:{XLA_HEAD_MAXIDX_OPT}
```

Table history

SN07 (DMS)

New table IHEADDR created as part of activity Q01083765.

ILPELGBL

Table name

Originating Line Number Screening IntraLATA Presubscription Eligibility Table

Functional description

This table determines if the called number is in the same local region as the calling number. If so, the call is not ILP eligible, but handled by the Local Exchange Carrier (LEC). Table ILPELGBL is accessed by the region number given in table ILPREGN. Then, table ILPELGBL provides a list of region numbers in the calling numbers local region.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table ILPELGBL.

Table size

0 to 2000 tuples

Datafill

The following table lists datafill for table ILPELGBL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
CLGREGN		0 to 1999	Calling party region. This is the key to the table and is indexed from table ILPREGN.
LCLREGNS		up to 220 numbers defined in ILPREGN	Local calling party region. Enter up to 20 region numbers defined in table ILPREGN, field REGNNUM, that are local to this calling party region. The regions that are local to the calling party are not ILP eligible, but handled by the LEC.

Datafill example

The following example shows sample datafill for table ILPELGBL.

ILPELGBL (end)

MAP display example for table ILPELGBL

```
CLGREGN     LCLREGNS
-------------------------------------------------------
3           4$
```

If the calling number has no local regions, it does not have to be datafilled in ILPELGBL. If the called party region is the same as the calling party region, the call is considered local, so ILPELGBL is not accessed, and the call does not have to be explicitly datafilled in table ILPELGBL. It is also assumed a region is local to itself and does not have to be explicitly datafilled in ILPELGBL. (This is the same condition as when the calling and called party are in the same region.) Following is an example with unncecessary datafill:

MAP display example for table ILPELGBL with unnecessary datafill

```
CLGREGN     LCLREGNS
-------------------------------------------------------
3           (3 4)$
4           (4)$
```

In tuple 3 above, field LCLREGNS does not require value 3 since this indicates the region is local to itself (which is the same as when the calling and called party are in the same region). Tuple 4 is not necessary since it indicates the region is local to itself and has no local regions.

Table history

NA007

Field LCLREGNS maximum value is increased from 20 to 220 per feature AN1842.

NA006

This table was introduced by feature AN1842 in functionality OLNS IntraLATA Presubscription, OSEA00006.

Supplementary information

None

ILPREGN

Table name

Originating Line Number Screening IntraLATA Presubscription Region Number Table

Functional description

This table determines the region numbers of the calling and called numbers. Then, table ILPELGBL is accessed to determine if the called region is local to the calling region.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table ILPREGN.

Table size

0 to 32,767 tuples

Datafill

The following table lists datafill for table ILPREGN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPANXX		up to 18 digits	Numbering plan area and office code. This is the key to the table. Enter the calling or called number. The range on the MAP display indicates up to 18 digits (which are used by the system); however, it is recommended to enter only up 6 digits.
REGNNUM		0 to 1999	Region number. A region defined by this table for determining intraLATA toll calls for ILP eligibility. This is an index into table ILPELGBL.

Datafill example

The following example shows sample datafill for table ILPREGN.

ILPREGN (end)

MAP display example for table ILPREGN

```
NPANXX      REGNNUM
-------------------------------------------------------
3152        1
31533       2
315440      3
315670      4
```

Table history

NA006

This table was introduced by feature AN1842 in functionality OLNS IntraLATA Presubscription, OSEA00006.

Supplementary information

None

IMAGEDEV

Table name

Image Device Table

Functional description

The automatic image dump process tables provide a method to schedule central control (CC) image dumps automatically. The system performs this process without user action. This process does guarantee that the dump correctly completes. The operating company (OC) must verify the completion or failure of the dump. The OC must take the appropriate action. The OCs have complete control over the automatic image dump schedule.

Table IMAGEDEV defines the image file storage devices that the automatic image dump process uses.

Each tuple in this table contains two fields, VOLNAME and ACTIVE.

The OC must enter data in this table.

The following are examples of datafill conditions:

- If the OC does not enter, the AUTO-IMAGE dump process does not run.
- If the OC defines one volume, the AUTO-IMAGE dump process dumps the image to that volume only.
- If the OC defines more than one volume, the next image dump occurs on the next available volume. If the current dump volume is the last one, the AUTO-IMAGE dump process rotates to the top of the table. The AUTO-IMAGE dump uses the volume that the first tuple defines.

Datafill sequence and meaning

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

Table size

0 to 4 tuples

The number of tuples added dynamically determines the table size. The maximum size of 4 tuples corresponds to four different load routes.

IMAGEDEV (end)

Datafill

Datafill for table IMAGEDEV appears in the following table.

xxxField descriptions

Field	Subfield or refinement	Entry	Explanation and action
VOLNAME		alphanumeric (a maximum of 16 characters)	*Volume name*. Enter the name of the disk volume where the system dumps the image. This field is the key to the table.
ACTIVE		Y or N	*Active*. Enter Y if the volume the OC enters is in use. If the volume is not in use, enter N.

Datafill example

Sample datafill for table IMAGEDEV appears in the following example.

In this example, the first image dump uses disk volume D000IMG1.

In the second dump, use of disk volume D010IMG2 does not occur. Field ACTIVE is N. The system dumps the image in D020IMG3.

The third dump uses disk volume D000IMG1. Disk volume D000IMG1 is the first tuple that the OC enters in the table.

MAP example for table IMAGEDEV

```
          VOLNAME        ACTIVE
_____________________________________________________

        D000IMG1             Y
        D010IMG2             N
        D020IMG3             Y
```

IMGSCHED

Table name

Image Schedule Table

Functional description

Table IMGSCHED tracks and schedules the automatic image dump process.

Each tuple contains the following six fields:

- DAY
- DUMPHOUR
- DUMPMIN
- CMMS
- ISN
- USESDM
- ACTIVE

Each field can change. The field DAY cannot change.

See table IMAGEDEV for additional information.

Datafill sequence and meaning

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

Table size

7 tuples

The size of table IMGSCHED corresponds to the seven days of the week, from Monday to Sunday. You cannot delete tuples or add tuples.

IMGSCHED (continued)

Datafill

Datafill for table IMGSCHED appears in the following table.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DAY		alphabetic (to a maximum of 9 characters)	*Day of the week*. Enter the day of the week when the dump occurs. The field entries are MONDAY to SUNDAY. You cannot add, delete or change entries.
DUMPHOUR		00 to 23	*Dump hour*. Enter the dump start hour schedule. The 24 hour system specifies this schedule. The default is 21 (9:00 p.m.).
DUMPMIN		00 to 59	*Dump minutes.* Enter the dump start minutes schedule. The default schedule is 00 (0 min).
CMMS		Y or N	*Computer Module and Message Switch*. Enter Y if the system must dump the CM and MS image for this day. Enter N if the system must ignore the day. The default is N.
ISN		Y or N	*Intelligent Switch Network*. Enter Y if the system must dump the ISN image. Enter N if the system must ignore the day. The default is N.
USESDM		Y or N	*USESDM.* Enter Y to use the SuperNode Manager (SDM) to store parts of the data store image during the computing module (CM) image dump process. Enter N to not use the SDM during the CM image dump process. The default entry is N.
ACTIVE		Y or N	*Active*. Enter Y if the system must dump the data for this day. The dump occurs on the day and at the time the DUMPHOUR and DUMPMIN fields specify. Enter N if a data dump is not necessary for this day. If CM/MS and ISN for the selected day is N, ACTIVE cannot be Y.

Datafill example

Sample datafill for table IMGSCHED appears in the following example.

In this example, the AUTO-IMAGE dump process runs as follows:

- Monday. At 21:00 the system dumps the ISN image.
- Tuesday. At 21:00 the system dumps the CMMS and ISN image using the SDM to reduce CI lockout time during the CM image dump.
- Wednesday. At 21:30 the system dumps the CMMS image using the SDM to reduce CI lockout time during the CM image dump.
- Thursday. At 20:30 the system dumps the CMMS and ISN images using the SDM to reduce CI lockout time during the CM image dump.
- Friday. At 21:00 the system dumps NO images.
- Saturday. At 21:00 the system dumps the CMMS and ISN images using the SDM to reduce CI lockout time during the CM image dump.
- Sunday. At 20:30 the system dumps NO images.

The CM image dump process can use the SDM every day as shown in the example.

MAP example for table IMGSCHED

```
  DAY     DUMPHOUR   DUMPMIN    CMMS    ISN    USESDM ACTIVE
_____________________________________________________________

MONDAY      21          0         N       Y      N      Y
TUESDAY     21          0         Y       Y      Y      Y
WEDNESDAY   21         30         Y       N      Y      Y
THURSDAY    20         30         Y       Y      Y      Y
FRIDAY      21          0         Y       Y      N      N
SATURDAY    21          0         Y       Y      Y      Y
SUNDAY      20         30         N       N      N      N
```

Table history

CSP12

Field USESDM is added to table IMGSCHED by feature 59007562 in CSP12.

CSP08

Fields CM/MS and ISN were added to table IMGSCHED by feature AR2215 in CSP08.

INTCCFMT

Table name

International Calling Card Format Table

Functional description

Table INTCCFMT specifies the format of each valid CCITT calling card. It is required by the Traffic Operator Position System (TOPS) and international TOPS for CCITT calling card validation.

The TOPS international CCITT calling card format feature allows TOPS to accept the AT&T Customer Accounts Service (CAS) card, which is in the CCITT telephone credit card format. Specifically, this feature provides for the following activities:

- dual-tone multifrequency (DTMF) reception of CCITT
- cards for subscriber-dialed automatic calling card (ACCS) credit card numbers
- entry and display of new card formats at operator terminals
- outpulsing of new card formats during inward validation of these cards to validation host switches
- recording of these telephone credit cards in Northern Telecom automatic message accounting (AMA) format

ISO cards

This table is used for validation of International Organization for Standardization (ISO) billing cards, domestic cards, and billed numbers (collect and third) that begin with the same digits. Note, an ISO billing card is any billing card that conforms to ISO 7812 standards. Both CCITT telephony calling cards and commercial credit cards are ISO cards.

All ISO cards must be datafilled in this table. If an ISO card is not datafilled in this table, the card is interpreted as a 14-digit card and table CCVINFO is checked. If the card is not datafilled in table CCVINFO, default tuple 0 in table CCVPARMS is used. All ISO cards in table INTCCFMT must have a matching entry in table CCVINFO

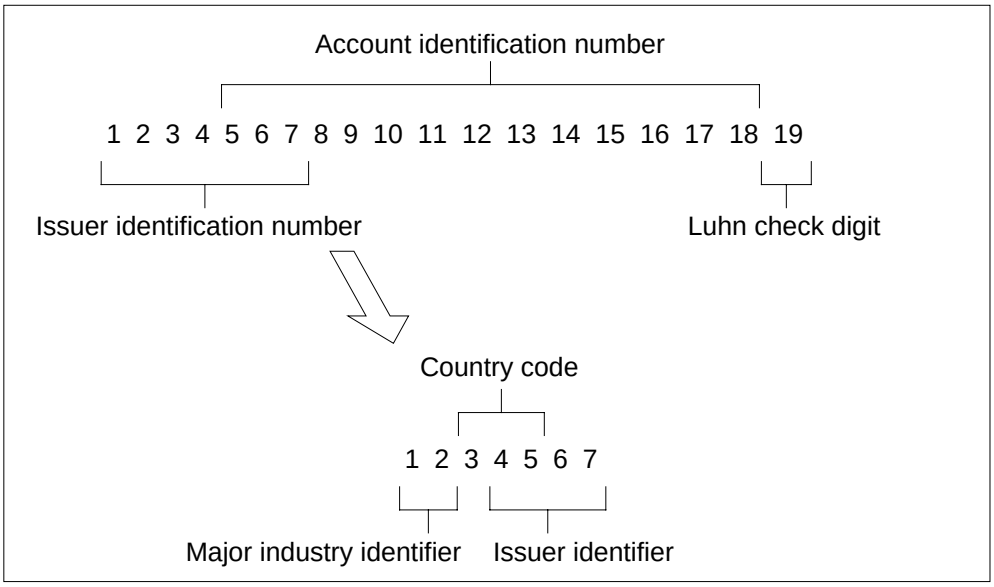
CCITT international credit card standard

CCITT Recommendation #E118 provides a worldwide standard for telecommunication credit cards. The standard allows identification of the origin and issuer of a particular card number and easy differentiation of telecommunications industry cards from other major industry credit cards.

The established format consists of an identification number line (INL) of up to 19 digits and an associated personal identification number (PIN) of up to 16 digits.

The INL is shown in the following figure. Each field is described in further detail.

International line number format



Issuer identification number

The issuer identification number is one to four digits in length. It consists of a major industry identifier (MII), a country code, and an issuer identifier. The MII identifies the industry of the card issuer. Value 89 is assigned for telecommunications. The country code is one to three digits, according to the world zone and country code numbering scheme used in international numbering. This numbering scheme is outlined in the *CCITT Red Book*, International Telephone Services Operation Recommendation E.163, 1985, Geneva. North American telecommunications credit cards use a country code of 1. In this zone, the country code and the world zone are the same.

Each card issuing organization has a unique issuer identifier (within the country code) that appears in each card. This field is one to four digits but is fixed for any given country code. The combined length of the country code and the issuer identifier does not exceed five digits.

INTCCFMT (continued)

Account identification number

The individual account identification number is assigned by the card-issuing organization. The identification number is of variable length but is fixed for each issuing organization (that is, fixed for each issuer identification number).

Luhn check digit

This is a single digit that provides a measure of local screening prior to initiation of a database query. The check digit is calculated by using all preceding digits in the card number according to the Luhn formula.

Personal identification number (PIN)

The PIN is a separate number associated with the INL. It is confidential to the owner of the card. The length of the PIN is variable (maximum of four digits), but is fixed for each issuer identification number.

Table INTCCFMT specifies the format of each card issuers CCITT standard credit cards.

Only those formatted cards that are validated are datafilled. Initially, only CAS cards are included in this table. As other CCITT cards are accepted by TOPS/OOC, then they can be included.

Validation is performed by outgoing inward validation procedures on validation host switches. Table CCVPARMS (field VALTYPE) verifies that inward validation is necessary. This table is indexed by table CCVINFO, which is indexed by the first one to seven digits of the calling card number.

If field VAL14DIG is set to Y (yes), a 14-digit number made up of the individual account ID number and the PIN is used for validation. If field VAL14DIG is set to N (no), then the call is marked for manual validation, which is done regardless of the datafill in table CCVPARMS.

A CCITT card keyed by a subscriber in subscriber-dialed ACCS service or by an operator has its format checked using the information stored in this table, and the Luhn check digit is verified. No further validation is performed if these initial checks are not successful. Instead, the card is treated as invalid.

Table INTCCFMT is not allowed to band. Banding is the condition in which 10 sequential entries in the table (for example, 891770, 891771, 891772 ... 891779) are compacted to a single entry (for example, 89177). This is not allowed for simplicity and for ease of dump and restore.

The total size of a telephone credit card number (including the PIN) is restricted to a maximum of 23 digits. Credit cards without PINs are restricted to a maximum of 19 digits.

Datafill sequence and implications

Table INTCCFMT assumes that at least the default tuple (tuple 0) in table CCVPARMS exists prior to datafilling a tuple in table INTCCFMT. However, the software does not enforce this assumption/restriction since the default tuple is added by restart code at IPL time and all attempted deletions of the tuple are blocked by table control.

The previous interaction of this table with table C7GTTYPE is changed by this feature. The restriction was: "When datafilling a non-empty string in table INTCCFMT, field GTTNAME, the GTTNAME must first be datafilled in table C7GTTYPE." Since field GTTNAME is moved from table INTCCFMT to table CCVPARMS, the above-mentioned restriction now exists between tables CCVPARMS and C7GTTYPE.

Tables CCVPARMS and CARRSCRN must be datafilled before this table. The value used in field CARRIDX of this table must first exist as the value of field IDX in table CARRSCRN. And the value in field PARMSIDX of this table must first exist in field IDX in table CCVPARMS.

Table size

This is a digilator table and therefore can use up to 32,000 words of memory, depending upon how many tuples are datafilled. The maximum number of tuples depends upon which numbers are datafilled (i.e. the maximum number of tuples is indeterminate).

Datafill

The following table lists datafill for table INTCCFMT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ISSUERID		vector (up to 18 digits)	Issuer identifier. This field is the key to the table and contains the identification of the international calling card. All ISO cards must be datafilled in this table and have a matching entry in table CCVINFO.
ACCIDSIZ		1 to 15	Account ID size. This field contains the number of digits in the account number for the international calling card. The combined number of digits in the account ID (ACCIDSIZ) and ISSUERID cannot exceed 19.

INTCCFMT (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PINSIZE		0 to 4	Personal ID size. This field contains the length of the PIN portion of the international calling card number. The combined number of digits in the PIN (PINSIZE) and the ISSUERID cannot exceed 23.
VAL14DIG		Y or N	Validate 14-digit number. This field determines whether the individual account ID number (ACCID) and the PIN are used to form a 14-digit number for validating the CCITT calling card.
LUHNCHK		Y or N	LUHN check digit. Turns checking of the LUHN check digit for ISO card on (Y) or off (N). The default is Y.
CARDBRND		from table CARDBRND	Card brand. Operating company assigned name of card issuer for billing card in field ISSUERID.
CARRIDX		0-62	Carrier index. Index into table CARSCRN.
PARMSIDX		0-254	Parameters index. Index into table CCVPARMS.

Datafill example

The following example shows sample datafill for table INTCCFMT.

MAP display example for table INTCCFMT

```
ISSUERID ACCSIDSIZ PINSIZE VAL14DIG LUHNCHK CARDBRND
CARRIDX PARMSIDX
_____________________________________________________
441644      10        4       N        N     Defaultname
   0        1
514644      10        4       N        Y     CCC1
   0        1
891222      11        4       N        Y     CCITT1
   0        3
```

Table history

BCS36

Fields CLDNUM, SEQQRY, TIMEOUT, and QRYBLK are moved to table CCVPARMS. Moving these fields makes them available to both CCITT and domestic (14-digit) calling cards. Change was from feature NC0342 in NTX825AB.

TOPS03

Added fields LUHNCHK, CARDBRND, CARRIDX, and PARMSIDX; and section on ISO cards per feature AN0409 in TOPS Commercial Credit Card, ABS00008.

INWOMAP

Table name

INWATS Originating Map Table

Functional description

Table INWOMAP enables operating companies to define special inward wide area telecommunication service (INWATS) routes for ISDN-originated INWATS calls.

Instead of using a route reference value from translations to directly access table INWORIRT, the DMS switch uses the route reference value and the routing characteristic name (field RCNAME) to access table INWOMAP in order to obtain a new route reference value. This value is then used to access table INWORIRT to obtain final route information.

If an entry in table INWOMAP is not found, the original route reference value from translations is used to access table INWORIRT. If the call's routing characteristic name in field RCNAME is NIL, then table INWOMAP is bypassed and the original route reference value is used to directly access table INWORIRT.

Datafill sequence and implications

The following tables must be datafilled before table INWOMAP:

- RCNAME
- INWORIRT

Table size

0 to 262 144 tuples

Table size is allocated dynamically.

Datafill

The following table lists datafill for table INWOMAP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields RCNAME and INDEX.
	RCNAME	alphanumeric (1 to 8 characters)	*Routing characteristics name* Enter the ISDN routing characteristic name that is defined in table RCNAME.
	INDEX	numeric (0 to 1023)	*Index* Enter the route reference index of a basic routing list in table INWORIRT. A basic routing list is a routing list that is accessed if ISDN routing characteristics are not present.
NEWINDEX		numeric (0 to 1023)	*Extended route reference index* Enter the route reference index of a non-basic routing list in table INWORIRT. A non-basic routing list is accessed if ISDN routing characteristics are present.

Datafill example

The following example shows sample datafill for table INWOMAP.

MAP display example for table INWOMAP

```
KEY                          NEWINDEX
_____________________________________________________

64KNAME 1          100
TNSPVT 1           201
```

INWORIBN

Table name

INWATS Originating Band Table

Functional description

Table INWORIBN records the following switching unit dependent data for INWATS serving area NNX codes:

- the serving NPA or special area code associated with the INWATS serving area NNX code (for example, if the ABC digits received are 800, the serving NPA is specified)
- the INWATS originating band associated with the INWATS serving area NNX code
- whether INWATS intrastate screening is required

If the switch is configured for intrastate INWATS, all INWATS serving area NNX codes that are associated with the originating serving office home state are flagged as intrastate. Intrastate screening of INWATS serving area NNX codes is required under the following circumstances:

- when intrastate NNX codes are NX2, and 800 + NX2 + XXXX calls are blocked unless originating from within the state
- if there are NNX codes that must not be dialed from within the state and there are 800 + NNX + XXXX calls to be blocked if dialed from within the state (all other serving NPAs or special area codes not associated with the office home state have intrastate set to N).

For related information, refer to table INWORICN.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table INWORIBN.

Table size

0 to 256 tuples

Datafill

The following table lists datafill for table INWORIBN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NXXSNPA		see subfields	*NXX and serving NPA code* This field consists of subfields NNX and SNPASAC.
	NNX	numeric (000 to 999)	*NNX code* Enter a three-digit value to specify the INWATS serving area NNX code. Any entry outside of the range indicated for this field is invalid.
	SNPASAC	numeric (000 to 999)	*Serving NPA or special area code* Enter a three-digit code to specify the serving NPA or special area code associated with the INWATS serving area NNX code. Any entry outside of the range indicated for this field is invalid.
ORIBAND		numeric(0 to 9)	*Originating band* Enter a numeric value to specify the INWATS band called in relation to the originating call. Any entry outside of the range indicated for this field is invalid.
INTRASTA		Y or N	*Intrastate* If intrastate INWATS screening is required, enter Y (yes). Otherwise, enter N (no).

Datafill example

The following example shows sample datafill for table INWORIBN.

The first and second tuples in the example are datafilled for an NXX that has the originating band set to 0 (zero). For example, if 800-131 is dialed, these digits are outpulsed.

The third and fourth tuples in the example are datafilled for an NXX that originates and terminates in the same building.

INWORIBN (end)

The fifth and sixth tuples in the example are datafilled for an NXX that only provides the originating function in the switching unit. The terminating function is provided at the far end.

The first, third, and fifth tuples apply to 800-NXX calls. For example, field SNPASAC is equal to the serving NPA (613). The second, fourth, and sixth tuples apply to 008-NXX calls (for example, the case where field SNPASAC is equal to the special area code 008).

MAP display example for table INWORIBN

```
NXXSNPA      ORIBAND      INTRASTA
_____________________________________________________

131 613      0            N
131 008      0            N
267 613      9            N
267 008      2            N
463 613      3            N
463 008      2            N
```

INWORICN

Table name

INWATS Originating Control Table

Functional description

The originating INWATS tables are used to translate all originating and tandem INWATS codes.

All originating and tandem INWATS codes must be specified in table HNPACODE with code types INWO and INWT respectively.

Table INWORICN specifies the data for each of the INWATS serving area NXX codes (maximum 256).

If originating and terminating function is accomplished in the same switching unit, the route reference number must be set to 0 and translation will be transferred to table INWTERCN using the terminating serving office code plus originating band as an index.

The initial input data is forwarded to Northern Telecom for production of an input data tape.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table INWORICN.

Table size

Memory is automatically allocated for 256 INWATS Serving Area Nxx Codes.

INWORICN (continued)

Datafill

The following table lists datafill for table INWORICN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NXX		numeric (200 to 999)	*NXX code* Enter a three-digit number to specify the INWATS serving area NXX code. Any entry outside the range indicated for this field is not valid.
TSO		numeric (00 to 09or 12 to 19)	*Terminating serving office code* Enter a two-digit number to specify the terminating service office code. If the originating and terminating function is performed on the switching unit, enter a value between 12 and 19. Otherwise, enter a value between 00 and 09. Any entry outside the range indicated for this field is not valid.
TOCODE		numeric (00 to 09)	*Tandem office code* Enter a two-digit number to specify the tandem prefix code for calls not routed directly to the terminating office. Any entry outside the range indicated for this field is not valid.
RTEREF		numeric (0 to 1023)	*Route reference* If the terminating function is provided at the far end of the route, enter the route reference number in table INWORIRT to which translation routes. If the originating and terminating function is performed in the switching unit, enter 0 (zero).

Datafill example

The following example shows sample datafill for table INWORICN.

The first tuple shows an NXX that has terminating service office set to 0 (zero). For example, if 800-131 is dialed, this is what is outpulsed.

INWORICN (end)

The second tuple shows an NXX that originates and terminates in the same switching unit. In this case route reference is equal to 0.

The third tuple shows an NXX that only provides the originating function in the switching unit. The terminating function is provided at the far end of the route.

MAP display example for table INWORICN

```
NXX TSO TOCODE RTEREF
_____________________________________________________

131 00   08    2
267 16   08    0
463 15   08    1
```

INWORIRT

Table name

INWATS Originating Route Reference Table

Functional description

Table INWORIRT identifies a list of routes (maximum 1023) associated with the inward wide area telephone service (INWATS) serving area XXX codes.

Each route list can have a maximum of eight route choices, (the preferred route plus seven alternate route choices). If all routes chosen are busy, a message is sent to the controller for assignment of one of the alternate route choices.

Each route has a specific connect type that determines the type of digit manipulation performed for the route.

The digit manipulation associated with each connect type is as follows:

- If the connect type is D (direct), the first six digits (for example, 800 to 463) are deleted, and the terminating serving office code and originating band (for example, 1XB) are prefixed.
- If the connect type is A (alternate), the digits received are outpulsed.
- If the connect type is T (tandem), the first three digits (for example, 800) are deleted, and tandem code and originating band (for example, 08B) is prefixed.
- The initial input is forwarded to Northern Telecom for production of an input data tape.

For related information, refer to table INWORICN.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table INWORIRT.

Table size

0 to 1024 tuples

Memory is internally allocated for this table.

Datafill

The following table lists datafill for table INWORIRT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023 or blank	*Route reference index* If the route is the first route in the route list, enter the reference number assigned to the route list. Otherwise, leave the field blank. Any entry outside the range indicated for this field is invalid.
RTELIST		see subfield	*Route list* This field consists of subfield RTESEL.
	RTESEL	S or TRMT	*Route selector*Enter the route selector. Enter S for standard and datafill refinements CONNTYPE and CLLI. Enter TRMT for treatment and datafill refinement RTETRMT. Any entry outside the range indicated for this field is invalid.
	CONNTYPE	A, D, or T	*Connect type* If the entry in subfield RTESEL is S, datafill this refinement. Enter the connect type that defines the type of digit manipulation required for the route: A (alternate), D (direct), or T (tandem). Any entry outside the range indicated for this field is invalid.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* If the entry in subfield RTESEL is S, datafill this refinement. Enter the common language location identifier (CLLI) assigned to the route (see table CLLI).
	RTETRMT	alphanumeric (1 to 8 characters)	*Route treatment* If the entry in subfield RTESEL is T, datafill this refinement. Enter the treatment to which the switch routes the call.

INWORIRT (end)

Datafill example

The following example shows sample datafill for table INWORIRT.

The first route specifies the first (direct), second (alternate), and third (tandem) routes for calls with the first six digits equal to 008 or 800 to 463.

For the direct route (connect type D), the first six (for example, 008 or 800 to 463) incoming digits are deleted, and the terminating serving office code (for example, 15) and the originating band (2 or 3) is prefixed.

For the alternate route (connect type A), the incoming digits are outpulsed, and no digit substitution is required.

For the tandem route (connect type T), the first three incoming digits (for example, 008 or 800) are deleted, and tandem office code (08) and originating band (2 or 3) are prefixed.

The second route specifies the first, second and third routes for calls with the first six incoming digits equal to 008 or 800 to 131. The connect type (alternate) defines that no digit manipulation is required; incoming digits are outpulsed with no substitution required.

MAP display example for table INWORIRT

```
RTE
                                                RTELIST
_____________________________________________________________

  1
   (S D OTWAON1002TO )
   (S A OTWAON1002T1 )
   (S T MTRLPQ0201TO )

  2
   (S A MTRLPQ0201TO )
   (S A OTWAON1002T0 )
   (S A OTWAON1001T1 )
```

INWSNPA

Table name

INWATS Originating Screen Office Table

Functional description

The INWSNPA table specifies the one to one correspondence between 00X and originating NPA codes for a given CCIS OSO office, where the actual numbers dialed are of the form 800-XXX-XXXX.

If a trunk group carries INWATS traffic for more than a single NPA, offices in the adjacent NPAs must convert the originating 800+ calls to a 00X-XXX-XXXX format (with X being any digit 0 to 9) before they are forwarded to a CCIS OSO. An originating NPA can be identified from its 00X correspondence by using table INWSNPA in the terminating office.

The INWATS OSO functions are:

- The call must be recognized as an INWATS call and the originating NPA of the call must be determined.
- A direct signaling inquiry message is sent to the NCP (Network Control Point) associated with the OSO.
- The reply message is analyzed and the POTS number corresponding to the INWATS number is extracted.
- The call is then routed by standard POTS translation through the network, or the appropriate treatment is applied to the call.
- The OSO must be capable of handling network management control directives from the NCP by blocking the affected calls.
- In the event that the NCP is unable to return a POTS number for a given INWATS number, the OSO must route the call by the conventional INWATS routing scheme.

Also ensure INWC is datafilled in field CD of table HNPACONT, subtable HNPACODE, and office parameter INWATS_CCIS_OSO_ENABLE is set to Y in table OFCENG.

Table size

Memory is allocated for a maximum of 10 entries.

INWSNPA (end)

Datafill

The following table lists datafill for table INWSNPA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SAC		000 to 009	*Special area code* Enter the special code assigned to an INWATS call bound for multiple NPAs. This code is unique per CCIS OSO office.
SNPA		000 to 999	*Serving NPA* Enter the serving NPA corresponding to the above special code.

Datafill example

The following example shows sample datafill for table INWSNPA.

Consider an office in NPA 214 equipped with CCIS direct signaling and INWATS OSO feature. An incoming trunk group carries originating INWATS traffic from NPA 713 and NPA 817 (both are adjacent NPAs to 214) with received digits prefixed by codes 001 and 002 respectively. When the actual number dialed by the customer is of 800+ format, an adjacent switching office converts the 800 to 00X before sending the call to the CCIS OSO office.

Table INWSNPA provides the mapping from 00X codes 001 and 002 to SNPA codes 713 and 817.

MAP display example for table INWSNPA

```
SACKEY    SNPA
_____________________________________________________________

   001     713

   002     817
```

INWTERCN

Table name

INWATS Terminating Control Table

Overview - terminating INWATS tables

A list of the terminating inward wide area telephone service (INWATS) tables is shown in the following table..

Terminating INWATS tables

Title of table	Table name
INWATS Terminating Control Table	INWTERCN
INWATS Terminating Route Reference Table	INWTERTE

The terminating INWATS tables are required for the translation of all terminating INWATS codes. Terminating INWATS codes must be specified in the table HNPACODE with code type INWS.

Functional description

Table INWTERCN lists the following information for each terminating serving office code:

- the GHI digits received
- the actual three-digit terminating NNX code
- the route reference number in the INWATS terminating route reference table to which translation proceeds.
- the INWATS band paid by the terminating line.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table INWTERCN.

Table size

Memory is allocated dynamically up to a maximum of 1000 codes for each terminating serving office code.

INWTERCN (continued)

Datafill

The following table lists datafill for table INWTERCN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TSOGHI		see subfields	*Terminating serving office code plus ghi digits* This field consists of subfields TSO and GHIDIG.
	TSO	numeric (12 to 19)	*Terminating serving office code* Enter a two-digit value to specify the terminating serving office code. Any entry outside of the range indicated for this field is not valid.
	GHIDIG	numeric (000 to 999)	*Ghi digits* Enter a three-digit numeric value to specify the GHI digits that will be received. Any entry outside of the range indicated for this field is not valid.
NNX		numeric (200 to 999)	*Nnx code* Enter a three-digit value to specify the actual terminating office NNX code. Any entry outside of the range indicated for this field is not valid.
RTEREF		numeric (0 to 1023)	*Route reference* Enter the route reference number in table INWTERTE to which translation routes.
BANDPAID		numeric (1 to 7)	*Band paid* Enter the INWATS band paid by the terminating line. Any entry outside of the range indicated for this field is invalid.

Datafill example

The following example shows sample datafill for table INWTERCN.

The datafill requirements for each tuple are as follows:

- First tuple: The incoming digits are 154-004X. Standard logic is performed in the TSO router. The TSO code 154 is deleted, the NNX digits 153 are prefixed, and the resulting digits 153-004X are stored. If the first route (standard) is selected (see table INWTERTE), digits 153-004X

are outpulsed. If the second (alternate) route is selected, digits 153 is deleted (from the stored number) and digits 800-265 are prefixed. Digits 800-265-004X are outpulsed.

- Second tuple: The incoming digits are 169-415X. Standard logic is performed in the TSO router and digits 237-415X (NNX-XXXX) are stored. The digits 237 are deleted and digit 7 is prefixed. Digits 7-415X are outpulsed.

  Note: In this example it is assumed that the outgoing end office trunk group is classified as an intertoll trunk group.

- Third tuple: The incoming digits are 162-002X. Standard logic is performed in the TSO router and digits 169-002X (NNX-XXXX) are stored. If either the first or alternate route is selected (see table INWTERTE), digits 169-002X are outpulsed.
- Fourth tuple: The incoming digits are 153-755X. Standard logic is performed in the TSO router and digits 336-755X (NNX-XXXX) are stored. If either the first or alternate route is selected (see table INWTERTE), no digits are deleted and digits 519 519 are prefixed. Digits 519-336-755X are outpulsed.
- Fifth tuple: The incoming digits are 141-636X. Standard logic is performed in the TSO router, and digits 226-636X (NNX-XXXX) are stored. The stored digits are available for table HNPACODE for retranslation to complete to a line within this office.

  Note: It is assumed that this office is a combined 100/200 Terminating Serving Office.

MAP display example for table INWTERCN

```
TSOGHI   NNX     RTEREF   BANDPAID
_____________________________________

15 004   153     1        4
16 415   237     2        1
16 002   169     3        2
15 755   336     4        3
14 636   226     5        1
```

INWTERTE

Table name

INWATS Terminating Route Reference Table

Functional description

Table INWTERTE identifies the list of routes that are associated with the terminating codes.

Each route list can have a maximum of eight routes, the first route plus seven alternates. If the first route cannot be selected (for example, the route chosen has no idle trunks on which to route the call), then the next route in the list is chosen, until the end of the list is reached. If the end of the list is reached and no route is found, the result is returned to the controlling logic for treatment interpretation.

Four formats are defined for a route, and routes within a route list can consist of one or all of the formats.

The formats are designated in field RTESEL as N (nonstandard), RT (retranslate), S (standard), T (route), or TRMT (treatment).

The following information is required for each of the formats:

- Nonstandard digit manipulation format (field RETSEL set to N)
  - — the common language location identifier (CLLI)
  - — number of digits deleted (maximum 7)
  - — digits prefixed (maximum 11)
  - — cancel normal charge (YES or NO)
- Retranslate digit manipulation format (field RTESEL set to RT)
  - — (only used in a combined DMS-100/200 terminating service office (TSO) to terminate calls on lines within the office) serving numbering plan area (SNPA)
  - — type of call (always NP [no prefix])
  - — originating source (always NLCL)
  - — digits to replace the digits dialed (always N)
  - — cancel normal charge (always N)
  - — billing code (always N)

- Standard digit manipulation format (field RTESEL set to S)
  - — CLLI
- Treatment format (field RTESEL set to TRMT)
  - — route treatment

The standard logic is always performed in the TSO router. The TSO code (1XB) is deleted, the actual terminating office NNX code is prefixed and the resulting NNX-XXXX is stored in a temporary location.

If standard format is used (field RTESEL set to S), the stored NNX-XXXX is outpulsed.

If nonstandard format is used (field RTESEL set to N), the number of digits deleted (maximum 7) and the digits prefixed (maximum 11) must be specified as input. The number of digits deleted refers to the deletion of the digits of the stored NNX-XXXX, not the received number.

If retranslate format is used (field RTESEL set to RT), the stored NNX-XXXX is retranslated using subtable HNPACODE.

If the route is to a route table, (field RTESEL set to T), control is passed to the route list specified. Further routes in the route list are ignored.

For related information, see table INWTERCN.

Datafill sequence and implications

There is no requirement to datafill other tables prior to table INWTERTE.

Table size

The memory is automatically allocated up to a maximum of 1023 tuples.

INWTERTE (continued)

Datafill

The following table lists datafill for table INWTERTE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023 or blank	*Route reference index* If the record is the first in the route list, enter the route reference number assigned to the route list. Otherwise, leave the field blank.
RTELIST		see subfield	*Route list* This field consists of subfield RTESEL.
	RTESEL	N, RT, S, T, or TRMT	*Route selector* Enter the route selector. Enter N for nonstandard digit manipulation format. Route selector N is required if the digits outpulsed are not identical to the digits dialed, for example, prefixing or deleting of digits. Datafill refinements CONNTYPE, CLLI, DELDIGS, PRFXDIGS, and CANCNORC in section “RTESEL=N”. Enter RT for retranslate digit manipulation format. Route selector RT is required for the re-translation of the dialed digits using the subtable HNPACODE. Route selector RT can only be used in a combined 100/200 terminating switch office (TSO) for terminating calls on lines within the switch. Datafill refinements SNPA, TYPECALL, and ORIGSCRE in section “RTESEL=RT”. Enter S for standard digit manipulation format. Route selector S is required if the digits dialed are the digits outpulsed. Datafill refinements CONNTYPE, and CLLI in section “RTESEL=S”

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			Enter T to route to a routing table. Datafill refinement TABID in section "RTESEL=T".
	RTESEL (continued)		Enter TRMT for treatment format. Route selector TRTMT is required to direct a call to treatment during routing. Prior to the addition of selector TRMT, calls could be directed to tones or announcements. This resulted in treatment calls not getting pegged against a specific treatment and the calls originator not being notified with the appropriate cause value. Selector TRMT is used for originators such as ISDN and ISDN user part (ISUP) where cause value is important. Datafill refinement RTETRMT in section "RTESEL=TRMT". Any entry outside the range indicated for this field is invalid.

RTESEL = N

If the entry in subfield RTESEL is N, datafill refinements CONNTYPE, CLLI, DELDIGS, PRFXDIGS, and CANCNORC as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CONNTYPE	D	*Connect type* Enter the connect type D (direct). Any entry outside the range indicated for this field is invalid.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) that is assigned to the trunk group.
	DELDIGS	0 to 15 (up to 7 digits)	*Delete* Enter the number of digits to delete from the stored NNX-XXXX before outpulsing.

INWTERTE (continued)

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PRFXDIGS	0 to 9 (11 digits) or N	*Prefix digits* If digits are prefixed for outpulsing, enter the prefix digits. Otherwise, enter N.
	CANCNORC	Y or N	*Cancel normal charge condition* If the type of call is DD (direct dial) and no charge is required, enter Y (yes). If the call is routed to an announcement and the call is charged (coins collected, offhook returned, message rate pegged), enter Y. Otherwise, enter N (no). Calls routed to an announcement are not usually charged. If field CANCNORC is set to Y, the call is charged.

RTESEL = RT

If the entry in subfield RTESEL is RT, datafill refinements SNPA, TYPECALL, and ORIGSCRE as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	0 to 9 (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (SNPA) of the HNPACONT subtable to which translation is to proceed for translation of the replace digits.
	TYPECALL	NP	*Type of call* Enter NP (no prefix) for the type of call associated with the replace digits. Any entry outside the range indicated for this field is invalid.
	ORIGSCRE	NLCL	*Originating source* Enter NLCL. Any entry outside the range indicated for this field is invalid.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	REPLDIGS	N	*Replace digits* This field is not used. Enter N. N is the only valid entry for this field.
	CANCNORC	Y or N	*Cancel normal charge condition* Enter N. N is the only valid entry for this field.
	BILLCODE	N	*Billing code* This field is not used. Enter N. N is the only valid entry for this field.
	OPTION	RC	*Option* This field is a vector of up to one option. Enter the routing characteristic (RC) option. RC is the only valid entry for this field.
	RCNAME	alphanumeric (up to 16 characters) or NILNAME	*Routing characteristic name* Enter the ISDN routing characteristic name.

RTESEL = S

If the entry in subfield RTESEL is S, datafill refinements CONNTYPE and CLLI as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CONNTYPE	D	*Connect type* Enter the connect type D (direct). Any entry outside the range indicated for this field is invalid.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the CLLI assigned to the trunk group.

INWTERTE (continued)

RTESEL = T

If the entry in subfield RTESEL is T, datafill refinement TABID as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TABID	AOSS AOSSAMA IBNRT2 IBNRT3 IBNRT4 IBNRTE OFRT OFR2 OFR3 OFR4 TOPS or TTL4	*Table name* Enter the table name to which translation routes and datafill refinement KEY. Tables AOSS and AOSSAMA are not valid entries for BCS36 and up.
	KEY	0 to 1023 or alphanumeric	*Key* If the entry in field TABID is AOSS or AOSSAMA, enter the Auxiliary Operator Services System (AOSS) call origination. If the entry in field TABID is TOPS, enter the call origination. If the entry in field TABID is TTL4, enter a value between 0 and 7. For all other entries in field TABID, enter a value between 0 and 1023.

RTESEL = TRMT

If the entry in subfield RTESEL is TRMT, datafill refinement RTETRMT as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RTETRMT	alphanumeric (4 characters)	*Route treatment* Enter the route treatment to which the call is routed.

Datafill example

The following example shows sample datafill for table INWTERTE.

MAP display example for table INWTERTE

```
RTE
                                          RTELIST
_____________________________________________________________

  1
   (S D TOROON0101T0 )
   (RT 613 NP NLCL N Y N (RC NATLCDN) $)$
```

INWTMAP

Table name

INWATS Terminating Map Table

Functional description

Table INWTMAP enables operating companies to define special inward wide area telecommunication service (INWATS) routes for ISDN originated INWATS calls.

Instead of using a route reference value from translations to directly access table INWTERTE, the DMS uses the route reference value and the call's routing characteristic name (see field RCNAME) to access table INWTMAP and obtain a new route reference value. This value is then used to access table INWTERTE to obtain final route information.

If an entry in table INWTMAP is not found, then the original route reference value from translations is used to access table INWTERTE. If the call's RCNAME is NIL, table INWTMAP is bypassed and the original route reference value is used to directly access table INWTERTE.

Datafill sequence and implications

The following tables must be datafilled before table INWTMAP.

- INWTERTE
- RCNAME

Table size

0 to 262 144 tuples

The size of table INWTMAP is allocated dynamically.

Datafill

The following table lists datafill for table INWTMAP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*Key* This field consists of subfields RCNAME and INDEX.
	RCNAME	alphanumeric (up to 8 characters)	*Routing characteristics name* Enter the ISDN routing characteristic name that is defined in table RCNAME.
	INDEX	numeric (0 to 1023)	*Index* nter the route reference index of a basic routing list in table INWTERTE. A basic routing list is a routing list that is accessed if ISDN routing characteristics are not present.
NEWINDEX		numeric (0 to 1023)	*Extended route reference index* Enter the route reference index of a non-basic routing list in table INWTERTE. A non-basic routing list is accessed if ISDN routing characteristics are present.

Datafill example

The following example shows sample datafill for table INWTMAP.

MAP display example for table INWTMAP

```
KEY          NEWINDEX
_____________________________________________________

64KNAME 1        100
TNSPVT 1         201
```

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual

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Data Schema FTRGOPTS-INWTMAP

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