# **Critical Release Notice**

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

# **Attention!**

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

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

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

## **Bookmark Color Legend**

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

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

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

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

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

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

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Attention!

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# **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 <u>updated</u> 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 <u>new</u> 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

<u>Volume 5</u> 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

<u>Volume 9</u> 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

#### <u>Volume 2</u> AUTHCDE

<u>Volume 3</u> 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

#### <u>Volume 7</u> 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

<u>Volume 4</u> DNROUTE, DNROUTE feature DISA

Volume 5-6 No changes

<u>Volume 7</u> LNPOPTS, LTDATA

#### Volume 8 OPTOPT

<u>Volume 9</u> 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

<u>Volume 4</u> 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

<u>Volume 6</u> ISDNPARM, ISERVOPT, KSETLINE

<u>Volume 7</u> LENLINES, LTCINV, MNMGPIP

<u>Volume 8</u> OFRT selector CND, OFRT selector NOT

Volume 9 No changes

Volume 10 STDPRTCT.STDPRT selector E911

<u>Volume 11</u> TODHEAD, TONES, TRKGRP E911, TRKGRP type IT

#### <u>Volume 12</u> 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

<u>Volume 6</u> 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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# 297-8021-351

# DMS-100 Family North American DMS-100

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

LET0015 and up Standard 05.02 May 2001



# DMS-100 Family North American DMS-100

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

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# **1** Data schema tables

The following pages contain the data schema tables.

# OQCQPROF

#### Table name

Operator Services System Advanced Intelligent Network Queue Management System Call Queue Profile

# **Functional description**

Table OQCQPROF associates lists of OSSAIN QMS call queues with a call queue profile number. Session pools can then be associated with one of those profile numbers in table OASESNPL.

This table is very similar to its TOPS counterpart, table TQCQPROF (TOPS QMS Call Queue Profiles table). The only difference between the tables is that table TQCQPROF contains field DLAYCT4Q which is not required for OSSAIN.

Call queue profiles are specified in one of two ways:

- Using office-wide priority and office-wide assignable grade of service (AGS) values (see field PRIOTYPE set to OFC).
- Using profile-specific priority and profile-specific assignable grade of service (AGS) values (see field PRIOTYPE set to PROF).

Call queue profiles datafilled using office-wide priorities contain a list of up to 255 call queues (field CQLIST). Each call queue is specified as a value in the range CQ0 to CQ254. The priority and AGS associated with each of the call queues specified are the office-wide values defined for the queue in table QMSCQDEF. Office-wide priority call queue profiles result in consistent office-wide priorities and AGS values being applied to all operators.

If the operating company wishes to override the system priority and AGS associated with each call queue, the particular profile is datafilled using priority and AGS values specific to that profile. For each of up to four priority levels (labeled PRIO3, PRIO2, PRIO1, and PRIO0, with PRIO3 being the highest priority level), a list of up to 32 call queues along with the desired AGS for each is specified.

## **Datafill sequence and implications**

Table QAPLNDEF must be datafilled before table OQCQPROF. Note that the AGENTQ and CALLQ values in table OQCQPROF are effectively limited by the datafill for the OSSAIN application in table QAPLNDEF.

#### Table size

0 to 255 tuples

# Datafill

The following table lists datafill for table OQCQPROF.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CQPROFNM		0 to 254	Call queue profile number. This number is used in table OASESNPL.
AGENTQ		AQ0 to AQ254 (upper value limited by AGENTQS in QAPLNDEF)	OSSAIN QMS agent queue. Enter the agent queue number for operators that are idle and available to handle calls with this profile number. When an agent is requested from the QMS CAM, the agent queues are searched for an agent that has the requested call queue in its profile. Any number of agent queues can be used, but a good starting point would be to have one agent queue for each call queue profile datafilled in table OQCQPROF.
			The range of agent queues is limited by the value datafilled in field AGENTQS of table QAPLNDEF. For example, if AGENTQS is set to 10, then in table OQCQPROF only queues AQ0 to AQ9 should be datafilled.
PRIOAREA		see subfield PRIOTYPE	Call queue priority type selector. This field consists of subfield PRIOTYPE.
	PRIOTYPE	OFC or PROF	Call queue priority type. Enter OFC for office-wide call queue and datafill refinement CQLIST.
			Enter PROF for profile call queue and datafill refinements PRIO3, PRIO2, PRIO1, and PRIO0. Up to four multiples of each specified priority levels PRIO3 (highest priority), PRIO2, PRIO1, and PRIO0 (lowest priority) can be datafilled. If less than four multiples are required, end the list with a \$ (dollar sign).
			If PRIOTYPE = OFC, datafill refinement CQLIST. If PRIOTYPE = PROF, datafill refinements PRIO3, PRIO2, PRIO1, and PRIO0.

Field	Subfield or refinement	Entry	Explanation and action
	CQLIST	CQ0 to CQ254 (upper value limited	Call queue list. If the entry in subfield PRIOTYPE is OFC, datafill this refinement. Enter a value for each call queue to be included in the profile.
		by CALLQS in QAPLNDEF)	No further refinements require datafill.
			The range of call queues is limited by the value datafilled in field CALLQS of table QAPLNDEF. For example, if CALLQS is set to 10, then in table OQCQPROF only queues AQ0 to AQ9 should be datafilled.
	PRIO3	see subfields CALLQ and AGS	Priority level 3. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. This field is the highest priority level and consists of subfields CALLQ and AGS.
	CALLQ	CQ0 to CQ254 (upper value limited by CALLQS in QAPLNDEF)	Call queue. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter up to 32 call queues to be included in the profile. If less than 32 queues are required, end the list with a \$ (dollar sign).
			The range of call queues is limited by the value datafilled in field CALLQS of table QAPLNDEF. For example, if CALLQS is set to 10, then in table OQCQPROF only queues AQ0 to AQ9 should be datafilled.
	AGS	10 to 80	Assignable grade of service. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter the aging factors from 1.0X to 8.0X for the grade of service to be applied to the call queue (refinement CALLQ) for the purposes of this profile. Specify 10 for no aging.
	PRIO2	see subfields CALLQ and AGS	Priority level 2. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. This field is the second highest priority level and consists of subfields CALLQ and AGS.

Field	Subfield or refinement	Entry	Explanation and action
	CALLQ	CQ0 to CQ254 (upper value limited by CALLQS in QAPLNDEF)	Call queue. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter up to 32 call queues to be included in the profile. If less than 32 queues are required, end the list with a \$ (dollar sign).
			The range of call queues is limited by the value datafilled in field CALLQS of table QAPLNDEF. For example, if CALLQS is set to 10, then in table OQCQPROF only queues AQ0 to AQ9 should be datafilled.
	AGS	10 to 80	Assignable grade of service. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter the aging factors from 1.0X to 8.0X for the grade of service to be applied to the call queue (refinement CALLQ) for the purposes of this profile. Specify 10 for no aging.
	PRIO1	see subfields CALLQ and AGS	Priority level 1. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. This field is the third highest priority level and consists of subfields CALLQ and AGS.
	CALLQ	CQ0 to CQ254 (upper value limited by CALLQS in QAPLNDEF)	Call queue. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter up to 32 call queues to be included in the profile. If less than 32 queues are required, end the list with a \$ (dollar sign).
			The range of call queues is limited by the value datafilled in field CALLQS of table QAPLNDEF. For example, if CALLQS is set to 10, then in table OQCQPROF only queues AQ0 to AQ9 should be datafilled.
	AGS	10 to 80	Assignable grade of service. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter the aging factors from 1.0X to 8.0X for the grade of service to be applied to the call queue (refinement CALLQ) for the purposes of this profile. Specify 10 for no aging.

#### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	PRIO0	see subfields CALLQ and AGS	Priority level 0. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. This field is the lowest priority level and consists of subfields CALLQ and AGS.
	CALLQ	CQ0 to CQ254 (upper value limited by CALLQS in QAPLNDEF)	Call queue. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter up to 32 call queues to be included in the profile. If less than 32 queues are required, end the list with a \$ (dollar sign).
			The range of call queues is limited by the value datafilled in field CALLQS of table QAPLNDEF. For example, if CALLQS is set to 10, then in table OQCQPROF only queues AQ0 to AQ9 should be datafilled.
	AGS	10 to 80	Assignable grade of service. If the entry in subfield PRIOTYPE is PROF, datafill this refinement. Enter the aging factors from 1.0X to 8.0X for the grade of service to be applied to the call queue (refinement CALLQ) for the purposes of this profile. Specify 10 for no aging.

#### **Datafill example**

The following example shows sample datafill for table OQCQPROF.

#### MAP display example for table OQCQPROF

$\left( \right)$	CQPROFNM	AGENTQ	PRIOAREA	
	0	AQ0	OFC (CQ0)\$	
	1	AQ1	OFC (CQ1)\$	
	2	AQ3	OFC (CQ0)(CQ1)\$	
$\left( \right)$	3	AQ4	PROF (CQ0 10)(CQ1 80)\$ (CQ2 10)\$	Ϊ

In the above example, call queue profile number 0 is used for agents that serve CQ0. From table OAFUNDEF sample datafill in this section, the BRANDING function is associated with CQ0. From table OASESNPL, both the BRAND\_NODE1 and BRAND\_NODE2 session pools are datafilled as using call queue profile number 0 (field OCQPROF). Since the MAXSESN field for

# OQCQPROF (end)

each of those session pools is set to 100, there are 200 agents placed in agent queue AQ0, waiting to serve calls from CQ0 (the BRANDING function).

#### **Error messages**

The following error messages apply to table OQCQPROF..

Error message	for table	OQCQPROF
---------------	-----------	----------

Error message	Explanation and action
At least one call queue must be specified.	When adding a tuple to table OQCQPROF, at least one call queue must be provided.
A call queue may not appear in more than one priority level.	This message is displayed if an attempt is made to datafill the same call queue in more than one priority level.
A call queue has been specified in the same priority level with different AGS values.	This message is displayed if an attempt is made to datafill the same call queue in the same priority level with different AGS values.
This call queue profile is in use in table OASESNPL.	Tuples may not be deleted in table OQCQPROF until all references to that call queue profile are removed from table OASESNPL. These error messages are displayed if an attempt is made to
You must remove all references to this profile before you can delete it.	delete a call queue profile from table OQCQPROF that is in use in table OASESNPL.
Unable to change call queue profile. Check QMS logs and SWERRS.	This error message can occur when changing a tuple in table OQCQPROF and an error occurs when trying to update the profile in the QMS CAM.

# Table history

#### NA011

Removed error message "All session pools with this call queue profile must be OFFLINE before this profile may be changed." since this restriction is removed. Added error message "Unable to change call queue profile. Check QMS logs and SWERRS."

#### NA006

Table OQCQPROF was created by functionality Operator Services, ENSV0014.

# ORIGRC

#### Table name

TOPS Point-to-point Rating Originating Rate Centers Table

# **Functional description**

Point-to-point rating system tables are used in a switch with the Traffic Operator Position System (TOPS).

Point-to-point rating is a method of automatic rate step determination by the DMS rating system using an operating company defined rate step between two points, each defined by its numbering plan area (NPA) and NXX.

Point-to-point rating is an alternative to the following automatic rate step determination methods:

- vertical and horizontal (V&H) method
- single rate area (SRA) method

Point-to-point rating system tables are listed in the table below.

**TOPS Point-to-point Rating System Tables** 

Table name	Form number	Form title
ORIGRC	2726A, B	TOPS Originating Rate Centers Table Record
TERMRC	2727A, B	TOPS Terminating Rate Centers Table Record
PTP	2728A, B	TOPS Point-to-point Table Record

Information for point-to-point rating is submitted by the operating company in the following customer data schema tables:

- table CLDNPA
- table ORIGRC
- table TERMRC
- table PTP
- table OFCENG, office parameters
  - TOPS\_MAX\_ORIG\_RATE CENTER
  - TOPS\_MAX\_TERM\_RATE\_CENTER

Table ORIGRC is used to divide the serving area which can originate calls to an area where point-to-point rating applies into originating rate centers. The

**ORIGRC** (continued)

division is done by specifying the originating rate center (ORC) number for each calling NPA-NXX combination within such a serving area.

For related information, refer to tables TARIFF, CLGTRF, SCHNUM, CLDNPA, OFCENG, TERMRC, and PTP.

#### **Datafill sequence and implications**

Table HNPACONT must be datafilled before table ORIGRC.

Table ORIGRC interacts with office parameter TOPS\_MAX\_ORIG\_RATE\_CENTER in table OFCENG.

# Datafill

The following table lists datafill for table ORIGRC.

#### **Field descriptions**

	Subfield or		
Field	refinement	Entry	Explanation and action
NPANXX		See subfields	Calling numbering plan area Nxx key for point-to-point rating This field consists of subfields CLGNPA and CLGNXX.
	CLGNPA	N 0/1 X	Calling numbering plan area. Enter the calling numbering plan area (NPA) as previously datafiled in table HNPACONT
			N is any number between 2 and 9, inclusive.
			X is any number between 0 and 9, inclusive.
	CLGNXX	200 to 999	Calling Nxx. Enter the calling NXX.
ORC		1 to 255 (see note)	Point-to-point originating rate center. Enter the point-to-point originating rate center number that the calling NPA-NXX combination belongs to.
			The entry in this field cannot exceed the value of office parameter TOPS_MAX_ORIG_RATE_CENTER in table OFCENG.
			NOTE: The DMS switch shows the range as 0-255, however, value 0 is a NIL value and not allowed by table control.

# **ORIGRC** (end)

# **Datafill example**

The following example shows sample datafill for table ORIGRC.

MAP display example for table ORIGRC



# Table history

#### NA005

Changed range of field ORC from 0-255 to 1-255. Value 0 is a NIL value and not allow by table control per PRS UT56251.

# OSCVLGRP

#### Table name

Operator Services Systems Advanced Intelligent Network (OSSAIN) Centralization Voice Link Group

# **Functional description**

Table OSCVLGRP identifies the voice link groups that are used by an OSSAIN centralization (OSAC) host to connect to OSAC remote switches. A tuple is added in this table for each OSAC office that an OSAC host switch communicates with for OSAC call processing. The most idle selection sequence is used for selecting a voice link member from the group. This table is only used in the OSAC host.

# **Datafill sequence and implications**

The following tables must be datafilled before table OSCVLGRP.

- TRKGRP
- OANODINV

# Table size

0 to 256 tuples

# Datafill

The following table lists datafill for table OSCVLGRP.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NODENAME		node name from table OANODINV	Node name. This is the key into the table. This is the node name of a OSAC remote switch from table OANODINV that the OSAC host communicates. This node must be datafilled in table OANODINV as an OSAC switch.
CLLI		from table CLLI	Common language location identifier. This field is the voice link group between the OSAC host and the OSAC switch in field NODENAME.

# **Datafill example**

The following example shows sample datafill for table OSCVLGRP.

# **OSCVLGRP** (continued)

#### MAP display example for table OSCVLGRP

NODENAME	CLLI	
OSAC_SW1	OSACVL1	
OSAC_SW2 OSAC_SW3	OSACVL2 OSACVL3	
OSAC_SW4	OSACVL4	

# **Error messages**

The following error messages apply to table OSCVLGRP.

#### Error messages for table

Error message	Explanation and action
Only node ids of PM type OSAC can be datafilled in this table.	Table OANODINV must be datafilled with the OSAC node name before being used in table OSCVLGRP. The node name must be datafilled as an OSAC switch. This error message is displayed if the NODEID is not datafilled in table OANODINV as an OSAC switch.
This CLLI must be datafilled in Table TRKGRP before datafilling this table.	The CLLI must be datafilled in table TRKGRP before being used in this table. This error message is displayed if the CLLI is not datafilled in table TRKGRP.
Trunk group type for CLLI must be TOPSVL.	The trunk group type for the CLLI must be TOPSVL since only trunks of that type can be used for host-remote voice connections. This error message is displayed if the trunk group is of another type.
The CLLI name is used in table XXXXXXX, it cannot be reused here.	If a CLLI is referenced in table SNVLGRP, it cannot be datafilled in table OSCVLGRP. And, if a CLLI is referenced in table OSCVLGRP, it cannnot be datafilled in table SNVLGRP. This error message is displayed when attempting to datafill table OSCVLGRP with a CLLI that is used in table SNVLGRP:
	In the error message, XXXXXXXX is the name of the table containing the CLLI; in this case, SNVLGRP.

## OSCVLGRP (end)

# Table history

# TOPS11

An error message is added for a dependency with table SNVLGRP by feature AF7714 in functionality OSSAIN 11 Enhancements, OSAN0006.

#### TOPS07

Table OSCVLGRP was introduced by feature AN1536 in functionality OSSAIN Enhancements, ENSV0020.

# **OSIPARMS**

#### Table name

Open Systems Interconnect Parameter Table

# **Functional description**

Table OSIPARMS modifies the parameters within the various layers of the billing server International Standards Organization (ISO) implementation.

Table OSIPARMS allows the user to alter parameters for the following ISO protocol specifications:

- ISO 8073AD2 (Class 4 Service Over Connectionless Network)
- ISO 8073 (Connection Oriented Transport Protocol)
- ISO 8327 (Connection Oriented Session Protocol)
- ISO 8823 (Connection Oriented Presentation Protocol)
- ISO 8649 (Association Control Service Element Protocol)
- ISO 8571 (File Transfer Access Management Protocol)

Each tuple in table OSIPARMS corresponds to one OSI protocol stack running on a specific Ethernet interface unit (EIU).

The local area network controller for Ethernet (LANCE) chip is set to transmit the most significant byte (MSB) first (byte flipping enabled). This results in real time-savings (1 ms for each frame) for the Open Systems Interconnect unit (OSIU) stack. This mode for the LANCE chip is activated only if the OSIU is in service.

#### **Datafill sequence and implications**

The following tables must be datafilled before table OSIPARMS.

- LIUINV
- OSIROUTE

#### Table size

0 to 16 tuples

# **OSIPARMS** (continued)

# Datafill

The following table lists datafill for table OSIPARMS.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
OSIPARMS-KE		see subfield	Open systems interconnect parameters key
Y			This field consists of subfield TUPLE_KEY.
	TUPLE_KEY	alphanumeric (up to 8 characters)	Tuple key
			This is the key field of the table. Enter the tuple key.
OSI_HOST-NA ME		see subfields	Open systems interconnect host name
			This field consists of subfields WORD_NODE and NODE_RNG.
	WORD_NODE	EIU	Word node
			Enter EIU for the Ethernet interface unit.
	NODE_RNG	0 to 750	Node range
			Enter a node range value.

# **OSIPARMS** (continued)

#### Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
TRANSPORT		INACTMR	Transport layers
	CKTMRRI IES TPCLASS		Enter up to eight transport layers. If less than eight entries are required, end the list with a \$ (dollar sign).
		TPDUSIZE WINSIZE	Enter INACTMR (inactivity timer) and datafill refinement INACTMR_VALUE on the following pages.
			Enter L4CONNS (number of connections) and datafill refinement L4NUMCON_VALUE on the following pages
			Enter LACKTMR (local acknowledgement delay timer) and datafill refinement LACKTMR_VALUE on the following pages
			Enter RETRIES (retries) and datafill refinement RETRIES_VALUE on page .
			Enter TPCLASS (transport layer class) and datafill refinement CLASS_VALUE onthe following pages.
			Enter TPDUSIZE (transport layer protocol disk units [TPDU]) and datafill refinement TPDUSIZE_VALUE on the following pages.
			Enter WINSIZE (window size) and datafill refinement WINDSIZE_VALUE on the following pages.
			Enter WINTMR (window timer) and datafill refinement WINTMR_VALUE onthe following pages.
	INACTMR_VAL	VAL 2 to 2	Inactivity timer value
UE	UE		Enter the value that defines the maximum length of time, in minutes, that the transport layer waits for a transport time-out signal.
			The time-out signal indicates that the transport layer communication handshaking is inactive.
			The default value is 2.

Field	Subfield or refinement	Entry	Explanation and action
	LACKTMR_VA	0 to 0	Local acknowledgement delay timer value
	LUE		Enter the value that defines the time to delay acknowledgement of received TPDUs.
			The default value is 0 (zero), which means the timer is disabled.
	L4NUMCON_V	48 to 48	Number of connections
	ALUE		Enter the value that defines the maximum number of simultaneous transport layer connections.
			The default value is 48.
	RETRIES_VAL	8 to 8	Retries value
	UE		Enter the value to define the maximum number of times the transport layer retransmits a single unacknowledged TPDU before issuing a disconnect.
			The default value is 8.
	CLASS_VALUE	0 to 4	Transport layer class value
			Enter the value to specify the transport layer classes of services supported.
			Class 0 provides the most simple type of transport connection.
			Class 1 provides a basic transport connection with minimum overhead.
			Class 2 provides multiplexing of several transport connections into a single network connection.
			Class 3 provides the capabilities of class 2 plus the ability to recover from network disconnect or reset.
			Class 4 provides the capabilities of class 3 plus the ability to detect and recover from errors as a result of lower layer failure. The kinds of errors detected by class 4 include TPDU loss, TPDU delivery out of sequence, TPDU duplication, and TPDU corruption.

### Field descriptions (Sheet 3 of 6)

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### Field descriptions (Sheet 4 of 6)

	ubfield or efinement	Entry	Explanation and action
	PDUSIZE_VA	T1024	Transport layer protocol disk unit size value
	UE		Enter the value to define the maximum size of the TPDUs.
			The default value is T1024.
w w	VINDSIZE_VA	8 to 8	Window size value
	UE		Enter the value to define the maximum number of outstanding TPDUs awaiting acknowledgement.
			The default value is 8.
w w	VINTMR_VAL	15 to 15	Window timer value
U	UE		Enter the value to define the frequency, in seconds, with which the transport layer sends an acknowledgement TPDU, if there is no activity, to determine if its peer entity is still active.
			The default value is 15.

Field	Subfield or refinement	Entry	Explanation and action
SESSION	EXTCO T L5CO PROTVI	EXPEDTRP	Session layer
		EXTCON-CA T L5CONNS PROTVER REUSETRP	Enter up to seven session layers. If less than seven layers are required, end the list with a \$ (dollar sign).
		SEGMENT TSDUSIZE	Enter EXPEDTRP (expedited transport) and datafill datafill refinement EXPEDTRP_VALUE on the following pages.
			Enter EXCONCAT (extended concatenation) and datafill refinement EXCONCAT_VALUE on the following pages.
			Enter L5CONNS (number of connectsion) and datafill refinement L5NUMCON_VALUE on the following pages.
			Enter PROTVER (protocol version) and datafill refinement PROTVER_VALUE on the following pages.
			Enter REUSETRP (reuse existing transport connections) and datafill refinement REUSETRP_VALUE on the following pages.
			Enter SEGMENT (segmentation) and datafill refinement SEGMENT_VALUE on the following pages.
			Enter TSDUSIZE (TSDU size) and datafill refinement TSDUSIZE_VALUE on the following pages.
	EXPEDTRP_V	NO	Expedited transport value
	ALUE		Enter the value to specify whether the transport layer expedited flow is available to the session connection.
			The default value is NO.
	EXCONCAT_V	YES	Extended concatenation value
	ALUE		Enter the value to specify whether extended concatenation is supported.
			The default value is YES.

### Field descriptions (Sheet 5 of 6)

### Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	L5NUMCON_V	48 to 48	Number of connections
	ALUE		Enter the value to define the maximum number of simultaneous session layer connections.
			The default value is 48.
	PROTVER_VA	VER_1	Protocol version value
	LUE	VER_2 or VER_1_2	Enter the value to specify the session layer protocol version.
			The default value is VER_1_2.
	REUSETRP_V	YES	Reuse existing transport connections value
	ALUE		Enter the value to enable or disable the attempt to reuse an existing transport connection once it has been released by a closed session connection.
			The default value is YES.
	SEGMENT_VA LUE	NO	Segmentation value
			Enter the value to specify whether segmentation is allowed.
			The default value is NO.
	TSDUSIZE_VA	S4096	Tsdu maximum size
	LUE		Enter the value to define the maximum size of the transport service data unit.
			The default value is S4096.
PRESENT-ATI		L6CONNS	Presentation layer
ON			Enter the presentation layer, L6CONNS (number of connections) and datafill refinement L6NUMCON_VALUE.
	L6NUMCON_V	48 to 48	Number of connections
	ALUE		Enter a value to define the maximum number of simultaneous presentation layer connections.
			The default value is 48.

# **Datafill example**

The following example shows sample datafill for table OSIPARMS.

#### MAP display example for table OSIPARMS

```
OSIPARMSKEY OSI_HOSTNAME

TRANSPORT

SESSION

PRESENTATION

APPLICATION

BNR1 EIU 208

(INACTMR 2) (LACKTMR 0) (L4CONNS 48) (RETRIES 8) (TPCLASS 4)

(TPDUSIZE T1024) (WINSIZE 8) (WINTMR 15) $

(EXPEDTRP NO) (EXTCONCAT YES) (L5CONNS 48) (PROTVER VER_1_2)

(REUSETRP YES)

(SEGMENT NO) (TSDUSIZE S4096) $

(L6CONNS 48)$(ASCECONNS 48) $
```

# Table history

#### NA008

Reference to FTAM was removed from Table and Map display.

#### BCS36

Subfields TRANS\_VECTOR, SESSION\_VECTOR, and APPL\_VECTOR were removed.

#### BCS35

Table OSIPARMS was introduced.

# OSIROUTE

### Table name

Open Systems Interconnect Routing Table

# **Functional description**

Table OSIROUTE describes the open systems interconnect (OSI) static routing information for the billing server network layer. The routing information supports the International Organization for Standardization (ISO) standard ISO 8473, connectionless internet protocol (IP). Table OSIROUTE functions as a look-up table for static route information to map the network entity title (NET) portion of the network services access point (NSAP) into the subnetwork point of attachment (SNPA) in the billing server network layer. The key field is OSIKEY. Table LIUINV lists the inventory of processor types and their network addresses.

## **Datafill sequence and implications**

Table LIUINV must be datafilled after table OSIROUTE.

## Table size

2 to 32 tuples

A maximum of 32 network addresses can be entered. The table size is set by the datafill in table SYSDATA. Each tuple requires 132 bytes of physical store. The storage requirement is therefore 4224 bytes (32 tuples x 132 bytes/tuple = 4224 bytes).

# **OSIROUTE** (continued)

# Datafill

The following table lists datafill for table OSIROUTE.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OSIKEY		alphanumeric	Open system interconnect key
			Enter up to a maximum of eight characters for the network address. Entries must begin with a letter, not the number. This is the key field to table OSIROUTE.
AFI		0 to 9 and A to	Authority and format identifier
		F	Enter the one- to two-character hexadecimal byte value for the authority and format identifier (AFI) used for the network address. The default value is 49.
DSP		0 to 9 and A to	Domain specific part
		F	Enter the nine two-character hexadecimal byte values for the domain specific part (DSP) of the network address. The first two bytes are the area address identifying the subnet within the network. The following six bytes are the logical node identifier identifying the node in the specific subnet The last byte is the NSAP selector identifying the user of the network service. The default value is 000000000000000001.

# **OSIROUTE** (continued)

### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SYSSEL		see subfields	System selector
			This field consists of subfield TYPE and its refinements HOSTNAME, REQ REM SYS, WORDNODE, NODERNG, PREFNET, REACHNET, MACADDR, and CONTMARK.
	TYPE	ESWIOSIU	System type
		ESWOOSIU ISWIOSIU	Enter the selector for the type of system.
	REM_ES_S S	REM_ES_SY S REM_IS_SYS	The following selectors apply to the open systems interconnect unit (OSIU) on the SuperNode/DMS billing server:
			<ul> <li>Enter ESWIOSIU for an end system (ES) running on the OSIU.</li> </ul>
			<ul> <li>Enter ESWOOSIU for an ES not running on the OSIU.</li> </ul>
			<ul> <li>Enter ISWIOSIU for an intermediate system (IS) running on the OSIU.</li> </ul>
			The following selectors apply to other ESs, that are not part of the DMS, but are part of the local area network (LAN) connected to the DMS:
			• Enter REM_ES_SYS for an ES.
			• Enter REM_IS_SYS for an IS.
			The default value is ESWIOSIU.

### TYPE = ESWIOSIU, ESWOOSIU, or ISWIOSIU

If the entry in subfield TYPE is ESWIOSIU, ESWOOSIU, or ISWIOSIU, datafill refinements HOSTNAME, WORDNODE, and NODERNG.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	HOSTNAME see subfie		Host name
			This field consists of subfields WORDNODE and NODERNG.
	WORDNODE	APUX, CM,	Word node name
		EIU, LIU7, FRIU, XLIU, LCOM, VPU, or FP	Enter the name for the DMS processor type. The entry must match the entry in field LIUTYPE in table LIUINV. Entries outside this range are invalid. The default value is EIU.
	NODERNG	numeric	Node ring identifier
			Enter the node ring identifier for the DMS processor type. The entry must match the entry in field LIUNO in table LIUINV. The following are valid entries for the corresponding values entered in WORDNODE:
			• APUX 1 to 98
			CM 0 only
			• EIU 1 to 710
			• FP 1 to 99
			Entries outside this range are invalid.
			The default value is 1.

# **OSIROUTE** (continued)

### TYPE = ESWOOSIU

If the entry in subfield TYPE is ESWOOSIU, datafill the additional refinement PREFNET to complete the datafill for field SYSSEL.

Field	Subfield or refinement	Entry	Explanation and action
	PREFNET alphanumeric		Preferred network name
	(vector of up to 8 characters)	Enter a name vector to define the ES router within the DMS. The name must match one of the names listed in field OSIKEY.	

#### Field descriptions for conditional datafill

#### TYPE = REM\_ES\_SYS or REM\_IS\_SYS

If the entry in subfield TYPE is REM\_ES\_SYS or REM\_IS\_SYS, datafill refinements REACHNET and MACADDR.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	REACHNET	alphanumeric	Reachable network names
			Enter up to two name vectors of up to eight characters each to define paths to other systems in the LAN. Names must match values in field OSIKEY. A minimum of one name must be entered.
	CONTMARK	\$	Continuation mark
			Enter \$ to indicate the end of the vector if only one value is entered in field REACHNET.
	MACADDR	0 to 9 and A to	Mac addresses
		F	Enter up to two media access control (MAC) address vectors of up to 12 hexadecimal characters each to define the physical addresses of remote systems able to reach this network address. A minimum of one address must be entered.
	CONTMARK	\$	Continuation mark
			Enter \$ to indicate the end of the vector if only one value is entered in field MACADDR.

### **OSIROUTE** (end)

### **Datafill example**

The following example shows sample datafill for table OSIROUTE.

The example consists of two ESs with an OSIU, two ESs without an OSIU, and two non-DMS remote systems.

1 = HOSTNAME 4 = PREFNET 7 = MACADDR 2 = WORDNODE 5 = CONTMARK 8 = REQREMSYS 3 = NODERNG 6 = REACHNET 9 = REQWOOSIU

MAP display example for table OSIROUTE

OSIKEY	AFI	DSP		
				SYSSEL
NET1	49	000000000000000000000000000000000000000		
		ESWIOSIU	EIU	07
NETLAST	49	000000000000000011		
		ISWIOSIU	EIU	08
NET2	49	000000000000000000021		
		ESWOOSIU	FP	01 NET 1
NET3	49	00000000000000000031		
		ESWOOSIU	CM	0 NETLAST
CUST1	49	00000000000000000041		
		REM_ES_SY	S NET1	\$
		0	0007	5F00022
CUST2	49	00000000000000000051		
		REM_IS_SY	S NET2	\$
		0	0007	5F00023

### Table history BCS36

Table OSIROUTE introduced.

# OSNCCAP

#### Table name

Operator Services Network Capability (OSNC)

### **Functional description**

Table OSNCCAP allows a set of OSNC capabilities such as connection hold to be datafilled in up to 254 tuples. Connection hold is the only OSNC capability that is a possible datafill entry in this table. The T-selector datafilled in tables HNPACONT, FNPACONT, OFRT, OFR2, OFR3, OFR4 points to the 254 tuples.

Table OSNCCAP controls whether OSNC capabilities are signalled on outgoing Intertoll (IT) or Access to Carrier (ATC) ISUP trunks. The OSNC activity provides functionality that allows a variety of services over Integrated Services Digital Network User Part (ISUP).

### Datafill sequence and meaning

Operating company personnel must add tuples into table OSNCCAP before the OSNC selector datafilled in the OFRT tables or RTEREF subtables can point to the tuples.

It is not possible to delete tuples from table OSNCCAP. Deletion of the tuples is blocked in order to ensure that the OFRT and RTEREF tables do not point to a non-existent OSNCCAP table.

### Table size

0 to 254 tuples

# **OSNCCAP** (continued)

# Datafill

The table that follows lists datafill for table OSNCCAP.

#### **Field descriptions**

Field	Subfield	Entry	Explanation and action
OSNCIDX		{0 to 254}	OSNC Capability index. This field is the route list index that is set in other routing tables such as table HNPACONT:RTEREF
OSNCINFO	STATE	{OFF, ON}	When OFF is selected, OSNC capabilities are not signalled on outgoing IT/ATC ISUP trunks. Also, no other fields follow.
			When ON is selected, OSNC capabilities are signalled on outgoing IT/ATC ISUP trunks for calls arriving to TOPS and service nodes with OSNC capabilities.
	OSNCCAP	{SAP}	When the SAP is selected, the CONNHOLD field follows. Selection of the SAP option causes the SAP to be included in the IAM to establish an outgoing connection.
	CONNHOLD	{N, Y}	When set to N, connection hold is unavailable on the outgoing connection.
			When set to Y, connection hold is available on the outgoing connection.

## **Datafill example**

The figure that follows shows sample datafill for table OSNCCAP.

1-30 Data schema tables

# OSNCCAP (end)

MAP display example for table OSNCCAP

```
OSNCIDX OSNCINFO

0 OFF

1 ON $

2 ON (SAP Y) $

3 ON (SAP N) $
```

# Table history

#### TOPS13

The OSNC activity created this table.

# **Additional information**

None

### Table name

Operator Services Signaling with CATegory (formerly called ANIID Mapping for TOPS Trunk Group with OSS Table)

# **Functional description**

Table OSSCAT allows the operating company to define the following upon receipt of specified pair of automatic number identification (ANI) identification (ID) digits over a Traffic Operator Position System (TOPS) trunk with operator services signaling:

• The expected number of digits to be found in the ANI spill as determined by the entry in field FORMAT.

Field FORMAT is used to set the ANI status of the call by comparing the digits received to the expected format. If the format is invalid, other data in table OSSCAT cannot be accessed.

• The method of determining the call origination type and the calling service feature as defined by the entry in field CLGSERV.

Field CLGSERV can set the call origination type or calling service feature if the call comes over a trunk group that may carry more then one type of traffic. If the trunk is a dedicated type, this field is ignored.

- An inter-LATA (local access and transport area) restriction option (field REST)
- An optional route (field ROUTE)

An optional route that overrides any route specified in the pretranslator can also be specified. This can route the call to a TOPS or, up to BCS35, to an Auxiliary Operator Assistance System (AOSS), position under a new call origination type or out of the office on a different trunk group.

*Note:* As of BCS32, table OSSCAT is present even if the Equal Access software package is not ordered.

The operator services signaling format is very close to that received from multifrequency (MF) trunks using standard bell signaling except for the following differences:

- The calling signaling terminal (ST) pulse tells us if the call is to be sent to an incoming (IC) ST or handled by the BOC (signaling transfer point [STP]).
- The ANI spill has a double identity digit rather than a single identity digit.
- OSS can arrive on MF trunks only because dial pulse (DP) trunks expect the calling ST pulse to indicate call origination or calling service feature and OSS uses this pulse to indicate a BOC- or an IC-handled call.

ANI information is set in the exact same manner as BELLANI signaling. The called ST pulses have the same meaning. Since only the ANI signaling type has changed for the trunk group, groups still have dedicated calling service features or call origination types.

A pair of ANI ID digits must be received in order to access any information in table OSSCAT, or else the call is marked as ANI FAIL (failure) and routed to a TOPS position.

If the ANI format is violated (which means that even though a pair of ANI ID digits is received, the ANI spill is not one of the valid formats specified in table OSSCAT), the following information can be used to set the calling service feature and the call origination type:

- Information inherent in the trunk group (dedicated trunks)
- ST pulse can be used to set the call origination type if the trunk group is MF (since CLD ST pulse is used in this case)
- If the ANI spill is simply missing the CLG ST pulse, yet the call has a valid format, table OSSCAT can be used to set the calling service feature and a route.

The table editor command, REP, to change the default values shown in the following table.

ANI ID digits	FORM	CLGSERV	REST	ROUTE
00	ANI	STATION	NONE	Ν
01	ONI	STATION	NONE	Ν
02	ANIF	STATION	NONE	Ν

#### Table OSSCAT default tuples (Sheet 1 of 2)

ANI ID digits	FORM	CLGSERV	REST	ROUTE
06	ANI_ANIF	HOTEL	NONE	Ν
07	ANI	SPECIAL	NONE	Ν
08	ANI	STATION	INTER	Ν
30	ANI	BLDNINTC	NONE	Ν
31	ANI	TRBLINTC	NONE	Ν
32	ANI	INTC	NONE	Ν
20	ANI	STATION	INTER	Ν
68	ANI_ANIF	HOTEL	INTER	Ν
78	ANI	SPECIAL	INTER	Ν

Table OSSCAT default tuples (Sheet 2 of 2)

# **Datafill sequence and implications**

The following tables must be datafilled before table OSSCAT.

- OFRT •
- TOPS •
- TOPSTOPT •

# Table size

Memory allocation is static and fixed at 100 entries.

## Datafill

The following table lists datafill for table OSSCAT.

#### Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
ANI		00 to 99	Automatic number identification digits. Enter the automatic number identification (ANI) identification (ID) digits found in the multifrequency (MF) ANI spill outpulsed from the originating office to the end office.
FORMAT		ANI, ANI_ANIF,	Format. Enter the code to identify the number of digits expected in a valid format ANI spill:
		ANI_ANIID, ANIF, ANIID, or ONI	Enter ANI if an ANI ID digit, a seven-digit calling number, and a signaling terminal (ST) signal are expected. The call is marked as ANI SUCCESS.
			Enter ANI_ANIF if at least an ANI ID digit and an ST pulse are expected. If no calling (CLG) digits are received, an ANI failure was identified by the originating office. If seven digits are received, the call is marked as ANI SUCCESS.
			Enter ANI_ANIID if at least an ANI ID digit and an ST pulse are expected. If no CLG digits are received, operator identification of the CLG number is not required. If seven digits are received, the call is marked as ANI SUCCESS.
			Enter ANIF if an ANI failure is detected at the originating office, and an ANI ID digit and an ST pulse are expected. Operator identification of the CLG number is required.
			Enter ANIID if an ANI ID digit and an ST pulse are expected, no CLG number is expected, and operator identification of the CLG number is not required.
			Enter ONI if an ANI ID digit and an ST pulse are expected, and operator identification of the CLG number is required. The ANI status is set to ONI_CALL.

Field	Subfield or refinement	Entry	Explanation and action
CLGSERV		ALM BLDNINTC COIN HOTEL INTC MOBILE SPECIAL STATION TRBLINTC	Calling service feature and call origination type. If the Traffic Operator Position System (TOPS) trunk group is dedicated (field STATCLAS in table TRKGRP is set to ALARM, COIN, HOTEL, INTCPT, MOBILE, NONCOIN, or TOLLSTA) then the calling service feature is set from the trunk group data unless ALM, INTC, or MOBILE is entered as described below.
			The call origination type is set when the TOPS trunk group is dedicated to mobile, attended pay station, alarm intercept, toll subscriber, or toll station.
			Otherwise the calling service feature and call origination are set as follows. Enter the calling service feature of the call and call origination using entries described below and the ST pulse received. Calling service feature is set from TOPS trunk group data (ALM, INTC, and MOBILE entries are exceptions)
			Enter ALM (alarm) if the calling service feature is to be set to STATION regardless of the originating trunk group and the call origination is to be set to ALM.
			Enter BLDNINTC (blank directory number intercept) if the calling service feature is set to STATION and the call origination is set to intercept. For BLDNINTC, the intercept call type is set to blank number intercept.
			Enter COIN if the end office uses the ANI to signify a coin call and the call origination is to be set to COIN.

### Field descriptions (Sheet 2 of 5)

### Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
CLGSERV (continued)			Enter HOTEL to indicate that the call origination is to be set by looking at the ST signal and if the TOPS trunk group is combined or centralized automatic message accounting (CAMA) tributary (field STATCLAS in table TRKGRP is set to COMBINED or CAMATRIB), then the calling service feature is to be set to HOTEL.
			Enter INTC (intercept) if the calling service feature is to be set to STATION regardless of the originating trunk group and the call origination is to be set to INTC.
			Enter MOBILE if the calling service feature is to be set to STATION regardless of the originating trunk group and the call origination is to be set to MOBILE.
			Enter SPECIAL to indicate that the call origination is to be set by looking at the ST signal, and if the trunk is combined (field STATCLAS in table TRKGRP is set to COMBINED), then the calling service feature is set by using the calling number as an index into table SPLDNID.

Field	Subfield or refinement	Entry	Explanation and action
CLGSERV		-	Enter STATION to indicate the following:
(continued)			• If the TOPS trunk group is combined or CAMA tributary (field STATCLAS in table TRKGRP is set to COMBINED or CAMATRIB), then the calling service feature and call origination are set by looking at the ST signal.
			• If the TOPS trunk group is class- of- service lookup (field STATCLAS in table TRKGRP is set to DNLOOKUP), then the calling service feature is set by looking in table SPLDNID using the calling number as an index and the call origination is set by looking at the ST signal.
			Enter TRBLINTC if the calling service feature is set to STATION and the call origination is set to intercept. For TRBLINTC, the intercept call type is set to trouble or special intercept.
REST		INTER or NONE	Inter-LATA restricted. Enter INTER to indicate that inter-LATA (local access and transport area) calls are restricted.
			Otherwise enter NONE.
ROUTE		see subfield	Automatic number identification route. This field consists of subfield ROUTEID.
			This field overrides any routing information derived from the called number and it is used to send the call to a position or an outgoing trunk.
	ROUTEID	N or T	Selector. Enter N if no route is specified in this table and any routes previously defined (such as STDPRTCT) are to remain in effect. No refinements require datafill.
			Enter T if the route is chosen by another routing table and datafill refinement TABID.

### Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TABID	AOSS, OFRT, or TOPS	Table name. If the entry in subfield SEL is T, datafill this refinement. Enter the route table name.
			<i>Note:</i> For BCS36 and up, table AOSS is not a valid entry.
	KEY	1 to 1023 or alphanumeric	Key. If the entry in refinement TABID is OFRT, enter the route reference index of the route list in table OFRT to which translation is to route.
			If the entry in refinement TABID is TOPS or AOSS, enter a call type code defined in table TOPS or table AOSS respectively.
			<i>Note:</i> If AOSS, intercept calls on all combined trunk groups route to AOSS.
SCRNIDX		0-100	Screening index. This field is an index into table RESTBIL (TA call) or DARSTBIL (DA call). This field supports a check of billing restrictions based on the incoming ANI ID digits for OSS signaling. This field is used if table TOPSTOPT field ANIIDSCR = Y, table TRKGRP field SIGTYPE = OSS, and no other restrictions apply to the call.

# Datafill example

The following example shows sample datafill for table OSSCAT.

#### MAP display example for table OSSCAT

ANI	FORMAT	CLGSERV	REST	ROUTE	SCRNIDX	
0	ANI	STATION	NONE	N	10	

# OSSCAT (end)

### Table history TOPS12

The feature Calling Restrictions for Wholesaling (59006832), UNBN0006, adds field SCRNIDX.

# **OSSPROV**

#### Table name

**Operation System Support Provisioning Table** 

### **Functional description**

Table OSSPROV stores all provisioning data for operation systems. Table OSSPROV contains a base common interface for all operation systems using table OSSPROV. The base interface contains the fields OSNAME, OSINFO and OSTYPE.

### **Datafill sequence and implications**

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

### Table size

Up to 256 tuples

Table OSSPROV is static with a fixed size of 256 bytes.

The physical store for a tuple with integrated test system (ITS) refinements is a description (DESC) of the physical tuple which is 40 words in protected store. This table can be incremented by eight tuples, up to a maximum of 255. Increasing the table size is allowed as long as the maximum tuples in table OSSPROV is not exceeded, that is table OSSPROV already has 256 tuples and not all of them are tuples with ITS OSTYPE. In this case, the physical table for ITS is not allowed to expand.

## Datafill

The following table lists datafill for table OSSPROV.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
OSNAME		see subfield	Operation system name
			This field consists of subfield OSKEY.
	OSKEY	alphanumeric	Operation system key
		(up to 16 characters)	Enter the operation key.
OSINFO		see subfield	Operation system information
			This field consists of subfield OSTYPE.

# **OSSPROV** (continued)

	<u> </u>		
Field	Subfield or refinement	Entry	Explanation and action
	OSTYPE	ITS	Operation system type
			Enter the value ITS (integrated test system).
			An entry outside this range is invalid.
	LANG	TL1	Language
			Enter TL1. This field is the language supported by ITS.
			An entry outside this range is invalid.
	ACTTMR	0 to 6000	Activity timeout
			Enter the TL1 link activity timeout in seconds. ITS uses 75 s. If this value is decreased, both ITS and DMS operations must agree on the new TL1 timeout value, otherwise the DMS may constantly reinitialize the TL1 session.
	LOGIN	LOGINOPT	Login
			Enter the login option (LOGINOPT).
	LOGINOPT	Ν	Login option
			Enter the login symbolic range option with no refinements to the LOGIN area. If N (no) is entered, ISDN TL1 does not require login procedures in phase 1.
	DCTYPE	MPC	Data communication type
			Enter the data communication peripheral module (PM) connecting the DMS to the Operation System (OS). The value for this field is MPC (multiprotocol controller).
	MPCINFO	see subfields	Multiprotocol controller information
			This field consists of up to three multiples of subfields MPCNO and LINKNO. If less than three multiples are required, end the list with a \$ (dollar sign). Separate each subfield with a single space.
	MPCNO	0 to 255	Multiprotocol controller number
			Enter the MPC number.

Field descriptions (Sheet 2 of 3)

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# **OSSPROV** (end)

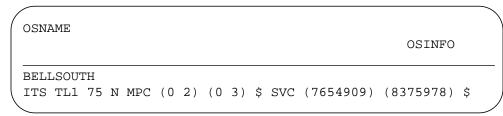
#### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	LINKNO	0 to 3	Link number
			Enter the link number.
	VCTYPE	SVC	Virtual circuit type
			Enter the virtual circuit type.
			An entry outside this range is invalid.
	SVCDNA	0 to 9	Switched virtual circuit data network address
			This field contains up to three switched virtual circuit (SVC) data network addresses (DNA). The calling OS administrator must supply the DNA values to DMS site operators so that the values can be datafilled in table OSSPROV. If less than three SVC DNAs are required, end the list with a \$ (dollar sign).

# Datafill example

The following example shows sample datafill for table OSSPROV.

#### MAP display example for table OSSPROV



### Table name

**TOPS** Overseas Billing Restrictions Table

# **Functional description**

Table OVSBILL contains the following information for each country listed in the table:

- If collect calls to the COUNTRY in question are permitted, and if so, if they are permitted for station to station calls only, or if they are permitted provided they are handled by the overseas operating center.
- If STA is flashed on the operator console if the operator attempts to complete a station call to the specified country.
- If third-number billing is legal for calls to the country.
- If terminating call screening is applied for this country on Automatic Calling Card Service (ACCS) calls from certain coin or restricted telephone stations.
- If terminating call screening is applied for this country on Automated Alternate Billing Service (AABS) calls from certain coin or restricted telephone stations.

If a given country is not listed in the table then the following applies:

- all collect calls are permitted
- station calls to the specified country are not flagged by flashing STA
- third-number billing is legal
- terminating code screening does not apply

The names of the countries listed in table OVSBILL must first be entered in table COUNTRY.

#### **Overseas Operating Center**

Prior to BCS36, use table OOCBILL instead of table OVSBILL. In BCS36, the OOC and AOSS tables are no longer supported.

### **Datafill sequence and implications**

Table COUNTRY must be datafilled before table OVSBILL.

# **OVSBILL** (continued)

## Datafill

The following table lists datafill for table OVSBILL.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
COUNTRY		alphabetic (up to 16 characters)	Key country name. Enter the country name as previously datafilled in table COUNTRY, where the country is associated with its country code.
COLLECT		ALW, DEN, OOC, or PER	Collect calls. Enter ALW if collect call to the country are allowed. Enter DEN if collect call to the country are denied. Enter OOC if collect calls to the country are allowed but handled by the overseas operating center (OOC). Enter PER if person-to-person collects calls only are allowed.
PERONLY		Y or N	Person-to-person only. Enter Y (yes) to indicate that STA is to be flashed on operator's screen if the operator attempts to complete a station call to the specified country. Otherwise, enter N (no).
THIRDOK		Y or N	Third number billing OK. Enter Y to indicate that third number billing is legal for calls to this country. Otherwise, enter N.
CCSCRN		Y or N	Calling card screening. In offices with features AJ0914 and NC0021 (TOPS: Terminating Code Screening), enter Y to indicate that terminating code screening is to be applied for this country. Terminating code screening is only applied to Automatic Calling Card Service (ACCS) calls from coin or restricted telephone stations listed in table TERMSCRN. Otherwise, enter N.

# OVSBILL (end)

Field	Subfield or refinement	Entry	Explanation and action
COLSCRN		Y or N	Collect call screening. In offices with features AJ0914 and NC0021, enter Y to indicate that terminating code screening is to be applied against collect calls for this country. Terminating code screening is only applied to Automated Alternate Billing Service (AABS) or ACCS calls from coin or restricted telephone stations. Otherwise, enter N.
THRDSCRN		Y or N	Third party billing screening. In offices with features AJ0914 and NC0021, enter Y to indicate that terminating code screening is to be applied for this country, against calls for this country. Terminating code screening is only applied to AABS or ACCS calls from coin or restricted telephone stations. Otherwise, enter N.

#### Field descriptions (Sheet 2 of 2)

### **Datafill example**

The following example shows sample datafill for table OVSBILL.

#### MAP display example for table OVSBILL

	COUNTRY	COLLECT	PERONLY	THIRDOK	CCSCRN	COLSCRN	I THRDSCH	RN	
	FRANCE	PER	Ţ	ζ 1	N	Y	Y	N	
	ANDORRA	DEN	1	1 ]	N :	N	N	N	
$\mathbf{X}$									

# OVSCC

### Table name

TOPS Overseas Credit Card Table

# **Functional description**

For each country listed, table OVSCC gives the following parameters used by the Traffic Operator Position System (TOPS)-DMS program to check on the validity of the overseas credit card number:

- minimum and maximum number of characters in the credit card number, including the country code and year letter
- day on which a new credit card becomes valid and day on which an old credit card expires
- year letter which relates the credit card with a specific year

For related information, refer to table HOTLIST.

## **Datafill sequence and implications**

Table COUNTRY must be datafilled before table OVSCC.

### Datafill

The following table lists datafill for table OVSCC.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
COUNTRY		alphabetic (up to 16 characters)	Key country name. This field is the key to the table. Enter the country name as previously datafilled in table COUNTRY, where the country is associated with its country code.
MINCHARS		2 to 17	Minimum number of characters. Enter the minimum number of characters in the credit card number, including the country code and year letter.
MAXCHARS		2 to 17	Maximum number of characters. Enter the maximum number of characters in the credit card number, including the country code and year letter.

# OVSCC (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
STARTDT		DEC1 or JAN1	Start date. Enter DEC1 or JAN1 to indicate the day on which the new overseas credit card number becomes valid. The year letter in the overseas credit card number relates it to a specific year.
ENDDT		DEC31 or JAN31	End date. Enter DEC31 or JAN31 to indicate the day on which the old overseas credit card number expires.

### **Datafill example**

The following example shows sample datafill for table OVSCC.

#### MAP display example for table OVSCC

COUNTRY	MINCHARS	MAXCHARS	STARTDT	ENDDT	
AUSTRALIA	12	12	JAN1	DEC31	
TURKEY	12	12	DEC1	JAN31	
KUWAIT	13	13	DEC1	DEC31	

# OVSCCYL

### Table name

TOPS Overseas Credit Card Year Letter Table

# **Functional description**

Table OVSCCYL lists the year letter for the present year and the year letter for the previous year.

On December 1 of each year, the present year letter is moved to the previous year letter and the year letter of the coming year is entered as the present year letter.

Because the information recorded on the form is normally considered confidential by the operating company, the form is not prepared until immediately before cutover and at the beginning of each year. The form is released to persons on a need-to-know basis only.

For related information, refer to table HOTLIST.

### **Datafill sequence and implications**

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

## Datafill

The following table lists datafill for table OVSCCYL.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
WHEN		PRESENT or PREV	When. Enter PRESENT or PREV to define the year as current or previous respectively.
LETTER		alphabetic capital (1 character)	Year letter. Enter the year letter for each of the current and previous years. On December 1 of each year the present year letter replaces the previous year letter, while the year letter of the coming new year is entered as the present year letter.

# **Datafill example**

The following example shows sample datafill for table OVSCCYL.

# OVSCCYL (end)

MAP display example for table OVSCCYL

Т

М

WHEN LETTER

PREV PRESENT

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# **OVSRS**

### Table name

TOPS Overseas Rate Step Table

### **Functional description**

Table OVSRS lists the applicable rate schedule name and rate step value for each combination of tariff and country, both required to index into table SCHED.

For related information, refer to table COUNTRY.

#### **Tops Mass Table Control**

Feature V0178 (TOPS Mass Table Control) permits data changes in table OVSRS 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 OVSRSI, and then, when all the required changes are entered, swap the contents of table OVSRS with table OVSRSI.

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

#### **Overseas Operator Center (OOC)**

Table OVSRS provides the schedule name and rate step information for each country based on the calling tariff. The rate step information is provided by Telecom Canada using the point-to-point method for rate step calculation.

### **Datafill sequence and implications**

The following tables must be datafilled before table OVSRS.

- SCHED
- COUNTRY
- TARIFF

### Table size

0 to 16 384 tuples

# Datafill

The following table lists datafill for table OVSRS.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TRFCTY		see subfields	Tariff-country key. This field consists of subfields TARIFF and COUNTRY.
	TARIFF	alphanumeric (up to 32 characters)	Tariff. Enter the tariff associated with the calling number numbering plan area (NPA) and NXX as previously defined in table TARIFF.
	COUNTRY	alphabetic (up to 16 characters)	Country name. Enter the called country name as previously defined in table COUNTRY.
SCHNAME		alphanumeric (up to 17 characters)	Schedule name. Enter the name of the overseas schedule assigned to this combination of calling tariff and called country as previously defined in table SCHED.
RATESTEP		0 to 998	Rate step. Enter the rate step value associated with this combination of calling tariff and called country.

# Datafill example

The following examples show sample datafill for table OVSRS.

The first example shows datafill for the North American Traffic Operator Position System (TOPS).

#### MAP display example for table OVSRS

SCHNAME RA	TESTEP	TRFCTY	
 OVSH	BELLONT 537	ANDORRA	

# OVSRS (end)

### MAP display example for table OVSRS

SCHNAME RAI	TESTEP	TRFCTY	
UK	STKITTS1 536	GREATBRITAIN	

# **OVSRSI**

#### Table name

TOPS Overseas Rate Step Inactive Table

# **Functional description**

Feature V0178 (TOPS Mass Table Control) permits data changes in table OVSRS 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 OVSRSI, and then, when all the required changes are entered, swap the contents of table OVSRS with table OVSRSI.

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

Refer to table OVSRS.

## **Datafill sequence and implications**

Refer to table OVSRS.

### Table size

Refer to table OVSRS.

### Datafill

Refer to table OVSRS.

### **Datafill example**

Refer to table OVSRS.

### OWATZONE

#### Table name

**OUTWATS** Zone Table

### **Functional description**

Outwards wide area telephone service (OUTWATS) is a feature designed to meet the needs of subscribers who make a substantial number of long distance calls. This feature is provided in terms of geographical regions called zones, with the subscriber purchasing as many lines for each zone as required.

The OUTWATS feature supports a total of 13 zones. These zones are referred to as zones 0 to 9, A, B, and C. Zones A, B, and C are recorded on billing records as zones 10, 11, and 12 respectively.

The arrangement of the zones, which is dependent on local tariffs, varies slightly between the U.S. and Canadian systems. Coverage, in accordance with the digits dialed, is in concentric zones about the home numbering plan area (NPA). Each zone includes all contained zones of the same type.

In Canada, the zones are typically numbered from 1 to 6, with zone 1 being the home NPA and zones 2 to 6 covering areas of increasing size.

In the U.S., the zones are typically broken up into two types:

- Intrastate zones 8, 9, and 0 are used for areas of increasing size within the home state.
- Interstate zones 1 to 6 cover the U.S. excluding the home state. Zones 1 to 5 cover increasingly large areas of the contiguous 48 states, plus Puerto Rico and the Virgin Islands. Zone 6 includes zone 5 plus Hawaii and Alaska.

The zones assigned to non-Integrated Business Network (IBN) lines are defined in the datafill for the OUTWATS line in table LENFEAT.

The zones assigned to the access codes for IBN OUTWATS lines are defined in table IBNXLA. A unique access code can be assigned for each zone. Calls are checked to determine whether they are within the zone assigned to the access code.

Since zones are ordered by increasing area, with each zone including all previous zones (within the zone type), it is acceptable to use a number that is higher than the called number requires. In such a case, the system determines the appropriate zone based upon the called number. Users can take advantage

of this by memorizing the access code for the highest (all-encompassing) zone, which can be assigned to all zones.

Table OWATZONE lists the zone for each set of digits that is assigned an OUTWATS zone in each home or serving NPA. The key to the table consists of the home or serving NPA and the digits that define the number assigned to the zone. The number of digits can be within the range of 1 to 18, but is normally within the range of 3 to 6.

If the number dialed is a seven-digit number, the table is searched for this number with a home NPA prefix. If it is not found, the table is searched for the actual number dialed.

If the number dialed is a ten-digit number, the table is searched for the digits dialed. Additional digits can be specified if required (for example, situations where six-digit screening is needed). See the example for the different methods of assigning numbers.

Table OWATZONE is accessed during call processing to determine the destination zone (the zone of the called number). The switch, having both the zone allowed for the calling line and the destination zone, accesses table ZONEORDR to check whether or not the call is allowed. If the destination code is included in the zone of the calling line, the call is allowed to complete.

If the number dialed is 800, the originator is routed to misdirected CAMA (centralized automatic message accounting) call (MSCA) treatment.

If the number dialed is 555 or NPA+555 and the 555 entry is datafilled in table OWATZONE with the same zone number as the subscriber, the call completes as dialed.

If the number dialed has not been datafilled or is out of zone and the originator is a non-IBN OUTWATS line, the call is routed to the treatment specified by the entry in table LENFEAT for the OUTWATS line. If it is an IBN line, the call is routed to the flexible intercept number for the route list that is assigned to the OUTWATS access code in table IBNXLA.

In a local without local automatic message accounting (LAMA) switching unit and with non-IBN OUTWATS, where local calls are charged, the local codes must be routed over the CAMA trunk group, through table CSVSCRC, to the toll office for registration of calls on automatic message accounting (AMA) tape.

For non-IBN OUTWATS lines that do not require the prefix digit (1+) to be dialed, the standard pretranslator associated with the OUTWATS lines must

### **OWATZONE** (continued)

have the type-of-call field (TYPCALL) set to direct dial (DD) so that calls are recorded on AMA tape.

The standard pretranslator and class of service screening subtable names that are associated with non-IBN OUTWATS lines are specified in table LINEATTR.

### **Datafill sequence and implications**

The SNPAs must be datafilled prior to table OWATZONE.

### **Table size**

4096 tuples (recommended maximum)

Memory is automatically allocated for table OWATZONE.

### Datafill

The following table lists datafill for table OWATZONE.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OWATCODE		see subfields	OUTWATS code
			This field, which is the key to the table, consists of subfields SVGNPA and DIGITS.
	SVGNPA	numeric	Serving NPA
			Enter the serving numbering plan area (NPA).
	DIGITS	numeric (up to	Digits
	18 digits)	18 digits)	Enter the digits that further define the zone.
ZONE		0 to 9, A, B, or	OUTWATS zone
		С	Enter the OUTWATS zone number that is assigned to the key OWATCODE.

## **Datafill example**

The following descriptions apply to the example of datafill for table OWATZONE shown below.

- Entry a is for home or serving NPA 613 with all codes in zone 1.
- Entry b is for a home or serving NPA of 819 with the code specified individually for numbers starting 819226. This approach uses more store

that used by entry a, but more clearly defines the codes. An NPA can have entry a or b, but not both.

- Entry c indicates that code 613225 (zone 3) is not in the same zone as entry a.
- Entry d is for a foreign numbering plan area (FNPA) where all codes are in the same zone.
- Entries e show the case where individual data is specified for each code within the FNPA. An NPA can have entries of type d or e, but not both.
- Entry f shows the case where code 416526 is not in the same zone as defined in entry d.
- Entry g shows the case where all NNX codes in the FNPA, starting with digit 4, are not in the same zone as defined in entry d.
- Entries h and d are examples of ambiguous codes.

		OWATZONE	ZONE	
	613	613	1	a
	613	613225	2	С
	613	4166325	1	е
	613	416326	1	е
	819	416	2	d
	819	4164	3	g
	819	819416	1	h
	819	819226	1	b
	819	416526	3	f
$\mathbf{k}$				

#### MAP display example for table OWATZONE

After items d and g are entered as input, 613416 is defined as follows:

SNPA	Digits	Zone	Remarks
613	4160	2	Default entry for 416
613	4161	2	Default entry for 416
613	4162	2	Default entry for 416

#### Definition of 613416 (Sheet 1 of 2)

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# OWATZONE (end)

#### Definition of 613416 (Sheet 2 of 2)

SNPA	Digits	Zone	Remarks
613	4163	2	Default entry for 416
613	4164	3	Entry for 4164
613	4165	2	Default entry for 416
613	4166	2	Default entry for 416
613	4167	2	Default entry for 416
613	4168	2	Default entry for 416
613	4169	2	Default entry for 416

#### Table name

Owner Table

#### **Overview**

Seven tables are associated with feature BR0745 (Customer Data Change Inventory System), and feature BC1459 (Partitioned Table Editor):

- CDCDNS Customer Data Change Directory Number Table
- CDCLENS Customer Data Change Line Equipment Number Table
- CDCLOGON Customer Data Change Logon Table
- CDCOPTS Customer Data Change Options Table
- DATAOWNR Data Owner Table
- OWNER Owner Table
- OWNTAB Ownership Table

These tables are optional and are only provided in switching units provisioned with the Customer Data Change (CDC) Inventory System and Partitioned Table Editor (PTE) features. The CDC and PTE features require the Enhanced Security and Command Screening software features.

The CDC and PTE features enable non-operating-company users to log onto the switching unit to view and modify certain routing, translation, and line data. Changes can be made only by using the Service Order System (SERVORD) or the PTE feature.

Non-operating-company users can have access to a table or subtable only if the privilege class assigned to the table or subtable (by means of tables CUSTPROT and SUBPROT) matches the command class of the user.

A list of steps required to set up a CDC user is shown in the following procedure. These steps must be followed precisely when setting up a CDC user in the switching unit.

To set up a CDC user in the switching unit:

- 1. Datafill table TERMDEV for the new CDC user.
- 2. The following is an example of a file:

ATTACH USERS. OPERATOR PROFILE LOGIN < user profile name > PROFILE RESTART < user profile name > LOGOUT

## **OWNER** (continued)

- 3. Edit a second file that is a user's profile read by the command interpreter (CI).
- 4. The following is an example of the file:

CDCSETUP < user class >

5. From the operator position enter:

>PERMIT userid pass priority stksize cmdclass
>LOGIN userid pass < first file > sink

The CDC user can now log on and use the CI and SERVORD commands.

### **Functional description**

One entry is required in this procedure for each name that is assigned as an owner. One or more customer groups can be assigned to an owner. The data for each owner specifies whether other owners are allowed to look at the data belonging to this owner.

### **Datafill sequence and implications**

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

### Table size

1 to 256 tuples

### Datafill

The following table lists datafill for table OWNER.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
OWNER		alphanumeric	Owner
		(vector of up to 8 characters)	Enter the name assigned to the owner.
PUBLIC		Y or N	Public
			Enter Y (yes), if other owners are allowed to look at this owner's data. Otherwise enter N (no).

## OWNER (end)

## **Datafill example**

An example of datafill for table OWNER is shown below. This example shows an owner of a group of customer groups with the name CARLING. Other owners are not allowed (PUBLIC = N) to look at data belonging to this owner.

#### MAP display example for table OWNER

OWNER	PUBLIC	
CARLING	Ν	

## **OWNTAB**

#### Table name

**Ownership** Table

### **Functional description**

Table OWNTAB is used with features BR0745 (Customer Data Change Inventory System) and BC1459 (Partition Table Editor).

Table OWNTAB is an ownership-enforced table and defines the access rights of various users. Table OWNTAB is a read-only table and is automatically datafilled during the loadbuild process.

The data in table OWNTAB, in conjunction with the data in table DATAOWNR, defines which entries in the tables listed in field TABNAME can be changed or viewed by non-operating-company users.

Table OWNTAB contains ownership information for a table or subtable. The information is used by the partitioned table editor (PTE) command to check ownership of a tuple in that table or subtable for a customer data change (CDC) user.

For related information, see table OWNER.

## **Datafill sequence and implications**

Table VFGDATA must be datafilled before table OWNTAB.

### Table size

1 to 64 tuples

## Datafill

The following table lists datafill for table OWNTAB.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TABNAME		see subfields	Table name
			This is the key field. It consists of subfields TABNAME and SUBNAME.
	TABNAME	alphanumeric (up to 16 characters)	Table name
			This subfield contains the table to which ownership applies.

# **OWNTAB** (continued)

Field	Subfield or refinement	Entry	Explanation and action
	SUBNAME	alphanumeric	Subtable name
		(up to 16 characters)	This field contains the subtable to which ownership applies. If no subtable exists, this subtable contains a \$.
KEYINDEX		INDEX or	Index or key
		KEY	This field specifies whether KEY (field TABNAME) or INDEX (field INDEXFS) is used to map the data into a form that can be used to read table DATAOWNR.
INDEXFS		alphanumeric	Index field
		(up to 2 vectors of up to 32 characters)	If the entry in field KEYINDEX is INDEX, the field and table name specified in this field are used to map the data into a form that can be used to read table DATAOWNR.
OWNDATA		see subfields	Owner data
			This field consists of subfields OWNTABID and FIELD_SPEC.
	OWNTABID	alphanumeric	Owner data
			This field contains the table that identifies data ownership. For the list of available tables, see the section "Datafill example" contained in this table description.
	FIELD_SPEC	alphanumeric	Field specification
		(vector of up to 32 characters)	This field is used in conjunction with the data in field OWNTABID to determine the ownership of the tuple. The resulting type must match the type that results from the value of field INDEXFS.

#### Field descriptions (Sheet 2 of 2)

# **Datafill example**

The following example shows sample datafill for table OWNTAB.

# OWNTAB (end)

### MAP display example for table OWNTAB

		INDEXFS OWNDATA
AUTHPART	\$ INDEX ( (AUTHPART	PARTNO)\$ AUTHNAME)\$
AUTHCDE	\$ INDEX ( (AUTHPART	INDEX\$PARTNO)\$ AUTHNAME)\$
DIGMAN	\$ KEY ( ( DIGMAN	DMIKEY)\$ DMIKEY)\$
CODEBLK	\$ KEY ( ( CUSTGRP	CRLKEY\$CUSTOMER)\$ CUSTNAME)\$
COSMAP	\$ INDEX ( ( COSMAP	IX)\$ COSNAME)\$
COSDATA	\$ KEY ( ( COSMAP	KEY\$COSNUM)\$ COSNAME)\$

#### Table name

IBN ESN Protocol Analysis and Code Manipulation Table

### **Functional description**

Table PACMAN contains the protocol analysis and code manipulation for electronic switched network (ESN) signaling formats incoming on an Integrated Business Network (IBN) trunk group type IBNTI or IBNT2.

Table PACMAN is used to interpret the ESN call types and subtypes for incoming calls.

If feature BC1459 (Partitioned Table Editor) was purchased, the ownership of each tuple in table PACMAN is defined in tables DATAOWNER and OWNTAB.

The entries in table DATAOWNR applicable to table PACMAN are those that have the entry in field TABNAME equal to CUSTGRP and the entry in field PMI equal to the value of field PMI in table PACMAN.

The entry in table OWNTAB applicable to table PACMAN is the one that has the entry in field TABNAME equal to PACMAN.

### **Datafill sequence and implications**

The following tables must be datafilled before table PACMAN.

- COSMAP
- OWNTAB

#### **Table size**

0 to 255 tuples

## **PACMAN** (continued)

## Datafill

The following table lists datafill for table PACMAN.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PMI		0 to 255	Protocol manipulation index
			Enter the protocol manipulation index to the protocol analysis and code manipulation (PACMAN) program.
PGM		see subfield	Protocol analysis and code manipulation program vector
			This field consists of up to 16 multiples of subfield CMD and its refinements. If less than 16 multiples are required, end the list with a \$ (dollar sign).
	CMD	END, FLD, or SET	Protocol analysis and code manipulation command
			Enter the PACMAN command code.
			Enter END if no more program commands are to be entered. No refinements require datafill.
			If translation is to extract a specified number of leading or trailing digits from incoming digits and then proceed to tables COSDATA and COSMAP with the index provided to screen and map the digits thus extracted to a network class of service (NCOS) value, enter FLD and datafill refinement FIELD_DATA.
			If the incoming call is associated with the call characteristics DIGDATA or SAT, enter SET and datafill refinements CALLCHR and VALUE.
	CALLCHR	DIGDATA or	Call characteristic
		SAT	If the entry in subfield CMD is SET, datafill this refinement. If the incoming call has a digital trunk connection to an electronic tandem network (ETN) or electronic switched network (ESN), enter the call characteristic DIGDATA.
			If incoming call comes through satellite, enter the call characteristic SAT (satellite).

## **PACMAN** (continued)

	Subfield or		
Field	refinement	Entry	Explanation and action
	VALUE	Y or N	Value
			If the entry in subfield CMD is SET, datafill this refinement. Enter Y (yes) or N (no) as the value given to the call characteristic.
	FIELD_DATA	see subfield	Field data
			If the entry in subfield CMD is FLD, datafill this refinement. This field consists of subfield FIELD and refinements NUMDIGS and COSMAP.
	FIELD	COS, DCOS,	Field to be extracted from inpulsed digits
		or TCOS	Enter COS if leading digits are extracted from the inpulsed digits.
			Enter DCOS if the trailing digits extracted from the inpulsed digits of a digital data call are compared with the value of parameter DATACOS in table OFCSTD.
			Enter TCOS if trailing digits are extracted from the inpulsed digits of a non-digital data call.
	NUMDIGS	0 to 15	Number of inpulsed digits to be extracted
			Enter the number of digits extracted from the inpulsed digits.
	COSMAP	alphanumeric	COSMAP index
		(1 to 16 characters)	Enter the index into tables COSMAP and COSDATA, where the extracted inpulsed digits are screened and mapped to a network class of service (NCOS).

### Field descriptions (Sheet 2 of 2)

# **Datafill example**

The following example shows sample datafill for table PACMAN.

# PACMAN (end)

#### MAP display example for table PACMAN



## PADDATA

#### Table name

Pad Data Table

### **Functional description**

Table PADDATA contains attenuation and boost settings for connections through different devices. Pads are applied to devices in order to balance volume levels across the network.

This document describes how DMS-100 and DMS-100/200 switching units use table PADDATA. This document does not describe how SL-100 switching units use this table.

The fixed loss plan uses an index from each party in calls that access table PADDATA. The data fields of tables TRKGRP, CONF3PR, CONF6PR, CPOS, and TOPSPOS contain this index. The system stores an index for each line.

Operating company maintenance personnel use digital pads to equalize differences between trunk groups. Table PADDATA does not affect the digital pads currently in use on the trunk modules (TM).

Table PADDATA stores the transmit and receive pad values inserted in this type of connection. The two-part key contains two pad group names. The associated data contains the pad values for connections between the specified pad groups.

Call processing determines where the system implements the pad value. The subscriber cannot control this process. If the connection involves a line, the operating company normally sets the pad in the line card in the receive direction. To set the value of 14L in field PAD1TO2 and field PAD2TO1, you must use the line and network pads together. The value of 14L indicates a loss of 14 dB. See the second example in Section "Additional information" for a description of this value.

The subscriber can define 21 of the 64 possible pad groups. The 43 pad groups that remain are reserved pad groups. The names of 38 of these pad groups appear in table PADDATA. See proposed pad group names.

Of the 38 defined pad groups, 16 pad groups are in table PADDATA when you enter data in this table. These pad groups appear in the following table. These pad groups have default values for fields PAD1TO2 and PAD2TO1. These values appear in the table in Section "Default keys and recommended DMS-100 loss values".

Pad group	Description
STDLN	standard line
UNBAL	unbalanced line
LRLM	remote line module (RLM)
IAO	plain ordinary telephone service (POTS) intraoffice trunk
LCO	POTS collocated step-by-step (SXS) trunk
ELO	POTS interoffice trunk
ETLS	POTS end office trunk (short distance)
ETLL	POTS end office trunk (long distance)
TLA	POTS toll connecting trunk (TCT) to toll trunk
TLD	POTS TCT to toll trunk (digital)
PPHON	P-phone line
PRAC	primary node access (PRA)
DAVLN	data above voice line
PKLNL	Gateway line that has GRPTYPE set to S in table LGRPINV
PKNIL	Gateway line that has GRPTYPE set to C in table LGRPINV
CONF	conference circuit
CPOS	centralized automatic message accounting (CAMA) position
TPOS	Traffic Operator Position System (TOPS) position

#### Pad groups at datafill

A nil pad group (NPDGP) appears in table PADDATA. A tuple that uses the nil pad group can contain only 0 0 settings. Table PADDATA has to have the tuple (NPDGP NPDGP 0 0) datafilled for the pad group NPDGP to prevent echo problems on trunks. The tuple cannot contain other values.

The central control (CC) instructs the connecting peripheral modules (PM) to use a 0 dB pad level on the line card gain setting. The CC instructs the PMs to use this level on the line card gain setting for all line connections to announcements. This value is a default value. You cannot administer this value.

The reserved 38 pad groups with defined names are as follows:

- Nil pad group:
  - NPDGP, not normally used
- Pad groups for POTS lines:
  - UNBAL (unbalanced line)
  - STDLN (standard line)
  - LRLM (line is on a remote line module [RLM] > 80 km)
- Pad groups for gateway lines:
  - PKLNL (gateway line with GRPTYPE S in table LGRPINV
  - PKNIL (gateway line with GRPTYPE C in table LGRPINV)
- Station is a line or attendant console. Pad groups for Integrated Business Network (IBN) lines:
  - ONS (on-premises station)
  - OPS (off-premises station)
- Pad group for P-phone lines:
  - PPHON (P-phone set)
- Pad groups for POTS trunks:
  - IAO (intraoffice trunk)
  - LCO (collocated-SXS in the same office)
  - ELO (interoffice trunk, class 5 office)
  - ELOA (interoffice trunk, analog class 5 office)
  - ELOD (interoffice trunk, digital class 5 office)
  - ETLS (end office toll < 320 km between 2 class 5 offices)
  - ETLL (end office toll > 320 km between 2 class 5 offices)
  - TLA (TCT to toll office analog [class 4])
  - TLD (TCT to toll office digital [class 4])
  - ITTA (intertoll trunk to analog toll office)

— ITTD (intertoll trunk to digital toll office)

Note: ITTD is recommended when trunking to Nortel CDMA sites.

— SAT (satellite office)

- Pad group for echo suppressors:
  - DES (digital echo suppressors)
- Pad group for conference bridges:
  - CONF (conference circuit)
- Pad groups for CAMA and TOPS positions:
  - CPOS (CAMA position)
  - TPOS (TOPS position)
- Pad groups for IBN trunks:
  - ATT (analog trunk interface to analog tie trunk)
  - DTT (digital trunk interface to digital or combination tie trunk)
  - CTT (combination tie trunk)
  - SATT (analog trunk interface to analog satellite private branch exchange [PBX] tie trunk)
  - SCTT (digital trunk interface to combination satellite PBX tie trunk)
  - SDTT (digital trunk interface to digital satellite PBX tie trunk)
  - ACO (analog trunk interface to analog central office [CO] trunk)
  - DCO (digital trunk interface to digital or combination CO trunk)
  - ATO (analog trunk interface to analog toll office [TO] trunk)
  - DTO (digital trunk interface to digital or combination TO trunk)

- Pad group for receivers:
  - RCVR, multifrequency [MF] and dual-tone multifrequency [DTMF] receivers, for selection of network pad values for trunk to receiver connections
- Pad group for PRA:
  - PRAC (PRA interface)
- Pad group for data above voice lines:
  - DAVLN (data above voice line)

#### Adding pad groups

You can add pad groups. The operating company can add pad groups to the proposed pad groups or define pad groups to add. The entry of the proposed pad groups is not a requirement. You can enter a maximum of 24 pad groups.

To create new pad groups, you can add the groups as keys in fields PADGRP1 and PADGRP2 of table PADDATA. To use pad groups as line or trunk data, make sure the pad groups are in table PADDATA.

#### Modifying pad groups

You can change the pad values in table PADDATA. Checks to make sure the specified values apply for the agent that uses the pad group do not occur.

#### **Deleting pad groups**

Deletion of a table entry sets the internal data to represent 0 pad settings. If you delete all references to a pad group that the subscriber defines from the table, the system removes the key. The entry NPDGP is the nil pad group entry in fields PADGRP1 and PADGRP2. This entry replaces references to the deleted pad group.

*Note:* Deletion of all entries of a defined pad group removes all table entries. Deletion of entries does not remove the pad group name from the key range. Data references can reference the pad group. This action sets the pads to 0.

#### Access restriction to table PADDATA

To restrict access to table PADDATA, enter data in table CUSTPROT. You must use this method to restrict access for United Kingdom operating companies. Table PADDATA contains the pad group values. Personnel that are not authorized must not change the values in this table.

### Default keys and recommended DMS-100 loss values

The default values for fields PAD1TO2 and PAD2TO1 appear in the following table.

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
STDLN	STDLN	0	0
UNBAL	STDLN	2L	2L
UNBAL	UNBAL	2L	2L
LRLM	STDLN	2L	2L
LRLM	UNBAL	2L	2L
LRLM	LRLM	2L	2L
IAO	STDLN	0	0
IAO	UNBAL	0	0
IAO	LRLM	0	0
IAO	IAO	0	0
LCO	STDLN	1L	0
LCO	UNBAL	1L	0
LCO	LRLM	1L	0
LCO	IAO	0	0
LCO	LCO	0	0
ELO	STDLN	3L	0
ELO	UNBAL	3L	0
ELO	LRLM	3L	0
ELO	IAO	0	0
ELO	LCO	2L	0
ELO	ELO	0	0
	n field PAD2TO1 is 3 6X21 line card cause		urate loss. A 3 dB

PADGRP1	PADGRP2 PAD1TO		PAD2TO1	
ETLS	STDLN	3L	0	
ETLS	UNBAL	3L	0	
ETLS	LRLM	3L	0	
ETLS	IAO	0	0	
ETLS	LCO	2L	0	
ETLS	ELO	3L	3L	
ETLS	ETLS	3L	3L	
ETLL	STDLN	6L	0	
ETLL	UNBAL	6L	0	
ETLL	LRLM	6L	0	
ETLL	IAO	3L	0	
ETLL	LCO	5L	0	
ETLL	ELO	3L	0	
ETLL	ETLS	3L	0	
ETLL	ETLL	0	0	
TLA	STDLN	5L	0	
TLA	UNBAL	5L	0	
TLA	LRLM	5L	0	
TLA	IAO	3L	0	
TLA	LCO	4L	0	
TLA	ELO	3L	0	
TLA	ETLS	3L	0	
TLA	ETLL	0	0	

Default keys and recommended DMS-100 loss values

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#### 1-8 Data schema tables

# PADDATA (continued)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
TLA	TLA	0	0
TLD	STDLN	6L	0
TLD	UNBAL	6L	0
TLD	LRLM	6L	0
TLD	IAO	3L	0
TLD	LCO	5L	0
TLD	ELO	3L	0
TLD	ETLS	3L	0
TLD	ETLL	0	0
TLD	TLA	0	0
TLD	TLD	0	0
CONF	STDLN	6L	0
CONF	UNBAL	6L	0
CONF	LRLM	6L	0
CONF	IAO	3L	0
CONF	LCO	5L	0
CONF	ELO	3L	0
CONF	ETLS	3L	0
CONF	ETLL	0	0
CONF	TLA	0	0
CONF	TLD	0	0
CONF	CONF	0	0
CPOS	STDLN	6L	0
	e in field PAD2TO1 is NT6X21 line card ca		accurate loss. A 3 dB

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
CPOS	UNBAL	6L	0
CPOS	LRLM	6L	0
CPOS	IAO	3L	0
CPOS	LCO	5L	0
CPOS	ELO	3L	0
CPOS	ETLS	3L	0
CPOS	ETLL	0	0
CPOS	TLA	0	0
CPOS	TLD	0	0
CPOS	CONF	0	0
CPOS	CPOS	0	0
TPOS	STDLN	6L	0
TPOS	UNBAL	6L	0
TPOS	LRLM	6L	0
TPOS	IAO	3L	0
TPOS	LCO	5L	0
TPOS	ELO	3L	0
TPOS	ETLS	3L	0
TPOS	ETLL	0	0
TPOS	TLA	0	0
TPOS	TLD	0	0
TPOS	CONF	0	0
TPOS	CPOS	0	0

#### 1-10 Data schema tables

# PADDATA (continued)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
TPOS	TPOS	0	0
PPHON	STDLN	0	0
PPHON	UNBAL	2L	0
PPHON	LRLM	2L	0
PPHON	IAO	0	0
PPHON	LCO	0	0
PPHON	ELO	0	0
PPHON	ETLS	0	0
PPHON	ETLL	0	3L
PPHON	TLA	0	2L
PPHON	TLD	0	3L
PPHON	CONF	0	3L
PPHON	CPOS	0	3L
PPHON	TPOS	0	3L
PPHON	PPHON	0	0
DAVLN	UNBAL	2L	5L
DAVLN	STDLN	0	3L
DAVLN	LRLM	2L	5L
DAVLN	DAVLN	3L	3L
DAVLN	SPPHN	0	3L
DAVLN	IAO	0	3L
DAVLN	LCO	0	4L
DAVLN	ELO	0	6L

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
DAVLN	ETLS	0	6L
DAVLN	ETLL	0	7L
DAVLN	TLA	0	6L
DAVLN	TLD	0	7L
DAVLN	CONF	0	7L
DAVLN	CPOS	0	7L
DAVLN	TPOS	0	7L
NPDGP	NPDGP	0	0
PKLNL	NPDGP	0	0
PKLNL	UNBAL	6L	6L
PKLNL	STDLN	6L	6L
PKLNL	LRLM	6L	6L
PKLNL	ONS	6L	6L
PKLNL	OPS	6L	6L
PKLNL	PPHON	6L	6L
PKLNL	DAVLN	0	6L
PKLNL	SPPHN	0	6L
PKLNL	IAO	0	6L
PKLNL	LCO	0	6L
PKLNL	ELO	0	6L
PKLNL	ELOA	0	6L
PKLNL	ELOD	0	6L
PKLNL	ETLS	0	6L

#### 1-12 Data schema tables

# PADDATA (continued)

PADGRP1	d recommended DM PADGRP2	PAD1TO2	PAD2TO1
PKLNL	ETLL	0	6L
PKLNL	TLA	0	6L
PKLNL	TLD	0	6L
PKLNL	ITTA	0	6L
PKLNL	ITTD	0	6L
PKLNL	SAT	0	6L
PKLNL	DES	0	6L
PKLNL	CONF	0	6L
PKLNL	CPOS	0	6L
PKLNL	TPOS	0	6L
PKLNL	ATT	0	6L
PKLNL	DTT	0	6L
PKLNL	СТТ	0	6L
PKLNL	SATT	0	6L
PKLNL	SCTT	0	6L
PKLNL	SDTT	0	6L
PKLNL	ACO	0	6L
PKLNL	DCO	0	6L
PKLNL	ΑΤΟ	0	6L
PKLNL	DTO	0	6L
PKLNL	RCVR	0	6L
PKLNL	PRAC	0	6L
PKLNL	PKLNL	3L	3L
	e in field PAD2TO1 is NT6X21 line card car		accurate loss. A 3 dB

ADGRP1	PADGRP2	PAD1TO2	PAD2TO1	
PKNIL	NPDGP	0	0	
YKNIL	UNBAL	6L	6L	
PKNIL	STDLN	6L	6L	
PKNIL	LRLM	6L	6L	
PKNIL	ONS	6L	6L	
PKNIL	OPS	6L	6L	
PKNIL	PPHON	0	9L	
PKNIL	DAVLN	0	9L	
PKNIL	SPPHN	0	9L	
PKNIL	IAO	0	9L	
PKNIL	LCO	0	9L	
PKNIL	ELO	0	9L	
PKNIL	ELOA	0	9L	
PKNIL	ELOD	0	9L	
PKNIL	ETLS	0	9L	
PKNIL	ETLL	0	9L	
PKNIL	TLA	0	9L	
PKNIL	TLD	0	9L	
PKNIL	ITTA	0	9L	
PKNIL	ITTD	0	9L	
PKNIL	SAT	0	9L	
PKNIL	DES	0	9L	
PKNIL	CONF	0	9L	

#### 1-14 Data schema tables

# PADDATA (continued)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
PKNIL	CPOS	0	9L
PKNIL	TPOS	0	9L
PKNIL	ATT	0	9L
PKNIL	DTT	0	9L
PKNIL	CTT	0	9L
PKNIL	SATT	0	9L
PKNIL	SCTT	0	9L
PKNIL	SDTT	0	9L
PKNIL	ACO	0	9L
PKNIL	DCO	0	9L
PKNIL	ΑΤΟ	0	9L
PKNIL	DTO	0	9L
PKNIL	RCVR	0	9L
PKNIL	PRAC	0	9L
PKNIL	PKLNL	6L	6L
PKNIL	PKNIL	9L	9L
PRAC	UNBAL	2L	0
PRAC	STDLN	3L	0
PRAC	LRLM	3L	0
PRAC	PPHON	0	0
PRAC	IAO	3L	0
PRAC	LCO	3L	0
PRAC	ELO	0	0
	e in field PAD2TO1 is NT6X21 line card ca		accurate loss. A 3 dB

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
PRAC	ETLS	0	0
PRAC	ETLL	0	0
PRAC	TLA	0	0
PRAC	TLD	0	0
PRAC	CONF	0	0
PRAC	CPOS	0	0
PRAC	TPOS	0	0
PRAC	ATT	3L	0
PRAC	DTT	0	0
PRAC	PRAC	0	0
	e in field PAD2TO1 is NT6X21 line card ca		accurate loss. A 3 dB

Default keys and recommended DMS-100 loss values

### **Datafill sequence and meaning**

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

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

- LNINV
- TRKGRP
- CONF3PR
- CONF6PR
- CPOS
- TOPSPOS

# Table size

The system automatically allocates memory for 64 pad groups.

## Datafill

Datafill for table PADDATA appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PADKEY		see subfields	<i>Pad data key</i> . This field is the key to table PADDATA. This field contains subfields PADGRP1 and PADGRP2.
	PADGRP1	alphanumeric (a maximum of 5 characters)	<i>Pad group one</i> . Enter the pad group name to enter in field PADGRP of table TRKGRP, LNINV, CONF3PR, CONF6PR, CPOS, or TOPSPOS. The pad group can be one of the pad groups that the subscriber defines.
	PADGRP2	alphanumeric (a maximum of 5 characters)	<i>Pad group two</i> . Enter the pad group name to enter in field PADGRP of table TRKGRP, LNINV, CONF3PR, CONF6PR, CPOS, or TOPSPOS. The pad group can be one of the reserved pad groups or a pad group the user defines.

Field descriptions
--------------------

Field	Subfield or refinement	Entry	Explanation and action
PAD1TO2		1L to 14L, 0G to 7G, or 0 (zero)	Pad group one to pad group two. Enter the value of the network or line pad for the connection between the entry in field PADGRP1 to the entry in field PADGRP2. Each entry value corresponds to a gain or loss level. The value G indicates gain and L indicates loss.
			<i>Note:</i> Gain (G) applies to Series 1 peripherals. Series 1 peripherals are trunk modules (TM), maintenance trunk modules (MTM), service trunk modules (STM), line modules (LM), and remote line modules (RLM). Entry values that are gains cause a loss of 0.
PAD2TO1		1L to 14L, 0G to 7G, or 0 (zero)	Pad group two to pad group one. Enter the value of the network or line pad for connection PADGRP2 to PADGRP1. Each entry value corresponds to a gain or loss level in decibels. The value G indicates gain and L indicates loss.
			<i>Note:</i> Gain (G) applies to Series 1 peripherals. Series 1 peripherals are TM, MTM, STM, LM, and RLM. Entry values that are gains cause a loss of 0.

# **Datafill example**

Sample datafill for table PADDATA appears in the following examples.

#### MAP example for table PADDATA

	PADKEY	PAD1TO2	PAD2T01	
NPDGP	NPDGP	0	0	

#### MAP example for table PADDATA

(	PADKEY	PAD1TO2	PAD2TO1	
	L1PAD L2PAD	10L	6L	

# **Table history**

#### SN07 (DMS)

Additional tuple datafilled for pad group NPDGP under CR Q00814439.

#### SN06 (DMS)

Pad groups PKLNL and PKNIL were added by feature 89009298. Pad group PKLNL is for use only by gateway lines that have GRPTYPE set to S in the LGRPINV table. Pad group PKNIL is for use only by gateway lines that have GRPTYPE set to C in the LGRPINV table. Gateway lines are automatically allocated the correct pad group when they are provisioned.

#### BCS36

A description of line connections to announcements was added.

## **Additional information**

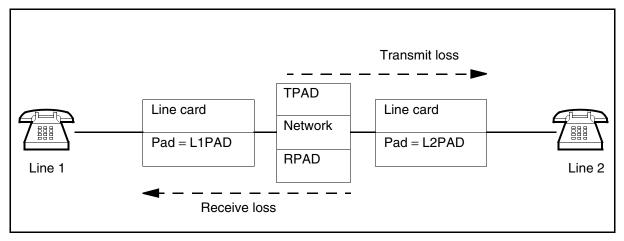
Table PADDATA is not used in TRAVER.

Examples of how to enter data in table PADDATA for specified applications appear in this section.

### Example 1

An example of a line-to-line call appears in the following figure.

#### Example 1



The call shown above has the following data requirements:

- Line 1 connects to line 2.
- The line equipment number (LEN) of the line 1 line card is LEN1.
- The LEN of the line card for line 2 is LEN2.
- The network transmit pad is TPAD.
- The network receive pad is RPAD.

Perform the following steps to complete the tables:

- Step 1 table LNINV
  - POS LEN1: Add the name of pad group (L1PAD) to field PADGRP.
  - POS LEN2: Add the name of pad group (L2PAD) to field PADGRP.
- Step 2 table PADDATA
  - POS L1PAD L2PAD: Add the values to fields PAD1TO2 and PAD2TO1. The same result can occur with POS L2PAD L1PAD if you enter the PAD1TO2 and PAD2TO1 values in reverse. If you enter PAD1TO2 and PAD2TO1 values 5 and 6 for POS L1PAD L2PAD, enter values 6 and 5 for POS L2PAD L1PAD.

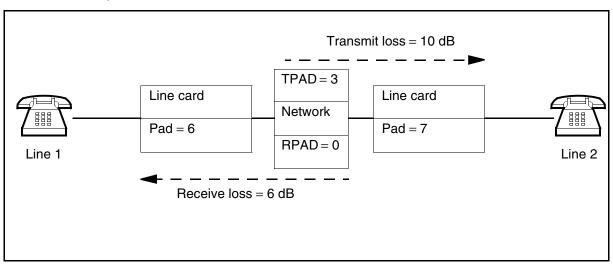
The calculation of the values of the line and network pads for loss is as follows:

- If the value of PAD2TO1 is less than 7, the line pad in LEN1 is the value in field PAD2TO1. The network receive pad (RPAD) is 0.
- If the value of PAD2TO1 is not less than 7, the line pad in LEN1 is 7. The network receive pad (RPAD) has the value in field PAD2TO1 minus 7.

- If the value of PAD1TO2 is less than 7, the line pad in LEN2 is the value in field PAD1TO2. The network transmit pad (TPAD) is 0.
- If the value of PAD1TO2 is not less than 7, the line pad in LEN2 is 7. The TPAD has the value in field PAD1TO2 minus 7.

The transmission loss between line 1 and line 2 can be 10 dB. The receive loss between line 2 and line 1 can be 6 dB. If these conditions occur, the line and network pads have the following values:

- The pad group in line 1 is set to a loss of 6 dB. The RPAD is 0.
- The pad group in line 2 is set to a loss of 7 dB. The TPAD is set to a loss of 3 dB.



Datafill for example 1

See the "Datafill example" section for a MAP display "Map example for table PADDATA" of the previous example.

#### Example 2

If one of the agents is a trunk, a network pad is available for the side of the trunk agent. In this example, the network receive and transmit pad values are the same as in table PADDATA. The field PADGRP in table TRKGRP indexes the pad values for the correct common language location identifier (CLLI).

This example has the following data requirements:

- Line 1 connects to a trunk.
- The line card for line 1 has a LEN of LEN1.

- The network transmit pad is TPAD.
- The network receive pad is RPAD.

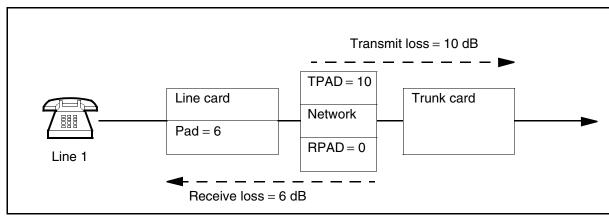
The calculation of the values of the line and network pads for loss is as follows:

- If the value of PAD2TO1 is less than 7, the line pad in LEN1 is the value in field PAD2TO1. The RPAD is 0.
- If the value of PAD2TO1 is not less than 7, the line pad in LEN1 is 7. The RPAD has the value in field PAD2TO1 minus 7.
- The TPAD is the value in field PAD1TO2.

*Note:* The previous algorithms apply for loss.

The transmission loss between line 1 and the trunk can be 10 dB. The receive loss between the trunk and line 1 can be 6 dB. If these conditions occur, the line and network pads have the following values:

- The pad group in line 1 is set to a loss of 6 dB.
- The RPAD is 0.
- The TPAD is set to a loss of 10 dB.



# Example 3

Example 2

This example has the following data requirements:

- A trunk connects to line 2.
- The line card for line 2 has a LEN of LEN2.
- The network transmit pad is TPAD.

# PADDATA (end)

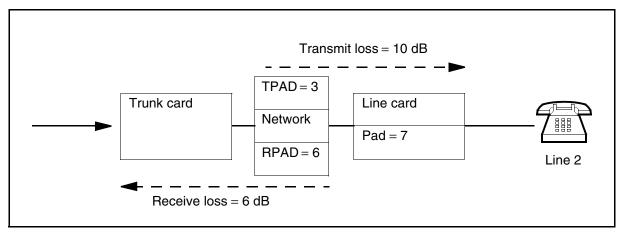
- The network receive pad is RPAD.
- The calculation of the values of the line and network pads for loss is as follows:
  - If the value of PAD1TO2 is less than 7, the line pad in LEN2 is the value in field PAD1TO2. The TPAD is 0.
  - If the value of PAD1TO2 is not less than 7, the line pad in LEN2 is 7.
     The TPAD has the value in field PAD1TO2 minus 7.
- The RPAD is the value in field PAD2TO1.

The transmission loss between the trunk and line 2 can be 10 dB. The receive loss between the trunk and line 2 can be 6 dB. If these conditions occur, the line and network pads have the following values:

- The RPAD is set to a loss of 6 dB.
- The pad group in line 2 is set to a loss of 7 dB.
- The TPAD is 3.

*Note:* This description does not apply to the use of command PADS at the trunk test position (TTP) level of the MAP terminal.





#### Table name

Patch Administration Device Table

# **Functional description**

The automatic patching application process uses table PADNDEV. A list of the devices that contain the patch appears in this table. When the system activates the automatic patch application process, the system searches table PADNDEV. The system searches this table for the patches that appear in table PATCTRL. You can add the store file device (SFDEV) and disk volumes to this table.

The key field (DEVKEY) and the associated device field (DEVICE) appear in this table. The automatic patch application process uses the key to select in sequence the devices that appear in the table. This operation stops when the system completes the search, or when the search reaches the bottom of the table.

See table PATCTRL for associated information.

### **Datafill sequence and meaning**

You must enter data in table DDU before you enter data in table PADNDEV.

# Datafill

Datafill for table PADNDEV appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DEVKEY		1, 2, or 3	<i>Device key.</i> Enter the key to the table that indicates the selection of the associated device. A key of 1 for the tuple indicates that the tuple contains the primary device used. A limit of three devices can appear in this table.
DEVICE		alphanumeric (1 to 12 characters)	<i>Device name.</i> Enter the device name that contains a patch. The name SFDEV (store file device), or a disk volume are correct device names.

### **Datafill example**

Sample datafill for table PADNDEV appears in the following example.

# PADNDEV (end)

#### MAP example for table PADNDEV

DEVKEY	DEVICE	
1	SFDEV	

# PARSDENY

#### Table name

TOPS Personal Audio Response System Denial Table

### **Functional description**

Table PARSDENY specifies which originating trunk groups interface to TOPS and are not to receive Personal Audio Reponse System (PARS) service. Field CLLI is the only field in the table.

Field CLLI is the index into the table. It contains the common language location identifiers (CLLI) of originating trunk groups that are not to receive PARS service. It can be datafilled with only incoming or two-way trunks which interface with TOPS. These trunk groups include TOPS, intertoll (IT), access tandem to carrier (ATC), and remote operator number identification (RONI).

If a call originates on a trunk group datafilled in this table, PARS service is not offered for the call. This table is present in TOPS stand-alone, host, and remote offices.

### **Datafill sequence and implications**

Table TRKGRP must be datafilled before table PARSDENY.

Table TRKGRP must be datafilled with the CLLI before table PARSDENY can be datafilled. The CLLI name must be deleted from this table before it can be deleted from table TRKGRP.

Table PARSDENY should be datafilled before table PARSMBR.

*Note:* In this table, no deletion of a CLLI name is allowed from table TRKGRP.

#### **Table size**

Table PARSDENY has a maximum of 8191 tuples.

# PARSDENY (end)

# Datafill

The following table lists datafill for table PARSDENY.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (16 characters)	Common language location identifier. Field CLLI is the index for this table. It contains common language location identifiers (CLLI) of originating trunk groups. There is no default.

# **Datafill example**

The following example shows sample datafill for table PARSDENY.

#### MAP display example for table PARSDENY

CLLI TOPSIC

# **Supplementary information**

This section provides information on dump and restore procedures for table PARSDENY.

#### **Dump and restore**

For dump and restore, current table values are copied.

#### Table name

TOPS Personal Audio Response System Member Table

## **Functional description**

Table PARSMBR is present only in stand-alone and host offices. It specifies which Traffic Operator Position System (TOPS) positions are associated with Personal Audio Response System (PARS) nodes.

Field TOPSPNUM is the index into the table. It contains the TOPS position number that receives PARS service. Before this field can be datafilled with a TOPS position number, field POSNO in table TOPSPOS must first contain the position number. The position type must be general.

Field PARSNNUM associates the TOPS position with a PARS node. This node corresponds to a link set defined in table MPCLSET. Before this field can be datafilled, a link set for multiprotocol controller (MPC) application TOPSPARS must first be datafilled in table MPCLSET. Field LSETNUM, a refinement of field LSETKEY of table MPCLSET, must contain the node number for the link set.

Field APPLNOPT assigns an integer parameter to the TOPS position. This field associates attributes with the position it is datafilled against.

*Note:* This field is currently unused. It is present to allow for convenient expansion of capabilities in the future.

TOPS position numbers datafilled in table PARSMBR cannot be deleted from table TOPSPOS.

### **Datafill sequence and implications**

The following tables must be datafilled before table PARSMBR.

- TOPSPOS
- MPCLSET

# PARSMBR (end)

# Datafill

The following table lists datafill for table PARSMBR.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TOPSPNUM		0 to 9999	Traffic operator position system position number. Enter a value for the Traffic Operator Position System (TOPS) that receives the Personal Audio Response System (PARS). This value must be previously datafilled in table TOPSPOS, field POSNO.
PARSNNUM		0 to 15	Personal Audio Response System node number. Enter the number that associates the TOPS position with a PARS node. A link set for multiprotocol controller (MPC) application TOPSPARS must first be datafilled in table MPCLSET The node number for the link set must be datafilled in field LSETNUM of table MPCLSET.
APPLNOPT (-BCS31)		0 to 32767	Application option. Effective BCS31, this is not an active field.

# **Datafill example**

The following example shows sample datafill for table PARSMBR.

### MAP display example for table PARSMBR

(	-			
	TOPSPNUM	PARSNNUM	APPLNOPT	
	100	0	0	

### Table name

Patch Alarm Table

# **Functional description**

Table PATALARM sets the alarm type that the system generates for each patch condition. The alarm type can be no alarm, minor, major, or critical alarm. These alarms replace the ACTPATCH (active patch) alarm.

You can generate DMS patch status reports manually through Patch Status Report. The system can generate the reports automatically during the 24-h patch audit, Patch Status Log Report. The DMS patch status reports include the following patch conditions:

- ACT (active) not applied
- ACT not activated
- ACT password not activated
- DBG applied
- DBG (debug) not applied
- DNR (do not reapply) not applied
- EMG (emergency) not applied
- GEN (general purpose) not applied
- LTD (limited) not applied
- MAN (extended multiprocessor system [XMS-based peripheral module] XPM operational code) not applied
- OBE (obsolete emergency) not removed
- OBS (obsolete) not removed
- Removed patches
- Restart not activated patches
- SRC (XPM source code) not applied

### Datafill sequence and meaning

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

#### Table size

15 tuples

### **PATALARM** (continued)

The table size does not change. The table size includes an entry for each patch condition defined. Fifteen patch conditions can be present.

# Datafill

Datafill for table PATALARM appears in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PTCHCOND			<i>Patch condition</i> . The defined patch conditions in the switch appear in this field:
		ACT_NOT_ACT	ACT_NOT_ACT (active not activated)
		ACT_NOT_ APPLIED	ACT_NOT_APPLIED (active not applied)
		ACT_PW_ NOT_ACT	ACT_PW_NOT_APPLIED (active password not activated)
		DBG_ APPLIED	DBG_APPLIED (debug applied)
		DBG_NOT_ APPLIED	DBG_NOT_APPLIED (debug not applied)
		DNR_NOT_ APPLIED	DNR_NOT_APPLIED (do not reapply not applied)
		EMG_NOT_ APPLIED	EMG_NOT_APPLIED (emergency not applied)
		GEN_NOT_ APPLIED	GEN_NOT_APPLIED (general purpose not applied)
		LTD_NOT_ APPLIED	LTD_NOT_APPLIED (limited not applied)
		MAN_NOT_ APPLIED	MAN_NOT_APPLIED (extended multiprocessor system [XMS]-based peripheral module XPM operational code not applied)
		OBE_NOT_ REMOVED	OBE_NOT_REMOVED (obsolete emergency not removed)
		OBS_NOT_ REMOVED	OBS_NOT_REMOVED (obsolete not removed)

# **PATALARM** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
		REMOVED_ PATCHES	REMOVED_PATCHES (removed patches)
		RESTART_ NOT_ACT	RESTART_NOT_ACT (restart not activated patches)
		SRC_NOT_ APPLIED	SRC_NOT_APPLIED (XPM source code not applied)
ALARM		CR, MJ, MN, NA	<i>Alarm</i> . Enter the alarm type for each patch condition when the patch audit runs.
			CR (critical)
			• MJ (major)
			• MN (minor)
			• NA (no alarm)
			The default is NA.

# **Datafill example**

Sample datafill for table PATALARM appears in the following example.

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## PATALARM (end)

MAP example for table PATALARM

```
PTCHCOND ALARM
ACT_NOT_APPLIED
                   MJ
    ACT NOT ACT
                   NA
ACT_PW_NOT_ACT
                  NA
   DBG APPLIED
                  MN
DBG_NOT_APPLIED
                   NA
DNR_NOT_APPLIED
                   NA
EMG_NOT_APPLIED
                   NA
GEN NOT APPLIED
                   NA
LTD_NOT_APPLIED
                   NA
MAN_NOT_APPLIED
                   NA
SRC_NOT_APPLIED
                  NA
OBS_NOT_REMOVED
                  NA
OBE_NOT_REMOVED
                  MJ
                  NA
REMOVED_PATCHES
RESTART_NOT_ACT
                   CR
```

# **Table history**

#### BCS36

Table PATALARM was introduced.

Entry GEN\_NOT\_APPLIED added under field PTCHCOND.

### **Additional information**

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

#### **Dump and restore**

Normal dump and restore procedures apply.

#### Table name

Patcher Options Table

## **Functional description**

Use table PATCHOPT to activate or deactivate PATCHER functions. You can use this table to schedule optional functions like the patch audit. A patch audit notifies operating companies of patch errors.

The patch audit scans patchable extended multiprocessor system (XMS)-based peripheral module (XPM) units. These units include the following:

- digital trunk controller (DTC)
- line group controller (LGC)
- message switch buffer 7 (MSB7)

The patch audit checks nodes and units that are in service (INSV), or in-service trouble (ISTB). The patch audit compares the status of the patches in the specified node to the status of the patches according to the central controller (CC) or computing module (CM).

If the audit detects an error, the audit performs the following procedure:

- generates a PCH log report to identify the error
- identifies the node or unit as ISTB if the audit detects an error
- updates the status of the patch in the CC or CM if the update option is on

You can set the patch audit to automatically update the patch status if the audit detects an error. If this condition occurs, the audit updates the CC or CM with the status of the patch in the ISN node or XPM node. The audit does not apply the patch.

You must not schedule a patch audit to run during a routine exercise (REX) test. The REX test cancels the patch audit. The office parameter NODEREXCONTOL in table OFCVAR schedules the REX test. The system generates the PCH107 log report to indicate this type of cancellation.

### Datafill sequence and meaning

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

#### Table size

1 tuple

# **PATCHOPT** (continued)

# Datafill

Datafill for table PATCHOPT appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
TUPLE		see subfield	<i>Patcher options key type</i> . This field contains subfield TUPLE_KEY.
	TUPLE_KEY	PATCHAUD	<i>Key tuple</i> . Enter PATCHAUD to schedule the patch audit.
ON		Y or N	<i>On</i> . Enter Y (yes) to turn the patch audit on. Enter N (no) to turn the patch audit off.
START		HHMM (4 digits)	<i>Start time</i> . Enter the patch audit start time on the 24-h clock.
			The default start time for the patch audit is 2300, 11:00 p.m., each night.
UPDATE		Y or N	<i>Update patch status.</i> Enter Y to update the patch status in the central control or computing module. Enter N to turn the update option off.
			<i>Note:</i> This audit updates the patch status only if the update option is on in table PATCHOPT. The audit does not apply, remove, or reclaim patches.

# **Datafill example**

Sample datafill for table PATCHOPT appears in the following example.

The first tuple makes the patch audit run at 2300 h each night. This tuple updates patch status when the audit detects patch errors.

The second tuple turns off the patch audit.

# PATCHOPT (end)

#### MAP example for table PATCHOPT

(	TUPLE	ON	START	UPDATE	
	PATCHAUD	Y	2300	Y	
$\left( \right)$	PATCHAUD	Ν	0000	N	

# Table history

# CSP02

References to Intelligent Services Node (ISN) in "Functional description" section were removed in CSP02.

# PATCTRL

#### Table name

Patch Control Table

# **Functional description**

A patch is a piece of code that repairs or improves current software. The automatic patch application process eliminates the requirement for manual application of patches to a DMS. When you download the patch to a specified office, the system can apply the patch to the switch. You can control the automatic patch application process. The operating company maintains final scheduling of patch applications.

Table PATCTRL contains a list of patches available to the switch. Table PATCTRL contains the information to control the automatic patch application process. This table monitors the patches that the system does not apply. These patches are on the store file device (SFDEV) in the switch. This table can monitor the devices that table PADNDEV specifies. At the scheduled time set in table PATSET, the patch application process applies the patches in table PATCTRL. Table PATCTRL updates the status of the applied patches and adds any new patches downloaded to the switch.

Use the command interpreter (CI) command GETPAT to add additional patches to the table.

Each execution of command GETPAT creates table PATCTRL again.

You cannot cannot add or delete tuples from the table. You can change the following tuple attributes:

- fields DATE and APPROVED for central control (CC) patches
- fields DATE, APPROVED, and NSNAME for computing module (CM) patches
- fields DATE, APPROVED, NSNAME, and ACTION for extended multiprocessor system (XMS)-based peripheral module (XPM) patches

### **Datafill sequence and meaning**

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

### Table size

0 to 999 tuples

The number of tuples added determines table size.

# PATCTRL (continued)

# Datafill

Datafill for table PATCTRL appears in the following table.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PATCHID		alphanumeric (maximum of 8 characters)	<i>Patch identifier.</i> Enter the patch identifier. The patch file can be on the store file device (SFDEV) in the system. The patch file can be on one of the devices that table PADNDEV specifies.
CAT		ACT, DBG, EMG, GEN, LTD, MAN, OBE, OBR, OBS, or SRC	<ul> <li><i>Category</i>. Enter the category assigned to the patch. The categories depend on the patch.</li> <li>ACT (active)</li> <li>DBG (debug)</li> <li>EMG (emergency release)</li> <li>GEN (general)</li> <li>LTD (limited release)</li> <li>MAN (manual)</li> <li>OBE (no longer in use emergency)</li> <li>OBR (no longer in use)</li> <li>SRC (source code)</li> <li>Any entry outside the range indicated for this field is not correct.</li> </ul>
TARG		CC, CM, MS, or XPM	<ul> <li><i>Target.</i> Enter the type of processor to which the system applies the patch.</li> <li>CC (central control) for NT40 switches</li> <li>CM (computing module) for DMS SuperNode switches</li> <li>MS (message switch) for DMS SuperNode switches</li> <li>XPM (extended multiprocessor system XMS-based peripheral module)</li> </ul>

# PATCTRL (continued)

### Field descriptions (Sheet 2 of 3)

	Subfield or		
Field	refinement	Entry	Explanation and action
APPLY		Y or N	Safe to apply. Enter Y to indicate that the system applies the patch. Enter N to stop automatic patch application. Other table entries do not affect patch application.
			The default value for this field is N.
APPROVED		Y or N	<i>Operating company approved</i> . Enter Y to approve the patch for the automatic patch application process. If you do not want to approve the patch for this process, enter N.
			The default value for this field is N.
			<i>Note 1:</i> The AUTOPATCH function does not run the command interpreter (CI) command GETPAT. You must run command GETPAT manually.
			<i>Note 2:</i> You must set the default value in field APPROVED of table PATSET.
DATE		numeric (maximum of 6 digits)	<i>Date.</i> Enter the date, YYMMDD (year, month, day), the patch applies to.
ACTION		APPLY_ALL APPLY_ EVEN or APPLY_ODD	Action. Enter APPLY_ALL to apply the patch to all qualified units. The APPLY_ALL defaults to CC patches. Operating company personnel cannot update this entry.
			Enter APPLY_EVEN to apply the patch to all qualified even units (0). Enter APPLY_ODD to apply the patch to all qualified odd units (1).

### **PATCTRL** (continued)

Field	Subfield or refinement	Entry	Explanation and action						
	NSNAME	alphanumeric (maximum of 8 characters)	<i>Nodeset name.</i> If the entry in field TARG is XPM, enter data in this refinement. Enter the nodeset used for the autopatch process. A nodeset contains a list of nodes with device and unit numbers. The autopatcher attempts to apply patches to the device and unit numbers. The autopatcher attempts to apply patches only to the nodes in this field.						
ACK		APPLY_ MANUALLY FAILED	Acknowledgement. Enter APPLY_MANUALLY to indicate that the user can apply the patch manually.						
		FULLY_ APPLIED MISSING_ NEED OUT_OF_ SEQ PARTIALLY_ APPLIED or PENDING	Enter FAILED to indicate that the action requested under field ACTION failed.						
			NEED	NEED	NEED OUT_OF_	NEED OUT_OF_	NEED OUT_OF_	NEED OUT_OF_	Enter FULLY_APPLIED to indicate that patch application is complete.
			Enter MISSING_NEED to indicate that a patch is not available before application can occur.						
			Enter OUT_OF_SEQ to indicate that the patch administration number is out of sequence.						
			Enter PARTIALLY_APPLIED to indicate that partial application occurred.						
			Enter PENDING to indicate that the process checked the patch (DLCHECKED) and placed the patch in the table.						
			The default value for this field is PENDING.						

#### Field descriptions (Sheet 3 of 3)

### **Datafill example**

Sample datafill for table PATCTRL appears in the following example.

In this example, operating company personnel download patch AJM02A26 to the office. The patch is a CM patch and is in the category GEN. The automatic patch application process does not apply this patch. Field APPLY (N) confirms that the process does not apply the patch. The system defaults fields APPLY and APPROVED automatically. Table PATSET describes this default. The CC patches default to an APPLY\_ALL entry in field ACTION. Field

# PATCTRL (end)

NSNAME is an ENET nodeset. The value PENDING in field ACK indicates that the process placed the patch in the table.

#### MAP example for table PATCTRL

NSNAME	CAT CKNOWI	-	APPLY	APPROVED	) DATE	ACTION	
AJM02A26 ENETONS	5 GEN	СМ	N	N	880510	APPLY_ALL	
	PEI	NDING					

# **Table history**

#### CSP02

References to Intelligent Services Node (ISN) in "Functional description" section and in fields TARG and NSNAME were removed.

#### BCS35

The refinement NSNAME was added.

# PATHSET

#### ATTENTION

This table applies to new or modified content for SN09(DMS) that is valid through the current release.

### **Universal Signaling Point m3ua Pathsets**

Table PATHSET lists the IP pathsets that can be used for Core to Universal Signaling Point (USP) connections using m3ua paths.

Datafill this table only if the office configuration includes a USP as a replacement for an LPP. If the office uses an LPP, do not datafill this table.

### **Datafill sequence and meaning**

Table PATHSET must be datafilled before table USPPATHS.

### Table size

0 to 1 tuples for a standard release. For GSM products the number of tuples can be enhanced to support 12 entries.

### Datafill

The following table lists the datafill for table PATHSET.

#### Field, subfield, and refinement descriptions for table PATHSET

Subfield orFieldrefinement		Entry	Explanation and action
PATHSET		up to 16 alphanumeric characters	Pathset Enter the name of the pathset to the USP.

1

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Field	Subfield or refinement	Entry	Explanation and action
SUFPATHS		0 to16	Sufficient pathsets Enter the numbers of pathsets that can be available before a major USP alarm is raised.
			<i>Note:</i> The value 0 is a special case: a USP major alarm is raised if less than one half of the datafilled pathsets are available.
APPL_TYPE		SGW, ASB	SGW: Signalling Gateway
			ASB: Application Server Blade
			In pre-SHR22 releases, USP paths could only be provisioned between a Core and USP (SGW). In the SHR22 release de-coupling allows provisioning of USPPATHS between any application blade. The field APPL_TYPE is introduced to distinguish the functionality of each end-point as shown in the following table.

### Field, subfield, and refinement descriptions for table PATHSET

### Relationship between PATHSET and application type

PATHSET	SUFPATHS	APPL_TYPE {SGW, ASB}
USP1	1	SGW
USP2	1	SGW
MRF1	1	ASB
HLR1	1	ASB
HLR2	1	ASB
HLR3	1	ASB

# Table history

# SN09 (DMS)

Q01077097 noted the addition of new field APPL\_TYPE.

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Table PATHSET documentation introduced.

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# PATNS

### Table name

Patch Nodeset (PATNS) Table

# **Functional description**

Table PATNS contains the list of default nodesets that the autopatcher nodeset options use. Each default nodeset contains only one node type. Table PATNS contains the nodesets for the autopatcher nodes in the switch.

# Datafill sequence and meaning

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

### Table size

2 to 64 tuples

The available patchable hardware that resides on the switch determines the size of the switch.

### Datafill

Datafill for table PATNS appears in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NODESET		alphanumeric (eight characters)	<i>Nodeset name.</i> Enter the name of the nodeset used for autopatching.
NODEDATA		see subfields	<i>Node data</i> . This field contains the following subfields:
			DEVICE_STR
			• LWB_STR
			• UPB_STR
			• UNIT_STR
	DEVICE_STR	alphanumeric (maximum of four characters)	<i>Device</i> . Enter the name of the node that the nodeset contains.

# **PATNS** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LWB_STR	alphanumeric (maximum of three	<i>Lower bound</i> . Enter the lower bound of the device numbers of the nodes that the nodeset contains.
	characters)	The default value is 0.	
	UPB_STR alphanumeric (maximum of three		<i>Upper bound</i> . Enter the upper bound of the device numbers of the nodes that the nodeset contains.
		characters)	The default value is 0.
	UNIT_STR alphanumeric (maximum of	<i>Unit.</i> Enter the unit or plane number of the node or nodes that the nodeset contains.	
		three characters)	The default value for plane 0 is 0. The default value for unit 1 or plane 1 is 1.
AUTOSET	SET Y or N		<i>Auto set.</i> Enter Y (yes) if the autoset has the nodeset included. If the autoset does not include the nodeset, enter N (no).
			The default value is N.

# **Datafill example**

Sample datafill for table PATNS appears in the following example.

#### MAP example for table PATNS

NODESET	NODEDATA				AUTOSET		
MSONS	(	MS NA	NA	0)\$	N		

# PATNS (end)

### Table history BCS36

The following field names were corrected in BCS36:

- DEVICE\_STR
- LWB\_STR
- UPB\_STR
- UNIT\_STR

### BCS35

Table PATNS was introduced in BCS35.

# **Additional information**

This section provides information on how to perform dump and restore procedures when you enter data in table PATNS

#### **Dump and restore**

A dump and restore is not a requirement during first application. Normal dump and restore procedures apply after the first application.

### PATSET

#### Table name

Patch Set (PATSET) Table

### **Functional description**

The automatic patching application process uses table PATSET to establish default values for entries in table PATCTRL. An operating company cannot add or delete tuples from this table. Use an extension (AUTOSUB) file to establish this single tuple table. All the tuple attributes except field TUPLE can change.

The monitoring of switch sanity occurs before and after the autopatch process runs. A snapshot of the log utility (LOGUTIL) log count occurs daily. Software buffers store the snapshot before and after the autopatch process runs. A comparison of log count changes against the defined threshold levels of the operating company occurs. The operating company enters the specified monitor times in table PATSET, fields PREMON and POSTMON. The operating company enters the acceptable threshold change that can occur in table PATSET, field THRSHOLD.

Refer to table PATCTRL for related information.

### **Datafill sequence and meaning**

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

### Table size

1 tuple

# Datafill

Datafill for table PATSET appears in the following table.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
TUPLE		AUTOPTCH	<i>Tuple</i> . This field contains AUTOPTCH (autopatch).
DATE		numeric (six digits)	<i>Date</i> . The default date for the start of the automatic application of all patches appears in this field. The default date appears as YYMMDD.

# **PATSET** (continued)

Field	Subfield or refinement	Entry	Explanation and action
START		numeric (four digits)	Start time. The time for the start of the automatic application of specified patches appears in this field. The time is based on the 24 h clock.
			The default value is 0300 (3:00 a.m.).
END		numeric (four digits)	<i>End time</i> . The time that automatic application of specified patches ends appears in this field. The time is based on the 24 h clock.
			The default value is 0600 (6:00 a.m.).
APPROVED		Y or N	<i>Approved</i> . The default value set for field APPROVED in table PATCTRL appears in this field. The default value set is Y (yes) or N (no). The initial setting is N.
ISUVAL		0 to 100	Incremental software update value. The accepted failure threshold for applying XPM patches appears in this field. The accepted failure threshold appears as a percentage of all extended multiprocessor system (XMS)-based peripheral modules (XPM).
			An entry in this field establishes the maximum failure rate for the application of an XPM patch. The automatic patching application process attempts the application of this patch. The specified failure rate can exceed the maximum. When this action occurs, the application of the offending patch halts and the application of other scheduled patches continues.
AUTO (-BCS35)		Y or N	Automatic patch application process. A Y appears in this field if the system allows the patch application process. An N appears in this field if the system does not allow the patch application process.

### Field descriptions (Sheet 2 of 4)

# **PATSET** (continued)

### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
PREMON		T15, T30, T45, T60, T90, or T120	<i>Premonitor minutes.</i> The monitor time of a log count snapshot before the autopatch process completes appears in this field. The monitor time is in minutes.
			The default value for this field is T15 (15 min).
POSTMON		T15, T30, T45, T60, T90, or T120	<i>Postmonitor minutes</i> . The monitor time of a log count snapshot after the autopatch process completes appears in this field. The monitor time is in minutes.
			The default value for this field is T15 (15 min).
THRSHOLD		0 to 100	<i>Threshold.</i> The percentage of acceptable change in LOGUTIL counts that allows the autopatch process to occur appears in this field. If the amount of change is less than the THRSHOLD percentage, the autopatch process occurs.
			The default value for this field is 15.
APLNSYNC		Y or N	Apply patch process in-synchronization or out-of-synchronization. A Y appears in this field if the autopatch process applies patches in-synchronization. An N appears if the autopatch process applies patches out-of-synchronization. The switch can already be out-of-synchronization when the autopatch process attempts to drop synchronization. In this event, the system cancels the autopatching session.
			The default value for this field is Y.
STOPFAIL		Y or N	<i>Stop fail.</i> An N appears in this field if the autopatch process continues to apply patches after a patch fails to apply. A Y appears if the autopatch process does not continue to apply patches after a patch fails to apply.
			The default value for this field is Y.

# **PATSET** (continued)

Field	Subfield or refinement	Entry	Explanation and action
MAXAPPLY		0 to 100	<i>Maximum patches applied.</i> The maximum number of patches to apply during the autopatch session appears in this field.
			The default value for this field is 15.
AUTOSET		Y or N	Autoset option. A Y appears in this field if the autoset option is on. An N appears if the autoset option is off. The default value for this field is N.
			<b>Note 1:</b> Autoset use causes the system to ignore the nodeset options. The autopatcher processes all patches against the autoset as opposed to separate patches against the specified nodeset of the patch. An N appears if the system does not present patches to the autopatcher.
			<i>Note 2:</i> You must download patches through NOPS.
AUTOGETP (BCS36-)		Y or N	Automatic get patch command. A Y appears in this field when the system performs the command interpreter (CI) command GETPAT. The system performs this action immediately following the download of patches to the DMS. The system enters data in table PATCTRL. An N appears if the user must execute the GETPAT command manually to enter data in table PATCTRL.
DAYOFWK (BCS36-)		Y or N (7 booleans)	<i>Day of week</i> . This field replaces field AUTO. Use of this field occurs to selectively run the Auto Apply utility (Autopatcher) on specified days during the week.
			A Y appears in this field for each day of the week that the system allows the patch application process. An N appears for each day of the week that the system does not allow the patch application process.

#### Field descriptions (Sheet 4 of 4)

# Datafill example

Sample datafill for table PATSET appears in the following example.

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# PATSET (end)

#### MAP example for table PATSET

TUPLE	DATE S	START	END	APPROVED	ISUVAL	PREMON	
POSTMON TI							
STOPFAIL I	MAXAPPLY	Y AUTO	DSET A	AUTOGETP	DAYOFWK		
AUTOPTCH	880501	2300	2330	N	0	T15	
Т15	15	Y					
Y	15	5	Ν	N	NNNNNNN		

### Table history CSP02

Reference to Intelligent Services Node (ISN) in field ISUVAL was removed in CSO02.

#### BCS36

The following changes were made in BCS36:

- Field XPMVAL was corrected to field ISUVAL
- Field AUTO was removed
- Fields AUTOGETP and DAYOFWK were added

# PCEMENTT

#### ATTENTION

This table applies to new or modified content for SN07 (DMS) that is valid through the current release.

# Packet Cable Event Messaging

The Packet Cable Event Messaging Entity Cable (PCEMENTT) table lists the following:

- A common set of PCEM data
- An Event Messaging Delivery Interface (EMDI) entity
- A collection of Record Keeping Server (RKS) entities
- A collection of RKS pair entities
- A collection of Delivery Function (DF) entities, and
- A Time Zone (TIMEZONE) entity.

### Datafill sequence and meaning (CM Only)

Before the new OFCENG parameter PCEM\_IS \_ACTIVE is set to Y:

- the COMMON tuple must be datafilled, and
- the TIMEZONE tuple must be datafilled.

The COMMON and TIMEZONE tuple cannot be deleted when the new OFCENG parameter PCEM\_IS\_ACTIVE is set to Y.

PCEMENTT does not use translation verification tools.

# Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
PCEMENTT	0	59	Memory is automatically allocated for 59PCEM entities.

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# Datafill

The following table lists fields/OIDs for PCEMENTT.

#### Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	Common, Emdi, RKS, RKSPAIR, DF, TIMEZONE	PCEM Entity. This field specifies the name of the entity.
	NEW	ENTRYNO	0 to 31	PCEM Entity Entry Number. This field specifies the entry number of an entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields based on the entity.

#### ENTITY = COMMON

If the ENTITY in KEY is COMMON, datafill tuple as shown below.

### **COMMON** entity field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	COMMON	PCEM Entity. This field specifies the name of the entity. Enter COMMON.
	NEW	ENTRYNO	0	PCEM Entity Entry Number. This field specifies the entry number of an entity. Enter 0 for the COMMON entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields ENTITY, VERSION_ID, ACCTSENDMODE, ACCOUNTING and SURVEILLANCE.

#### **COMMON** entity field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
	NEW	ENTITY	COMMON	PCEM Entity. Enter COMMON for common data entity.
	NEW	ACCTSEN DMODE	REALTIME, BATCH, or FTP	PCEM Accounting Sending Mode. Enter the desired sending mode for accounting Event Messages.
	NEW	ACCOUNTI NG	Y or N	PCEM for Accounting. Enter Y if Accounting Event Messages is to be generated. Enter N if Accounting Event Messages is not to be generated.
	NEW	SURVEILL ANCE	Y or N	PCEM for Electronic Surveillance (ES). Enter Y if ES Event Messages is to be generated. Enter N if ES Event Messages is not to be generated.

ENTITY = EMDI

If the ENTITY in KEY is EMDI, datafill tuple as shown below.

#### **EMDI** entity field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	EMDI	PCEM Entity. This field specifies the name of the entity. Enter EMDI for Event Messaging Delivery Interface.
	NEW	ENTRYNO	0	PCEM Entity Entry Number. This field specifies the entry number of an entity. Enter 0 for the EMDI entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields ENTITY and EMDI_IP.
	NEW	ENTITY	EMDI	PCEM Entity. Enter EMDI.

#### EMDI entity field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
	NEW	EMDI_IP	full 4-part Internet Protocol (IP) address	EMDI IP Address. Enter the full 4-part IP address of the EMDI entry. This field specifies the IP address of the Core & Billing Manager (CBM).
	NEW	EMDI_PORT	0 to 65535	EMDI Port Number. Enter the port number assigned for EMDI in the CBM.

#### ENTITY = RKS

If the ENTITY in KEY is RKS, datafill tuple as shown below.

#### **RKS entity field descriptions**

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	RKS	PCEM Entity. This field specifies the name of the entity. Enter RKS for Record Keeping Server.
	NEW	ENTRYNO	0 to 31	PCEM Entity Entry Number. This field specifies the entry number of an entity. Enter the number desired for an RKS entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields ENTITY, RKS_IP and RKS_PORT.
	NEW	ENTITY	RKS	PCEM Entity. Enter RKS.
	NEW	RKS_IP	full 4-part IP address	RKS IP Address. Enter the full 4-part IP address of the RKS entry.
	NEW	RKS_PORT	0 to 65535	RKS Port Number. Enter the port number assigned to the RKS entity.

ENTITY = RKSPAIR

### If the ENTITY in KEY is RKSPAIR, datafill tuple as shown below.

#### Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	RKSPAIR	PCEM Entity. This field specifies the name of the entity. Enter RKSPAIR for Record Keeping Server Pair.
	NEW	ENTRYNO	0 to 15	PCEM Entity Entry Number. This field specifies the entry number of an entity. Enter the number desired for an RKSPAIR entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields ENTITY, RKS_PRIMARY, RKS_SECONDARY and ASSOC_EMDI.
	NEW	ENTITY	RKSPAIR	PCEM Entity. Enter EMDI.
	NEW	RKS_PRIM ARY	0 to 31	RKS Primary. Enter the entry number of the primary RKS in this RKS pair.
	NEW	RKS_SEC ONDARY	0 to 31	RKS Secondary. Enter the entry number of the secondary RKS in this RKS pair.
	NEW	ASSOC_E MDI	0 to 31	Associated EMDI. Enter 0 for the EMDI associated with this RKS pair. EMDI 0 is the only one supported.

ENTITY = DF

Note: The DF entity is only required for Electronic Surveillance.

If the ENTITY in KEY is DF, datafill tuple as shown below.

#### Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	DF	PCEM Entity. This field specifies the name of the entity. Enter DF for Delivery Function.
	NEW	ENTRYNO	0 to 7	PCEM Entity Entry Number. This field specifies the entry number of an entity. Enter the number desired for a DF entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields ENTITY, CDC_IP, CDC_PORT, CCC_IP, CCC_PORT and ASSOC_EMDI.
	NEW	ENTITY	DF	PCEM Entity. Enter DF.
	NEW	CDC_IP	full 4-part IP address	Call Data Channel (CDC) IP Address. Enter the full 4-part IP address of the DF's CDC.
		CDC_POR T	0 to 65535	CDC Port Number. Enter the port number assigned to the DF's CDC.
		CDC_IP	full 4-part IP address	Call Content Channel (CCC) IP Address. Enter the full 4-part IP address of the DF's CCC.
	NEW	CCC_POR T	0 to 65535	CCC Port Number. Enter the port number assigned to the DF's CCC.
	NEW	ASSOC_E MDI	0 to 31	Associated EMDI. Enter 0 for the EMDI associated with this DF. EMDI 0 is the only one supported.

# ENTITY = TIMEZONE

If the ENTITY in KEY is TIMEZONE, datafill tuple as shown below.

#### Table field descriptions

Field	New or Changed	Subfield or refinement	Entry	Explanation and action
KEY	NEW		See subfields.	PCEM Entity and Entry Number. Enter the name of the entity and its entry number.
	NEW	ENTITY	TIMEZONE	PCEM Entity. This field specifies the name of the entity. Enter TIMEZONE for Time Zone entity.
	NEW	ENTRYNO	0	PCEM Entity Entry Number. This field specifies the entry number of an entity. Enter 0 for the Time Zone entity.
DATA	NEW		See subfields.	PCEM Entity Data. This field consists of subfields ENTITY, DST, DIRECTION, and HHMMSS.
	NEW	ENTITY	TIMEZONE	PCEM Entity. Enter TIMEZONE.
	NEW	DST	Y or N	Daylight Savings Time (DST) Indicator. Enter Y for DST and N for Standard TIme.
	NEW	DIRECTIO N	PLUS, MINUS	Universal Time Coordinated (UTC) Offset Direction. Part of the UTC offset, this field is automatically filled in by the PCEMTIME process. Initially, enter PLUS.
	NEW	HHMMSS	000000 to 999999	UTC Offset in hours, minutes and seconds. Part of the UTC offset, this field is automatically filled in by the PCEMTIME process. Initially, enter 000000.

# Datafill example

The following example shows sample datafill for table PCEMENTT.

MAP display example for table PCEMENTT

```
>table pcementt
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: PCEMENTT
>lis all
TOP
                                                     DATA
    KEY
_____
COMMON 0
                                         COMMON REALTIME Y N
  EMDI 0
                                    EMDI 47 142 128 220 5
                                  RKS 132 131231234RKS 141 226122007
  RKS 0
  RKS 31
                                          RKSPAIR 31 0 0
RKSPAIR 15
                 DF 123 232 15 6 6543 212 131 55 7 3456 0
  DF 7
TIMEZONE 0
                                      TIMEZONE Y MINUS 050000
BOTTOM
>
```

Note: the DF tuple is only required for Electronic Surveillance.

### Table history SN07 (DMS)

New table PCEMENTT created as part of activity A00007196. Documentation updated by CR Q01077110.

# PCEMFEID

#### ATTENTION

This table applies to new or modified content for SN07 (DMS) that is valid through the current release.

# Packet Cable Event Messaging Financial Entity Identifier

The Packet Cable Event Messaging Financial Entity Identifier (PCEMFEID) table lists a tuple of up to 247-character Financial Entity Identifier (FEID) which consists of an 8-character Multi-System Operator (MSO) Defined Data and up to 239-character MSO Domain Name.

### Datafill sequence and meaning (CM Only)

The FEID is required to be datafilled before the new OFCENG parameter PCEM\_IS\_ACTIVE can be set to Y.

The FEID cannot be deleted when the new OFCENG parameter PCEM\_IS\_ACTIVE is set to Y.

# Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
PCEMFEID	0	1	Physical tuple memory is allocated for up to 247-character FEID.

### Datafill

The following table lists fields/OIDs for PCEMFEID.

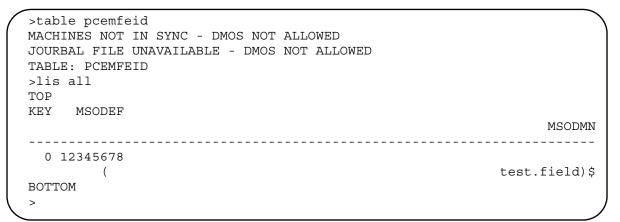
#### **Table field descriptions**

Field	New or Change d	Subfield or refinem ent	Entry	Explanation and action
KEY	NEW		0	PCEM Financial Entity Identifier Key. This is the key to the table.
MSODEF	NEW		8 ASCII character string	Multi-System Operator (MSO) Defined Data. Enter the MSO Defined Data.
MSODMN	NEW		Limited to 4 64-character vectors to accommodate up to 239 ASCII characters.	MSO Domain Name. Enter the MSO Domain Name.

### **Datafill example**

The following example shows sample datafill for table PCEMFEID.

#### MAP display example for table PCEMFEID



# Table history

#### SN07 (DMS)

New table PCEMFEID created as part of activity A00007196. Documentation updated by CR Q01077137.

### Table name

Phantom Carrier Identification Code

# **Functional description**

Table Phantom Carrier Identification Code (PCIC) is only accessed for trunk-originated calls using feature group D (FGD) signaling. Phantom carrier identification codes (CIC) that originate in an equal access end office (EAEO) are not mapped to a real CIC before routing. If the carrier number is not found in table OCCINFO, a lookup is performed in table PCIC. If the carrier number is found in table PCIC, it is mapped to a real national CIC or a real international CIC.

# **Datafill sequence and implications**

You can complete table OCCINFO independent of table PCIC. Ensure that the carriers in table PCIC are not in table OCCINFO.

# Table size

0 to 10,000 tuples

# Datafill

The following table lists datafill for table PCIC.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PCICKEY		0000 - 9999	The actual phantom CIC that comes into the office. This field is not a tuple count.
RNATLNM		alphanumeric (1 to 16 characters)	The real national carrier name used in place of the phantom CIC. This field is popluated using the OCCNAME field in table OCCNAME.
RINTLNM		alphanumeric (1 to 16 characters)	The real international carrier name used in place of the phantom CIC. This field is populated using the OCCNAME field in table OCCNAME.

# **Datafill example**

The following example shows sample datafill for table PCIC.

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# PCIC (end)

MAP display example for table PCIC

# Table history NA010

This table exists as of NA010.

# **Supplementary information**

After the system replaces the phantom CIC with a real CIC, translations begins at table STDPRTCT using standard datafill.

# PECINV

### **Table name**

Product Engineering Code Inventory (PECINV) Table

# **Functional description**

Table PECINV accommodates the baseline datafill of the SuperNode Product Engineering Codes (PECs).

The baseline datafill is in a separate EXT file. The system picks up this file during the loadbuild process. The content of this table is shipped with the software that goes to the operating company.

Changes to the hardware baseline can be necessary for special requirements of specified operating companies. You can perform changes to the baseline during hardware upgrades.

### **Datafill sequence and meaning**

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

### Table size

The minimum size is 0 tuples and the maximum size is 200 tuples. This maximum size is a constant.

There is no office parameter that allows you to change the maximum number of tuples in Table PECINV.

### Datafill

Datafill for table PECINV appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Description
PEC		vector of a maximum of eight characters	Product Engineering Code. This field contains correct SuperNode Product Engineering Codes (PECs). This field is the key field.
SSYSBASE	vector of a maximum of	maximum of	Subsystem baselines. This field contains an optional vector of sub-tuples.
		nine multiples with SUBSYS, BASELINE, EXCPTN or \$	Entry SUBSY is the SN_SUBSYSTEM_HW (SuperNode subsystem hardware) type, and contains the range STDHW, CMHW, MSHW, ENETHW, LIMHW, LIU7HW, APHW, HSIHW and LTSHW. The sub-tuple with STDHW subsystem hardware that applies for subsystem types does not appear in the tuple.
			The BASELINE is a table of two characters.
			The EXCPTN is an optional vector, with a maximum of two characters. These exception characters must be higher than the baseline. A \$ (dollar sign) terminates the vector.

### Procedure for determining the minimum allowable baseline release number associated with a Product Engineering Code

- 1. Access C-SPAN as the C-SCAN Basic User Guide describes.
- 2. Select the Baseline Reports option.

# Procedure for changing the release number associated with a Product Engineering Code

At the MAP terminal

1. To return to the CI level of the MAP display, type

#### >QUIT ALL

and press the Enter key.

Example of a MAP response:

NO COMMAND IN LINE

2. To access table PECINV, type

#### >TABLE PECINV

and press the Enter key.

Example of a MAP response:

TABLE: PECINV

3. To identify (position on) the Product Engineering Code (PEC) to change, type

#### >POS pec

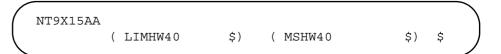
and press the Enter key.

where

pec

is the Product Engineering Code (like NT9X15AA)

Example of a MAP response:



4. To prepare to change the release number for the PEC, type

#### >CHA

and press the Enter key.

Example of a MAP response:

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

5. To confirm that a change must occur, type

#### >Y

and press the Enter key.

Example of a MAP response:

SSYSBASE: LIMHW 40 \$

6. To enter the new release number for the PEC, type

#### >subsys rel\_no \$

and press the Enter key.

where

# subsys

is the subsystem hardware type (like LIMHW)

#### rel\_no

is the new release number (like 49)

Example of a MAP response:

SSYSBASE: LIMHW 49

7. To confirm that the new release number is correct for the PEC, type >\$

and press the Enter key.

Example of a MAP response:

NT9X15AA ( LIMHW49 \$) \$ ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

8. To confirm the change, type

#### >Y

and press the Enter key.

Example of a MAP response:

TUPLE changed

9. To make sure the change to table PECINV occurs, type

#### >LIST

and press the Enter key.

Example of a MAP response:

PEC		SSYSBA	SE
 NT9X15AA	(LIMHW	49\$)	 \$

10. To quit the table editor and return to the CI level of the MAP display, type

#### >QUIT ALL

and press the Enter key.

### **Datafill example**

Sample datafill for table PECINV appears in the following example.

#### MAP example for table PECINV

PEC SSYSBASE NT9X13DA (MSHW 12 (16) (17) \$)(LIMHW A8 \$) (STDHW 10 \$)\$ NT9X10AA (ENETHW 11 \$) \$

# Table history

# LET17/SN07 (DMS)

### Q00900178

Change to text stating that there is no office parameter that allows any change to the number of tuples in Table PECINV. The maximum table size is amended to 200 tuples.

#### CSP08

The procedure to update this table was introduced in CSP08.

#### BCS34

This table was introduced in BCS34.

# PECINV (end)

# **Additional information**

The system cannot perform Dump and Restore for this table. The content of this table is in an EXT file. If the system performs a dump and restore, the system loses the new content of the table.

### PFCTRL

#### Table name

Power Feature Control Table

### **Functional description**

Table PFCTRL is used to control the availability of features that can be assigned through feature AJ1240 (Power Features Enhancements I). Table PFCTRL replaces the existing power feature (PF) terminal management environment (TME) command interpreter (CI) command. Table PFCTRL has identical functions to the TME CI command, with the exception that the datafill associated with the table survives a batch change supplement (BCS) application switch of activity (SWACT).

### **Datafill sequence and implications**

Table CUSTENG must be datafilled before table PFCTRL.

Table PFCTRL is automatically datafilled for the default customer group PFDEFAULT if the table is in the load. All tuples for customer group PFDEFAULT have field ENABLED set to N (no).

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

### Table size

The maximum number of tuples in table PFCTRL depends on the number of customer groups and the number of power features (PF) options that are supported.

Maximum number of tuples = (number of customer groups) × (number of PF options)

# Datafill

The following table lists datafill for table PFCTRL.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric	Customer group name
		(up to 16 characters)	This is the first part of the key. Enter the name of the customer group to which the data in this tuple applies. This name must be previously datafilled in table CUSTENG.
PFOPT	PFOPT alph	alphanumeric	Power feature options
		(1 to 8 characters)	This is the second part of the key. Enter the name of a feature that can be assigned as a power features (PF) option. Each operating company office has an individualized list of PF options, depending on the feature packages loaded into the switch. Refer to tables IBNFEAT, KSETFEAT, and LENFEAT for a description of all the options.
<i>Note:</i> If NAME (for Name Programming) had been enabled previously under field PFOPT, then PUB_NAME and PRIV_NAME are enabled during the dump and restore process. If NAME had not been enabled previously, then PUB_NAME and PRIV_NAME are not enabled.			

# **PFCTRL** (continued)

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			The list of PF options include the following:
			AAB (automatic answer back)
			ACB (automatic call back)
			ADMIN_CTRL (administrator control)
			AUTODISP (auto display)
			AUD (auto dial)
			BLF (busy lamp field)
			CCV (call covering)
			CADDON (configure add on)
			CPHONE (configure phone)
			CFI (call forwarding intragroup)
			CFU (call forwarding universal)
			CPU (call pickup)
			CWT (call waiting)
			DCPK (directed call park)
			DRING (distinctive ringing)
			EMW (executive message waiting)
PUB_NAME	and PRIV_NAME are	e enabled durin	en enabled previously under field PFOPT, then g the dump and restore process. If NAME had not PRIV_NAME are not enabled.

# **PFCTRL** (continued)

	Subfield or refinement	Entry	Explanation and action
PFOPT (continued)			The list of PF options include the following: (continued)
			INSPECT (inspect)
			LANG (choose language)
			LVM (leave message)
			MSB (make set busy)
			MWT (message waiting)
			• PF (power feature)
			PRK (call park)
			PSWD (alter password)
			PUB_NAME (public name)
			PVT_NAME (private name)
			QLEN (query line equipment number)
			• QTD (query time and date)
			RAG (ring again)
			SLOCK (security lock)
			3WC (three-way calling)
ENABLED		Y or N	Enabled
			Enter Y (yes) to enable the specific feature datafilled as a PF option in field PFOPT. Enter N (no) to disable the specific feature.
AUDIT		Y or N	Audit
			Enter Y to generate journal file entries and lo reports to record power feature usage. Otherwise, enter N.

#### Field descriptions (Sheet 3 of 3)

*Note:* If NAME (for Name Programming) had been enabled previously under field PFOPT, then PUB\_NAME and PRIV\_NAME are enabled during the dump and restore process. If NAME had not been enabled previously, then PUB\_NAME and PRIV\_NAME are not enabled.

# Datafill example

The following example shows sample datafill for table PFCTRL.

# PFCTRL (end)

#### MAP display example for table PFCTRL

CUSTGRP	PFOPT	ENABLED	AUDIT	
PFDEFAULT	NAME	Ν	N	

# Table history

#### NA005

Entry NAME (Name Programming) under field PFOPT was replaced by two entries, PUB\_NAME and PRIV\_NAME, to permit the datafill of public and private name permissions individually in accordance with PF Robustness-Public and Private Name Programming.

#### NA003

Field PFOPT was expanded to accommodate new valid inputs for Power Features.

#### BCS34

Table PFCTRL was introduced.

# PFXTREAT

### Table name

Prefix Treatment (PFXTREAT) Table

# **Functional description**

Table PFXTREAT determines the call treatment to which the system routes a call. The following information determines the treatment:

- the prefix selector from table LCASCRCN
- the type of call from the standard pretranslator
- the local calling area status (local or toll), in subtable LCASCRCN.LCASCR

The prefix selector allows a maximum of four different routes for each combination of fields TYPCALL and LOCAL. The prefix selector name can be a 4-character vector of the two specified prefix selectors mandatory (MAND) or optional (OPTL). The prefix selector name can also be a maximum of 14 customer-definable prefix selectors.

One prefix selector can be assigned to a LCASCRCN.LCASCR subtable. The entries in the table with that prefix selector apply to subtable LCASCRCN.LCASCR.

If the caller has the option of dialing prefix digits, the system requires field UPDTYPCA to update the type of call.

The prefix digit can be optional on toll calls. When this event occurs, an entry must have fields UPDTYPCA and TREAT set to DD and UNDT, in that order. This entry has fields TYPCALL and LOCAL equal to NP and N, in that order. The fields must be set in this manner so that the call completes and the operating company applies charging.

The system can route local calls when the caller dials the prefix digit 1 in error. When this event occurs, an entry must have fields UPDTYPCA and TREAT set to NP and UNDT, in that order. This entry has fields TYPCALL and LOCAL equal to DD and Y, in that order. The fields must contain these entries so that the call completes and the operating company does not apply charging.

For related information, see table LCASCRCN.

### **Datafill sequence and meaning**

Enter data in Table LCASCRCN after you enter data in table PFXTREAT.

# **PFXTREAT** (continued)

# Table size

The system allocates memory for 128 prefix treatments.

# Datafill

Datafill for table PFXTREAT appears in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description
TYPLCLCD		see subfields	Type of call and local code. This field contains subfields PFXSELEC, TYPCALL, and LOCCODE.
	PFXSELEC	Four-character vector of the two predefined prefix selectors mandatory (MAND) or optional (OPTL), or a maximum of 14 customer-definable prefix selectors.	Prefix selector. Enter the prefix selector assigned to the prefix treatment.
	TYPCALL	DD, NP, OA, or NL	Type of call. Enter DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil) for the type of call.
			For Traffic Operator Position System (TOPS) calls, a mixture of 0 and 1 (OA and DD) call types can be present. Enter NL for these cases.
	LOCCODE	Y or N	Local code. If the record is for a local call, enter Y (yes). Enter N (no) if the prefix treatment record is for a non-local call.

# **PFXTREAT** (end)

Field	Subfield or refinement	Entry	Description
UPDTYPCA		DD, OA, NP or NL	Updated type of call. If the system updates the type of call, enter this type of call. The types of calls can be DD (direct dial), OA (operator assisted), NP (no prefix), or NL (nil). If the system does not update the type of call, enter the value for to field TYPCALL.
			For Traffic Operator Position System (TOPS) calls, a mixture of 0 and 1 (OA and DD) call types can be present. Enter NL for these conditions.
TREAT		UNDT or TMTCNTL	Treatment. If calls that route to the prefix treatment can complete, enter UNDT (undefined treatment) as the treatment. If calls which route to the prefix treatment are not allowed to complete, enter TMTCNTL.

#### Field descriptions (Sheet 2 of 2)

### Datafill example

Sample datafill for table PFXTREAT appears in the following example.

#### MAP example for table PFXTREAT

(	TYPLCLCD		UPDTYPCA	TREAT	$\frown$
	OPTL	DD N	DD	UNDT	
$\langle$	MNDT	OA Y	OA	TMTCNTL	

### Table history NA006

The description of field PFXSELEC changed according to the Dial Plan Translations Enhancements feature in NA006.

# PHDS1

### Table name

Packet Handler to DS-1 Connection Table

# **Functional description**

This table contains the mapping of each DS-1 circuit to a particular T1 Interface Module (TIM) in a Digital Interworking Unit (DIU). PHDS1 provides the following information:

- DS1 Endpoint
- DIU Number
- TIM Number

# **Datafill sequence and implications**

Table LTCPSINV must be datafilled before table PHDS1.

# Table size

0 to 60 tuples

# Datafill

The following table lists datafill for table PHDS1.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DS1ENDPT		see subfields	Data set 1 end point
			This field consists of subfields PMTYPENO and PORT.
	PMTYPENO	see subfields	Peripheral module type number
			This field consists of fields PMTYPE and and PMNO.
	PMTYPE	LTC or LGC	Peripheral module type
			Enter the peripheral module type to be used in this connection.
	PMNO	0 to 255	Peripheral module number
			Enter the peripheral module number of C-side peripheral. Any entry outside of this range is not valid.

# PHDS1 (end)

	Subfield or		
Field	refinement	Entry	Explanation and action
	PORT	0 to 63	Port
			Enter the P-side port number on the C-side peripheral. An entry outside of this range is invalid.
DIUENDPT		see subfields	Digital interworking unit end point
			This field consists of subfields DIU and TIM.
	DIU	1 to 255	Digital interworking unit
			Enter the DIU number. This corresponds to the DIU agent number.
	TIM	2 to 16	T1 interface module
			Enter the T1 Interface Module slot number.

# **Datafill example**

Field descriptions (Sheet 2 of 2)

The following example shows sample datafill for table PHDS1.

#### MAP display example for table PHDS1

DS1ENDPT DIUENDPT LTC 19 2 3 2

# **Table history**

#### NA008

Table PHDS1 has been updated for the NA011 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the NA008 timeframe.

#### NA004

A note was added to subfield PORT regarding BITS and RCC2 P-side links 0 and 8.

# PHINFO

### Table name

Packet Handler Information Table

# **Functional description**

Table PHINFO holds the exception packet service information assigned to an ISDN logical terminal (LT). Information provided by this table consists of the configuration of X.25 service on each logical terminal that has either D or PB access privilege.

Table PHINFO contains the following information:

- logical terminal identifier (LTID)
- index
- connection type
- status
- packet handler (PH) return code
- service parameter and data

### **Datafill sequence and implications**

The following tables must be datafilled before table PHINFO.

- LTGRP
- LTDEF

### Table size

0 to 64 000 tuples

# Datafill

The following table lists datafill for table PHINFO.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PHKEY		see subfields	Packet handler key
			This field consists of subfields LTID and TUPLENUM.
	LTID	see subfields	Logical terminal identification
			This subfield consists of subfields LTGRP and LTNUM.
	LTGRP	ISDN	Logical terminal group
			This field identifies the group of logical terminals. Enter ISDN.
	LTNUM	1 to 1022	Logical terminal number
			Enter the number of the logical terminal within a group.
	TUPLENUM	0 to 50	Tuple number
			Enter the index of packet parameter sets that are associated with the logical terminal.
CONNTYPE		ATT or DET	Connection type
			Enter whether the logical terminal is attached (ATT) to a physical location in the packet handler (PH) or detached (DET).
STATUS		OK or SEND	Status
			Enter the status of the parameter set. Enter OK if service parameters have been successfully downloaded to the PH if the connection type is ATT, or removed from PH if connection type is DET. Enter SEND if service parameters for this tuple are waiting to be transferred to or removed from the PH through the operation, administration, and maintenance (OAM) processor.

### Field descriptions (Sheet 2 of 2)

	Subfield or	_	
Field	refinement	Entry	Explanation and action
PHSRC		0	Packet handler return code
			Enter the return code of the last service request sent down to the PH.
			0 (zero) is the only valid entry.
PHPRMVAR		see subfield	Packet handler parameter variables
			This field consists of subfield SERVPARM and its refinements.
	SERVPARM	CUG, DC,	Service parameter
		DNA, LAPB, LAPD, PVC	Enter the service parameter type.
			Enter CUG (closed user group) and datafill refinements on the following pages.
			Enter DC (device controller) and datafill refinements on the following pages.
			Enter DNA (data network address) and datafill refinements on the following pages.
			Enter LAPB (link access procedure balanced) and datafill refinements on the following pages.
			Enter LAPD (link access procedure on the D-channel) and datafill refinements on the following pages.
			Enter PVC (permanent virtual circuit) and datafill refinements on the following pages.

### SERVPARM = CUG

If the entry in subfield SERVPARM is CUG, datafill refinements CUGNUM, CUGINDEX, DNASPEC, and CUGPARMS as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CUGNUM	0 to 65535	Closed user group number
			Enter the CUG number.
	CUGINDEX	0 to 255	Closed user group index
			Enter the CUG index.
	DNASPEC	0 to 9	DNASPEC
			Enter up to 15 DNA specification multiples.
	CUGPARMS	see subfield	Closed user group parameters
			This field consists of subfield CUGSEL.
	CUGSEL	CUGDNIC	Closed user group selectors
		CUGTYP INCCALLS NPI OUTCALLS PCUG PVCUG PRIVMEM	Enter up to eight CUG selectors.
	BOOLPARM	Y or N	Boolean parameters
			If the entry in subfield CUGSEL is INCALLS, OUTCALLS, PCUG, or PRIVMEM datafill this refinement.
	CUGDNIC	0 to 9999	CUGDNIC
			If the entry in subfield CUGSEL is CUGDNIC, datafill this refinement.
	CUGTYP	l or N	Closed user group type
			If the entry in subfield CUGSEL is CUGTYP, datafill this refinement.
	NPI	E164 or X121	If the entry in subfield CUGSEL is NPI, datafill this refinement.

### SERVPARM = DC

If the entry in subfield SERVPARM is DC, datafill refinements ORIGDNA, ORIGLCN, RESPDNA, and DCPARMS as described below.

Field	Subfield or refinement	Entry	Explanation and action
	ORIGDNA	0 to 9	Originating data network access
			Up to 15 multiples can be datafilled.
	ORIGLCN	1 to 1024	Originating LCN
			Enter the originating LCN.
	RESPDNA	0 to 9	RESPDNA
			Up to 15 multiples can be entered.
	DCPARMS	see subfield	Device controller parameters
			This field consists of subfield DCSEL.
	DCSEL	CUGFAC	Device controller selectors
		CUGINDX FASTSEL NORMCHRG ORIGNPI PKTFAC PKTRECV PKTSEND PRIORITY RESPNPI RPOADNIC PRIORITY PROCTET1 PROCTET2 PROCTET3 PROCTET3 PROCTET3 PROCTET4 RPOAFAX TPTRECV TPTSEND TRFFAC TPTFAC WDWFAC WDWFAC WDWSEND	Enter up to 23 DC selectors.

Field	Subfield or refinement	Entry	Explanation and action
	BOOLPARM	Y or N	Boolean parameter
			If the entry in subfield DCSEL is CUGFAC, PKTFAC, PRIORITY, RPOAFAX, TPTFAC, TRFFAC, or WDWFAC, datafill this refinement.
	CUGIDX	0 to 16	Closed user group index
			If the entry in subfield DCSEL is CUGINDX, datafill this refinement.
	FASTSEL	N, Y, or R	FASTSEL
			If the entry in subfield DCSEL is FASTSEL, datafill this refinement.
	NORMCHRG	N or R	NORMCHRG
			If the entry in subfield DCSEL is NORMCHRG, datafill this refinement.
	NPI	E164orX121	NPI
			If the entry in subfield DCSEL is ORIGNPI or RESPNPI, datafill this refinement.
	PKTSZ	128, 256, or	PKTSZ
		512	If the entry in subfield DCSEL is PKTRECV or PKTSEND, datafill this refinement.
	PROCTET1	0 to 255	PROCTET1
			If the entry in subfield DCSEL is PROCTET1, datafill this refinement.
	PROCTET2	0 to 255	PROCTET2
			If the entry in subfield DCSEL is PROCTET2, datafill this refinement.
	PROCTET3	0 to 255	PROCTET3
			If the entry in subfield DCSEL is PROCTET3, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 2 of 3)

	Subfield or		
Field	refinement	Entry	Explanation and action
	PROCTET4	0 to 255	PROCTET4
			If the entry in subfield DCSEL is PROCTET4, datafill this refinement.
	RPOADNIC	0 to 9999	RPOADNIC
			If the entry in subfield DCSEL is RPOADNIC, datafill this refinement.
	TPTRECV	3 to 12	TPTRECV
			If the entry in subfield DCSEL is TPTRECV, datafill this refinement.
	TPTSEND	3 to 12	TPTSEND
			If the entry in subfield DCSEL is TPTSEND, datafill this refinement.
	WDWRECV	1 to 7	WDWRECV
			If the entry in subfield DCSEL is WDWRECV, datafill this refinement.
	WDWSEND	1 to 7	WDWSEND
			If the entry in subfield DCSEL is WDWSEND, datafill this refinement.

Field descriptions for conditional datafill (Sheet 3 of 3)

#### SERVPARM = DNA

If the entry in subfield SERVPARM is DNA, datafill refinements DNAPSPEC, ACCLASS, GROUP, and DNAPARMS as described below.

#### Field descriptions for conditional datafill (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DNASPEC	0 to 9	DNASPEC
			Up to 15 multiples can be datafilled.
	ACCLASS	1 to 255	AC class
			Enter the AC class.

Field	Subfield or refinement	Entry	Explanation and action
	GROUP	alphanumeric	Customer group name
		(1 to 16 characters)	Enter the customer group name.
	DNAPARMS	see subfield	Data network address parameters
			This field consists of subfield DNASEL.
	DNASEL	BNPI	Data network address selectors
		BLKNUIACC CHRGAL-LO W CHRGSUBS CUGIDX EXPLRPOA EXTCUG HPRECVPKT HPSENDPKT INACCESS INFAST INHPRC INNCINTL INONLY INNPRC INRCINTLNPI NUIREQ OUT OUTACCESS OUTBLKNUIO UTDP OUTFASTRO OUTFASTRO OUTFASTRO OUTFASTUR OUTFASTUR	Enter the DNA selectors.

#### Field descriptions for conditional datafill (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DNASEL (continued)	OUTNPOUTO NLY OUTRCDEF PCSINDX PKT16 PKT32 PKT64 PKT256 PKT512 PNPIRCFOR CE RECVPKTRE CVTPT RPOAPDNIC RXWDW SECNUI SENDPKT SENDTPT SIGPCUG SRVEXCH TXWDW	
	BOOLPARM	Y or N	Boolean parameter
			If the entry in subfield DNASEL is BLKNUIACC, CHRGALLOW, CHRGSUBS, CUGIDX, EXPLRPOA, EXTCUG, INACCESS, INFAST, INHPRC, INNCINTL, INNPRC, INRCINTL, OUT, OUTBLKNUI, OUTDP, OUTHP, OUTINTL, OUTNP, OUTONLY, OUTRC, OUTRCDEF, PKT16, PKT32, PKT64, PKT128, PKT256, PKT512, RCFORCE, SECNUI, or SIGPCUG, datafill this refinement.
	NPI	E164 or X121	NPI
			If the entry in subfield DNASEL is BNPI, NPI, or PNPI, datafill this refinement.
	PCSINDX	0 to 255	PCSINDX
			If the entry in subfield DNASEL is PCSINDX, datafill this refinement.

### Field descriptions for conditional datafill (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	PKTSZ	16, 32, 64,	PKTSZ
		128, 256, 512	If the entry in subfield DNASEL is HPRECVPKT, HPSENDPKT, RECVPKT, or SENDPKT, datafill this refinement.
	RECVTPT	3 to 13	RECVTPT
			If the entry in subfield DNASEL is RECVTPT, datafill this refinement.
	RPOADNIC	0 to 9999	RPOADNIC
			If the entry in subfield DNASEL is RPOADNIC, datafill this refinement.
	RXDWD 1 to 7	1 to 7	RXDWD
			If the entry in subfield DNASEL is RXWDW, datafill this refinement.
	SENDTPT	3 to 13	SENDTPT
			If the entry in subfield DNASEL is SENDTPT, datafill this refinement.
	SRVEXCH	XCH 0 to 255	SRVEXCH
		If the entry in subfield DNASEL is SRVEXCH, datafill this refinement.	
	TXDWD	1 to 7	TXDWD
			If the entry in subfield DNASEL is TXWDW, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 4 of 4)

### SERVPARM = LAPB

If the entry in subfield SERVPARM is LAPB, datafill refinement LAPBSEL as described below.

#### Field descriptions for conditional datafill (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	LAPBSEL	AFRMD	Link access procedure balanced selectors
		AFRMO AFRMOOS BADFRMDBA DFRMO BADFRMO-O S CALLCOLL CCFMT CLLDDSE CLLDSRV CLLGDSE CLLGSRV CLRTMR	Enter up to 65 LAPB selectors and datafill the appropriate refinements.
		CPSIGS CRCERRD CRCERRO CRCERRO-O S CRQTMR CTARIFDBIT DCONLY ENTRTHROT EXITTHROT FRMQD FRMQO FRMQOOS FRMWDWKID LETMR IDLPBT3 IGNORADD	

Field	Subfield or refinement	Entry	Explanation and action
	LAPBSEL	IPDIPO	
	LAPBSEL (continued)	IPDIPO IPOOS IPTMO LCERRD LCERRO LCERROS LCNBASE LCNORD LNKALARM LNKPROC LRCERRDLR CERRO LRCERRO-O SMAXSTC MULTDNAS NATLTRF NOLBUFD NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NOLBUFO NUIOSS NUIOPT NUIOSS NUIOPT NUMIVC NUMPVCOCT ETALGN	
		OCTETONLY OVERUND OVERUNO	
		OVERUNO-O S	

### Field descriptions for conditional datafill (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	LAPBSEL (continued)	PHFMT PKTNEG PMTCALL PRERRD PRERRO PRERROOS PRIODLY RECVDIAG RESETTMR RESPTMR RESPT1 RESPTMR2 RESTRTTMR RETRAND RETRAND RETRANO SRETRYN2 SRVTST THROT THROTALRM TPTNEG TRANSDIAG TRFCLASS UNDRUND UNDRUNOW DWCEIL WDWCLNEG WDWNEG X25TYP	
	AFRM	1 to 14	AFRM
			If the entry in subfield LAPBSEL is AFRMD, AFRMO, or AFRMOOS, datafill this refinement.
	BADFRM	1 to 14	BADFRM
			If the entry in subfield LAPBSEL is BADFRMD, BADFRMO, or BADFRMOOS, datafill this refinement.

### Field descriptions for conditional datafill (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	BOOLPARM	Y or N	Boolean parameter
			If the entry in subfield LAPBSEL is CCFMT, CPSIGS, CTARIF, DBIT, DCONLY, IGNORADD, MULDNAS, NUIOPT, OCTETONLY, PHFMT, PKTNEG, PMTCALL, PTNEG, RECVDIAG, SRVTST, THROT, THROTALRM, TOCTETALGN, TRANSDIAG, or WDWNEGH, datafill this refinement.
	CALLCOLL	EXT, NET, or	CALLCOLL
		BOTH	If the entry in subfield LAPBSEL is CALLCOLL, datafill this refinement.
	CLLDDSE	0 to 63	CLLDDSE
			If the entry in subfield LAPBSEL is CLLDDSE, datafill this refinement.
	CLLGDSE	0 to 63	CLLGDSE
			If the entry in subfield LAPBSEL is CLLGDSE, datafill this refinement.
	CLLDSRV	0 to 63	CLLDSRV
			If the entry in subfield LAPBSEL is CLLDSRV, datafill this refinement.
	CLLGSRV	0 to 63	CLLGSRV
			If the entry in subfield LAPBSEL is CLLGSRV, datafill this refinement.
	CLRTMR	1 to 62	CLRTMR
			If the entry in subfield LAPBSEL is CLRTMR, datafill this refinement.
	CRCERR	1 to 14	CRCERR
			If the entry in subfield LAPBSEL is CRCERRD, CRCERRO, or CRCERROS, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	ENTTHROT	1 to 255	ENTTHROT
			If the entry in subfield LAPBSEL is ENTRTHROT, datafill this refinement.
	EXTTHROT	1 to 255	EXTTHROT
			If the entry in subfield LAPBSEL is EXITTHROT, datafill this refinement.
	FRMQ	1 to 255	FRMQ
			If the entry in subfield LAPBSEL is FRMQD, FRMQO, or FRMQOOS, datafill this refinement.
	FRMWDWK	1 to 127	FRMWDWK
			If the entry in subfield LAPBSEL is FRMWDWK, datafill this refinement.
	IDLETMR	1 to 62	IDLETMR
			If the entry in subfield LAPBSEL is IDLETMR, datafill this refinement.
	IDLPBT3	0 to 655	IDLPBT3
			If the entry in subfield LAPBSEL is IDLPBT3, datafill this refinement.
	IP	1 to 255	IP
			If the entry in subfield LAPBSEL is IPD, IPO, or IPOOS, datafill this refinement.
	IPTMO	0 to 655	IPTMO
			If the entry in subfield LAPBSEL is IPTMO, datafill this refinement.
	LCERR	1 to 14	LCERR
			If the entry in subfield LAPBSEL is LCERRD, LCERRO, or LCERROOS, datafill this refinement.

Field descriptions for conditional datafill (Sheet 5 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	LCNBASE	1 to 1024	LCNBASE
			If the entry in subfield LAPBSEL is LCNBASE, datafill this refinement.
	LCNORD	A or D	LCNORD
			If the entry in subfield LAPBSEL is LCNORD, datafill this refinement.
	LNKALRM	MINORorMAJ OR	LNKALARM
			If the entry in subfield LAPBSEL is LNKALARM, datafill this refinement.
	LNKPROC	LAPB_DCE or	LNKPROC
		LAPBE_DCE	If the entry in subfield LAPBSEL is LNKPROC, datafill this refinement.
	LRCERR	1 to 255	LRCERR
			If the entry in subfield LAPBSEL is LRCERRD, LRCERRO, or LRCERROOS, datafill this refinement.
	MAXSTC	1 to 15	MAXSTC
			If the entry in subfield LAPBSEL is MAXSTC, datafill this refinement.
	NATLTRF	1 to 255	NATLTRF
			If the entry in subfield LAPBSEL is NATLTRF, datafill this refinement.
	NOLBUF	1 to 14	NOLBUF
			If the entry in subfield LAPBSEL is NOLBUFD, NOLBUFO, or NOLBUFOOS, datafill this refinement.
	NORMDLY	0 to 10000	NORMDLY
			If the entry in subfield LAPBSEL is NORMDLY, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	NUIDGRD	1 to 255	NUIDGRD
			If the entry in subfield LAPBSEL is NUIDGRD, datafill this refinement.
	NUIOOS	1 to 255	NUIOOS
			If the entry in subfield LAPBSEL is NUIOOS, datafill this refinement.
	NUMIVC	0 to 1024	NUMIVC
			If the entry in subfield LAPBSEL is NUMIVC, datafill this refinement.
	NUMLCN	1 to 1024	NUMLCN
			If the entry in subfield LAPBSEL is NUMLCN, datafill this refinement.
	NUMOVC	0 to 1024	NUMOVC
			If the entry in subfield LAPBSEL is NUMOVC, datafill this refinement.
	NUMPVC	0 to 1024	NUMPVC
			If the entry in subfield LAPBSEL is NUMPVC, datafill this refinement.
	OVERUN	1 to 14	OVERUN
			If the entry in subfield LAPBSEL is OVERUND, OVERUNO, or OVERUNOOS, datafill this refinement.
	PRERR	1 to 14	PRERR
			If the entry in subfield LAPBSEL is PRERRD, PRERRO, or PRERROOS, datafill this refinement.
	PRIODLY	0 to 10000	PRIODLY
			If the entry in subfield LAPBSEL is PRIODLY, datafill this refinement.

Field descriptions for conditional datafill (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	RESETTMR	1 to 62	RESETTMR
			If the entry in refinement LAPBSEL is RESETTMR, datafill this refinement.
	RESPDTMR	0 to 10	RESPDTMR
			If the entry in refinement LAPBSEL is RESPDTMR, datafill this refinement.
	RESPT1	1 to 655	RESPT1
			If the entry in refinement LAPBSEL is RESPT1, datafill this refinement.
	RESPTMR2	1 to 62	RESPTMR2
			If the entry in refinement LAPBSEL is RESPTMR2, datafill this refinement.
	RETRAN	1 to 14	RETRAN
			If the entry in refinement LAPBSEL is RETRAN, datafill this refinement.
	RETRYN2	1 to 15	RETRYN2
			If the entry in refinement LAPBSEL is RETRYN2, datafill this refinement.
	TRFCLASS	RC, NF, or NO	TRFCLASS
			If the entry in refinement LAPBSEL is TRFCLASS, datafill this refinement.
	UNDRUN	1 to 14	UNDRUN
			If the entry in subfield LAPBSEL is UNDRUND, UNDRUNO, or UNDRUNOOS, datafill this refinement.
	WDWCEIL	1 to 7	WDWCEIL
			If the entry in refinement LAPBSEL is WDWCEIL, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 8 of 9)

Field descriptions for conditional datafill (Sheet 9 of 9)
Subfield or

Field	Subfield or refinement	Entry	Explanation and action	
	WDWCLNEG	S or D	WDWCLNEG	
			If the entry in refinement LAPBSEL is WDWCLNEG, datafill this refinement.	
	X25TYP DTE, X4D,		, ,	X25TYP
		X80, X84, or XPL	If the entry in refinement LAPBSEL is X25TYP, datafill this refinement.	

#### SERVPARM = LAPD

If the entry in subfield SERVPARM is LAPD, datafill refinement LAPDSEL as described below.

#### Field descriptions for conditional datafill (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	LAPDSEL	BADFRMD BADFRMO BADFRMO-O S CALLCOLL CCFMT CHKLRC CLLDDSE CLLDSRV CLLGDSE CLLGSRVCL BTMR	Link access procedure on the D-channel selectors Enter up to 65 LAPD selectors and datafill the appropriate refinements.
		CPSIGS CRQTMR CTARIF DBITDCONL Y FRMQD FRMQOOS FRMQOOS FRMWDWK IDLETMR IDLPBT203 IGNORADD LCNBASE	

Field	Subfield or refinement	Entry	Explanation and action
		LCNORD LNKALARM LRCERRD LRCERRO URCERRO-O SMAXSTC MSGRELS MULTDNAS NATLTRF NORMDLY NUIDGRD NUIOSS NUIOPT NUMIVC NUMLCN NUMOVC NUMPVC OCTETALGN	
	LAPDSEL (continued)	PHFMT PKTNEG PMTCALL PRERRD PRERRO PRERROOS PRIODLYRE SETTMR RESPDTMR RESPT200 RESPTMR RESTRT-TM R RETRAND RETRANO RETRANO-O S RETRYN2SR VTST TPTNEG TRANSDIAG TRFCLASS WDWCEIL WDWCLNEG WDWNEG X25TYP	

#### Field descriptions for conditional datafill (Sheet 2 of 6)

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Field	Subfield or refinement	Entry	Explanation and action
	BADFRM	1 to 14	BADFRM
			If the entry in subfield LAPDSEL is BADFRMD, BADFRMO, or BADFRMOOS, datafill this refinement.
	BOOLPARM	Y or N	Boolean parameter
			If the entry in subfield LAPDSEL is CCFMT, CHKLRC, CPSIGS, CTARIF, DBIT, DCONLY, IGNORADD, MULDNAS, NUIOPT, OCTETALGN, PHFMT, PKTNEG, G, RECVDIAG, SRVTST, TRANSDIAG, or WDWNEG, datafill this refinement.
	CALLCOLL	EXT, NET, or	CALLCOLL
		BOTH	If the entry in subfield LAPDSEL is CALLCOLL, datafill this refinement.
	CLLDDSE	0 to 63	CLLDDSE
			If the entry in subfield LAPDSEL is CLLDDSE, datafill this refinement.
	CLLGDSE	0 to 63	CLLGDSE
			If the entry in subfield LAPDSEL is CLLGDSE, datafill this refinement.
	CLLDSRV	0 to 63	CLLDSRV
			If the entry in subfield LAPDSEL is CLLDSRV, datafill this refinement.
	CLLGSRV	0 to 63	CLLGSRV
			If the entry in subfield LAPDSEL is CLLGSRV, datafill this refinement.
	CLRTMR	1 to 62	CLRTMR
			If the entry in subfield LAPDSEL is CLRTMR, datafill this refinement.

Field descriptions for conditional datafill (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	FRMQ	1 to 255	FRMQ
			If the entry in subfield LAPDSEL is FRMQD, FRMQO, or FRMQOOS, datafill this refinement.
	FRMWDWK	1 to 127	FRMWDWK
			If the entry in subfield LAPDSEL is FRMWDWK, datafill this refinement.
	IDLETMR	1 to 62	IDLETMR
			If the entry in subfield LAPDSEL is IDLETMR, datafill this refinement.
	IDLPBT203	0 to 655	IDLPBT203
			If the entry in subfield LAPDSEL is IDLPBT203, datafill this refinement.
	LCNBASE	1 to 1024	LCNBASE
			If the entry in subfield LAPDSEL is LCNBASE, datafill this refinement.
	LCNORD	A or D	LCNORD
			If the entry in subfield LAPDSEL is LCNORD, datafill this refinement.
	LNKALRM	MINOR or	Link alarm
		MAJOR	If the entry in subfield LAPDSEL is LNKALARM, datafill this refinement.
	LRCERR	1 to 255	LRCERR
			If the entry in subfield LAPDSEL is LRCERRD, LRCERRO, or LRCERROOS, datafill this refinement.
	MAXSTC	1 to 15	MAXSTC
			If the entry in subfield LAPDSEL is MAXSTC, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	NATLTRF	1 to 255	NATLTRF
			If the entry in subfield LAPDSEL is NATLTRF, datafill this refinement.
	NORMDLY	0 to 10000	NORMDLY
			If the entry in subfield LAPDSEL is NORMDLY, datafill this refinement.
	NUIDGRD	1 to 255	NUIDGRD
			If the entry in subfield LAPDSEL is NUIDGRD, datafill this refinement.
	NUIOOS	1 to 255	NUIOOS
			If the entry in subfield LAPDSEL is NUIOOS, datafill this refinement.
	NUMIVC	0 to 1024	NUMIVC
			If the entry in subfield LAPDSEL is NUMIVC, datafill this refinement.
	NUMLCN	1 to 1024	NUMLCN
			If the entry in subfield LAPDSEL is NUMLCN, datafill this refinement.
	NUMOVC	0 to 1024	NUMOVC
			If the entry in subfield LAPDSEL is NUMOVC, datafill this refinement.
	NUMPVC	0 to 1024	NUMPVC
			If the entry in subfield LAPDSEL is NUMPVC, datafill this refinement.
	PRERR	1 to 14	PRERR
			If the entry in subfield LAPDSEL is PRERRD, PRERRO, or PRERROOS, datafill this refinement.
	PRIODLY	0 to 10000	PRIODLY
			If the entry in subfield LAPDSEL is PRIODLY, datafill this refinement.

Field descriptions for conditional datafill (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	RESETTMR	1 to 62	RESETTMR
			If the entry in refinement LAPDSEL is RESETTMR, datafill this refinement.
	RESPDTMR	0 to 10	RESPDTMR
			If the entry in refinement LAPDSEL is RESPDTMR, datafill this refinement.
	RESPT200	1 to 655	RESPT200
			If the entry in refinement LAPDSEL is RESPT200, datafill this refinement.
	RETRAN	1 to 14	RETRAN
			If the entry in refinement LAPDSEL is RETRAND, RETRANO, or RETRANOOS, datafill this refinement.
	RETRYN200	1 to 15	RETRYN200
			If the entry in refinement LAPDSEL is RETRYN200, datafill this refinement.
	TRFCLASS	RC, NF, or	TRFCLASS
		NO	If the entry in refinement LAPDSEL is TRFCLASS, datafill this refinement.
	WDWCEIL	1 to 7	WDWCEIL
			If the entry in refinement LAPDSEL is WDWCEIL, datafill this refinement.
	WDWCLNEG	S or D	WDWCLNEG
			If the entry in refinement LAPDSEL is WDWCLNEG, datafill this refinement.
	X25TYP	DTE, X4D,	X25TYP
		X80, X84, or XPL	If the entry in refinement LAPDSEL is X25TYP, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 6 of 6)

#### SERVPARM = PVC

If the entry in subfield SERVPARM is PVC, datafill refinements ORIGDNA, ORIGLCN, RESPDNA, RESPLCN, and PVCPARMS as described below.

Field descriptions for conditional datafil	(Sheet 1 of 2)
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Field	Subfield or refinement	Entry	Explanation and action
	ORIGDNA	0 to 9	Originating data network address
			Up to 15 multiples can be datafilled.
	ORIGLCN	1 to 1024	Originating LCN
			Enter the originating LCN.
	RESPDNA	0 to 9	Responding data network address
			Up to 15 multiples can be datafilled.
	RESPLCN	1 to 1024	Responding LCN
			Enter the RESPLCN.
	PVCPARMS	see subfield	PVC parameters
			This field consists of subfield PVCSEL.
	PVCSEL	MRECVPKT	PVC selector
		MRECVTPT MRECVWFW MSENDPKT MSENDTPT MSENDWDW ORIOGNPI PRIORITY RESPNPI SSENDPKT	Enter the PVCSEL.
	BOOLPARM	Y or N	Boolean parameters
			If the entry in subfield PVCSEL is SSENDPKT, datafill this refinement.
	PKTSZ	16, 32, 64,	PKTSZ
		128, 256, 512	If the entry in subfield PVCSEL is MRECVPKT or MSENDPKT, datafill this refinement.

Field	Subfield or refinement	Entry	Explanation and action
	MRECVTPT	3 to 13	MRECVTPT
			If the entry in subfield PVCSEL is MRECVTPT, datafill this refinement.
	MRECVWDW	1 to 7	MRECVWDW
			If the entry in subfield PVCSEL is MRECVWDW, datafill this refinement.
	MSENDTPT	3 to 13	MSENDTPT
			If the entry in subfield PVCSEL is MSENDTPT, datafill this refinement.
	MSENDWDW	1 to 7	MSENDWDW
			If the entry in subfield PVCSEL is MSENDWDW, datafill this refinement.
	NPI	E164 or X121	NPI
			If the entry in subfield PVCSEL is ORIGNPI or RESPNPI, datafill this refinement.
	PRIORITY	HIGH or	PRIORITY
		NORMAL	If the entry in subfield PVCSEL is PRIORITY, datafill this refinement.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

# **Datafill example**

The following example shows sample datafill for table PHINFO.

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# PHINFO (end)

MAP display example for table PHINFO

```
PHKEY CONNTYPE STATUS PHSRC

PHPRMVAR

ISDN 10 0 ATT SEND 0

LAPB (RETRYN2 10) (X25TYP X84) (NUMPVC 10) $

ISDN 20 1 ATT SEND 0

CUG 20 200 012345678 (INCCALLS Y) $
```

#### Table name

Packet Handler Inventory Table

## **Functional description**

Table PHINV provides the means to datafill the configuration of ISDN packet handler (PH) nodes (PHN). The PHNs are maintained at the PH maintenance and administration position (MAP) levels.

The PH consists of one or more access modules (AM) and resource modules (RM) connected to the DMS by DS 1 links through one or more digital interworking units (DIU).

AMs and RMs consist of a duplicated common bus, two independent common memories, and a number of processing elements (PE) connected to the common bus. Each PE can have one or more peripheral interface (PI) cards associated with it.

A PH node refers to an AM, RM, or combined AM and RM (ARM). A PH component refers to a PE, PI, or port.

Single-shelf ARM can be configured with PE and PI cards in slots 1 through 14. Dual-shelf ARM can also have PE and PI cards in slots 17 to 30 in addition to 1 through 14. In all maintenance directives, PEs and PIs are identified by their slot number.

Each tuple in table PHINV represents one AM, RM, or ARM. For each AM, RM and ARM, table PHINV identifies the physical location of the hardware plus the configuration of PEs and PIs.

Only link access procedure balanced (LAPB) or link access procedure on the D-channel (LAPD) PEs can be configured through table PHINV. Other PEs can be datafilled, but the information is not downloaded to the PH. The Network Administration System (NAS) must be used to configure non-LAPB or non-LAPD PEs.

### **Datafill sequence and implications**

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

### Table size

0 to 20 tuples

Table size is dynamically determined by the number of AMs, RMs, and ARMs datafilled. If an existing tuple is changed or deleted, the PH node must first be

offlined by means of the PH MAP (maintenance and administration position) CI (command interpreter) command, OFFLN.

## Datafill

The following table lists datafill for table PHINV.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PHNODE		0 to 19	Packet handler node
			Enter the packet handler (PH) node number. The PH node number is the key to the table.
MNEMONIC		alphabetic (1 to	Packet handler node mnemonic
		12 characters)	Enter the customer specified PH node mnemonic that uniquely identifies this PH node.
NODETYPE		AM, ARM, or	Node type
		RM,	Enter the node type: AM (access module), ARM (combined AM and RM), or RM (resource module).
SHELF1		1 to 3	Shelf position
			Enter the position of AM, ARM, or RM shelf in the PH bay for the first shelf.
FRAME1		0 to 511	Frame number
			Enter the frame number of the first shelf where AM, ARM, or RM are mounted.
SHELF2		0 to 3	Shelf position
			Enter the position of the AM, ARM, or RM shelf in the PH bay for the second shelf. An entry of 0 (zero) datafilled in this field means that the node is single shelf.
FRAME2		0 to 511	Frame number
			Enter the frame number of the second shelf where AM, ARM, and RM are mounted.

	Subfield or		
Field	refinement	Entry	Explanation and action
FLOOR		0 to 99	Floor location
			Enter the floor location of PH bay.
ROW		A to Z,	Row location
		AA to ZZ, except I, II,	Enter the row location of PH bay.
		O, OO	
PECONFIG	see subfields		Peripheral equipment configuration
			This field is a vector of up to 30 peripheral equipments (PE) and consists of subfields PENUMBER, PETYPE, and PILIST. Separate each subfield with a single space. The PE configuration lists the PEs for the AM, RM, and ARM. If less than 30 PEs are required, end the list with a \$ (dollar sign).
	PENUMBER	1 to 14,	Peripheral equipment number
		17 to 30	Enter the slot of the PE.
			Slots 15 and 16 are not valid entries for this field.
	PETYPE	LAPB	Peripheral equipment type
		LAPD	Enter the type of the PE.
		LINK	
		MASTER NETWORK SERVER TRUNK	
		X75	

#### Field descriptions (Sheet 2 of 3)

<b>Field descriptions</b>	(Sheet 3 of 3)
---------------------------	----------------

Field	Subfield or refinement	Entry	Explanation and	action
	PILIST	DMA1	Peripheral interfac	ce list
		DS30,		ate number for the PE
		V24_4P V24_8P V35_8P	type. Up to five PH peripiheral interface (F types can be configured for a PE dependir on the type of PE as shown below. If less than five PH PI types are required, end th	
		or	list with a \$ (dollar	
		V35SCSI		
			PETYPE	Number of PIs
			LAPB	0 to 2
			LAPD	1
			LINK	0 to 5
			MASTER	0 to 1
			NETWORK	0 to 5
			SERVER	0
			TRUNK	0 to 5
			X75	0 to 5
			For LAPB and LAF PI types are allow	PD PEs only the following ed:
			• V24_4P	
			• V24_8P	
			• V35_8P	
			For MASTER PEs is allowed:	only the following PI type
			V35SCSI	

# Datafill example

The following example shows sample datafill for table PHINV.

# PHINV (end)

#### MAP display example for table PHINV

```
PHNODE MNEMONIC NODETYPE SHELF1 FRAME1 SHELF2 FRAME2
FLOOR ROW PECONFIG
0 A47 AM 2 6 3 6 1
(1 LAPB (V35SCSI) (V35_8P) $)
(2 LAPD ( V35_8P) $)
(3 SERVER $) $
```

### PICNAME

#### Table name

Primary Inter-LATA Carrier Name Table

### **Functional description**

Table PICNAME lists the names of all of the carriers serving the DMS.

The first three tuples of table PICNAME are added at initial program load (IPL) time. The first entry is reserved for system use and is identified internally with tuple NODATA. The second tuple in table PICNAME is NOCAR. If this tuple is used in table DNPIC, a subscriber is served but has not chosen a primary carrier. The third tuple in table PICNAME is NILCAR. If this tuple is used in table DNPIC, a nil carrier is assigned and no presubscribed dialing is allowed.

### **Datafill sequence and implications**

Table OCCNAME must be datafilled before table PICNAME.

#### Table size

0 to 1000 tuples

Table PICNAME requires less than 1 kbyte of data store.

### Datafill

The following table lists datafill for table PICNAME.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PICNAME		alphanumeric (up to 16 characters)	<i>Carrier namey</i> This field contains the valid primary inter-LATA (local access and transport area) carriers found in table OCCNAME. This is the key field.
			Carrier names NOCAR and NILCAR appear in table PICNAME if feature package NTX710AA (LATA Equal Access System) is present. These two carrier names have no corresponding definition in table OCCNAME.

### **Datafill example**

The following example shows sample datafill for table PICNAME.

### PICNAME (end)

#### MAP display example for table PICNAME

PICNAME		
		_
NODATA		
NOCAR		
NILCAR		
CARR3		
CARR1		
CARR2		

# Table history

TOPS10

The table size is increased to 1000 tuples by feature AF7376 in functionality PICNAME Expansion, OSB00001.

### PILOTGRP

#### Table name

Pilot Groups Table

### **Functional description**

Table PILOTGRP (Pilot Groups) lists the non-pilot member directory numbers (NPMDN) for all Simultaneous Ringing (SimRing) groups defined on the switch.

*Note:* The operating company cannot use the table editor to add tuples to or delete tuples from table PILOTGRP. The operating company must use the Service Order System (SERVORD) to perform these operations. The operating company can use either the table editor or the SimRing user interface to modify existing tuples in table PILOTGRP.

The switch blocks simultaneous access to the same SimRing group by different users through SERVORD, the table editor, or the SimRing user interface. An error message warns the user that the SimRing group information is locked.

### **Datafill sequence and implications**

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

#### Table size

10 000 tuples

#### Datafill

The following table lists datafill for table PILOTGRP.

#### **Field descriptions**

Field	Subfield	Entry	Explanation and action
GRPKEY		0 to 9999	Group key. SERVORD creates a tuple in table PILOTGRP during provisioning of the SIMRING line option. The SIMRING line option uses the associated GRPKEY index for subsequent references.
MEMBERS		Up to 4 members, each ranging from 4 to 30 digits	List of NPMDNs. This field stores the list of all the NPMDNs of the SimRing group defined by this tuple. The list can contain up to 4 members.

## **Datafill example**

The following example shows sample datafill for table PILOTGRP.

#### MAP display example for table PILOTGRP

GRPKEY	MEMBERS
1	6136216076 2558 7236055 \$
2	8196246082 \$
4	6137217146 8197217164 96211234 \$

# Table history

#### NA010

The RES Simultaneous Ringing feature created table PILOTGRP.

# Supplementary information

The following table lists SimRing table control error and information messages for table PILOTGRP.

#### SimRing table control error and information messages (Sheet 1 of 2)

Message	Туре	Explanation
SIMRING FEATURE STATE IS NOW INACTIVE	Information	This message warns the operating company that the SimRing feature state will change to inactive.
		This message displays when the operating company does any of the following:
		<ul> <li>uses the EST command without entering any members and tries to change the SimRing feature state</li> </ul>
		<ul> <li>deletes the last NPMDN from the NPMDN list</li> </ul>
		<ul> <li>sets the SimRing feature state to active when the NPMDN list is empty</li> </ul>
MEMBER LIST IS CURRENTLY BEING EDITED BY ANOTHER USER	Error	This message warns the user that the SimRing group information is locked. This message displays when another user is already editing the SimRing group member list.

# PILOTGRP (end)

Message	Туре	Explanation
DUPLICATE MEMBER DNs	Error	This message displays when the operating company tries to add identical NPMDNs using the EST, ADD, or DEL command.
MEMBER DN MUST BE AT LEAST 4 DIGITS	Error	This message displays when the operating company tries to add an NPMDN with fewer than 4 digits.
		<i>Note:</i> If the NPMDN contains more than 30 digits, SERVORD displays a type mismatch message.
UNSUPPORTED LCC. MEMBER DN:NPANXXXXX	Error	This message displays when the operating company tries to add a member that the SimRing feature does not support. "NPANXXXXX" indicates the 10-digit DN of the unsupported member.
INVALID DIGITS ENTERED	Error	This message displays when the operating company enters invalid digits for the SimRing member or PIN. This error can occur during use of the ADO, CHF, EST, ADD, or DEL command. This error can also occur during use of the table editor.

### SimRing table control error and information messages (Sheet 2 of 2)

# PINDATA

### Table name

Personal Identification Number Data

# **Functional description**

Table PINDATA develops a database to support multiple two-digit and three-digit validated personal identification numbers (PIN) for each authorization code (authcode). The database supports 4096 lists of two-digit PINs (maximum of 100 for each list) and 4096 lists of three-digit PINs (maximum of 1000 for each list).

### **Datafill sequence and implications**

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

### Table size

0 to 8192 tuples

### Datafill

The following table lists datafill for table PINDATA.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key
			This field consists of subfields MPIDX and PINDIGS.

## **PINDATA** (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MPIDX	0000 to	Personal identification number index
		8191(2 or 4 digits)	Enter the personal identification number (PIN) index. Each index can be associated with 100 PINs or 1000 PINs depending on its index value.
			Indices 0 (zero) to 4095 are allocated for two-digit PINs, and indices 4096 to 8191 are allocated for three-digit PINs.
	PINDIGS	2 or 3 digits	Personal identification number digits
		(program-me d) vector of up to 3 digits 0 to 9, N, B, C, D, E, F (reserved)	Enter the PIN.

# **Datafill example**

The following example shows sample datafill for table PINDATA.

#### MAP display example for table PINDATA

KE	Y		
555	53 758	8	
			/

# **PKTVPROF**

#### Table name

Packetized voice profiles

## **Functional description**

This table defines packetized voice profiles and is indexed from table TQCQINFO, field PKTVPROF.

#### **Datafill sequence and implications**

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

A tuple cannot be deleted if there is an associated index in table TQCQINFO, field PKTVPROF.

### Table size

0 to 64 tuples

### Datafill

The following table lists datafill for table PKTVPROF.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PROFNUM		0 to 63	Profile number. This field is the index into the table and is accessed by table TQCQINFO, field PKTVPROF.
PKTVFLDS		see subfield	Packetized voice fields. This field consists of subfield CODEC.

### **PKTVPROF** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CODEC	G711 or G729	Code C. The field indicates the voice CODEC for the call queue. The values are as follows:.
			<ul> <li>G711 - Enter this value for IP or non-IP communication.</li> </ul>
			G729 - Enter this value for IP only communication and datafill refinement SILEN
	SILEN	NOSILSUP or SILSUP	Silence suppression. This subfield appears only when CODEC = G729. This subfield determines if silence suppression is enabled. Silence suppression discontinues the codec output if it detects parts of a signal where there is no speech. The values are as follows:.
			<ul> <li>SILSUP - Silence suppression. This is achieved using the G.729AB voice codec (G.729A protocol with silence suppression per G.729 Annex B).</li> </ul>
			• NOSILSUP - No silence suppression. This is achieved using the G.729A voice codec (G.729A protocol with no silence suppression).

# Datafill example

The figure that follows shows sample datafill for table TQCQINFO.

#### MAP display example for table PKTVPROF

PROFNUM	PKTVFLDS		
0	G711		
1	G729	NOSILSUP	
2	G729	SILSUP	

The above example shows default tuples 0 and 1.

# PKTVPROF (end)

## Table history TOPS15

This table is created by feature 59022288 in functionality OPP Over IP, OSB00101.

# PLATAB

#### Table name

Physical Link Adapter (PLATAB) Table

# **Functional description**

Table PLATAB preserves the relationship between integrated link maintenance (ILM) physical link adapter (PLA) links and pairs of access identifiers over BCS applications.

Direct access to the table has limits. The customer has read-only access. Data entry in a device that requires ILM supported resources, or as part of a restore operation on the N + 1 BCS as part of a BCS application allows indirect access.

## Datafill sequence and meaning

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

#### Table size

From 0 to 2048 tuples. The number of tuples dynamically determines table size.

# Datafill

Datafill for table PLATAB appears in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PLAID		see subfields	<i>Physical link adapter identifier</i> . This tuple is a unique identifier that ILM uses to identify a physical link that uses the PLA. The physical link connects a pair of access identifiers.
			An access identifier refines the concept of access key and access index more. An access identifier specifies a particular channel on an access. The PLAID field is multiple with two parts: EPT_KEY and INDEX.
	EPT_KEY	0 to 255	<i>Physical link adapter endpoint key.</i> This subfield contains a unique identifier that ILM uses. The unique identifier identifies a pair of access keys that connect by ILM transport resources using PLA.

# PLATAB (continued)

Field	Subfield or refinement	Entry	Explanation and action
	INDEX	0 to 127	<i>Physical link adapter endpoint index.</i> If more than one PLA physical link is present between two access keys, the PLA endpoint index can differentiate between the links.
ACID1		see subfields	Access identifier one. The first of a pair of access identifiers between which the physical link runs. This tuple is a multiple with three parts: KEY, INDEX, and CHANNEL
	KEY	0 to 1023	Access key. The access key part of the access identifier.
	INDEX	0 to 1023	Access index. The access index part of the access identifier.
	CHANNEL	0 to 1023	Access channel. The access channel part of the access identifier.
ACID2		see subfields	Access identifier two. The second of a pair of access identifiers between which the physical link runs. This tuple is a multiple with three parts: KEY, INDEX, and CHANNEL
	KEY	0 to 1023	Access key. The access key part of the access identifier.
	INDEX	0 to 1023	Access index. The access index part of the access identifier.
	CHANNEL	0 to 1023	Access channel. The access channel part of the access identifier.

#### Field descriptions (Sheet 2 of 2)

# **Datafill example**

Sample datafill for table PLATAB appears in the following example.

# PLATAB (end)

#### MAP example for table PLATAB

PLAID	ACID1	ACID2	 	
0 0 1 0	$\begin{array}{ccc} 0 & 0 & 0 \\ 1 & 0 & 0 \end{array}$	1 0 0 2 0 0		
1 1	1 1 0	2 1 0		

## **Table history**

#### BCS26

Table PLATAB was introduced.

#### **Additional information**

You must restore table PLATAB before you restore any of the inventory tables of the devices that require ILM resources. These tables are APINV, LIMINV, LIUINV, and NIUINV. This table must immediately follow table AKEYTAB.

# PMEXCEPT

#### Table name

Peripheral Modules Excepted Table

# **Functional description**

Table PMEXCEPT contains peripheral modules (PM) that the PMTYP operational measurements (OM) group PMTYP does not contain. With this table, the operating company can exclude PM types from the subtotal for each PM type in OM group PMTYP. The operating company can exclude PMs that are in commissioning or under test. This condition does not affect the OM counts of the subgroup total fields.

### **Datafill sequence and meaning**

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

### Table size

0 to 4095 tuples

The system statically allocates memory for this table for a maximum of 4096 entries at loadbuild time. The 4096 entries represent 256 words of protected store.

# Datafill

Datafill for table PMEXCEPT appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NODE		0 to 4095	<i>Node</i> Enter the node number of the peripheral module. The OM group PMTYP does not include the OM counts of this peripheral module.

### **Datafill example**

Sample datafill for table PMEXCEPT appears in the following example.

### PMEXCEPT (end)

#### MAP example for table PMEXCEPT

#### Querying node numbers

You can determine the node number of the PM to exclude from PMTYP registers. To perform this action, use command OMSHOW at the MAPCI level of the MAP terminal. Another method to determine this node number is to use command QUERYPM at the PM level of the MAP terminal.

If the operating company has the command OMSHOW, the node number appears before the PM name in the information field. To determine the node number, obtain the device name (DEVNAME) in the information field. When you have this name, enter the DEVNAME in single quotation marks. This condition determines the node number. The letters inside the single quotation marks must be in upper case. An example of this condition follows:

```
OMSHOW PM ACTIVE `DTC 7'
```

If the operating company has the command QUERYPM, use the PM-level command POST. Use this command to identify the PM on which the other PM-level commands can execute. Issue the command QUERYPM. The node number appears in the MAP display after the heading NODE\_NO.

#### Table name

Peripheral Module Loads Table

### **Functional description**

Feature AL0131 (PM Autoloading—Phase II) provides a general autoload capability for the peripheral module (PM) loader. Extended multiprocessor system (XMS)-based PM (XPM) maintenance uses this capability to provide automatic reloads of XPMs that require a new load.

The application of dual-plane loading occurs for first-level XPMs. This condition reduces the load time of first-level XPMs.

The following node types provide PM autoload:

- line trunk controller (LTC)
- remote cluster controller (RCC)
- message switch and buffer (MSB)
- emergency stand-alone (ESA)

The system reloads LTC or RCC PM types that have a load with faults. Operating company personnel do not have to interrupt when the system reloads these LTC or RCC PM types. This condition reduces recovery time.

Table PMLOADS stores the device location of every PM load file. This table stores mapping between the load names and devices on which the loads exist. This condition permits autoload to locate load files without the interruption of operating company personnel.

*Note:* The system does not activate autoloading for tape devices. The storage of PM loads must occur on a disk device. The system does not check the tuples the user enters during first entry of data. Every other add operation checks that the device and files are present.

#### Office alarms

Use of the autoload option only occurs if a disk contains the load files. If the system does not locate a PM load on the disk, the system raises a minor alarm. This condition occurs because the magnetic tape center cannot recover the PMs that require reloads. The magnetic tape center cannot recover these PMs because the system cannot locate the load file.

#### **PMLOADS** (continued)

A minor alarm also occurs after PMLOADS locates invalid datafill for table ESRVATTR. The invalid ESRVATTR datafill appears before it can cause an outage.

## **Datafill sequence and meaning**

The user must enter data in the following tables after table PMLOADS.

- LTCINV
- RCCINV
- XESAINV
- MSBINV

An exception to this condition occurs during the following events:

- first data entry
- dump and restore

In these events, the system adds tuples to table PMLOADS when the addition of tuples occurs in tables LTCINV and RCCINV.

During first data entry and dump and restore, the system enters data in table PMLOADS with a dummy entry. This condition occurs if the load name is not in the table. When this condition applies to a switch, the dummy entry must include the storage device for the PM load files.

Remove every use of a load name from every PM inventory table before you can remove the load name from table PMLOADS.

## Table size

0 to 255 tuples

# Datafill

The datafill for table PMLOADS appears in the following table.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
load name		alphanumeric	PM loadfile name
		(a maximum of 32 characters)	Enter the PM load file name. The load file name in this field must be the same as the load file name specified in the inventory tables.
ACTFILE		alphanumeric	Active PM loadfile name
		(a maximum of 32	Enter the active PM load file name.
		characters)	<i>Note:</i> The active load file can be the original load file or a patched load file.
ACTVOL		alphanumeric	Active loadfile storage device
		(a maximum of 16 characters)	Specify the device that stores the active load file. The range is the set of disk drive unit (DDU) volumes and system load module (SLM) disks available to the computing module (CM).
BKPFILE		alphanumeric	Backup PM loadfile name
		(a maximum of 32	Enter the backup load file name.
		characters)	<i>Note:</i> In BCS36, the PM load file name is the shipped load file. The PM load file must be the same name as the name specified in field load name.

# PMLOADS (continued)

Field description	ons (Sheet 2 of 2)
-------------------	--------------------

Field	Subfield or refinement	Entry	Explanation and action
BKPVOL		alphanumeric (a maximum of 16 characters)	Backup loadfile storage device
			Specify the device that stores the backup load file. The range is the set of disk drive unit (DDU) volumes and system load module (SLM) disks available to the computing module (CM).
UPDACT		Y or N	Automatic loadfile name update
			Enter Y (yes) to update field ACTFILE automatically with the patched load file name. If you do not require an automatic update of field ACTFILE, enter N (no).
			The default value for this field is Y.
			<i>Note:</i> This field controls the ability of the load file to receive load file patching.

The modified table PMLOADS stores data for the following:

- the names of the active load file name
- the backup load file name
- the file locations
- an update active load file to indicate if the user wants to activate load file patching

# **Datafill example**

Sample datafill for table PMLOADS appears in the following example.

# PMLOADS (end)

MAP example for table PMLOADS

load name UPDACT	ACTFILE	ACTVOL	BKPFILE	BKPVOL	
LTI02C	LTI02C	S01DVOL1	LTI02C	S01DVOL1	
RMM34C N	RMM34C	S00DVOL2	RMM34C	S00DVOL2	
M7CQA01 N	M7CQA01	S00DVOL1	M7CQA01	S00DVOL1	
MPCX33AB N	MPCX33AB	S01DVOL1	MPCX33AB	S01DVOL1	

# Table history

## BCS36

The following improvements were added to table PMLOADS to simplify maintenance and office recovery:

- field DEV was renamed ACTFILE
- fields ACTVOL, BKPFILE, BKPVOL, and UPDACT were added

## **PMNODES**

### Table name

Peripheral Module Nodes Table

# **Functional description**

Table PMNODES contains data that specifies the configuration of the XMS-based peripheral module (XPM) and subtending nodes connected to its P-side. Each tuple contains the type of node, type of PM, number of ports, number of terminals, external node number and other data. Node table data is sent to the XPM by the computing module (CM) during a bulk download of configuration data when the XPM is returned to service, and when nodes are dynamically reconfigured on an in-service XPM.

Table PMNODES is a read-only table that contains data on all nodes resident in each XPM. Data is added to this table automatically as tuples are datafilled in the inventory tables, such as LTCINV (Line Trunk Controller Inventory) and LCMINV (Line Concentrating Module Inventory). Attempts by a user to change the data in this table are rejected.

## **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table PMNODES. However, during a one night process (ONP), table PMNODES must be transferred before any of the following hardware inventory tables:

- LTCINV (Line Trunk Controller Inventory)
- RCCINV (Remote Cluster Controller Inventory)
- LTCRINV (Line Trunk Controller Remote Inventory)
- MSBINV (Message Switch And Buffer Inventory)
- LCMINV (Line Concentrating Module Inventory)
- RMMINV (Remote Maintenance Module Inventory)
- RCUINV (Remote Carrier Urban Inventory)
- RCSINV (Remote Concentrator SLC-96 Inventory)
- RCTINV (Remote Concentrator Terminal Inventory)
- XESAINV (Emergency Stand-alone Inventory)
- IPMLINV (Interperipheral Message Link Inventory)
- DLMINV (Digital Line Module Inventory)
- XPEINV (Extended Peripheral Equipment Inventory)
- IRLNKINV (Interlink Inventory)

## **PMNODES** (continued)

# Table size

The table size is dynamically extended when required. No restart is required to increase the size. The table has a minimum size of 0 tuples and a maximum size of 30 000 tuples. Each XPM can have a maximum of 118 tuples.

# Datafill

The following table lists the datafill for table PMNODES.

Field	Subfield or refinement	Entry	Explanation and action
ТАВКЕҮ		0-4095 0-117	The TABKEY field is the KEY field of the table. It has two parts, they are: the external node number and the internal node number. The external node number refers to the peripheral in which the data resides. The internal node number references the specific tuple in that XPM's node table. The default value for each is 0.
EXTNDNUM		0-4095	This field contains the external node number, that is assigned by the CM for the node residing in that XPM's node table. The default value is 0.
NODETYPE		any valid node type	The node type field identifies the node type of the P-side node entry. The default value is NIL_NODE.
PMTYPE		any valid peripheral type	The peripheral module type field identifies the peripheral module type in the P-side node entry. The default value is NIL_PMTYPE.
LEVEL		0-15	The level field identifies the distance from the CM; for example, a line concentrating module (LCM) designated level 2, the remote cluster controller (RCC) designated level 1, and the line trunk controller (LTC) that is hosting the RCC designated level 0. The default value is 0.
MSGHOST		0-4095	The messaging host field contains the node number of the peripheral responsible for transferring messages to this specific node in the node table. The default value is 0.

**PMNODES field descriptions (Sheet 1 of 3)** 

# **PMNODES** (continued)

Field	Subfield or refinement	Entry	Explanation and action
PHYSHOST		0-4095	The physical host field identifies which node the element directly subtends. For example, the physical host of an LCM is an RCC; however, the LCM is also present in the LTC's node table, which is not its physical host. Although the LCM is not directly connected to the LTC, the LTC has an entry in its node table for the LCM and all other subtending nodes. The default value is 0.
PORTS		0-127	This field indicates the number of ports required by the node. This field may display a number greater than zero even if the node does not reserve ports on the host. The default value is 0.
STPORT		0-255	This field contains the first port in the XPM used by this node. If the node does not reserve any ports on the host, this field is set to zero. The default value is 0.
TERMS		0-4095	This field identifies the number of terminals required by the node. This field always shows a number greater than zero, even if the node does not reserve terminals in the host. The default value is 0.
STTERM		0-8675	The start terminal field shows the starting terminal in the XPM used by the node. If the node does not reserve terminals on the node, then this field displays a zero. The default value is 0.
PROTOCOL		any valid messaging protocol	The protocol field indicates the messaging protocol used between the P-side node and its host. The default value is MNIL (no messaging protocol entry).
MS		M or S	This field indicates the master (M) or slave (S) relationship of the P-side node and its host. The default value is M.
IPML		Y or N	This field indicates whether the entry is an interperipheral message link. The default value is N.

## PMNODES field descriptions (Sheet 2 of 3)

## **PMNODES** (continued)

Field	Subfield or refinement	Entry	Explanation and action
MODE		T or P	This field indicates whether the P-side entry is temporary (T) or permanent (P). The default value is P.
SLLCON		Y or N	This field indicates whether the Site Line Load Control feature is activated. The default value is N.
NT6X28		Y or N	This field indicates whether the XPM has a NT6X28 card datafilled. The default value is N.
LCMLGMEM		Y or N	This field indicates whether the LCM is a large memory LCM. This field should always show N for nodes other than LCM_NODE types. The default value is N.
RSVPORTS		Y or N	This field indicates whether the P-side node reserves ports on the host node. The default value is N.
RSVTERMS		Y or N	This field indicates whether the P-side node reserves terminals on the host node. The default value is N.
MATENODE		Y or N	This field indicates whether the P-side node is a mate node of the host. this field should be Y for dual RCCs. The default value is N.
PACKED		Y or N	This field indicates whether the P-side nodes are compressed. This field is only valid for the host node. The default value is N.
SUPPCDM		Y or N	This field indicates whether each unit of the XPM supports the new node table format. this field consists of a boolean value for each unit of the XPM. The default value is YY.
CMINCTRL		Y or N	This field indicates whether the XPM is using the new node table format. The default value is N.

#### PMNODES field descriptions (Sheet 3 of 3)

# **Datafill example**

The following example shows sample datafill for table PMNODES.

# PMNODES (end)

#### MAP display example for table PMNODES

TABKEYEXTNDNUMNODETYPEPMTYPELEVELMSGHOSTPHYSHOSTPORTSSTPORTTERMSSTTERMPROTOCOLMSIPMLMODESLLCONNT6X28LCMLGMEMRSVPORTSRSVTERMSMATENODEPACKEDSUPPCDMCMINCTRL

22 1	22	LT	C NODE		LTC	! 0	2	2	22 16	6
0	641	1 MD	S30 S	N	P	N	Ν	Ν	Y	
Y	N	Y	YY		N					

## Table history NA005

Table PMNODES was introduced.

# PODPATTR

### Table name

Public Office Dialing Plan Attributes Table

## **Functional description**

Table PODPATTR allows subscription to line attribute indexes for the AIN 0.1 Public Office Dialing Plan 3 to 10 (PODP) trigger. The table provides post query processing for the AIN 0.1 PODP trigger based on the PODP number. This table associates a PODP number with a line attribute index number. Translation (Analyze\_Route response) and normal digit collection (Send\_To\_Resource response), and default routing are based on these line attributes when present. When there is no entry in table PODPATTR for the PODP directory number, the originator's line attributes are used.

Table PODPATTR digit pattern matching is most specific to least specific. Fields PIC and LPIC subscription are mandatory fields for the PODP number. The fields are used when the Analyze\_Route response does not include carrier or trunk group identification.

*Note:* The PODP trigger and the Specific\_Digit\_String (SDS) trigger are one and the same. Datafill for table TRIGITM uses the SDS trigger. Datafill for table TRIGGRP uses the PODP trigger.

#### **PODPATTR in a multi-NPA office**

The SCP can return an Analyze\_Route message that contains the following information:

- The message is a seven-digit subscriber number.
- The subscriber number is in response to a PODP trigger.

### **PODPATTR** (continued)

When the message matches this information, the following characteristics apply:

- The home serving translations schema (HSTS), as defined by the XLAPLAN in table PODPATTR, indexes table HNPACONT.
- For duplicate NXXs, response translations uses the DN or route connected with the NPA of the trigger.
- Trigger criteria checking for subsequent PODP triggers uses the called party digits prefixed with the NPA of the trigger.

## **Datafill sequence and implications**

The following tables must be datafilled before table PODPATTR.

- LINEATTR
- XLAPLAN
- RATEAREA
- OCCNAME
- OCCINFO

## Table size

0 to 8000 tuples

The system dynamically allocates the size of this table size.

# Datafill

The following table lists datafill for table PODPATTR.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		alphanumeric	Key
		(N, 0 to 9, B, C, D, E, or F) (up to 18 digits)	Enter a digit string for the most-specific to least-specific digit pattern matching for the PODP DN.
LINEATTR		alphanumeric	Line attribute
		(1 to 16 characters)	Enter a line attribute index corresponding to a valid entry in field LNATTIDX in table LINEATTR.

## **PODPATTR** (continued)

Field	Subfield or refinement	Entry	Explanation and action
PIC		alphanumeric	Primary inter-LATA carrier
		(1 to 16 characters)	Enter the carrier name or abbreviation for the carrier name corresponding to a valid entry in field OCCNAME in table OCCNAME. This subscribes the PODP DN to a PIC.
			Enter NILC when no carrier is to be selected.
XLAPLAN		alphanumeric	Translation plan index
		(up to 16 characters)	Enter the index into the XLAPLAN table.
RATEAREA		alphanumeric	Rate area index
		(up to 16 characters)	Enter the index into the RATEAREA table.
PIC	alphanumeric(1		Primary inter-LATA carrier
	to 16 characters)		Enter the carrier name or abbreviation for the carrier name corresponding to a valid entry in field OCCNAME in table OCCNAME. This subscribes the PODP DN to a PIC.
			Enter NILC when no carrier is to be selected.
LPIC		alphanumeric	Intra-LATA PIC
	(1 to 16 characters)	•	Enter the carrier name or abbreviation for the carrier name corresponding to a valid entry in field OCCNAME in table OCCNAME. This subscribes the PODP DN to an LPIC.
			Enter NILC for the PODP DN when no carrier is to be selected.

### Field descriptions (Sheet 2 of 2)

# **Datafill example**

The following example shows sample datafill for table PODPATTR.

## PODPATTR (end)

MAP display example for table PODPATTR

KEY	LINEATTR	XLAPLAN	RATEAREA	PIC	LPIC
1	1	613_P621_1	L613_NILLA_1	ATT	ATT

# **Table history**

#### NA012

Development activity 59007050 introduces changes to field LINEATTR. This field now accepts an alphanumeric string instead of an integer string.

Added warning message.

#### NA011

Added fields XLAPLAN and RATEAREA.

Added information about PODPATTR in a multi-NPA office.

#### NA008

Increased the range of field LINEATTR index to 31 999.

#### NA007

Increased the range of field LINEATTR to 4095.

#### NA006

The table is new for this release.

## Supplementary information

When the trigger item transition tool has disabled trigger group subscriptions and adds or changes are blocked, the customer receives the warning message that follows:

Provisioning for AIN trigger groups has been diSabled.

When the trigger item transition tool is not disabled but the office is subscribed to trigger items, the customer receives the warning message that follows:

TABLE PODPATTR IS INACTIVE, AS THE OFFICE IS SUBSCRIBED TO TRIGGER ITEMS. USE LARP OPTION IN TABLE TRIGITM.

## Table name

Portable Numbers

# **Functional description**

Table PORTNUMS identifies portable numbers served by the TOPS switch. Before TOPS call processing can launch an LNP query for any number (calling, called, billing), the number must be within the range found in table PORTNUMS. Table PORTNUMS also identifies the Global Title Translations (GTT) name used to route the LNP query.

TOPS call processing needs ten digits to check table PORTNUMS. So, if the number is only seven digits, the NPA must first be derived using the method described in the Translations manual under functionality LNP (OSEA0008), section "Operation", subsection "DN 7- to 10-digit conversion".

AIN tables TRIGGRP and TRIGDIG are not checked to determine if a DN is in a portable NPA-NXX.

An NPA-NXX is defined as portable if it is datafilled in table PORTNUMS.

The value in the GTTNAME field must be datafilled in field GTTNAME of table C7GTTYPE in order to be used in this table. If a GTT is datafilled in table PORTNUMS, it will not be allowed to be deleted from table C7GTTYPE.

Table PORTNUMS is specific to the TOPS system implementation of LNP.

To avoid unnecessary queries, the following types of numbers should not be datafilled in table PORTNUMS:

- 800 numbers and similar service access codes
- NPA-555 numbers

# **Datafill sequence and implications**

Table C7GTTYPE must be datafilled before table PORTNUMS.

## Table size

0 to 32K words

# **PORTNUMS** (continued)

## Datafill

The following table lists datafill for table PORTNUMS.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
LNPKEY		3 to 10 digits	Local number portability key. This is the key into the table and is a digilator. Enter the portable number. The range is from 3 to 10 digits and specifies ranges of portable numbers.
			<i>Note:</i> The excessive use of ten-digit datafill will exhaust table PORTNUMS.
GTTNAME		name from table C7GTTYPE	Global title translation name. Enter a GTT name for use in obtaining portability information from the LNP database.

# Datafill example

The following example shows sample datafill for table PORTNUMS.

## PORTNUMS (end)

#### MAP display example for table PORTNUMS

LNPKEY G	TTNAME
617	LRNGTT
6182201234	LRNGTT
61932	LRNGTT
619330	LRNGTT
619331	LRNGTT
619332	LRNGTT
619333	LRNGTT
619334	OSLRNGT
619335	LRNGTT
619336	LRNGTT
619337	LRNGTT
619338	LRNGTT
6193390	LRNGTT
6193391	LRNGTT
6193392	LRNGTT
6193393	LRNGTT
6193394	LRNGTT
6193395	OSLRNGT
6193396	LRNGTT
6193397	LRNGTT
6193398	LRNGTT
6193399	LRNGTT

## **Error messages for table PORTNUMS**

The following error messages apply to table PORTNUMS.

#### Error messages for table PORTNUMS

Error message	Explanation and action
The key must contain 3 to 10 digits.	The LNPKEY field identifies a range of portable numbers. It is a digilator field which can contain 10 digits. If an attempt is made to add a number with an incorrect number of digits, this error message is displayed.

## Table history TOPS07

Created by feature AF6553 in functionality TOPS LNP, OSEA0008.

## POSITION

#### Table name

Position Table

## **Overview**

#### Position tables

The two position tables appear in the following table.

#### Position tables

Table name	Title
POSNAME	List of Position Names Table
POSITION	Position Table

Table POSITION stores the types of positions the switching unit contains. The table stores the associated routes of these positions.

The position names for the switching unit appear in Table POSNAME.

The switching unit contains a number of fixed pseudo position names. Table POSNAME allows the operating company to assign additional position names if necessary. The following names are pseudo fixed position names.

#### AMAFAIL

A local, toll, or combined local/toll switching unit that has the office parameter AMA\_FAILURE\_FREE\_CALL set to N (no) requires this position name. The parameter is in Table OFCENG. This position name specifies the office route to where the system routes automatic message accounting (AMA) calls when AMA failure occurs. This failure occurs when the system does not route AMA calls free of charge.

#### CAMA

A toll or combined local/toll switching unit arrangement for central AMA (CAMA) operation requires this position name. The system routes ANIFAIL or ONI calls on a Super CAMA or AMR 5 trunk group to this position.

#### LAMA

Enter CAMA in field POS of table POSITION if a local or combined local/toll switching unit is for local AMA (LAMA). Office parameter LAMA\_OFFICE is Y in table OFCOPT for local AMA (LAMA) operation.

## 000

The overseas operator center (OOC) switching unit for incoming calls on type OOC trunk groups requires position name OOC.

# TOPS

A toll or combined local/toll switching unit arranged for Traffic Operator Position System (TOPS) operation requires this position name. This position is where the system routes ANIFAIL or ONI calls on an Incoming or two-way TOPS trunk group.

A toll or combined local/toll switching unit that tandems 0+ or 0- calls to a TOPS switching unit through a type ZI trunk group requires this position name.

# TSPS

A toll or combined local/toll switching unit that tandems 0+ or 0- calls requires this position name. The switching unit that receives the tandem calls is arranged for Traffic Service Position System (TSPS). The calls travel through a trunk group with trunk group type ZI.

# AMRX

A local switching unit arranged for AMR5 type signaling requires this position name. The system routes a 0- call from a line to this position.

# AOSS

A toll or combined local/toll switching unit arranged for Auxiliary Operator Services System (AOSS) operation requires this position name. The system routes 411, 555-1212, intercept, and 131 call types route from dedicated AOSS trunk groups to this position.

The operating company can use the pseudo fixed position names CTOP, RTE1, RTE2, RTE3, or RTE4. The operating company can specify additional position names. If the operating company does not require this position name, the default value is NONE.

# Translation proceeds through table POSITION

Translation proceeds through table POSITION in the following occurrences:

- In a local or combined local/toll switching unit arranged for 0+ or 0dialing, the line attribute table LINEATTR, field ZEROMPOS, specifies the position to which the system routes 0- calls.
- The system can route a code or block of codes for class of service screening to a position. In this event, the position name the class of service screening tables CLSVSCRC or CLSVSCRC.CLSVSCR, field POSN associated with selector N contains the position name.

## **POSITION** (continued)

- The standard pretranslator table SDTDPRTCT.STDPRT, field POS with selectors R, P, T, or S can contain the position name. This table contains the position name when a code or block of codes routes directly from a standard pretranslator table to a position.
- A seizure (no digits) can occurs on an incoming CAMA call. In this event, the system routes the call to a position. The definition of the position appears in the SuperCAMA trunk group table TRKGRP type SC, field NODIGRTE.
- If the arrangement of a PBX is for 0+ or 0- dialing, the system routes a 0call to a position. The Two-way PBX DID/DOD or Digital trunk group table, table TRKGRP types PX or P2, field ZEROMPOS specify this position.

### **Translation paths from table POSITION**

Translation from table POSITION routes to table CLLI or through table OFRT.

Digits can be prefixed or deleted in table OFRT. This action can occur if implicit suppression of routing from table POSITION and a leading digit 0 does not occur. Translations paths that relied on the known suppression of leading digit zero in table POSITION must change. This action makes sure the clear suppression of leading digit 0 occurs.

# **Functional description**

Table POSITION stores the types of positions the switching unit contains. This table also stores the associated routes. There are three different types of input for this table.

The system uses route selector S when a call proceeds directly to a CLLI. The CLLI can be a pseudo CLLI for the following:

- a CAMA position
- a TOPS position
- an AOSS position, like CPOS or CAMA
- a trunk group CLLI

The implicit deletion leading digit of zero does not occur in table POSITION. For 0- calls, use selector T and suppress one leading digit explicitly in table OFRT route selector N, field DELDIGS. CAUTION: This action deletes any leading digit, not just digit 0. Calls with leading digits that are not 0 must contain the correct number of outgoing digits.

The system uses route selector T when a call proceeds to the office route table OFRT at specified route index = KEY.

## **POSITION** (end)

The system uses route selector C when a call proceeds to one of two destinations. The destination depends on the translation system (TRANSYS) associated with the call. When TRANSYS is NA, the call proceeds as a national route (NATRTE) specifies. When TRANSYS is IN, the call proceeds as an international route (INTRTE) specifies.

The NATRTE and INTRTE can specify selector S or T.

For related information, refer to table POSNAME.

#### **Route selectors**

A description of the available route selectors appear in the following sections of table POSITION:

- POSTION route selector C
- POSTION route selector S
- POSTION route selector T

# **POSITION route selector C**

## **Route selector C**

Switching units with TOPS require position route selector C. This requirement occurs when the digit 1 prefixes to an international call before the system routes a TOPS position.

Two routes are present. The first route is for calls where the translation system is national. The second route is for international calls.

## Datafill

Data entries for table POSITION route selector C appear in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
POS		AMAFAIL, AMRX, AOSS, CAMA, CTOP, NONE, OOC, RTE1, RTE2, RTE3, RTE4, TOPS, or TSPS	<i>Type of position.</i> Enter the name assigned to the type of position. Enter CAMA for offices equipped with LAMA.
PRTE		see subfield	<i>Position route selector.</i> This field contains subfield PRTESEL. This field contains refinements NATRTE and INTRTE.
	PRTESEL	С	<i>Position route selector.</i> Enter the position route selector C.
	NATRTE	see subfields	<i>National route.</i> This field contains subfield RTESEL. This field contains refinements CLLI and EXTRTEID.
			If field RTESEL contains S, enter data in subfield CLLI.
			If field RTESEL contains T, enter data in subfield EXTRTEID.
	RTESEL	S or T	<i>Route selector.</i> If a call routes directly to a code in the CLLI table, enter S. If a call routes through the Office Route table, enter T.

# **POSITION route selector C** (continued)

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (1 to 16 characters)	<i>Common language location identifier.</i> If the entry in field PRTESEL is S, enter the code for the trunk group to which the system routes the call.
			If the entry in field POS is CAMA, field CLLI must contain CPOS.
			If the entry in field POS is TOPS, field CLLI must contain TOPSPOS.
			If the entry in field POS is AOSS, field CLLI must contain AOSSPOS.
	EXTREID	see subfields	<i>External route identifier.</i> If the entry in field PRTESEL is T, enter data in field EXTRTEID. This field contains subfields TABID and KEY
	TABID	OFRT	<i>Table name.</i> If the entry in field PRTESEL is T, enter office route table OFRT. Any entry outside the range for this field is incorrect.
	KEY	1 to 1023	<i>Key.</i> The entry in field PRTESEL can be T. In this event, enter the route list route reference index in the office route table to which the system routes the translation. Any entry outside the range for this field is incorrect.
	INTRTE	see subfield	International route. This field contains subfield RTESEL and RTESEL refinements. If the entry in field RTESEL is S, enter subfield CLLI.
			If the entry in field RTESEL is T, enter subfield EXTRTEID.

#### Field descriptions (Sheet 2 of 2)

## **Datafill example**

Sample datafill for table POSITION route selector C appears in the following example.

The system routes calls with national translation type directly to the TOPS trunk group. The system routes international calls to the office route table. The entry in the Office Route table has the N selector and prefix the digit 1. The entry routes to the TOPS trunk group.

# POSITION route selector C (end)

#### MAP example for table POSITION route selector C

	POS		PRTE	
λ.	TOPS	C S TOPSPOS	T OFRT 24	

# **POSITION route selector S**

## **Route selector S**

A switching unit that is not TOPS with international dialing requires position selector S. The switching unit requires selector S when calls to the position route directly to a CLLI code that table CLLI recognizes. International dialing requires prefix digit 1.

# Datafill

The datafill for table POSITION route selector S appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
POS		AMAFAIL, AMRX, AOSS, CAMA, CTOP, NONE, OOC, RTE1, RTE2, RTE3, RTE4, TOPS, or TSPS	<i>Type of position.</i> Enter the name assigned to the type of position. Enter CAMA for offices that have LAMA.
PRTE		see subfields	<i>Position route selector.</i> This field contains subfields PRTESEL and PRTESEL refinement CLLI.
	PRTESEL	S	<i>Position route selector.</i> When translation routes to a CLLI, enter selector S.
	CLLI	alphanumeric	<i>Common language location identifier.</i> Enter the CLLI code assigned to the trunk group to which the system routes the call.
			If field POS contains CAMA, field CLLI must contain CPOS. If field POS contains TOPS, field CLLI must contain TOPSPOS. If field POS contains AOSS, field CLLI must contain AOSSPOS.

# **Datafill example**

Sample datafill for table POSITION route selector S appears in the following example.

# POSITION route selector S (end)

The system routes all calls to CAMA position to the CAMA position talk circuits. Table CLLI contains the assignments for these circuits to fixed pseudo code CPOS.

#### MAP example for table POSITION route selector S

POS	PRTE
CAMA	S CPOS

# **POSITION route selector T**

## **Route selector T**

The system requires this selector when the switching unit is not Traffic Operator Position System (TOPS) with international dialing. International dialing requires a prefix digit 1. The system requires this selector with calls to the position route through table OFRT.

When translation routes to the Office Route table, enter data in fields POS and FSTRTE as follows.

# Datafill

Datafill for table POSITION route selector T appears in the following table.

#### **Field descriptions**

E. LI	Subfield or	Factors	Further day on the day
Field	refinement	Entry	Explanation and action
POS		AMAFAIL, AMRX, AOSS, CAMA, CTOP, NONE, OOC, RTE1, RTE2, RTE3, RTE4, TOPS, or TSPS	<i>Type of position</i> . Enter the name assigned to the type of position. Enter CAMA for offices equipped with LAMA.
PRTE		see subfields	<i>Position route selector.</i> This field contains subfields PRTESEL and PRTESEL refinement EXTRTEID.
	PRTESEL	Т	<i>Position route selector</i> . If translation routes to the Office Route table, enter selector T.
	EXTRTEID	see subfields	<i>External route identifier</i> . This field contains subfields TABID and KEY.
	TABID	OFRT	<i>Table name</i> . Enter the office route table name OFRT. Entries out of the range for this field are not correct.
	KEY	1 to 1023	<i>Key.</i> Enter the route reference index of the route list in the office route table to which translation routes. Entries out of the range for this field are not correct.

## **POSITION route selector T** (end)

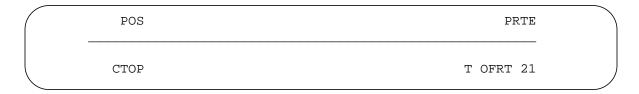
## **Datafill example**

Sample datafill for table POSITION route selector T appears in the following example.

This example is for an entry in table POSITION for a local or combined local/toll switching unit arranged for TOPS. The position CTOP is the route a line takes when a 0+/- call occurs.

The route reference index 21 in table OFRT must specify the outgoing trunk group to TOPS with trunk group type OP.

#### MAP example for table POSITION route selector T



## Table name

Position Name (POSNAME)

# **Functional description**

Table POSNAME lists the position names assigned to the switch. The switch has a number of fixed pseudo position names. Table POSNAME allows the operating company to assign additional position names, if required.

The pseudo-fixed position names are as follows.

- AMAFAIL: This position name is required in a local, toll, or combined local/toll switch that has the parameter AMA\_FAILURE\_FREE\_CALL set to N in the OFCENG table. This position name should specify the office route to which all AMA calls are routed during AMA failure when AMA calls are not routed free of charge.
- CAMA: This position name is required in a toll or combined local/toll switch arranged for CAMA operation and is the position to which ANIFAIL or ONI calls on a super CAMA or AMR 5 trunk group are routed.
- TOPS: This position name is required in a toll or combined local/toll switch arranged for TOPS operation and is the position to which ANIFAIL or ONI calls on an incoming or two-way TOPS trunk group are routed. This position name is required in a toll or combined local/toll switch which tandem 0+ or calls to a TOPS switch by means of a trunk group with trunk group type ZI.
- TSPS: This position name is required in a toll or combined local/toll switch which tandem 0+ or calls to a switch arranged for TSPS by means of a trunk group with trunk group type ZI.
- AMRX: This position name is required in a local switch arranged for AMR5 type signaling and is the position to which a 0- call from a line is routed.
- AOSS: This position name is required in a toll or combined local/toll switch arranged for AOSS operation and is the position to which 411, 555-1212, intercept, and 131 types of call route from dedicated AOSS trunk groups.

The operating company can use pseudo-fixed position names CTOP, RTE1, RTE2, RTE3, or RTE4, and can specify additional position names, if required. When a position name is not required, the default value is NONE.

### **POSNAME** (continued)

#### Requirements

The following requirements are for the POSNAME table.

- In a local or combined local/toll switch arranged for 0+ or dialing, the position to which 0- calls are to be routed is specified in Line Attribute table.
- When a code or block of codes for class of service screening have to route to a position, the position name is specified in the class of service screening tables CLSVSCRC or CLSVSCR.
- When a code or block of codes routes directly from a standard pretranslator table to a position, the position name is specified in the standard pretranslator table STDPRT.
- When a seizure (no digits) occurs on an incoming CAMA call, the position to which the call is routed is defined in the Super CAMA trunk group data.
- When a PBX is arranged for 0+ or dialing, the position to which a 0 call is routed is specified in the two-way PBX DID/DOD or digital trunk group data.
- Translation from the position table route directly to the CLLI table or via the office route table when prefixing or deletion of digits is required.
- Each of the position names are assigned a value (0-15) in the POSNAME table.
- Position NONE is assigned the value of 0.
- Forward initial input to Northern Telecom for production of an input data tape.

### Table size

Memory is automatically assigned for a maximum of 16 positions.

## **POSNAME** (end)

# **Field descriptions**

The following table describes field names, subfield names, and valid data ranges for table POSNAME.

Field	Subfield or refinement	Entry	Explanation and action
VALUE		0-32 767	VALUE. Enter the numeric value assigned to the position name.
SYMBOL		NONE or alphanumeric vector of up to 32 characters	NAME. Enter NONE if value is equal to 0; otherwise, enter the name of the position.

# **Datafill example**

The following example shows datafill for table POSNAME. It shows input data for position names NONE and CAMA, which are assigned values of 0 and 1, respectively.

VALUE	SYMBOL	
0	NONE	
1	CAMA	
		)

# PRECONF

### Table name

Preset Conference Table

## **Functional description**

Table PRECONF contains information on Integrated Business Network (IBN) preset conferences in the office.

For an IBN switch, the only conference type (field CONFTYPE) allowed is IBN.

This table allows all IBN customer groups to assign 50 conferees for each conference.

Entries in table PRECONF are sorted by preset conference identifier (field PRECONF) and conferee identifier (field CONFEREE). The first entry to appear for each conference is always conferee 0 (zero). This tuple must be the first one added to a new preset conference, and serves the following purposes:

- This tuple contains the conference directory number (DN), and other fields.
- This tuple is always present when data is entered for a particular preset conference, and can be used to locate that conference in table PRECONF. If this tuple is not found, no data was entered for a conference.
- Conferees are added or deleted from a particular conference one at a time. The tuple associated with conferee 0 can be used to delete all the conferees in the conference at once. By deleting this tuple, the entire conference is deleted from table PRECONF.

A preset conference is initiated by dialing a predefined conference DN. The conference feature originates calls to a maximum of 50 DNs simultaneously.

For IBN preset conference, the presence of the tone depends on the datafill of field IMMSTART. This field determines the start of an IBN preset conference.

Termination of the tone or announcement occurs under one of the following conditions:

- All conferees have answered.
- A full complement of attempts at call completion has been made.
- Originator forces the conference by pressing the # key on a 2w, 12-key dual tone multifrequency (DTMF) station.

*Note:* If the originator initiates from a DP station, the conference does not start until all conference have either answered or two attempts at both primary and secondary addresses (DN) have been made.

When the conference is forced, attempts to complete calls to unanswered conferees continue without audible tone or announcement. Subsequent answering conferees who join the conference neither hear the tone or announcement nor provide any indication to the existing conferees that they have joined the conference. If an announcement circuit is not available, the notification defaults to tone.

In order to have announcement or notification tone, the following tables must be datafilled:

- CLLI
- CLLIMTCE
- ANNS
- ANNMEMS
- STN
- PRECONF

To use an announcement for preset conference notification, the standard notification common language location identifier (CLLI) in table PRECONF must be the same as in table ANNS.

To use a tone for preset conference notification, the standard notification tone CLLI is hard-coded as PCNOR in field NOTICILLI. These must be datafilled in table STN and in table PRECONF.

For IBN preset conference, if the IBN station customer group has used its maximum number of six-port conference circuits, the originator is routed to reorder tone unless the preset conference is datafilled as an emergency type conference.

An IBN station not permitted to originate a conference must dial 0 (zero) to access the attendant. The attendant can then dial the preset conference DN and transfer the call to the station upon hearing ringing tone.

An IBN preset conference can also be originated by a direct-inward-dial (DID) agent, for example, plain ordinary telephone service (POTS) line or incoming trunk, depending on the datafill of the preset conference.

Since there can be more than one originator for a conference, when an attempt is made to originate a conference that has already been initiated, the second originator is routed to busy tone.

For an IBN preset conference, the customer group and a network class of service (NCOS) is datafilled for the conference to allow for proper screening and locating of the appropriate translator.

For an IBN preset conference, there is no requirement for conference to belong to the same customer group.

Automatic retrial is provided and one alternate address for each conferee is also available if required. Automatic retrial is attempted on all conferees that have not returned answer supervision within an adjustable interval of 15 to 60 s after the call to that conferee was originated. If a call to a primary address fails to complete within two trials and the conferee has an alternate address, two call attempts are directed to the alternate address.

Retrials are not attempted on an address that is a secondary conference bridge.

For IBN preset conference, in the case of trunk groups that do not return true answer supervision (for example, 5X25 and FX on digital carrier module [DCM] trunks), a tone detector is used to determine answer. As above, if answer is not detected after two attempts, the alternate address is used—if one exists.

If answer propagation is interrupted, the feature cannot complete to that conferee (for example, if conferee has line option FNT or inward wide area telephone service [INWATS]).

For an IBN preset conference, the conference data can be set so that the conference starts as soon as the first conferee answers. In this case, the answer causes audible ringing to the originator to stop and the conference to begin. Attempts to complete the calls to unanswered conferees continue, without audible ring. As other conference answer, they are connected into the conference after 400 ms of conference warning tone (440Hz + 480Hz) has been applied.

The conference can also have a delayed start. When the first conferee answers, a tone or announcement according to datafill is attached to the conference bridge. The tone or announcement continues as an audible signal to answering conferees until 2 s after all conferees have answered. The originator can force the conference by pressing the # key on a 2w, 12-key DTMF set.

Secondary conferencing, which is the ability to interconnect with remote conference bridges, is permitted. When a conference is activated and one of the addresses requires a secondary bridge, the address is processed in a normal manner and directed toward the office serving the secondary equipment. All conferee DNs that are secondary conferences are identified in table PRECONF.

All connections are automatically released and equipment is returned to idle when all the conferees have gone onhook. Individual bridges are released from multiple bridge conferences as soon as the last conferee connected to them goes onhook. Whenever a conferee disconnects, a 400-ms burst of conference exit tone (350Hz + 440Hz) is provided to all other members of the conference.

For IBN preset conference, datafill allows for the originator to be in control of the conference. In this case, when the originator goes on-hook, the conference is taken down even if there are conferees still on the bridge. If the originator does not control the call, when a conferee disconnects from the bridge, a check is made for the presence of DMS stations or trunks with disconnect supervision. If no station or trunk of the described type is a conferee, the conference is taken down (even though there can be active conferees with no-disconnect type trunks).

If the originator of the preset conference is an IBN line that is a member of the preset conference customer group, the originator is either allowed to add additional conferees once the conference is established, or prevented from adding additional conferees at this time, depending on the value in field ADDON.

If the value in field ADDON is Y (yes) and the preset conference is established (all conferees having answered or abandoned or the conference was forced to start), addon can begin. The originator can add on up to a maximum of 30 conferees, including the originator, the preset conference conferees, and the addon conferees. Only the originator has the capability of adding on conferees.

## Feature Interaction for IBN Preset Conference

If conferees that are connected to the switch where the preset conference is being originated have any of the features listed below, these features remain active for the incoming conference call:

- Call Forwarding No Answer
- Call Forwarding Busy
- Call Forwarding Intragroup

If the primary address does not answer, call forwarding is attempted if it is activated.

On origination to a conferee, routing features Expensive Route Warning Tone and Off-hook Queuing are deactivated.

When a conferee is connected to a preset conference, the following features are disabled for the duration of the call:

- Call Waiting
- Three-way Calling
- Busy Verification of Lines and Trunks
- Flash Recall
- Executive Busy Override

The feature does not allow for preemption of the conference bridges since the use of bridges by a customer group is limited according to datafill.

Station message detail recording (SMDR) may be applicable to one, several or all of the legs of the conference call. Each leg, once added to the conference call, is identified as a conference call in the SMDR record though use of the originating feature code for preset conference.

Each preset conference can contain up to 50 conference for each conference, beginning with the number 0 (zero).

An Australian telephone user part (ATUP) trunk can be a conferee in an IBN preset conference call. The following actions apply to an ATUP conference call:

- After the conferee answers, the receipt of a Clear Back (CBK) message indicates the immediate disconnect of that party and is handled the same as a conferee exit.
- If the conference is taken down because the originator has exited, a Clear Forward (CLF) message is sent to clear the trunks.
- No ATUP messages are sent to existing conferees when other parties join or exit the conference. The indications given by the feature are provided as-inband tones only. If the conference drops down to a single conferee, a CLF message is sent, disconnecting the remaining conferee from the conference bridge.

# **Datafill sequence and implications**

The following tables must be datafilled before table PRECONF.

- NCOS
- NARDATA

## Datafill

0 to 2048 tuples

Memory is dynamically allocated in blocks of 32.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PCNFKEY		see subfields	Preset conference key
			This field consists of subfields PRECONF and CONFEREE. This field is the key to the table.
	PRECONF	0 to 63	Preset conference identifier
			Enter the number assigned to the preset conference by the operating company.
	CONFEREE	0 to 49	Conferee identifier
			Enter the number assigned to the conferee by the operating company. Conferee 0, which is used to hold the conference directory number (DN), must be entered first.

## Field descriptions (Sheet 2 of 2)

Field	Subfield or	Fratric	Further and action
Field	refinement	Entry	Explanation and action
CONFADDR		numeric (up to	Conference address
		18 digits)	If the preset conference is for IBN, enter the conference address.
PCNFVAR		see subfields	Preset conference variables
			This field consists of subfields CLASS, ALTADDR, TIMEOUT, CONFTYPE, CUSTGRP, NCOS, ORIGCONT, ADDON, DIDORIG, EMERG, ATDREQ, IMMSTART, and NOTICL1I.
	CLASS	A, C, D, or P	Conference class
			If an alternate address is required in addition to the primary address, enter A and datafill refinements ALTADDR and TIMEOUT on the following pages.
			If the primary address consists of a secondary conference located on another switch, enter C and datafill refinement TIMEOUT on the following pages.Secondary conferencing is the ability to interconnect with remote conference bridges.
			If the entry is for conferee 0, enter D. This must be the first entry made for the conference. Datafill refinements CONFTYPE, CUSTGRP, NCOS, ORIGCONT, ADDON, DIDORIG, EMERG, ATDREQ, and IMMSTART on the following pages.
			If only a primary address is required, enter P and datafill refinement TIMEOUT on the following pages.

### CLASS = A

If the entry in field CLASS is A, datafill refinement ALTADDR as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ALTADDR	numeric (up to	Alternate address
		18 digits)	If the preset conference is for IBN, enter an alternate address.

## CLASS = A, C or P

If the entry in field CLASS is A, C, or P, datafill refinement TIMEOUT as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TIMEOUT	15 to 300	Variable timeout
			Enter the variable timeout in seconds.
			If the entry in field CLASS is A, the range is 15 to 60. If a call to the conferee's primary address receives no answer on the second trial, the call is placed to the alternate address. If no answer is received before the timeout (the same timeout is used for the primary and alternate address) the call is placed a second time to the alternate address and if no answer is received before timeout, the conferee is not included in the conference.
			If the entry in field CLASS is C, the range is 15 to 300.
			If the entry in field CLASS is P, the range is 15 to 60. If a call to the conferee's primary address receives no answer before timeout, the call is placed a second time to the primary address and if no answer is received before timeout, the conferee is not included in the conference call.
			Go to field OPTIONS on the following pages.

## CLASS = D, IBN preset conference

If the value of selector CLASS is D and the preset conference is for IBN, datafill refinement CONFDATA as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)	Field descriptions fo	r conditional	datafill	(Sheet 1 of 2)
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Field	Subfield or refinement	Entry	Explanation and action
	CONFDATA	see subfield	Conference data
			This field consists of subfield CONFTYPE.
	CONFTYPE	IBN	Conference type
			Enter IBN to indicate an IBN type of preset conference and datafill refinements CUSTGRP, NCOS, ORIGCONT, ADDON, DIDORIG, EMERG, ATDREQ, and IMMSTART.
	CUSTGRP	alphanumeric (1 to 16 characters)	Enter the name of the customer group as assigned in table CUSTHEAD.
	NCOS	0 to 511	Network class of service
			Enter the network class of service (NCOS) number assigned to the preset conference.
	ORIGCONT	Y or N	Originator control
			If the preset conference is to be taken down when the originator of the conference goes on hook, enter Y (yes). To allow the preset conference to continue after the originator goes on hook, enter N (no).
	ADDON	Y or N	Conference add ons
			If the originator of this IBN preset conference is allowed to add additional conferees to the conference once the conference is established, enter Y. Otherwise, enter N to indicate that additional conferees cannot be added.
	DIDORIG	Y or N	Direct-inward-dial origination allowed
			If a direct-inward-dial (DID) party is allowed to originate a preset conference, enter Y. Otherwise, enter N.

Field	Subfield or refinement	Entry	Explanation and action
	EMERG	Y or N	Emergency conference
			If a preset conference is allowed to originate even if the customer group is already using its maximum number of six-port circuits, enter Y. Otherwise, enter N.
	ATDREQ	Y or N	Audio tone detector required
			An attempt to use a audio tone detector (ATD) is done for all calls that use trunks that do not return true answer supervision. If the call does not continue when ATD is not available, enter Y. If the call does continue without the use of an ATD, enter N.
	XTRADATA	see subfield	Extra data
			This field consists of subfield IMMSTART.
	IMMSTART	Y or N	Immediate start
			If the preset conference starts as soon as the first conferee answers, enter Y and go to field OPTIONS on page Section, "CLASS = all entries" on page -218.
			If the preset conference starts only after all conferees have answered, enter N and datafill refinement NOTICLLI.
	NOTICLLI	PCNOR or	Standard preset conference notification
		alphanumeric (1 to 16 characters)	Enter PCNOR for the standard notification tone or any announcement common language location identifier (CLLI) entered in table ANNS.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

#### **CLASS = all entries**

For all entries in field CLASS for BCS36 and up, datafill field OPTIONS as described below.

Field	Subfield or refinement	Entry	Explanation and action
	OPTIONS	see subfield	Options
	(BCS36-)		This field consists of subfield PCNFOPTN.
	PCNFOPTN	NARS	Preset conference option
	(BCS36-)		Enter up to two options. If less than two options are required, end the list with a \$ (dollar sign).
			Enter NARS (network access registers) for the network access register (NAR) feature and datafill refinement NARNAME. Feature NAR is used to throttle (regulate a call's ability to terminate) incoming calls. If the original termination of an incoming throttleable call is unavaiable, the incoming NAR member associated with the call continues to be associated with the call. No other incoming NAR members can be access due to the final termination.
	NARNAME	alphanumeric	Network access register name
	(BCS36-)	orNILNAR	Enter the NAR that a call must have access tugh before terminating on the feature. The NAR name is datafilled in table NARDATA.
			If NILNAR is entered, the default NAR entered in table CUSTENG is used.

#### Field descriptions for conditional datafill

## **Datafill example**

The following example shows sample datafill for table PRECONF.

This example is datafilled for an IBN preset conference with the following characteristics:

• The conference identifier is 3, the conference DN is 226-7432, the conference type is IBN, the customer group is BNRGRP, the NCOS number is 126, the originator controls the conference, the originator can add additional conference to the conference once the preset conference is

## PRECONF (end)

established, DID origination is allowed, emergency conference is allowed, audio tone detector is not required, immediate start is not required and the standard notification is a tone, PCNOR.

- Conferee 1 has a primary address of 514-595-1234, an alternate address of 514-595-9887 and a timeout of 30 s.
- Conferee 2 has a primary address of 519-421-6212 and a timeout of 45 s.
- Conferee 3 has a primary address of 727-4691 and is the DN of a secondary conference located on another switch.
- No options are defined

#### PCNFKEY CONFADDR PCNFVAR OPTIONS 3 0 2267432 D IBN BNRGRP 126 Y Y Y N N PCNOR \$ 3 1 5145951234 5145959887 А \$ 3 2 5194216212 P 45 \$ 7274691 3 3 С \$

#### MAP display example for table PRECONF

## Table history BCS36

Field OPTIONS, PCNFOPTN, and NARNAME were added.

## PREFHUNT

#### Table name

Preferential Hunt List Member

## **Functional description**

The Preferential Hunt (PRH) feature is an optional feature that can be assigned to one or more of the directory number hunt (DNH) groups.

With this feature, each DNH group can have up to 64 PRH lists. Each PRH list can contain up to 19 members. Each of the 19 members must be a member of the DNH group in which the PRH list is based.

Each member of a DNH group can be the pilot of only one PRH list. Each member can also be a member of any other PRH list that is already defined.

Member number 0 (zero) must always be the pilot number of the PRH list and must be assigned before other members in the list are assigned.

Options LOD, LOR, BNN, OFR, OFS, SHU, RMB, and CIR are invalid for PRH lists; however, they can co-exist with PRH on a DNH group.

For calls made directly to a busy directory number (DN) of a PRH list, PRH hunts over the members of the PRH list before returning to search the DNH group.

Preferential hunting only occurs if the pilot DN of the PRH list is busy.

Care must be taken when setting up the PRH lists. Having many PRH lists end on the pilot of the DNH group could lead to the first few members of the DNH group being extremely busy. Conversely, having many members end at the last member of the DNH group can result in a large number of overflows, even though there are free members in the DNH group.

Feature ISDN PKT single DN (AF6872) can be assigned PRH groups on a hunt group basis. Table PREFHUNT will allow voice information (VI) circuit mode data (CMD), and shared packet mode (PMD) hunt groups on ISDN integrated terminals (IT) using the same DN.

## **PREFHUNT** (continued)

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

- Add preferences on members of hunt groups provisioned for circuit switched (CS) and packet switched (PS) call types with DN shared.
- Change preferences on members of hunt groups provisioned for CS and PS call types with DN shared.
- Delete preferences on members of hunt groups provisioned for CS and PS call types with DN shared.

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

## **Datafill sequence and implications**

The following tables must be datafilled before table PREFHUNT.

- HUNTMEM
- HUNTGRP

## Table size

0 to 32 767 tuples

## Datafill

The following table lists datafill for table PREFHUNT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
DNHGRP		0 to 32767	Directory number hunt group number
			Enter the group number of the DNH group to which the member belongs.
PRHLIST		0 to 63	Preferential hunt list number
			Enter the PRH list number to which the hunt member is assigned in the DNH group.
PRHMEM		0 to 18	Preferential hunt list member number
			Enter the PRH list member number that is assigned to the hunt member in the DNH group.

## **PREFHUNT** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
INSERT		Y or N	Insert
			Enter Y (yes) if an addition to an existing PRH list is made. The new member is inserted in the PRH 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 PRH list.
DN		10-digit DN with NPA (maximum is 15 digits)	Directory number
			The system expects a 10-digit entry which is the DN assigned to the PRH list member. This must match the DN of the host DNH group member. If 7 digits are entered, NPA of the host DNH group pilot is used with this DN
			<i>Note:</i> Due to feature 59006893, Provisioning for Enhanced Multi-NPA, this DN can contain an NPA different from that of the pilot DN when this feature is enabled.

# Table history

#### NA012

Field DN is updated for feature 59006893, Provisioning for Enhanced Multi-NPA.

#### 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 call type mismatch in support of feature (AF6777).
- Added supplementary information; modification of preferential hunt list member attributes of CS ISDN terminals with DN sharing feature (AF6782).

## **Datafill example**

The following example shows sample datafill for table PREFHUNT.

## **PREFHUNT** (end)

In this example

- All members are assigned to DNH group number 5.
- DN 7252860 is the pilot DN for PRH list 1, member number 2 of PRH list 0 (zero) and 2, and member number 5 of PRH list 4.
- DN 7252863 is the pilot DN for PRH list 4.
- DN 7252858 is member number 3 of PRH list 2.

#### MAP display example for table PREFHUNT

DNHGRP	PRHLIST	PRHMEM	INSERT	DN	
5	1	0	N	7252860	
5	0	2	N	7252860	
5	2	2	N	7252860	
5	2	3	N	7252858	
5	4	0	N	7252863	
5	4	5	Ν	7252860	

## **Supplementary information**

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.

If the CALLTYPE of a member being added or changed in table PREFHUNT is different from the CALLTYPE of the hunt group, the following error message will be issued:

ERROR: CALLTYPE MISMATCH BETWEEN HUNT GROUP AND MEMBER.

# PREPLANS

### Table name

Network Management Preplan Table

## **Functional description**

Table PREPLANS lists the following information for each network management preplan:

- the short common language location identifier (CLLI) to which the preplan applies
- the type of control that applies to the preplan

The following control types can be applied to the preplan:

- directional reservation equipment (DRE)
- protective reservation equipment (PRE)
- cancel to (CANT)
- cancel from (CANF)
- skip (SKIP)
- incoming trunk busy (ITB)
- selective trunk reservation (STR)
- flexible reroute (FRR)
- international trunk override (ITO)
- bearer services skip (BSSKIP)
- time alignment speech interpolation (TASI)

## **Datafill sequence and implications**

Tables POECNM and CLLIMTCE must be datafilled before table PREPLANS. Table POECNM provides a list of all other licensed operators (OLO) that are used.

## Table size

0 to 8192 tuples

The length of table PREPLANS depends on the value of field NCTRLS in table NWMPPLN. Each tuple in table PREPLANS requires three words of protected data store.

# Datafill

The following table lists datafill for table PREPLANS.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PPLN		see subfields	Preplan
			This field consists of subfields PPLNNO and PPLNCTRL.
	PPLNNO	0 to 255	Preplan number
			Enter the preplan number.
	PPLNCTRL	0 to 31	Preplan control number
			Enter the preplan control number.
SCLLI			Short common language location identifier
		(6 character vector)	(CLLI) name of the trunk group to which the preplan control applies. The short CLLI (SCLLI) is defined in table CLLIMTCE.

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action			
CTRL		BSSKIP,	Control data			
		CANF, CANT, DRE, FRR, ITB, ITO,	DRE, FRR,		DRE, FRR,	This field specifies the trunk group control parameters.
		PRE, SKIP, STR, or TASI	For the bearer services skip control type, enter BKSKIP. No refinements need datafill.			
			For the cancel from control type, enter CANF and datafill refinements DRPCT and ARPCT on the following pages.			
			For the cancel to control type, enter CANT and datafill refinements DRPCT, ARPCT, and ANN on the following pages.			
			For the directional reservation equipment control type, enter DRE and datafill refinement LEVEL on the following pages.DRE is a control (applied to two-way trunk groups) that gives priority to completing traffic by reserving a number of idle trunks in a group for this traffic. Originating traffic is skip-routed (that is, it overflows to the new group). Once DRE is enabled and the level setting is reached, all the traffic (direct and alternate) offered to the two-way trunk group is skip-routed. The skip-routing continues until the number of idle trunks in the group increases past the trigger (level) threshold.			
			For the flexible reroute control type, enter FRR and datafill refinements DRLEV, ARLEV, CTRLOPT, HTROPT, EAOPT, CICROPT, and VIARTE on the following pages.			
			For the incoming trunk busy control type, enter ITB and datafill refinement LEVEL on the following pages.			

Field	Subfield or refinement	Entry	Explanation and action
CTRL(continue d)			For the international trunk override, enter ITO. No refinements require datafill.
			For the protective reservation equipment control type, enter PRE and datafill refinement LEVEL on the following pages.PRE is a control similar to DRE but PRE acts only on alternate-routed traffic offered to a two-way trunk group. Direct-routed traffic is allowed full access. Once PRE is enabled and the level setting is reached, all the alternate-routed traffic offered to the two-way trunk group is skip-routed.
			For the skip control type, enter SKIP and datafill refinements DRPCT, ARPCT, and ANN on the following pages.
			For the selective reservation control type, enter STR and datafill refinements LEV1, LEV2, and LEVEL on the following pages.
			For the time alignment speech interpolation control type, enter TASI. No refinements require datafill.

### Field descriptions (Sheet 3 of 3)

## CTRL = DRE, ITB, or PRE

If the entry for field CTRL is DRE, ITB, or PRE, datafill refinement LEVEL as described below.

Field descriptions for	conditional datafill
------------------------	----------------------

Field	Subfield or refinement	Entry	Explanation and action
	LEVEL	0 to 100	Level
		(DRE, ITB) 0 to 63 (PRE)	If a preplan control is assigned to directional reservation equipment (DRE), enter the number of trunks reserved in a two-way final route in preference to the higher ranking office (0 to 100).
			If a preplan control is assigned to protective reservation equipment (PRE), enter the number of trunks reserved in a two-way trunk for direct routes and incoming trunks (0 to 63).
			Enter the percentage of incoming trunks busied (ITB) in the group (0 to 100). The trunks must have feature NTX395 (Remote Make Busy).

## CTRL = CANF or CANT

If the entry for field CTRL is CANT, datafill refinements DRPCT, ARPCT, and ANN as described below.

Field descriptions	for conditional datafill	(Sheet 1 of 2)
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Field	Subfield or refinement	Entry	Explanation and action
	DRPCT	0 to 100	Direct-routed percentage selector
			Enter a number to determine the percentage of CANF direct-routed (DR) traffic or controlled DR traffic.
	ARPCT	0 to 100	Alternate-routed percentage selector
			Enter a number to determine the percentage of CANF alternate-routed (AR) traffic or controlled AR traffic.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action		
<i>Note:</i> Fields DRPCT and ARPCT cannot both be set to 0 (zero). One field must contain a value other than 0 (zero) to make valid entries possible.					
	ANN	NCA, EA1, or EA2	Announcement Enter the announcement to which blocked calls are routed: NCA (no-circuit announcement), EA1 (emergency announcement 1), or EA2 (emergency announcement 2).		

#### CTRL = FRR

If the entry for field CTRL is FRR, datafill refinements DRLEV, ARLEV, CTRLOPT, HTROPT, EAOPT, CICROPT, and VIARTE as described below.

#### Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DRLEV	0 to 100	Direct-routed traffic percentage
			Enter a number to determine the percentage of direct-routed (DR) traffic affected by the FRR control.
	ARLEV	0 to 100	Alternate-routed traffic percentage
			Enter a number to determine the percentage of alternate-routed (AR) traffic affected by the FRR control.
	CTRLOPT	IRR or RRR	Control option
			Enter the control option used with the FRR control. To specify an immediate reroute control option, enter IRR. To specify a regular reroute control option, enter RRR.
			There is no default.

Field	Subfield or refinement	Entry	Explanation and action
	HTROPT	Y or N	Hard-to-reach option
			Enter Y (yes) to specify that only calls identified as hard-to-reach are affected by the FRR control. Enter N (no) to specify that all calls, regardless of hard-to-reach status, are affected by the FRR control.
	EAOPT	EA, NEA, or	Equal access option
		ALL	Enter the type of call affected by the FRR control.
			Equal access (EA) specifies that only EA calls are affected by the FRR control.
			NEA specifies that only non-equal access calls are affected by the FRR control.
			ALL specifies that both EA and NEA calls are affected by FRR.
			There is no default.
	CICROPT	Y or N	Cancel in-chain return option
			Enter Y to specify that calls rerouted by the FRR control must be sent to treatment once the out-of-chain route list for those calls is exhausted. Enter N to specify that calls rerouted by the FRR control must not be sent to treatment once the out-of-chain route list for those calls is exhausted. Instead, these calls are returned to the next route in the in-chain route list.
			There is no default.
	VIARTE	alphanumeric (1 to 16	Out-of-chain common language location identifier
		characters)	Enter the first out-of-chain route to which calls affected by the FRR control are directed. Enter the full or short CLLI name of the trunk group chosen as the first out-of-chain route.

### Field descriptions for conditional datafill (Sheet 2 of 2)

## CTRL = SKIP

If the entry for field CTRL is SKIP, datafill refinements DRPCT and ARPCT as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DRPCT	0 to 100	Direct-routed percentage selector
			Enter a number to determine the percentage of controlled by SKIP direct-routed (DR) traffic.
	ARPCT	0 to 100	Alternate-routed percentage selector
			Enter a number to determine the percentage of controlled by SKIP alternate-routed (AR) traffic.
Note: Fields		cannot both be s	et to 0 (zero) One field must contain a value other

*Note:* Fields DRPCT and ARPCT cannot both be set to 0 (zero). One field must contain a value other than 0 (zero) to make valid entries possible.

#### CTRL = STR

If the entry for field CTRL is STR, datafill refinements LEV1, LEV2, and LEVEL as described below.

#### Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LEV1	0 to 63	Number of trunks
			If level 1 is activated, the percentage specified for field LEVEL of hard-to-reach traffic is skip-routed. Enter the number of idle trunks that activate the level 1 control.

Field	Subfield or refinement	Entry	Explanation and action
	LEV2	0 to 63	Number of trunks
			If level 2 is activated, 100% of alternate, 75% of hard-to-reach, and the percentage specified for field LEVEL of direct-routed traffic is blocked. Enter the number of idle trunks that activate the level 2 control.
	LEVEL	0 to 100	Percentage of traffic
			Enter the percentage of traffic to skip route in level 1 and to block in level 2.
			An entry outside this range is invalid.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

## **Datafill example**

The following example shows sample datafill for table PREPLANS.

In the first tuple, subfield PPLNNO specifies a preplan number of 0 (zero). Subfield PPLNCTRL specifies a preplan control number of 0 (zero). Field SCLLI specifies HULO as the short CLLI name of the trunk group affected by the control. The control data (CTRLDATA) subfield SELR specifies SKIP as the control applied to the trunk group HULO. The direct-routed percentage subfield (DRPCT) specifies that none of the direct-routed traffic on trunk group HULO is affected by the control. The alternate-routed percentage subfield (ARPCT) specifies that 75% of the alternate-routed traffic on trunk group HULO is affected by the control.

In the last tuple, subfield PPLNNO specifies a preplan number of 3. Subfield PPLNCTRL specifies a preplan control number of 0. Field SCLLI specifies OTW3 as the short CLLI name of the trunk group affected by the control. The control data (CTRLDATA) subfield SELR specifies FRR as the control applied to the trunk group OTW3. Subfields DRLEV and ARLEV respectively specify that 20% of the direct-routed traffic and 75% of the alternate-routed traffic on trunk group OTW3 are affected by the control.

The control option used is IRR (immediate reroute), as specified in subfield CTRLOPT. Only calls identified as hard-to-reach are affected by the control, as specified in subfield HTROPT. Subfield EAOPT specifies that all equal access (EA) and non-EA calls are affected by the control. Subfield CICROPT specifies that calls rerouted by FRR control must be returned to the next in-chain route list if they exhaust their assigned out-of-chain route lists. CLLI

## PREPLANS (end)

STGOVFL in subfield VIARTE is the name of the trunk group designated as the out-of-chain route for calls affected by the FRR control.

#### MAP display example for table PREPLANS

 PPLN SCCLI
 CTRLDATA

 0
 0
 HUL0
 SKIP
 0
 75

 3
 0
 OTW3
 FRR
 20
 75
 IRR Y ALL Y
 STGOVFL

## Table history BCS36

Refinement OLO was removed.

# **PRI1WAY**

## Table name

Primary Rate Interface (PRI) 1 Way.

# **Functional description**

New table PRI1WAY provides a mechanism allowing PRI trunks to behave as outbound trunks. This table carries entries of peripherals like SPM, DTCI, LTCs on which PRI trunks are required to act as terminators only. ISUP, PTS and other trunks types are not impacted by entry in this table.

In CM, when PRI call origination messages are received for 1 way PRI trunks provisioned on peripheral datafilled in the new table, will be rejected with the cause value of "Service or Option not available, unspecified".

# **Datafill sequence and implications**

Tables MNNODE and LTCPSINV need to be provisioned before datafill for this table.

## **Datafill sequence and implications**

Hardware datafill tables MNNODE and LTCPSINV need to be provisioned before datafill for this table.

# Table size

Abbreviated table name	Minimum tuples	Maximum tuples	Information on memory
PRI1WAY	0	511	2 words per tuple

# **Field descriptions**

The following table lists the fields of table PRI1WAY.

Field	Subfield or refinement	Entry	Explanation and action
Node Type	None	Type of Node (PMNAME)	This entry has type of node e.g. DTCI, LTC, SPM.
Node ID	None	Node Number	This has ext pm no.

## PRI1WAY (end)

## **Datafill example**

All PRI trunks on SPMO, DTCI1, and LTC2 are one way outbound trunks and all originations on these trunks are rejected.

MAP display example for table control interface for provisioning of PRI1WAY

```
TABLE: PRI1WAY
SPM 0
DTCI 1
LTC 2
```

# Table history

## NA017

Feature A59033985 introduced this table for the enhancement of PRI trunks.

## PRIPROF

#### Table name

Primary Rate Interface (PRI) Profile

## **Functional description**

Table PRIPROF contains the status of function switches that were configured for a particular issue of a variant.

### **Datafill sequence and implications**

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

Before a tuple in table PRIPROF can be deleted or changed, all references to the profile name must be removed from table LTDEF. Profile names are stored in field PROFNAME in both tables.

## Table size

256 tuples

Table size for table PRIPROF is statically allocated in accordance with the maximum number of profiles that can be held in the table, which is currently 256.

## Datafill

The following table lists datafill for table PRIPROF.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PROFNAME		alphanumeric (1 to 8 characters)	Profile name
			Enter a character string to represent the primary rate interface (PRI) profile name.
VARINFO		see subfield	Variant information
			This field consists of subfield VARIANT and refinement.

# **PRIPROF** (continued)

Field	Subfield or refinement	Entry	Explanation and action
	VARIANT	AUSTPRI,	Protocol variant
		ETSIPRI, EVN4PRI, INSPRI, N449PRI,	Enter the data for this field to define the PRI protocol with which the profile name must be associated, then datafill refinement ISSUE.
		NTNAPRI, NIPRI, QSIGPRI, U449PRI, or U459PRI	Permitted entry values for this field are dependent upon the PRI variant packages that are loaded on the switch.
			When the N449PRI variant is selected, enter corresponding ISSUE subfield V1.
			When the NTNAPRI variant is selected, five function switches are available. These switches enable a user to set up interworking between the DMS switch and an SL-1 private branch exchange (PBX).
			You must select ETSIPRI if you wish to select SWISS3, SPAIN1, or HOLLAND1 in the ISSUE field to activate Swiss PRI, Spanish PRI, or Dutch PRI.
			When the NIPRI variant is selected, SWITCH can be datafilled using the value for an unknown type of number/numbering plan identifier (UNTONNPI). When NIPRI is selected, only the UNTONNPI function switch is available.

### Field descriptions (Sheet 2 of 3)

## **PRIPROF** (continued)

### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action					
	ISSUE	1990, ETSI1993, ISO1996, TS141490, V1, NI2V1, NET3, X11, EVN4V1, SWISS3, SPAIN1, HOLLAND1	Protocol issue					
			ISO1996, TS141490,	Enter the data for this field to define the specification issue with which the PRI variant is associated. Default value is ISO1996.				
			SWISS3, SPAIN1 and HOLLAND1 can only be selected if the entry in the VARIANT field is ETSIPRI. Also, see table LTDEF.					
SWITCH		vector of up to 64 alphanumeric names (1 to 8 characters)	Function switch name					
			alphanumeric names (1 to 8	alphanumeric names (1 to 8	alphanumeric names (1 to 8	alphanumeric names (1 to 8	alphanumeric names (1 to 8 characters) This field is a vector of up to 64 fun switch names. Valid entry values for this field are of specific applications. These entry v	This field is a vector of up to 64 function switch names.
								Valid entry values for this field are defined by specific applications. These entry values are dependent upon the variant and issue combination.
					Enter a function switch name for each software function that must be associated with the switch. Separate each entry by a space and end the vector with \$.			
					Software functions for switch names that are not datafilled in this field are disabled.			
			When the NIPRI variant is selected in field VARIANT, SWITCH can be datafilled using the value for the unknown type of number/numbering plan identifier (UNTONNPI).					

# Datafill example

The following example shows sample datafill for table PRIPROF.

**PRIPROF** (continued)

#### MAP display example for table PRIPROF

PROFNAME	VARINFO		SWITCH	
NAPBX	NTNAPRI	VI	(EXMPL1) (EXMPL2)	\$
ETSIPBX	ETSIPRI	1990 (EXMPL3	) (EXMPL4) (EXMPL6)	\$
AUSTPBX	AUSTPRI	TS14_1990	(EXMPL5)	\$
NI2UNKNWN	NIPRI NI	[2V1	(UNTONNPI) \$	

## **Table history**

#### NA015

Feature A59023416 added subfield N449PRI to option VARIANT.

#### MMP12

Added option ETSI1993 and deleted options ISO1990 and ISO1994 from subfield ISSUE.

#### **EUR010**

Options SPAIN1 and HOLLAND1 added to subfield ISSUE for activities AU3208 and AU3209 (Spanish PRI and Dutch PRI).

#### **EUR009**

Option SWISS3 added to field ISSUE for feature AU2826.

#### EUR008 and APC009

Adds value EVNPRI to subfield VARIANT, and values, EVN4V1, NET3, and X11, to subfield ISSUE.

Option DIALTONE in table PRIPROF can not be provisioned in EUR008 or APC009. Option DIALTONE is visible. If you attempt to provision option DIALTONE, the following error message appears:

DIALTONE SWITCH NO LONGER SUPPORTED.USE NET\_DIALTONE\_ON IN LTDATA INSTEAD.

*Note:* Option NET\_DIALTONE\_ON in table LTDATA and option DIALTONE in table PRIPROF provide the same functionality.

#### **EUR006**

Adds new value, QSIGPRI, to subfield VARIANT and three new values, ISO1996, ISO1994 and ISO1990, to subfield ISSUE.

#### **XPM08**

Add NI2V1 as an option for subfield ISSUE.

# **PRIPROF** (end)

## **CCM07**

Table PRIPROF was modified to include NIPRI as a valid entry in subfield VARIANT.

#### BCS36

Table PRIPROF was introduced.

# PRSUDATA

#### ATTENTION

This table applies to new or modified content for SN07(DMS) that is valid through the current release.

# **PRSUDATA**

## **Datafill sequence and implications**

The table is dynamically datafilled when a PRSU is successfully validated via the Post Release Software Manager (PRSM).

## Table size

The table may contain up to 32000 entries.

## Datafill

Datafilling is done dynamically.

### Fields and subfields for table PRSUDATA

Field	Subfield or refinement
PRSUINDX	PRSUDATA_KEY
PRSUID	PRSU_CHAR_VECTOR
FLCLASS	CLASSID
BCSNO	UNSIGNEDINT
CATEGORY	PRSU_CATEGORY
ACTINDEX	UNSIGNEDINT
CLASS	PRSU_CLASS_TYPES
CUSTAPP	BOOL
AUTOAPP	BOOL
AUTOINST	BOOL
INSTREQD	BOOL

1

Field	Subfield or refinement
SPECIAL	BOOL
SRC	BOOL
MAN	BOOL
CMD	BOOL
HOLD	BOOL
PROCESOR	PRSM_PROCESSOR_TYPE
RESTART	RESTART_REQUIRED_TYPE
STATAUD	BOOL
STATALRM	BOOL
FILEAUD	BOOL
FILEALRM	BOOL
PERM	BOOL
ENTRVALD	PRSU_ENTRY_CODE
FIRSTVAL	PRSM_TIME_TUPLE
VALDATE	PRSM_DATE_TUPLE
FIRSTAPP	PRSM_TIME_TUPLE
APPDATE	PRSM_DATE_TUPLE
FIRSTREM	PRSM_TIME_TUPLE
REMDATE	PRSM_DATE_TUPLE
FIRSTINS	PRSM_TIME_TUPLE
INSDATE	PRSM_DATE_TUPLE

#### Fields and subfields for table PRSUDATA

# **Table history**

## SN07(DMS)

New table PRSUDATA created as part of activity Q01083765.

# PRTN2CCD

### Table name

Pretranslator To CC Translator Name Table

## **Functional description**

This table provides the mapping from the Pretranslator Name to the Country Code (CT) Translator Name. This mapping is required to maintain the customer group translations partitioning begun in MDC translations and to pass this partitioning on to the international partitioned translations.

## **Datafill sequence and implications**

The following tables must be datafilled before table PRTN2CCD.

- LINEATTR
- CTHEAD

## Table size

Table PRTN2CCD is a static table with 256 tuples. Tuples without datafill do not display.

# Datafill

The following table lists datafill for table PRTN2CCD.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PRTN		alphanumeric	Pretranslator name
			Lists the pretranslator name from table LINEATTR.
TRANNAME		alphanumeric	<i>CT translator name</i> Lists the translator name from table CTHEAD.

# **Datafill example**

The following example shows sample datafill for table PRTN2CCD.

The example consists of a pretranslator name, CTID, which is mapped to the CT translator name, CCTID. The pretranslator name is found in table LINEATTR, field PRTNM. The CT translation name is found in table CTHEAD, field XLANAME.

# PRTN2CCD (end)

### MAP display example for table PRTN2CCD

PRTN TRANNAME

CTID CCTID

# PRTTONET

## Table name

Partition Number to NETINFO Mapping Table

## **Functional description**

Table PRTTONET maps partition numbers to NETINFO information for IVPM calls.

## **Datafill sequence and implications**

Table NETNAMES must be datafilled before table PRTTONET.

## Table size

0 to 1000 tuples

A restart is not required in order to increase the table size.

## Datafill

The following table lists datafill for table PRTTONET.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PARTNO		numeric (3	Partition number
		digits)	Enter a partition number.
NETNAME		alphanumeric	Network name
		(up to 32 characters)	Enter a character string corresponding to a NETNAME that exists in table NETNAMES.
NETCGID		numeric (0 to	Network customer group id
		4095)	Enter a number to identify the external customer group.
NCOS		numeric (0 to	Network class of service
		255)	Enter a number to specify the network class of service.

# **Datafill example**

The following example shows sample datafill for table PRTTONET.

# PRTTONET (end)

This example shows the initial datafill for the following partition number to NETINFO mapping requirements:

- Partition digits 601 are associated with NETWK1 external customer group 50 and a class of service of 25.
- Partition digits 602 are associated with NETWK2 external customer group 100 and a class of service of 60.
- Partition digits 603 are associated with NETWK3 external customer group 100 and a class of service of 70.

#### MAP display example for table PRTTONET

PR	FNO NETNA	ME NETCGID	NCOS	
	501 NETWK	1 50	25	
(	502 NETWK	2 100	60	
	503 NETWK	.3 100	70	

## PS

## Table name

Program Store Assignment Table

## **Functional description**

The following assignment data for each program store (PS) shelf appears in table PS:

- floor, row on floor, frame position in row, and base mounting position for each PS shelf
- frame type and number on which the PS shelf mounts
- highest numbered memory card
- product engineering code (PEC) of PS shelf

The system allocates memory for planes 0 and 1 for eight PS shelves.

Table 1 contains PS PEC descriptions with the correct references from the *DMS-100 Provisioning Manual*, 297-1001-450.

PEC	Description	Reference
NT3X31AA	Program store	EMR4-01-000
NT3XA31AD	1 Megaword program store	EMR4-03-000
NT3X32AA	1 Megaword program store	EMR4-05-000
NT3X32BA	1 Megaword program store	EMR4-07-000
NT3X41DA	8 Megaword program store	Not available
NT3X41EA	Central PROC and shelf assembly	EMR4-10-000
NT3X4106	Central PROC and shelf assembly	EMR4-10-000
NT9X99ZZ	Dummy PEC	Not available
NT7X31AA	Special DMS-100 project	Not available
NT7X3102	Special DMS-100 project	Not available

#### **Program store PEC descriptions**

## **PS** (continued)

## Datafill sequence and meaning

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

### Table size

2 to 8 tuples

The table contains 1 tuple for each defined PS memory shelf. Each defined PS memory shelf is for each central control (CC) plane that can have a maximum of four PS shelves.

### Datafill

Datafill for table PS appears in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PSNM		see subfields	<i>Program store number</i> . This field contains subfields PSSHNO and PLANE.
	PSSHNO	0 to 7	<i>Program store shelf number</i> . Enter the number assigned to the program store (PS) shelf.
PLANE		0 to 1	Plane. Enter the plane of the PS shelf.
NOMEMCDS		0 to 15	<i>Highest numbered memory card</i> . Enter the highest numbered memory card on the PS shelf.
FRTYPE		CCC MCCM or MEX	<i>Frame type</i> . Ecabinet core module (MCCM) or memory extension frame (MEX) on which the PS shelf mounts.
FRNO		0 to 1	<i>Frame number</i> . Enter the frame number of the CCC or MEX frame on which the PS shelf mounts.
			Entries out of this range are not correct.
SHPOS		18, 32, 51, or 65	<i>Shelf position.</i> Enter the base mounting position of the PS shelf on the CCC or MEX frame.
			Entries out of this range are not correct.

# **PS** (continued)

Field	Subfield or refinement	Entry	Explanation and action
FLOOR		0 to 99	<i>Floor.</i> Enter the floor or remote location number that indicates the location of the frame of the PS shelf.
ROW		A to Z, AA to ZZ, except I, II, O, and OO	<i>Row</i> . Enter the row on the floor that indicates the location of the frame of the PS shelf.
FRPOS		0 to 99	<i>Frame position.</i> Enter the bay position in the row that indicates the location of the frame of the PS shelf.
EQPEC		3X31AA 3X31AD 3X32AA 3X32BA 7X31AA 9X99ZZ 3X41DA 3X41EA 3X4106 or 7X3102	Equipment product engineering code. Enter the product engineering code (PEC) of the PS shelf. Do not include the NT prefix.

#### Field descriptions (Sheet 2 of 2)

## Datafill example

Sample datafill for table PS appears in the following example.

The assignments associated with PS shelf 0, planes 0 and 1 appear in the following example.

The system provides one record for each plane.

# PS (end)

MAP example for table PS

FOIM	NOMEMCDS	L IVI I E F	I ILINO	5112 05	I DOOK	ROW	FREOD	EQPEC
00 0	15	CCC	0	32	05	В	03	3x31aa
00 1	15	CCC	0	32	05	В	04	3x31aa

# PSCNUM

### Table name

Private Speed Call Number Table

# **Functional description**

Table PSCNUM contains all of the private speed calling (PSC) numbers used by feature AD2186 (Meridian SuperNode (MSN) Private Speed Calling and hotline Dialing). Table PSCNUM has a double index, the PSC index that associates the PSC number with an authorization code (authcode), and the PSC number that the caller dials. Destination digits are datafilled for each entry. These digits are the number to which the call is routed when the PSC number is dialed for the authcode corresponding to the PSC index.

# **Datafill sequence and implications**

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

### Table size

0 to 5000 tuples

### Datafill

The following table lists datafill for table PSCNUM.

#### Field descriptions (Sheet 1 of 2)

	Subfield or		
Field	refinement	Entry	Explanation and action
PSCKEY		see subfields	Private speed calling key
			This field consists of subfields PSCIDX and PSCNUM.
	PSCIDX	0 to 4999	Private speed calling index
			Enter the number that associates a private speed calling (PSC) number with a particular authorization code (authcode).

# PSCNUM (end)

### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PSCNUM	2 digits nn	Private speed calling number
		(where <i>n</i> is 2 to 9 [pro-grammed ]) or 2 to 99 (reserved)	Enter the PSC number in the form <i>nn</i> , where <i>nn</i> is a number in the range 2 to 9 that the caller dials. Any combination of numbers using 0 (zero) or 1 is invalid. For example, 24 and 35 are valid PSC numbers, but 21 and 30 are invalid.
	DESTDIGS	0 to 9 (1 to 18	Destination digits
		digits)	Enter the number to which the speed call terminates.

# **Datafill example**

The following example shows sample datafill for table PSCNUM.

#### MAP display example for table PSCNUM

PSCKEY	DESTDIGS	
5 22	24231	
69 34	8067953323	
3378 54	011555364785674	

# **PSNAILUP**

### Table name

P-Side Nail-up Table

# **Functional description**

Table PSNAILUP contains an inventory of P-side to P-side, nailed-up cross-connections whose endpoints are either lines on a remote concentrator SLC-96 (RCS) or channels on a DS-1 line connecting to equipment other than an RCS or DMS-100 remote peripheral module (PM).

### **Datafill sequence and implications**

Table PSNAILUP must be datafilled before table <short name of table>.

The following tables must be datafilled before table PSNAILUP.

- table LTCPSINV for the DS-1 channel endpoint subtending a subscriber carrier module-100S (SMS)
- table LTCRPINV for the DS-1 channel endpoint subtending a remote SMS (SMSR)
- table LNINV for the RCS line endpoint

### Table size

0 to 4600 tuples

Table PSNAILUP requires 14 bytes of memory in protected data store for each nailed-up cross-connection.

### Datafill

The following table lists datafill for table PSNAILUP.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
ENDPT1		see subfield	Endpoint 1
			This field consists of subfield PSSEL. It consists of the first endpoint of the nailed-up cross-connection. This endpoint can either be an remote concentrator SLC-96 (RCS) line or a DS-1 channel.
	PSSEL	SMS, SMSR,	P-side selector
	RCS, or NIL	Enter SMS if the first endpoint is a DS-1 channel subtending a subscriber carrier module-100S (SMS) and datafill refinements PMNO, PORT, and CHNL.	
		Enter SMSR if the first endpoint is a DS-1 channel subtending a remote SMS (SMSR) and datafill refinements PMNO, PORT, and CHNL.	
			Enter RCS if the first endpoint is an RCS line and datafill refinement LEN.
	PMNO	0 to 255	Peripheral module number
	or 0 to 1023	If the entry in subfield PSSEL is SMS or SMSR, datafill this refinement. Enter the external number of the SMS or SMSR.	
			If the switch type is an NT40, the range is 0 to 255.
			If the switch type is a SuperNode, the range is 0 to 1023.
	PORT	0 to 19	SMS P-side port
			If the entry in subfield PSSEL is SMS or SMSR, datafill this refinement. Enter the P-side port number of the SMS or SMSR.

Field	Subfield or refinement	Entry	Explanation and action
	CHNL	1 to 24	P-side circuit time slot
			If the entry in subfield PSSEL is SMS or SMSR, datafill this refinement. Enter the DS-1 channel (time slot) of the SMS or SMSR.
			Go to field ENDPT2.
	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.
			When datafill for field LEN is complete, go to field ENDPT2.
ENDPT2		see subfield	Endpoint 2
			This field consists of subfield PSSEL. It consists of the second endpoint of the nailed-up cross-connection. This endpoint can be either an RCS line or a DS-1 channel.
	PSSEL	SMS, SMSR,	P-side selector
		RCS, or NIL	Enter SMS if the first endpoint is a DS-1 channel subtending an SMS and datafill refinements PMNO, PORT, and CHNL.

### Field descriptions (Sheet 2 of 4)

### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	PMNO	0 to 255 or 0	Peripheral module number
		to 1023	If the entry in subfield PSSEL is SMS or SMSR, datafill this refinement. Enter the external number of the SMS or SMSR.
			If the switch type is an NT40, the range is 0 to 255.
			If the switch type is a SuperNode, the range is 0 to 1023.
	PORT	0 to 19	Sms p-side port
			If the entry in subfield PSSEL is SMS or SMSR, datafill this refinement. Enter the P-side port number of the SMS or SMSR.
	CHNL	1 to 24	P-side circuit time slot
			If the entry in subfield PSSEL is SMS or SMSR, datafill this refinement. Enter the DS-1 channel (time slot) of the SMS or SMSR.
			Go to field STATUS.
	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.
			When datafill for field LEN is complete, go to field STATUS.

	Subfield or		
Field	refinement	Entry	Explanation and action
STATUS		A or P or I	Status
		or NIL	Enter the status of the connection. Enter A (active) if the connection is datafilled and set up. Enter P (pending) if the connection is datafilled, but the system has not set up the connection in the PM.
			Inactive (I) is a possible status and indicates that the connection is datafilled, but the DS-1 link is not in service. The switch operator cannot enter I. The system sets the status to inactive if it is unable to set up a connection after the connection was datafilled. The endpoints remain datafilled in table PSNAILUP, and the connection is made active by the system when both endpoints become in-service.
			NIL indicates that there is no physical hardware connection and that the nonexistent connection is not datafilled. The system initializes the STATUS field to NIL.
ABINSERT		Y or N	A- and b-bits insertion
			Enter Y (yes) if A- and B-bits are inserted into the information stream. Otherwise, enter N (no).
			Digital Dataphone Services (DDS) use DDS protocol bits in the same position as A and B signaling bits, so A- and B-bits are not inserted into the information stream for DDS. Voice connections normally use A- and B-bits.
			The default value for this field is Y.

#### Field descriptions (Sheet 4 of 4)

### **Datafill example**

The following example shows sample datafill for table PSNAILUP.

The example shows the two endpoints, the STATUS field of the nailed-up cross-connection, and whether A and B bits are inserted.

The first endpoint is an RCS line. It has a PSSEL of RCS and a LEN of REM1 00 00 01 03. The second endpoint is a DS-1 channel. It has a PSSEL of SMS. The SMS is number 0 (zero) and its number 2 P-side port connects to the DS-1 line carrying the DS-1 channel. The DS-1 channel is number 1.

Field STATUS shows the status of the connection. In the example, the status is active. A- and B-bits are inserted.

#### MAP display example for table PSNAILUP

	ENDPT1		ENDPT2	STATUS ABINSERT	
-					
l	RCS REM1	00 0 01 03	SMS	0 2 1 A	Y

# **Table history**

#### CSP04

The following changes take effect in CSP04.

- Reference to cold restart removed.
- Table size changed to 4600.

### Supplementary information

This section provides information on error messages that can occur when datafilling table PSNAILUP.

#### Datafill conditions and error messages

To enter data on lines and DS-1 channels in table PSNAILUP, the following criteria must be satisfied:

Both endpoints must be on the same SMS or the same SMSR. If this condition is not met, one of the following error messages is displayed at the MAP (maintenance and administration position) terminal:

ENDPOINTS NOT CONFIGURED ON THE SAME SMS

ENDPOINTS NOT CONFIGURED ON THE SAME SMSR

The SMS must be datafilled in table LTCINV. If this condition is not met, one of the following error messages is displayed at the MAP terminal:

#### SMS NOT DATAFILLED IN LTCINV (for lines)

DS1 NOT PROPERLY CONDIGURED (for DS-1 channels)

Neither endpoint can be part of an existing nailed-up cross-connection. If this condition is not met, the following error message is displayed at the MAP terminal:

#### ENDPOINT PART OF AN EXISTING NAILED-UP CONNECTION

Line endpoints must be datafilled in table LNINV. If this condition is not met, the following error message is displayed at the MAP terminal:

#### LINE NOT EQUIPPED

Line endpoints must have card code NAILUP in table LNINV. If this condition is not met, the following error message is displayed at the MAP terminal:

#### LINE NOT A SPECIAL SERVICES CIRCUIT

DS-1 channels cannot be on DS-1 lines that are datafilled in table LTCPSINV for an SMS or table LTCRPINV for an SMSR. If this condition is not met, the following message is displayed at the MAP terminal:

#### DS0 NOT ON AN EQUIPPED DS1

DS-1 lines must be properly configured in table LTCPSINV for an SMS or table LTCRPINV for an SMSR. Otherwise, the following message is displayed at the MAP terminal:

#### DS1 NOT PROPERLY CONFIGURED

DS-1 channels cannot be on DS-1 lines that terminate on an RCS. If this condition is not met, the following message is displayed at the MAP terminal:

#### DS0 TERMINATES ON A REMOTE PERIPHERAL

The status of the nailed-up cross-connection must be specified as A (active) or P (pending) only. Specifying the cross-connection status other than A or P results in the following error message being displayed at the MAP terminal:

MUST SPECIFY ACTIVE OR PENDING STATUS ONLY

The table editor CHANGE command is not allowed when a change is required to an endpoint in table PSNAILUP. To change an endpoint, the tuple

### **PSNAILUP** (end)

containing the endpoint must be deleted and a new one added. The CHANGE command can be used only on field STATUS of nailed-up cross-connections. Attempting to change an endpoint using the CHANGE command results in the following error message:

CHANGE COMMAND NOT ALLOWED ON ENDPOINTS

If operating company personnel try to change field ABINSERT of table RCSINV while the status of the nailed-up cross-connection is active or inactive, the following message appears at the MAP terminal:

# CANNOT CHANGE ABINSERT FIELD WHEN STATUS IS ACTIVE OR INACTIVE

If any company used in a P-side to P-side, nailed-up cross-connection is out of service (this includes the SMS, SMSR, RCS, and DS-1 link) when the connection is datafilled is table PSNAILUP, the status is set to inactive, with the following message displayed at the MAP terminal:

#### CONNECTION INACTIVE -- ENDPOINTS NOT IN SERVICE

The connection becomes active when the equipment is put into service.

If any DS-1 channels are part of a nailed-up cross-connection, no RSC can be attached to the DS-1 link holding those channels. No lines with special services card code NAILUP can be datafilled in table LENLINES.

# **PSTNTRK**

### Table name

Public Switched Telephone Network Trunk Table

# **Functional description**

Table PSTNTRK functions as a look-up table to determine if the marked tables connect to the public switched telephone network (PSTN). The key field is GRPKEY. Field GRPKEY contains the common language location identifier (CLLI) from table TRKGRP.

The default setting for field PSTN is N. The treatment of any trunk that does not have data entry is as PSTN. This process prevents the use of any new trunk to bypass PSTN restrictions.

# Datafill sequence and meaning

Enter data in tables CLLI and TRKGRP before you enter data in table PSTNTRK.

### Table size

1 to 8191 tuples

### Datafill

Datafill for table PSTNTRK appears in the following table.

### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	Group key. This field contains subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	<i>Common language location identifier</i> . Enter the common language location identifier (CLLI) of the trunk group.
PSTN		Y or N	Public switched telephone network. Enter Y (yes) if the trunk group is PSTN. Enter N (no) if the trunk group is not PSTN. The default value for this field is N.

# Datafill example

Sample datafill for table PSTNTRK appears in the following example.

# PSTNTRK (end)

### MAP example for table PSTNTRK

GRPKEY	PSTN	
MELPVN	Ν	)

# Table history

### BCS35

Table PSTNTRK was introduced in BCS35.

# **PTIDTAB**

#### Table name

Port Identifier Table

### **Functional description**

Table PTIDTAB is a read-only table. This table preserves the integrated link maintenance (ILM) ports and ILM access identifiers over software applications.

An update of this table can occur through the datafill of a device that requires ILM supported resources. An update of this table can occur as part of a restore operation on the N + 1 software application as part of a software application. For this reason, table PTIDTAB is a write-restricted table with a SYSPROT table protection level.

*Note:* Table PTIDTAB is for NT use only. This table is not for operating company use.

### Datafill sequence and meaning

You do not have to enter data in other tables before you enter data in table PTIDTAB.

Table PTIDTAB must appear early in the data entry order. This table must follow table AKEYTAB immediately, to allow any future cross-checking between these tables.

Restore table PTIDTAB before you restore inventory tables of devices that require ILM resources. The use of a restore operation allows data entries in this table. This table is write-restricted for direct datafill.

### Table size

0 to 2048 tuples

The number of tuples added dynamically determines table size.

# PTIDTAB (continued)

### Datafill

Datafill for table PTIDTAB appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PTID		see subfields	<i>Port identifier</i> . This field is a different identifier that ILM uses to identify a port. This field contains subfields EPT_KEY and OFFSET.
	EPT_KEY	0 to 32767	<i>Port endpoint key.</i> This subfield is a different identifier that can identify the access key on which the port resides.
	OFFSET	0 to 32767	<i>Port offset.</i> This subfield is a different identifier that identifies the port on the access key. If an access key has several ports, use of the port offset differentiates between the ports.
ACID		see subfields	Access identifier. This field is the access identifier that locates the port. This field contains subfields KEY, INDEX, and CHANNEL.
	KEY	0 to 32767	Access key. This subfield is the access key part of the access identifier.
	INDEX	0 to 32767	Access index. This subfield is the access index part of the access identifier.
	CHANNEL	0 to 32767	<i>Access channel.</i> This subfield is the access channel part of the access identifier.

# **Datafill example**

Sample datafill for table PTIDTAB appears in the following example.

# PTIDTAB (end)

### MAP example for table PTIDTAB

PTID	ACID	
0 0 1 0 1 1	0 0 0 1 0 0 1 1 0	

# Table history

### BCS35

Table PTIDTAB was introduced in BCS35.

### PTP

#### Table name

TOPS Point-to-Point Rating Table

### **Functional description**

Table PTP lists the schedule name and rate step that apply for each combination of point-to-point originating rate center and terminating rate center.

For related information, refer to table ORIGRC.

### **Datafill sequence and implications**

Table SCHED must be datafilled before table PTP.

Table PTP has direct interaction with office parameter TOPS\_MAX\_ORIG\_RATE\_CENTER in table OFCENG.

### Datafill

The following table lists datafill for table PTP.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ORCTRC		see subfields	Point to point originating—terminating rate center key. This field consists of subfields ORC and TRC.
	ORC	1 to 255	Point to point originating rate center. Enter the point-to-point originating rate center.
			The entry in this field cannot exceed the entry in office parameter TOPS_MAX_ORIG_RATE_CENTER in table OFCENG.
			The DMS switch shows the range as 0-255, however, value 0 is a NIL value and not allowed by table control.

# PTP (end)

Field	Subfield or refinement	Entry	Explanation and action
	TRC	1 to 255	Point to point terminating rate center. Enter the point-to-point terminating rate center.
			The entry in this field cannot exceed the entry in office parameter TOPS_MAX_ORIG_RATE_CENTER in table OFCENG.
			The DMS switch shows the range as 0-255, however, value 0 is a NIL value and not allowed by table control.
SCHNAME		alphanumeric (up to 17 characters)	Rate schedule name. Enter the rate schedule name.
			The entry in this field must be datafilled in table SCHED as a domestic termination type (field TERMTYPE set to DOM).
RATESTEP		0 to 999	Rate step. Enter the rate step that applies to this combination of point-to-point originating-terminating rate centers.
			The entry in this field must be within the range of rate steps associated with this rate schedule name in table SCHED (fields LRS and HRS).

#### Field descriptions (Sheet 2 of 2)

### **Datafill example**

The following example shows sample datafill for table PTP.

#### MAP display example for table PTP

$\left( \right)$	ORCTRC		SCHNAME RATESTEP	
	1	1	CARIBA 341	

### Table history NA005

Changed range of fields TRC and ORC from 0-255 to 1-255. Value 0 is a NIL value and not allow by table control per PRS UT56251.

# **PVCINFO**

### Table name

Permanent Virtual Circuit Information Table

### **Functional description**

Table PVCINFO functions as a look-up table to determine permanent virtual circuit (PVC) service parameters for use with the DMS packet handler (DMS-PH). A PVC is a permanent logical connection between two network endpoints. One endpoint is designated as the master end and the other endpoint is designated as the slave end. The key fields KEY and SLVEND contain a directory number (DN) from table DNCHNL or a common language location identifier (CLLI) from table X75INFO.

The following rules apply for datafilling an individual PVC:

- There is only one set of data (for example, options SENDTC and RECVTC [send and receive throughput class]) for the PVC, which is defined from the master end. The slave end does not have independent data.
- Slave end send parameters are equal to master end receive parameters.
- Slave end receive parameters are equal to master end send parameters.

### **Datafill sequence and implications**

The following tables must be datafilled before table PVCINFO.

- DNCHNL
- X75INFO

### Table size

0 to 8100 tuples

# Datafill

The following table lists datafill for table PVCINFO.

### Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	Permanent virtual circuit key
			This field identifies the master end and consists of subfield ENDTYPE and its refinements. This is the first of two key fields.
	ENDTYPE	X25 or X75	Endpoint type
			Enter the network layer protocol for the permanent virtual circuit (PVC) network endpoint interface.
			Enter X25 and datafill refinements DN, CHNL, and LCN.
			Enter X75 and datafill refinements CLLI, MEMB, and LCN.
		numeric (up to	Directory number
		18 digits)	If the entry in subfield ENDTYPE is X25, datafill this refinement. Enter the directory number datafilled in table DNCHNL for the PVC data terminal equipment (DTE).
	CHNL	B or D	Channel type
			If the entry in subfield ENDTYPE is X25, datafill this refinement. Enter the PVC channel type used to identify the PVC on the X.25 interface.
	CLLI	alphanumeric	Common language location identifier
		(1 to 16 characters)	If the entry in subfield ENDTYPE is X75, datafill this refinement. Enter the common language location identifier (CLLI) datafilled in table X75INFO for the PVC trunk group.
	MEMB	0 to 9999	Permanent virtual circuit index number
			If the entry in subfield ENDTYPE is X75, datafill this refinement. Enter the PVC member number used to identify the PVC on the X.75 interface.

### Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	LCN	1 to 4095	Logical channel number
			Enter the PVC logical channel number used to identify the PVC on the X.25 or X.75 interface.
	VIRT	see subfield	Virtual link
			This field identifies the LEA link and consists of subfields LINK_ID and LCN.
	LINK_ID	0 to 511	Link identifier
			This field identifies the link assigned to the LEA that is monitoring the data call.
	LCN	1 to 10	Logical channel number
			This field identifies the channel assigned to the LEA that is monitoring the data call.
			<i>Note:</i> The LCN is automatically assigned when the USNBD command CCR ASSOC is entered.
PVCOPTNS		see subfield	Permanent virtual circuit options
			This field consists of subfield PVCPRM. Up to eight parameters can be entered. If less than eight parameters are required, end the list with a \$ (dollar sign).
SLVEND		see subfield	Slave end
			This field identifies the slave end and consists of subfield ENDTYPE and its refinements. This is the second of two key fields.
	ENDTYPE	X25 or X75	Endpoint type
			Enter the network layer protocol for the PVC network endpoint interface.
	DN	numeric (up to	Directory number
	18 digits)	If the entry in subfield ENDTYPE is X25, datafill this refinement. Enter the directory number datafilled in table DNCHNL for the PVC data terminal equipment (DTE).	

Field	Subfield or refinement	Entry	Explanation and action
	CHNL	B or D	Channel type
			If the entry in subfield ENDTYPE is X25, datafill this refinement. Enter the PVC channel type used to identify the PVC on the X.25 interface.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier
			If the entry in subfield ENDTYPE is X75, datafill this refinement. Enter the common language location identifier (CLLI) datafilled in table X75INFO for the PVC trunk group.
	MEMB	0 to 9999	Permanent virtual circuit index number
			If the entry in subfield ENDTYPE is X75, datafill this refinement. Enter the PVC member number used to identify the PVC on the X.75 interface.

### Field descriptions (Sheet 3 of 5)

### Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
PVCOPTNS		see subfield	Permanent virtual circuit options
			This field consists of subfield PVCPRM. Up to eight parameters can be entered. If less than eight parameters are required, end the list with a \$ (dollar sign).
	PVCPRM	BILLING	Permanent virtual circuit parameters
		LATA RECVPS	Enter the PVC parameter.
		RECVTS RECVWS	Enter BILLING for billing and datafill refinement SCHEME.
		SENDPS SENDTC SENDWS	Enter LATA for local access and transport area and datafill refinement LRANGE.
	LRANGE		Enter RECVPS for receiving packet size and datafill refinement PSIZE.
			Enter RECVTS for receive throughput class and datafill refinement TPUCLAS.
			Enter RECVWS for receiving window size and datafill refinement WSIZE.
			Enter SENDPS for sending packet size and datafill refinement PSIZE.
			Enter SENDTC for send throughput class and datafill refinement TPUCLAS.
			Enter SENDWS and datafill refinement WSIZE.
		INTER or INTRA	Local access and transport area range
			If the entry in subfield PVCPRM is LATA, datafill this refinement. Enter the local access and transport area (LATA) status for the PVC.
			The default value is INTRA.
	PSIZE	128 or 256	Packet size
			If the entry in subfield PVCPRM is RECVPS or SENDPS, datafill this refinement. Enter the packet size for master end packet data receiving or sending.
			The default is 128.

Field	Subfield or refinement	Entry	Explanation and action
	TPUCLAS	75, 150, 300,	Throughput class
		600, 1200, 2400, 4800, 9600	If the entry in subfield PVCPRM is RECVTS or SENDTS, datafill this refinement. Enter the receiving or sending throughput class
		or	baudrate value for the master end.
		19200,	If one of the endpoints is identified as X25 D,
		48000, 56000, 64000	the valid entries are: 75, 150, 300, 600, 1200, 2400, 4800, and 9600.
			If both endpoints are X25 B or X75, additional valid entries are: 19200, 48000, 56000, and 64000.
			The default value is 9600.
	WSIZE	1 to 127	Window size
			If the entry in subfield PVCPRM is RECVWS or SENDWS, datafill this refinement. Enter the window size for master end packet data receiving or sending. If one of the endpoints uses MODULO 8 packet level sequencing (PLSQ), as defined in table X75INFO, valid entries are 1 to 7. If both endpoints use MODULO 128 PLSQ, valid entries are 1 to 127.
			The default value is 2.

### Field descriptions (Sheet 5 of 5)

### **PVCPRM = BILLING**

If the entry in field PVCPRM is BILLING, datafill refinement SCHEME as described below.

Field descriptions for	conditional datafill	(Sheet 1 of 2)
------------------------	----------------------	----------------

Field	Subfield or refinement	Entry	Explanation and action
	SCHEME	see subfield	Scheme
			This field consists of subfield ENABLE.
	ENABLE	Y or N	Billing enable
			Enter Y (yes) to generate a billing record and datafill refinement BILLOPT. Otherwise, enter N (no) and datafill no refinements.
			The default value is Y (yes).
	BILLOPT	CHRGDN	Billing selection
		NORMAL orNUI	For BCS36 and up, enter CHRGDN for chargeable DN billing and datafill refinements ADDRFMT, CHRGDN, CHNLTYP, and LCN.
			<i>Note:</i> Entry CHRGDN is only valid if the master endpoint is X.25 and the slave endpoint is X.75. For example, an inter-LATA PVC call.
			Enter NUI if billing is charged to the Network User Identifier (NUI) and datafill refinement DIGITS.
			<i>Note:</i> NUI billing is supported only within a LATA, that is, field LATA is datafilled as INTRA.
			Otherwise, enter NORMAL. No refinements require datafill.
			The default is NORMAL.
	DIGITS	numeric (up to	Network user identifier digits
		15 digits)	If the entry in subfield BILLSEL is NUI, datafill this refinement. Enter the NUI number that receives the billing record.

Field	Subfield or refinement	Entry	Explanation and action
	ADDRFMT	E164orX121	Address format
			If the entry in subfield BILLSEL is CHRGDN, datafill this refinement. Enter the address format of the chargeable DN.
	CHRGDN	numeric (up to	Chargeable directory number
		14 digits)	If the entry in subfield BILLSEL is CHRGDN, datafill this refinement. Enter the chargeable DN.
		If the entry in field ADDRFMT is E164, the DN is up to 14 digits.	
			If the entry in field ADDRFMT is X121, the DN is 5 to 14 digits.
	CHNLTYP	B1, B2, or D	Channel type
			If the entry in subfield BILLSEL is CHRGDN, datafill this refinement. Enter the channel type of the chargeable DN.
	LCN	1 to 4095	Logical channel number
			If the entry in subfield BILLSEL is CHRGDN, datafill this refinement. Enter the PVC logical channel number used to identify the master X.25 endpoint of the PVC call.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

### **Datafill example**

The following example shows sample datafill for table PVCINFO.

The example consists of master end type X25, DN 7652222, channel B, and logical channel number 124. The slave end consists of end type X75, CLLI ISDNX75, PVC index member 2418, and logical channel number 23. Option SENDTC has a throughput class of 9600. Option BILLING is enabled twice: in the first option, billing is charged to NUI 14; in the second option, billing is charged to DN 2581975 using address format E164N on channel B1, and the logical channel number is 666. Option LATA is INTRA.

# PVCINFO (end)

#### MAP display example for table PVCINFO

 KEY
 SLVEND

 PVCOPTNS
 PVCOPTNS

 X25
 7652222 B
 124
 X75
 ISDNX75 2418
 345

 (SENDTC 9600)
 (BILLING Y NUI 14)

 (BILLING Y CHRGDN E164 2581975 B1 666)
 (LATA INTRA) \$

### **Table history**

#### NA014

Subfields VIRT, LINK\_ID, and LCN added to KEY field for USNBD virtual links..

#### BCS36

Entry CHRGDN was added to option BILLING.

#### BCS34

Table PVCINFO was introduced.

# **PVCTYPE**

### Table name

Permanent Virtual Circuit Type Table

# **Functional description**

Table PVCTYPE relates a type of permanent virtual circuit (PVC) layout to each tuple defined in table TMSPVC. Table PVCTYPE is indexed by an integer value in field VALUE. An identifier is datafilled in field SYMBOL against each integer value. These identifiers are types used to define the configuration type of a PVC layout in table TMSPVC.

This table contains six default entries. These entries are added as field VALUE (0 (zero) to 5) and are TRANS, DMS, STD, CG14, TEG, and CGI\_TEG, respectively. The last five tuples are used to incorporate the numbering scheme for table TMSPVC. Tuple 0 (zero), TRANS, is used for the Traffic Operator Position System (TOPS) message switch (TMS) cutover methods.

### **Datafill sequence and implications**

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

Table TMSPVC must be datafilled after table PVCTYPE.

### Table size

6 to 32 tuples

# Datafill

The following table lists datafill for table PVCTYPE.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VALUE		see subfield	<i>Value</i> This field consists of subfield UNINT.

# **PVCTYPE** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	UNINT	0 to 32	<i>Unit integer</i> This is the key field of the table. Enter the integer value.
			Indicated values outside this range are not valid.
SYMBOL		alphanumeric (1 to 32 characters)	<i>Symbol</i> Enter a text string to define a name used to define a permanent virtual circuit (PVC) configuration type in table TMSPVC.

### **Datafill example**

The following example shows sample datafill for table PVCTYPE.

The example consists of ten tuples. The first six are default entries.

#### MAP display example for table PVCTYPE

VALUE	SYMBOL	
0	TRANS	
1	DMS	
2	STD	
3	CG14	
4	TEG	
5	CGI_TEG	
6	MPX16	
7	CGI16	
8	MPX20	
9	CGI20	

# Table history

### BCS35

Table PVCTYPE was introduced.

# **Supplementary information**

This section provides information on dump and restore procedures for table PVCTYPE, and possible error messages when datafilling table PVCTYPE.

### **PVCTYPE** (end)

#### Dump and restore

No dump and restore procedure is needed when the table is first applied. Normal dump and restore procedures apply after the first application.

#### **Error messages**

No method exists for blocking deletions from this table. The following message is displayed as a deterrent each time a tuple is deleted:

WARNING-STRING RANGE VALUES MAY BE REFERENCED IN OTHER TABLES. DELETION OF STRING RANGE VALUES MAY LEAVE BLANK FIELDS IN THESE OTHER TABLES. IF YOU THINK THIS MAY BE THE CASE, RE-ADD THE VALUE AND ENSURE THE VALUE IS NOT USED IN ANOTHER TABLE BEFORE DELETING THE VALUE AGAIN.

### **PVDNAGEN**

#### Table name

Private Virtual Data Network Agent Table

### **Functional description**

Table PVDNAGEN stores all the FRS (frame relay service) agents in the private virtual data network (PVDN) database. All the attributes for table FRS Agents are programmed in table PVDNAGEN.

### **Datafill sequence and implications**

Table PVDNAGEN is the first table datafilled in the PVDN database. The agent identifiers are used in the tables PVDNCHAN and PVDNCUST. Table PVDNAGEN is not dependent on any other tables, although it must be datafilled before any of the frame relay tables.

The FRS agents must be assigned to a private virtual data network (PVDN) customer in table PVDNCUST.

### Table size

0 to 2201 tuples

Table size can be increased by adding new agents in table PVDNAGEN. The write routine for table PVDNAGEN allocates the space required.

### Datafill

The following table lists datafill for table PVDNAGEN.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
AGENTKEY		see subfields	FRS agent identifier
			This field consists of subfield AGENT and is the key to the table.
	AGENT	0 to 2200	Agent
			Enter the agent number.

Field	Subfield or refinement	Entry	Explanation and action
	DN	0 to 9(vector of up to 15 digits)	Directory number
			The directory number (DN) is the full complement of digits required to designate a subscriber's station within a numbering plan area (NPA).
			The NPA cannot be a number that is the same as a toll-free service access code (SAC) when the North American Numbering Plan is used.
			<i>Note:</i> For every tuple in PVDNAGEN, if field DN contains any non-digit (non-numeric) characters, or is greater than 9999999999999999, the whole tuple fails to restore.
	NUMBPLAN(B	INTL, NATL,	Numbering plan
	CS34- )	or X121INTL	The numbering plan adds support to internetworking with other networks. This field is based on the Q.931 origination message type of number and numbering plan identification fields.
			The default value for this field is X121INTL.
AGTTYPE		ACCESS or	Agent type
		T1TRUNK	Enter either ACCESS or T1TRUNK to indicate the agent type.
	DN	see subfield	Directory number
	(BCS35- )		This field consists of subfield DNTYPE.
	DNTYPE( BCS35- )	NIL or VALID	Directory number type
			Enter either NIL or VALID to indicate the DN type. If the entry in this field is VALID, datafill refinements DN and NUMBPLAN.
	DN (BCS35- )	0 to 9 (vector of up to 15 digits)	Directory number
	DN (DC333- )		If the entry in field DNTYPE is VALID, datafill this refinement. Enter the DN.

### Field descriptions (Sheet 2 of 4)

### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NUMBPLAN(B	INTL, NATL,	Numbering plan
	CS35- )	or X121INTL	The numbering plan adds support to internetworking with other networks. This field is based on the Q.931 origination message type of number and numbering plan identification fields.
	CUSTOMER	alphanumeric	Customer name
	(BCS35- )	(vector of up to 20 characters)	If the entry in field AGTTYPE is ACCESS, datafill this refinement. Enter the customer name.
	CONTMARK	+ or \$	Continuation mark
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.
SPEED		LS_56KBS	Speed
		LS_64KBS LS_384KBS LS_1344KBS or LS_1536KBS	Enter the speed at which the data is transferred across the medium to which the agent is connected. LS_1344KBS is used for T1 trunking.
ABSIGN		Y or N	A/B BIT signaling
			Enter Y (yes) or N (no).
CONTMARK		+ or \$	Continuation mark
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.
CONDEV		DDS_LATCH	Connected circuit device
		_LPBK or NIL	Enter the connected circuit device. DDS_LATCH_LPBK is a digital data system modem that supports latching loopback. When NIL is entered the far-end device is not specified.

Field	Subfield or refinement	Entry	Explanation and action
CONTMARK		+ or \$	Continuation mark
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.
TUNING		see subfield	T1 tuning
			This field consists of subfield OPTION.
	OPTION	WINDOW	Option
		INVERSION KEEP BUFFER ERAM CTRL_IDX or	Enter WINDOW for the window size of the end-to-end protocol running over the link. This option is used to recover frame loss and to ensure that no misordering of frames occurs. The default value is 16.
		FLAG	Enter INVERSION to invert the HDLC data before transmission over the physical T1 circuit. The default value is N.
			Enter KEEP to represent the number of transmit buffers that the channel retains after a period of heavy traffic. The default value is 5.
			Enter BUFFER to represent the maximum number of transmit buffers that channel can allocate from the common buffer pool during periods of heavy traffic. The default value is 75.
			Enter FLAG to represent minimum number of HDLC flags that are inserted between each frame. The default value is 1.

### Field descriptions (Sheet 4 of 4)

### **OPTION = BUFFER, FLAG, KEEP, CTRL\_IDX, or WINDOW**

If the entry in field OPTION is BUFFER, FLAG, KEEP, CTRL\_IDX, or WINDOW, datafill refinements VALUE and CM as described below.

Field	Subfield or refinement	Entry	Explanation and action
	VALUE	0 to 255	Value
			If the entry in subfield OPTION is BUFFER, FLAG, KEEP, CTRL_IDX, or WINDOW, datafill this refinement then go to field LMI on page Section, "If the entry in field LMI is ANSI, datafill refinement YES_NO as described below." on page -283 to continue datafill for table PVDNAGEN.
			Enter a number to indicate the window size.
			If the entry in field OPTION is BUFFER, the range is 4 to 100.
			If the entry in field OPTION is FLAG, the range is 1 to 255.
			If the entry in field OPTION is KEEP, the range is 0 to 100.
			If the entry in field OPTION is CTRL_IDX, the range is 0 to 100.
			If the entry in field OPTION is WINDOW, the range is 1 to 128.
	СМ	+ or \$	Continuation mark
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.

### **OPTION = INVERSION or ERAM**

If the entry in subfield OPTION is INVERSION or ERAM, datafill refinements YES\_NO and CM as described below.

Field descriptions for conditional datafill
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Field	Subfield or refinement	Entry	Explanation and action
	YES_NO	Y or N	Yes or no
			If the entry in subfield OPTION is INVERSION or ERAM, datafill this refinement then go to field LMI on page Section, "If the entry in field LMI is ANSI, datafill refinement YES_NO as described below." on page -283 to continue datafill for table PVDNAGEN.
			Enter either Y (yes) or N (no) to indicate whether the HDLC inversion occurs.
	СМ	+ or \$	Continuation mark
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.

## All options

For all options, datafill field LMI as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action		
LMI		ANSI,	Local management interface		
		BADENV, BADMSG, BACKCOMP, KARXTIME, CCITT	,	,	Enter the type of local management interface.
			Enter ANSI to indicate that ANSI format LMI is shared with the CPE and datafill subfield YES_NO.		
			Enter BADENV to define a window for counting incoming message errors.		
			Enter BADMSG to define a threshold, applied within the bounds of the BADENV value, for the acceptable number of errored incoming LMI messages before a timeout is declared.		
			Enter BACKCOMP is the switch being used provides backwards compatibility for trunking agents. This entry applies to enhanced trunk frame relay interface units (FRIU). Datafill subfield YES_NO.		
			Enter KARXTIME to control how long the LMI process waits on a channel in expectation of a status enquiry message before timing out.		
			Enter CCITT to indicate that the CCITT format is shared with CPE. Datafill subfield YES_NO.		

# LMI = ANSI

If the entry in field LMI is ANSI, datafill refinement YES\_NO as described below.

Field descri	ptions for	conditional	datafill
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Field	Subfield or refinement	Entry	Explanation and action
	YES_NO	Y or N	Yes or no
	(BCS35- )		If the entry in field LMI is ANSI, datafill this refinement. Enter Y to indicate that ANSI format LMI is shared with the CPE. Otherwise, enter N.
		Go to field ITS, section "ITS = KATXTIME" to continue datafill for table PVDNAGEN.	

#### LMI = BADENV, BADMSG, or KARXTIME

If the entry in field LMI is KARXTIME, BADMSG, or BADENV, datafill refinements VALUE and CONTMARK as described below.

Field	Subfield or refinement	Entry	Explanation and action
	VALUE	0 to 30 or 1 to 10	Value
			Enter the value for the LMI.
			If the entry in field LMI is KARXTIME, the range is 0 to 30. A value of 0 causes the LMI process to ignore whatever channel to which this agent is assigned. The process does not raise any alarms.
			The default values for KARXTIME are 20 or 15.
			If the entry in field LMI is BADMSG or BADENV, the range is 1 to 10. The BADMSG value cannot be greater than the BADENV value.
			The default values for BADMSG are 2 or 3.
			The default value for BADENV is 4.
	CONTMARK	+ or \$	Continuation mark
			Enter + if information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.

#### LMI = BACKCOMP

If the entry in field LMI is BACKCOMP, datafill refinement YES\_NO as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	YES_NO	Y or N	Yes or no. Enter Y to indicate that T1 trunking is connected to a pre-BCS35 node. Default value is N.

#### LMI = CCITT

If the entry in field LMI is CCITT, datafill refinement YES\_NO as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	YES_NO	Y or N	Yes or no. Enter Y to indicate that CCITT format is shared with the CPE. Default value is N.

#### All LMI

For all entries in field LMI, datafill field ITS as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
ITS		KATXTIME ASYNUPDT BIDIR	Interim trunk signaling
			Enter KATXTIME to determine how often a keep-alive message is transmitted and datafill refinement VALUE.
			Enter ASYNUPDT to indicate that the CPE is sent asynchronous PVC status messages and datafill refinement YES_NO.
			Enter BIDIR to indicate that bidirectional LMI procedures are used by the network and datafill refinement YES_NO.

#### **ITS = ASYNUPDT or BIDIR**

If the entry in field ITS is ASYNUPDT or BIDIR, datafill refinement YES\_NO as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	YES_NO	Y or N	Yes or no
	(BCS35- )		If the entry in field ITS is ASYNUPDT or BIDIR, datafill this refinement. Enter Y to indicate that asynchronous PVC messages are sent or that bidirectional LMI procedures are used. Otherwise, enter N.

#### ITS = KATXTIME

If the entry in field ITS is KATXTIME, datafill refinement VALUE as described below.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VALUE	0 to 30	Value	
	(BCS35- )	If the entry in field ITS is KATXTIME, datafill this refinement. Enter the KATXTIME value.	

### **Datafill example**

The following example shows sample datafill for table PVDNAGEN.

#### MAP display example for table PVDNAGEN

(	AGENTKEY				AGTTYPE	
	SPEED	ABSIGN	CONDEV			
				TUNING		
			LMI			
				ITS		
						_
	5	T1TRUNK	VALID	12345677005	NATL	
	LS_1344KBS	Y	NIL			
				-	ERSION N)\$	
1		(KARXTIM	E 20) (KAF	XXTIME 15)\$		

# **PVDNAGEN** (end)

### Table history NA005

Added text to the Explanation column of field DN.

#### BCS36

Options CTRL\_IDX and ERAM were added to field TUNING, range for fields VALUE and ITS was corrected, and refinement CUSTOMER was added.

# **PVDNCHAN**

#### ATTENTION

This table applies to new or modified content for SN07 (DMS) that is valid through the current release.

## **PVDNCHAN (Private Virtual Data Network Channel Table)**

Table PVDNCHAN stores the relationship between the frame relay service (FRS) agents and the physical frame relay interface unit (FRIU) channels.

#### **Datafill sequence and implications**

The following tables must be datafilled before table PVDNCHAN.

- PVDNAGEN
- LIUINV

The FRS agents must be programmed in table PVDNAGEN.

The FRIUs must be programmed in table LIUINV.

During the ONP, if there are CAUs datafilled in table PVDNCHAN, they will be removed during TABXFER.

#### Table size

0 to 2201 tuples

The table size can be increased by adding new FRIUs in table LIUINV.

1

2

# Datafill

The following table lists datafill for table PVDNCHAN.

# **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CHANKEY		see subfields	<i>Channel key</i> This field is the key to table PVDNCHAN and consists of subfield AGENT.
	AGENT	0 to 2200	<i>Agent</i> Enter an agent number.
DEVAREA		see subfields	<i>Device area</i> This field consists of subfields DEVTYPE, DEVNUM, and CHANNEL.
	DEVTYPE	FRIU	Device type Enter the device type FRIU (frame relay interface unit) on which the frame relay service (FRS) agent is associated.
	DEVNUM	0 to 750	Device number Enter a device number that uniquely identifies which device type the FRS agent is associated with.
	CHANNEL	1 to 24	Channel Enter a number between 1 and 24 to represent the channel the FRS agent is connected to.

# Datafill example

The following example shows sample datafill for table PVDNCHAN.

#### MAP display example for table PVDNCHAN

CHA	ANKEY		DEVAREA	
 	FRIU	100	1	
	FRIU			
2	FRIU	102	3	
3	FRIU	102	4	
4	FRIU	236	24	

# **Table history**

# SN07 (DMS)

Note added confirming that during ONP, if any CAUs are datafilled, they are removed during TABXFER. CR Q00806759/Q01207784.

4

### **PVDNCUST**

#### Table name

Private Virtual Data Network Customer Table

#### **Overview**

Table PVDNCUST stores the name of the private virtual data network (PVDN) customer.

#### **Functional description**

Table PVDNCUST provides the PVDN customer name for table PVDNAGEN.

## **Datafill sequence and implications**

Table PVDNCUST must be datafilled before table PVDNAGEN.

### Table size

0 to 1000 tuples

### Datafill

The following table lists datafill for table PVDNCUST.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CUSTOMER		alphanumeric	Customer
		(up to 20 characters)	Enter the unique customer name.

# **Datafill example**

The following example shows sample datafill for table PVDNCUST.

#### MAP display example for table PVDNCUST

CUSTOMER	
20000	
20001	
20002	
$\sim$	

# **PVDNCUST** (end)

## Table history NA005

Table PVDNCUST was revised to remove references to subtables that no longer exist in this table.

## **PVDNCUST.AGENTS**

#### Table name

Private Virtual Data Network Customer Agents Table

## **Functional description**

The subtable AGENTS stores the PVDN customer's frame relay service (FRS) agents.

#### **Datafill sequence and implications**

Table PVDNAGEN must be datafilled before table PVDNCUST.AGENTS.

*Note:* The FRS agents must be datafilled in the PVDNAGEN table before they can be datafilled in this subtable.

### Table size

0 to 2201 tuples

### Datafill

The following table lists datafill for table PVDNCUST.AGENTS.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
AGENT		0 to 2200	Agent
			Enter a number between 0 and 2200 to represent the agent number.
FRSTYPE		SUBSCRIB-E	FRS agent type
		R	This field determines how the FRS agent is used in connections. The only valid entry is SUBSCRIBER.

# Datafill example

The following example shows sample datafill for table PVDNCUST.AGENTS.

# PVDNCUST.AGENTS (end)

#### MAP display example for table PVDNCUST.AGENTS

AGENT	FRSTYPE	
12	SUBSCRIBER	
14	SUBSCRIBER	
15	SUBSCRIBER	
16	SUBSCRIBER	

## **PVDNCUST.CONNECT**

#### Table name

Private Virtual Data Network Customer Connect Table

## **Functional description**

The subtable PVDNCUST.CONNECT stores the Private Virtual Data Network (PVDN) customer's connections.

## **Datafill sequence and implications**

Table PVDNAGEN must be datafilled before table PVDNCUST.CONNECT.

*Note:* The frame relay service (FRS) agents must be datafilled in table PVDNAGEN before they can be datafilled in this subtable.

## Table size

0 to 32 678 tuples

### Datafill

The following table lists datafill for table PVDNCUST.CONNECT.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
CONKEY		see subfields	Connect key
			This field is the key to the table. This field consists of subfields AGENT and DLCI, which make up a logical endpoint of a data connection.
	AGENT	0 to 2200	Agent
			Enter a number to represent the agent.
	DLCI	0 to 1023	Data link connection identifier
			Enter a number to represent the data link connection identifier (DLCI).
			Any entry outside this range is not valid.
CONTYPE		PRIVATE	Connection type
		or NONPRIV- ATE	Enter the connection type: PRIVATE or NONPRIVATE.

## **PVDNCUST.CONNECT** (continued)

#### **CONTYPE = PRIVATE**

If the entry in field CONTYPE is PRIVATE, datafill subfields AGENT and DLCI.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
AGENT		0 to 2200	Agent
			Enter a number to represent the agent.
DLCI		0 to 1023	Data link connection identifier
			Enter a number to represent a DLCI.

#### **CONTYPE = NONPRIVATE**

If the entry in field CONTYPE is NONPRIVATE, datafill subfields CUSTOMER, AGENT, and DLCI.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
CUSTOMER		alphanumeric	Customer
		(1 to 20 characters)	Enter the customer name.
AGENT		0 to 2200	Agent
			Enter a number to represent the agent.
DLCI		0 to 1023	Data link connection identifier
			Enter a number to represent a DLCI.

### **Datafill example**

The following example shows sample datafill for table PVDNCUST.CONNECT.

# PVDNCUST.CONNECT (end)

#### MAP display example for table PVDNCUST.CONNECT

CONKEY CONTYPE 12 247 PRIVATE 14 290 16 908 NONPRIVATE CUSTOMER\_X 34 137

# PXCODE

#### Table name

Prefix Code Table

# **Functional description**

Table PXCODE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table PXCODE translates the prefix code digit segment, together with tables PXHEAD and PXCRTE.

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

## **Datafill sequence and implications**

Table PXHEAD must be datafilled before tables PXCODE and PXRTE.

Refer to table ACCODE.

#### **Table size**

Refer to table ACCODE.

### Datafill

Field names, subfield names, and valid data ranges for table PXCODE are described in table ACCODE.

### **Datafill example**

Refer to table ACCODE.

### **Table history**

Refer to table ACCODE.

# **PXHEAD**

#### Table name

Prefix Code Head Table

## **Functional description**

Table PXHEAD is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table PXHEAD translates the prefix code digit segment, together with tables PXCODE and PXRTE.

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

## **Datafill sequence and implications**

Refer to table ACHEAD.

#### **Table size**

Memory is automatically allocated to a maximum of 2047 tuples. The size is initially set to 64 and the table extends itself automatically.

### Datafill

Field names, subfield names, and valid data ranges for table PXHEAD are described in table ACHEAD.

### **Datafill example**

Refer to table ACHEAD.

#### **Table history**

Refer to table ACHEAD.

# PXLAMAP

#### Table name

ISDN Pretranslation Map Table

# **Functional description**

Table PXLAMAP associates a pretranslator name and a routing characteristic name (RCNAME) to obtain either a new pretranslator name, an operator position (POSITION), or a routing index. This allows the call to translate differently based on ISDN routing characteristics.

If selector POSITION or ROUTE is not datafilled in table PXLAMAP, and the called digits are not present, the call is routed to partial dial treatment.

If the tuple is not found in table PXLAMAP, the call proceeds to table STDPRTCT, using the original pretranslator name.

## **Datafill sequence and implications**

The following tables must be datafilled before table PXLAMAP.

- RCNAME
- OFRT
- STDPRTCT.STDPRT
- POSITION

This table has no restart requirements.

### Table size

0 to 262 144 tuples

Data store is dynamically allocated for each tuple.

## Datafill

The following table lists datafill for table PXLAMAP.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
PXLAKEY		see subfields	Translation key
			This field consists of subfields RCNAME and XLANAME.
	RCNAME	alphanumeric	Routing characteristic name
	(1 to 8 characters)	Enter the routing characteristic name required for the translation. Valid entries must be defined in table RCNAME.	
	XLANAME alphanumeric	Translation name	
		(1 to 4 characters)	Enter the required pretranslator name. Valid names must be defined in table STDPRTCT.
DATA		see subfield	Selector and refinement
			This field consists of subfield SEL and its refinements.

Field	Subfield or refinement	Entry	Explanation and action
	SEL	POSITION,	Selector
		PREFIX,	Enter up to two types of selectors.
		ROUTE, XLA	<ul> <li>Enter POSITION if routing to an operator position occurs when the called digits are not present in the ISDN information element (IE) and datafill refinement POS. Selector POSITION can be used in conjunction with the selector XLA. Selector POSITION is also used in cases where the Operator System Access (OSA) IE specifies public or principal network access and the called digits are not received. This call resembles a 0- call.</li> <li>With SOC option AIN00026 in the ON state, enter PREFIX to activate the AIN response simplification feature.</li> </ul>
			<i>Note:</i> Selector PREFIX can only be used in conjunction with the XLA selector.
			Enter ROUTE if required translation proceeds to a routing table index, if no digits are present and datafill refinements TABID and KEY. Selector ROUTE provides a route to follow if the called digits are not present. It can be used in conjunction with the selector XLA. Selector ROUTE is used in cases where the OAS IE specifies public or private network access, and no further digits are received. This call resembles a call to the interexchange operator.
			Enter XLA if pretranslation continues with a new pretranslator name and datafill refinement NEWXLA.

#### Field descriptions (Sheet 2 of 4)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	POS	TOPS,	Position
		CTOP, CAMA,	If the entry in subfield SEL is POSITION, datafill this refinement. Enter a valid operator
		TSPS,	position defined in table POSITION.
		AMRX,	Enter + if additional information for this tuple is contained in the next record. Otherwise,
		RTE1,	enter \$ to indicate the end of the tuple.
		RTE2,	
		RTE3,	
		RTE4,	
		AOSS,	
		OCC,	
		NONE	
	TABID	OFRT,	Routing table identifier
		OFR2,	If the entry in subfield SEL is ROUTE, datafill
		OFR3,	this refinement. Enter the table to which translation proceeds if no digits are present.
		OFR4, IBNRTE, IBNRT2, IBNRT3, IBNRT4, RRTE,	
		TTL4,	
		AOSS,	
		TOPS, TOPSAMA, AOSSAMA	

Field	Subfield or refinement	Entry	Explanation and action
	KEY	alphanumeric	Routing index key
		or 0 to 1023	If the entry in subfield SEL is ROUTE, datafill this refinement. Enter the required translation routing index.
			The key must be a valid entry in the table specified in refinement TABID.
			If the entry in refinement TABID is AOSS, AOSSAMA, TOPS, or TOPSAMA, enter the alphanumeric call origination code previously datafilled in the appropriate routing table.
			If the entry in refinement TABID is any other than mentioned above, the range is 0 to 1023, as previously datafilled in the appropriate routing table.
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.
	NEWXLA	alphanumeric	New pretranslator
		(1 to 4 characters)	If the entry in subfield SEL is XLA, datafill this refinement. If the tuple is present in table STDPRTCT, translations proceed as specified by table STDPRTCT. If the tuple is not present in table STDPRTCT the following standard default values are used:
			The route selector is set to national translations.
			• The type of call is set to no prefix.
			<ul> <li>The number of prefix digits is set to 0 (zero).</li> </ul>
			The translation system is set to national translation.
			Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.

#### Field descriptions (Sheet 4 of 4)

# PXLAMAP (end)

# **Datafill example**

The following example shows sample datafill for table PXLAMAP.

#### MAP display example for table PXLAMAP

PXLAKEY	DATA		
64KNAME P621	( XLA 64KP621)\$		
64KPUBP P622 (	XLA 640PP621) (POSITION TOPS)\$		
64KPUBA P621 ( X	LA 64PAP621) ( ROUTE OFRT 85)\$		
64KPUBA P621 ( X	LA 64PAP621) ( ROUTE OFRT 85)		

# Table history NA007

Added entry PREFIX.

# PXRTE

### Table name

Prefix Code Route Table

# **Functional description**

Table PXRTE is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table PXRTE translates the prefix code digit segment, together with tables PXHEAD and PXCODE.

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

# **Datafill sequence and implications**

Table PXHEAD must be datafilled before tables PXRTE and PXCODE.

## Table size

Refer to table ACRTE.

# Datafill

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

# **Datafill example**

Refer to table ACRTE.

# **Release history**

### NA017

Feature 59035336 introduces the Supergroup (SG) option.

# QAPLNDEF

#### Table name

Queue Management System Application Definition Table

# **Functional description**

Table QAPLNDEF specifies the call and agent queueing limits for each application. These limits are used to allocate internal data store for the application. The key to this table is an application name. As of BCS33, Traffic Operator Position System (TOPS) is the only allowable application. Initial data store for an application is allocated within the upon entry of a tuple against the application name in table QAPLNDEF, and is deallocated when the tuple is deleted.

The field values in a QAPLNDEF tuple may be changed at any time for an application, with the restriction that the following field values may not be decreased in size:

- CALLQS
- CQELEMS
- AGENTQS
- NUMAGNTS

Therefore, decreases in any of these fields sizes (and the associated deallocation of data store) are possible only if the entire tuple is deleted (which may be done only after deleting application entries in table QMSCQDEF) and then re-added with the smaller field sizes. Note, this implies a shutdown of the application's queueing functionality until the application's QAPLNDEF tuple and QMSCQDEF entries are reentered. An alternative is to reduce the field size(s) as part of the dump and restore process, during BCS upgrades.

With respect to increasing the size of these fields via the change command, the additional data store required by such an increase is allocated immediately; no restart is required.

# **Datafill sequence and implications**

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

### Table size

0 or 1 tuple

Datastore is allocated dynamically when an application is added to table QAPLNDEF. Currently, the TOPS application is the only application defined

for QMS; it enforces the limits shown below at the time an entry is made in table QAPLNDEF.

	TOPS maximum value	QAPLNDEF field name
Agents:	1023	NUMAGNTS
Call Queues:	255	CALLQS
Agent Queues:	255	AGENTQS
Call Queue Elements:	32767	CQELEMS

A TOPS application datafilled to these maximum limits requires approximately 855K words (1710K bytes) of datastore.

## Datafill

The following table lists datafill for table QAPLNDEF.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
APLNAME		see subfield	Application name. This field consists of subfield APLNAME.
	APLNAME	TOPS or OSSAIN	Application name. This is the key and must be one of a predefined set of values.
CALLQS		1 to 8191	Call queues. This field specifies the number of allocated call queues for the application. The maximum for this field is 8,191 call queues; however, individual applications may enforce maximums which are lower. For TOPS, the maximum allowable value is 255. For OSSAIN, the maximum is 8191.

#### Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CQELEMS		1 to 32767	Call queues elements. This field specifies the number of call queues elements allocated for the application. Therefore, this field indicates the maximum number of calls allowed in queue at one time.
			The CQELEMS field should be datafilled with a value indicating the maximum number of calls expected to be waiting in call queues for an available agent at any single point in time. This should be a value which an application expects never to exceed. A conservative strategy is to sum the values to be datafilled in the CQMAXSIZ field in table QMSCQDEF for each call queue defined and enter the resulting value into the CQELEMS field.
			If the CQELEMS threshold is exceeded during call processing, call queue overflow occurs, and calls are deflected from all call queues in the application until the number of calls in queue application-wide falls below the CQELEMS threshold.
			OM register CQELHIGH in OM Group QMSDATA allows monitoring of the maximum number of call queue elements in use at one time for each QMS application, for a given OM reporting period. If the CQELHIGH register indicates the current CQELEMS maximum is unnecessarily high during busy hours, the CQELEMS field value could be reduced.

Field	Subfield or refinement	Entry	Explanation and action
AGENTQS		1 to 2047	Agent queues. This field indicates the number of queues allocated for agents (operator positions) that are idle and waiting for a call. For TOPS, the maximum allowable value is 255. For OSSAIN, the maximum is 2047.
			When groups of agents handle different types of calls, separate agent queues should be specified for each of the agent groups to improve search efficiency. Field AGENTQS should be datafilled with the total number of agent queues required.
			Then, for example, if DA and TA call type agents are segregated, only the applicable agent queues (DA or TA) must be checked. Otherwise, each agent (DA and TA) must be checked in the one queue.

#### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
NUMAGNTS		1 to 16383	Number of agents. This field indicates the maximum number of agents that may be logged onto TOPS positions at any one time. For TOPS, the maximum allowable value is 1023. For OSSAIN, the maximum allowable value is 16383.
CTSEARCH		0 to 254	Controlled traffic search depth. This field indicates the Controlled Traffic Agent Queue maximum search depth for an agent which serves the call class associated with an arriving TOPS call. The recommended value is 10 if Controlled Traffic Profiles are in use by an application. If not in use, zero should be specified. For TOPS and OSSAIN, the maximum allowable value is 254.
			Controlled traffic agent profiles are intended for agent training purposes. Normal call processing routes different call classes to the same call queue. However, controlled traffic routes calls based on call type to controlled traffic agents. This allows an agent to learn handling of one call type at a time.
			The Controlled Traffic mechanism should be used sparingly due to the time inefficiency of an agent in training. Also, for incoming calls, a controlled traffic agent is considered first before a normal operator. And calls already in queue are not considered when a controlled traffic agent becomes idle.
			Field CTSEARCH may not be set to zero if any agents with a Controlled Traffic profile are currently defined for the application, since these agents do not receive calls if the idle Controlled Traffic agent queue search depth were zero.

# Datafill example

The following example shows sample datafill for table QAPLNDEF.

### **QAPLNDEF** (end)

The example consists of the application name TOPS, 255 call queues, 3000 call queue elements, 20 agent queues, with a maximum number of agents of 1023, and a search depth limit of 10.

#### MAP display example for table QAPLNDEF

APLNAME	CALLQS	CQELEMS	AGENTQS	NUMAGNTS	CTSEARCH	
TOPS	255	3000	20	1023	10	

# Table history

#### NA006

Field APLNAME value OSSAIN added by functionality Operator Services, ENSV0014.

#### BCS36

Subfield APLNAME was added.

#### BCS34

Table QAPLNDEF was introduced.

#### Supplementary information

This section provides information on dump and restore procedures for table QAPLNDEF.

#### **Dump and restore**

Copy the data from the previous BCS to the current BCS for the table.

# QDEF

#### Table name

ITOPS ACD Call Queues Table

# **Functional description**

Table QDEF is used to define the mapping of call classes to call queues. For each call class that has been defined in table QCLASS, there can be a call queue containing this call class.

A call queue is a set of call classes. Each one of these call queues is assigned to an operator.

For related information, refer to table QPROP.

# **Datafill sequence and implications**

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

## Table size

0 to 63 tuples

# Datafill

The following table lists datafill for table QDEF.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
QNUM		1 to 63	Queue number. Enter the queue number. Call queue 0 is reserved for any calls with the default call class of 0 and any other classes that are not associated with the current mapping of call classes to call queues.
QPRIORITY		0 to 4	Priority of the queue. Enter the priority of the queue, where 0 (zero) is the highest priority and 4 is the lowest priority.
QGRADE		10 to 80	Grade of service. Enter the grade of service. The length of time a call has been in a queue is multiplied by the grade of service to determine the `age' of a call. Calls with the highest priority are handled first. When several calls with the same priority are in the queue, the ones with the highest age are handled first.

# **QDEF** (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
QCLASSES		vector of up to 256 class names defined in table QCLASS	Classes assigned to the queue. Enter the set of call classes in this call queue. Since each call queue must be unique, each call class can only be entered in one call queue.
CONTMARK		+ or \$	Continuation mark . Enter + to indicate that additional information (QCLASSES) for this tuple is contained in the next record.
			Enter \$ to indicate the end of the QCLASSES set.

# **Datafill example**

The following example shows sample datafill for table QDEF.

#### MAP display example for table QDEF

	QCLASSES	)GRADE	QPRIORTY (	QNUM
_	CLASS1 CLASS5\$	30	2	3
	CLASS3\$	10	1	9
	CLASS2 CLASS4\$	20	4	10
	CLASS10 CLASS11\$	50	2	7
	CLASS6 CLASS7\$	10	2	8

## QMSCQDEF

#### Table name

Queue Management System Call Queue Definition Table

## **Functional description**

Table QMSCQDEF defines the characteristics of the call queues required by each application. The table is indexed by a two-part key containing the application name and a call queue number.

Tuples can be added at any time. They are immediately available for use by the application specified.

Tuples cam be added or changed at any time; changes take effect immediately. For example, if an agent with an office-wide call queue priority profile containing TOPS call queue 0 is handling calls, and the priority of call queue 0 is changed from 20 to 10, then this change in priority takes immediate effect, and the call selected for the agent from queue the next time the agent becomes available is based on the updated call queue priorities in the agent's profile.

A tuple cannot be deleted if the call queue being removed is present in the call queue profile (table TQCQPROF) of any agent (table TQOPROF) or if calls are currently waiting in the call queue being removed.

# **Datafill sequence and implications**

Table QAPLNDEF must be datafilled before table QMSCQDEF.

### Table size

0 to 8191 tuples

# Datafill

The following table lists datafill for table QMSCQDEF.

Field descriptions (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
APPLNCQ		see subfields	Application name and call queue number. This field is the key into the table and consists of the subfields APLNAME and CALLQNUM.
	APLNAME	TOPS, OSSAIN	Application name. Enter one of the listed valid application names.

# **QMSCQDEF** (continued)

Field	Subfield or refinement	Entry	Explanation and action
	CALLQNUM	0 to 8190	Call queue number. The call queue number must be less than the CALLQS value in table QAPLNDEF for the application. For example, if CALLQS = 10, then call queues in the range 0 to 9 may be datafilled in table QMSCQDEF.
CQPRIO		0 to 126	Call queue priority. This field indicates the priority of the call queue (0 = lowest priority, 126 = highest priority). Calls in queues with a higher priority are considered first, regardless of the call age (field CQAGS). Calls in queues with the same priority are then chosen according to call age (field CQAGS).
			This field provides absolute priority. Whereas, field CQAGS provides relative priority.
			For additional, related information, refer to table TQCQPROF to the paragraphs about field PRIOTYPE that follow the datafill example.

#### Field descriptions (Sheet 2 of 9)

#### Field descriptions (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
CQAGS		10 to 80	Call queue assignable grade of service aging. This field allows artificial aging of a call. A value between 10 and 80 may be selected, representing aging factors from 1.0X to 8.0X. The age of the oldest call in a queue is multiplied by the queue's aging factor, and the resulting age is used for comparison with the oldest calls in other served queues. For no aging, enter 10.
			As an example, if a call is 3 seconds old and CQAGS = 18, its adjusted age is $3 * 1.8 = 5.4$ seconds.
			Calls in a queue with a higer priority (field CQPRIO) are served first. Then calls with the same priority are chosen according to age (field CQAGS), the oldest being served first.
			This field provides relative priority. Whereas, field CQPRIO provides absolute priority.
			For additional, related information, refer to table TQCQPROF to the paragraphs about field PRIOTYPE that follow the datafill example.

Field	Subfield or refinement	Entry	Explanation and action
CQMAXSIZ		0 to 32766	Call queue maximum size. This field defines the maximum number of calls allowed in the queue, above which all calls are deflected due to queue overflow, including calls with a deflect status of NO DEFLECT (field ALLOWDEF = N). This usually occurs for a 0 minus call when no operator is available. Then, the call is deflected and sent to treatment. On the second attempt, if no operator is available, the call is given a NO DEFLECT status.
			Since a single pool of call queueing elements is maintained for each application declared in table QAPLNDEF, the CQMAXSIZ field prevents a call queue or a subset of call queues in a given application from consuming all of the application's call queueing elements when those call queues are in an extreme overload condition. This ensures that other call queues not in an overload condition can continue to function normally.
			The CQMAXSIZ value should be set so that it is not exceeded during anticipated peak traffic conditions. The CQCDTIME field should be utilized to control the input of calls to the call queues so that the CQMAXSIZ thresholds are not reached.
DEFLAREA		see subfield	Deflect area. This field consists of subfield ALLOWDEF and refinements.

#### Field descriptions (Sheet 4 of 9)

#### Field descriptions (Sheet 5 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	ALLOWDEF	Y or N	Allowed deflection. This field indicates whether a deflection threshold should be considered before queueing a call.
			If this field is set to N, then calls are queued regardless of the predicted wait time (but still subject to the CQMAXSIZ limitation and the limited number of call queue elements available as determined by the CQELEMS field size in table QAPLNDEF). No further refinements require datafill.
			If calls marked for this call queue are to be deflected when the predicted wait for a call exceeds the threshold specified in field CQCDTIME, enter Y. Then datafill refinements CQCDTIME and MINODEFL.

Field	Subfield or refinement	Entry	Explanation and action
	CQCDTIME	0 to 32766	Call queue call deflection time. Enter the predicted call wait time (in tenths of seconds) before the call is deflected from the queue.
			If the predicted wait time for newly arriving calls exceeds the CQCDTIME value, new calls are deflected from the queue until the predicted wait time drops below this threshold.
			An exception to this is a 0 minus call on the second attempt where the call should not be deflected (Deflect Status = NO DEFLECT). In this case, there is an attempt to place the call in the call queue regardless of the CQCDTIME threshold (subject to the CQMAXSIZ and CQELEMS constraints).
			The predicted wait time is determined by monitoring the rate at which calls are being served from the given queue (for the preceding 60 seconds, updated every 10 seconds), along with the number of calls in queue. For example, if 120 calls were served in the previous 60 seconds (i.e., calls are being served at the rate of 2 calls per second), and the queue holds 29 calls, then the projected wait time for a newly arriving call is (29 + 1)/2, or 15 seconds.
			Calls served include both calls presented to an operator and calls abandoned.
			If no calls have been served for a given call queue in the preceding 60 seconds, then the system is unable to predict the wait time of an arriving call. The system does not consider deflecting calls from this queue in this case until a call is served (and the 60-second tally is updated to reflect it) and a valid predicted wait time is obtained.

#### Field descriptions (Sheet 6 of 9)

#### Field descriptions (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	MINODEFL	0 to 32766	Minimum no deflection. Enter the minimum number of calls in queue below which calls are not deflected, even if the value in CQCDTIME is exceeded. This prevents calls from being prematurely deflected from call queues with very low or erratic throughput. If the number of calls in queue would be equal to or greater than MINODEFL, then CQCDTIME is applied.
PRAQAREA		see subfield	Priority agent queue area. This field consists of subfield PRIOAQ and refinements.

Field	Subfield or refinement	Entry	Explanation and action
	PRIOAQ	Y or N	Priority agent queue. This field indicates whether a priority agent queue should be associated with the given call queue (CALLQNUM).
			If this field is set to Y, then the agent queue specified in field AQNUM is searched first for an agent to serve incoming calls, even if agents in other agent queues able to serve the call have been idle longer.
			If no agent able to serve the call is found in the priority agent queue, then the remaining agent queues are searched only if the arriving call's predicted wait time (if it were to be queued) exceeds the PRTHTIME threshold specified. If found, the agent's age (that is, the length of time the agent has been waiting in the agent queue) is compared to that of the oldest agent able to serve the call waiting in other agent queues. The agent which has been waiting the longest is presented with the call.
			If the predicted wait time does not exceed the threshold or the system is unable to predict the wait time, the call is queued.
			If this field is set to N, then all agent queues containing agents able to serve the call are considered equally with the call being presented to the most idle agent (if one is available).
			If this field is set to Y, datafill refinements AQNUM and PRTHTIME. Otherwise, if set to N, no further refinements require datafill.

#### Field descriptions (Sheet 8 of 9)

#### Field descriptions (Sheet 9 of 9)

Field	Subfield or refinement	Entry	Explanation and action
			Priority agent queues can be used to route certain types of calls to operators with more experience or expertise in handling these types of call. This applies even if less preferred operators have been waiting longer for a call.
			Priority agent queues should be used with restraint, since they distort the normal distribution of calls to operator positions on a most-idle basis. For example, operators in priority agent queues could be overworked while other operators sit idle.
	AQNUM	0 to 2046	Agent queue number. Enter the agent queue to receive priority in the range 0 to x, where x = AGENTQS - 1, using the agent queue value specified in table QAPLNDEF.
	PRTHTIME	0 to 32766	Priority threshold time. If no agent is waiting in the priority agent queue to serve the call, then other agent queues are considered only if the predicted wait time for the call exceeds this threshold (in tenths of seconds).

### **Datafill example**

The following example shows sample datafill for table QMSCQDEF.

MAP display	v example f	or table	QMSCQDEF
-------------	-------------	----------	----------

(	APPI	LNCQ	CQPRIO	CQAGS	CQMAXSIZ		DEFL	AREA	PR.	AQAI	REA	
	TOPS	0	20	18	300	Y	600	5	Y	4	100	
	TOPS	1	20	10	200	Ν			Y	4	100	
	TOPS	2	35	18	300	Y	600	5	Y	3	100	
	TOPS	3	35	10	240	Y	600	5	Ν			

The above example consists of four TOPS applications, call queue numbers 0 to 3. Zero and one are assigned a call queue priority of 20; two and three are assigned call queue priority of 35. Zero and two are assigned a grade of service factor of 18 while one and three are assigned a factor of 10. One is not allowed deflection while zero, two, and three are allowed deflection with a threshold of

### **QMSCQDEF** (end)

600 and a minimum value of 5. A priority agent queue of four is associated with zero and one while three is the priority agent queue associated with two. Call queue three is not associated with a priority agent queue. A priority threshold time of 100 is specified for call queue zero and two while a time of zero is specified for call queue one.

# Table history

#### NA006

Field APLNAME value OSSAIN added by functionality Operator Services, ENSV0014.

#### BCS34

Table QMSCQDEF was introduced.

#### **Supplementary information**

This section provides information on datafilling table QMSCQDEF for specific applications, and product descriptive information related to table QMSCQDEF.

#### Dump and restore procedures

Copy the data from the previous BCS to the current BCS for the table.

#### **Miscellaneous**

The call queue number must be less than the CALLQS value datafilled in table QAPLNDEF. When priority agent queue is specified, AQNUM must be less than the CALLQS value datafilled in table QAPLNDEF.

### **QMSMIS**

#### Table name

QMS MIS Link Definition Table

### **Functional description**

Table QMSMIS defines the links used by a Queue Management System Management Information System (QMS MIS) application and also defines the audit frequency for the links.

# **Datafill sequence and implications**

When field DATALINLK = MPC, datafill the tables that follow in the indicated order before table QMSMIS:

- MPC
- MPCLINK

When field DATALINLK = ETHERNET, datafill the tables that follow in the indicated order before table QMSMIS:

- OANODNAM
- OANODINV

When field DATALINLK = IP, datafill table IPCOMID before table QMSMIS.

### Table size

0 to 2 tuples

### Datafill

The following table lists datafill for table QMSMIS.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfield	QMS Management Information System index. This field consists of subfield K.
	К	TOPS, QMSNILAP, OSSAIN	QMS Management Information System application in use. This is the key field of the table. The entries are:
			<ul> <li>TOPS - Traffic Operator Position System. This entry is used for MIS statistics accumulated for calls handled by operators. This entry requires that field DATALINK is set to MPC or IP.</li> </ul>
			QMSNILAP - non-TOPS QMS application
			<ul> <li>OSSAIN - Operator Services System Advanced Intelligent Network. This entry is used for MIS statistics accumulated for calls handled by OSSAIN Service Nodes. This entry requires that field DATALINK is set to ETHERNET.</li> </ul>
DATALINK		see subfield	Data link. This field consists of subfield DATALINK and refinements.

Field	Subfield or refinement	Entry	Explanation and action
	DATALINK	MPC, ETHERNET IP	Datalink. This field indicates the type of datalink used by the application to send MIS statistics. The values are the following:
			• MPC - Multiprotocol controller link conversation list, which uses an X.25 datalink. This link is used by the TOPS MIS application. This entry requires that subfield K is set to TOPS or QMSNILAP. Enter datafill in subfield MLCLIST and refinements.
			• ETHERNET - An Ethernet link, which is used by the OSSAIN MIS application. This entry requires that subfield K is set to OSSAIN. Enter datafill in refinements NODENAME, MISNETID, and MISPORT.
			<ul> <li>IP - Internet protocol. Datafill fields BUFXTIME and CONNLIST.</li> </ul>
	MLCLIST	see subfields	Multiprotocol controller link conversation list. This field consists of subfields M, L, and C. Separate each subfield with a single space. Up to 16 multiples of the subfields can be entered. If less than 16 multiples are entered, end with a \$ (dollar sign).
			Entries in field MLCLIST must match entries in tables MPC and MPCLINK.
			Only permanent virtual circuits (PVC) are supported by the Queue Management System Management Information System (QMS MIS) application.
			At least two links should always be datafilled for the TOPS application to guarantee that data is not lost if one link fails. A maximum of 16 links can be entered for the TOPS application.
			When more than one link has datafill against the TOPS application, the DMS switch shares the data transmission load, sending buffers across the least recently used link.

**Field descriptions** 

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
	М	0 to 255	Multiprotocol controller number. Enter the multiprotocol controller (MPC) number. This entry must first be entered in table MPC.
	L	0 to 3	Link number. Enter the link number. This entry must first be entered in table MPCLINK.
			<i>Note:</i> All link numbers must be 2 or 3 for QMS MIS applications.
	С	0 to 255	Conversation number. Enter the conversation number.
	NODENAME	name from table OANODINV	OSSAIN node name. Enter the source name of the MIS data. The node must be entered in tables OANODNAM and OANODINV. For table OANODINV, set fields ONPMTYPE = OSNM.
	MISNETID	0 to 32,766	Management information system (MIS) network identification. This field enables a unique identifier to be specified within the header of the MIS data stream. Enter a source identifier for the MIS data. In the OSAC environment, where multiple Host nodes may be connected, the MIS network Id can be used to uniquely identify the source of the MIS statistics.
	MISPORT	1024 to 32,767	MIS port. This field specifies the port number for sending an MIS class message to the given node.
	BUFXTIME	1 to 59	Buffer transfer time. This field indicates the maximum period before a buffered MIS IP buffer is sent to the MIS server.
	CONNLIST	see subfields	Connect list. Datafill subfields DESTADDR, DESTPORT, DESSTAT, and COMID.
	DESTADDR	4 numbers (0-255, 1-255, 0-255, 0-255)	Destination address. Enter the destination IP address to send the QMS MIS event message. The entry consists of 4 numbers, each in the indicated range and separated by a space.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
			•
	DESTPORT	1024 to 32767	Destination port. Enter the port number to send the QMS MIS event message.
	DESSTAT	INACTIVE or ACTIVE	Destination status. The desired status of the destination server.
	COMID	number from IPCOMID	Communication identifier. Enter an index into table IPCOMID. This field points to an XPM and associated port (according to the service name) to use for IP communication.

#### **Datafill example**

The following example shows sample datafill for table QMSMIS.

#### MAP display example for table QMSMIS

(	INDEX	DATALINK
	OSSAIN	ETHERNET MIS_OSSAIN 24 7001
	TOPS	MPC (3 3 1) (4 4 2) \$
1		/

The above example first tuple shows 2 data links for redundancy as recommended.

### **Additional information**

This section provides information on dump and restore procedures and error messages that can occur when datafilling table QMSMIS.

#### **Dump and restore**

No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

#### **Error messages**

The following error messages apply to table QMSMIS.

#### Error messages for table QMSMIS

Error message	Explanation and action
UNABLE TO OBTAIN OWNERSHIP OF CONVERSATION MPC <mpc number&gt;,LINK <link number=""/>, CHANNEL <channel number="">, AT POSITION <position number=""> IN</position></channel></mpc 	If an attempt is made to datafill an MPC or link (field MLCLIST) in table QMSMIS that is not datafilled in tables MPC or MPCLINK, respectively, this error message is produced:
MLCLIST.	<position number=""> refers to the position of the particular MLC tuple in the MLC list. For instance, if the second MLC element in the MLC list had a link number that is not datafilled in table MPCLINK, the position number printed is 2.</position>
The node specified must be datafilled with PMTYPE of OSNM in Table OANODINV.	The specified node name must be datafilled with a PMTYPE of OSNM in table OANODINV or this message is displayed.
You must OFFL the new node before changing the node name.	The node name can not be changed unless the node specified by node name is off-line. Otherwise, one of these messages is displayed.
You must OFFL the old node before changing the node name.	
You must OFFL this node before changing the MISPORT.	The MISPORT can not be changed unless the node specified by NODENAME is off-line. Otherwise, this message is displayed.
You must OFFL this node before deleting the tuple.	The tuple cannot be deleted unless the node specified by NODENAME is off-line. Otherwise, this message is displayed.
You must OFFL this node before adding the tuple.	The tuple cannot be added unless the node specified by NODENAME is off-line. Otherwise, this message is displayed.

#### Error messages for table QMSMIS

Error message	Explanation and action
The NODENAME specified is in use in Table OASESNPL.	The specified node name cannot be in use in table OASESNPL. Otherwise, this error message is displayed.
You must set DATALINK to IP or MPC for TOPS MIS facility. You must set DATALINK to ETHERNET for OSSAIN MIS nodes.	The index and DATALINK fields must match. If the index is set to TOPS the DATALINK field must be either IP or MPC, and if the index is OSSAIN, the DATALINK needs to be ETHERNET. Failure to do so results in one of these messages.
Invalid COMID. Make sure COMID exist in table IPCOMID.	The COMID specified must already be datafilled in table IPCOMID before it can be used in table QMSMIS. Failure to do so will result in this message.
Error! COMID already in use by another application	If the COMID is already being used by another application, this error message is displayed.
ERROR ALLOCATING MEMORY FOR NEW IP TUPLE.	If the CM cannot allocate memory when an IP tuple is being added, this error message is displayed.
COMID IS NOT PRESENT IN TABLE IPCOMID	When an IP tuple being added to the IP vector fails to bind to the IP Datacomm layer due to an invalid comid error this message is displayed.
COMID IS ALREADY IN USE BY ANOTHER APPLICATION	When an IP tuple being added to the IP vector fails to bind to the IP Datacomm layer because the comid is already in use by another application, this message is displayed.
PROBLEM WITH THE SERVICE BOUND TO THIS COMID	When an IP tuple being added to the IP vector fails to bind to the IP Datacomm layer due to a wrong service datafilled for the comid this message is displayed
COMID FAIL TO BIND TO IP LAYER	When an IP tuple being added to the IP vector fails to bind to the IP Datacomm layer for any unknown reason, this message is displayed.

#### Error messages for table QMSMIS

Error message	Explanation and action
EMPTY IP VECTOR IS NOT ALLOWED	Empty IP vectors are not allowed. This message is displayed if an attempt is made to add an empty vector.
DUPLICATE COMIDS ARE NOT ALLOWED.USE ONE COMID PER IP CONNECTION.	An attempt to add duplicate COMIDs to an IP vector will result to this message being displayed.
ERROR - ONLY COMIDS DATAFILLED TO USE TCP PROTOCOL ARE ALLOWED IN TABLE QMSMIS.	An attempt to datafill a protocol other than TCP for a COMID used by table QMSMIS will result in this message.
FAIL TO ALLOCATE MEMORY FOR IP BUFFERS.	If memory cannot be allocated for the IP buffers the first time an IP interface is added in table QMSMIS, this message is displayed.
YOU MUST SET THE DESSTAT FIELD(S) TO INACTIVE BEFORE DELETING THE TUPLE.	When an attempt is made to delete a TOPS IP tuple whose DESSTAT Field(s) are active, this message is displayed.
YOU MUST SET THE DESSTAT FIELD(S) TO INACTIVE BEFORE CHANGING THE TUPLE.	When an attempt is made to change the datalink of a TOPS tuple from IP to MPC, this message is displayed if any of the DESSTAT fields are active.
WARNING!! DATAFILLING A COMID WITH A NON-ZERO PORT IN TABLE IPSVCS FOR TCP, WILL RESULT IN TCP/IP CONNECTION RE-ESTABLISHMENT DELAYS. IT IS HIGHLY RECOMMENDED TO DATAFILL ZERO AS THE PORT NUMBER IN TABLE IPSVCS FOR THE QMS MIS IP APPLICATION.	When a non-zero port is datafilled in table IPSVCS for a QMSMIS service, a warning is produced when the COMID that uses that port is datafilled in table QMSMIS.
THIS NODE HAS DATAPATH XAETHR IN TABLE OANODINV. OSSAIN QMS MIS SERVERS MUST USE THE EIU. XA-CORE ETHERNET DATA PATH IS NOT SUPPORTED FOR OSSAIN QMS MIS.	When an attempt is made to datafill an OSSAIN tuple whose node has data path XAETHR in table OANODINV, this message is displayed

### QMSMIS (end)

# Table history

### SN07 (DMS)

Cross-checks are added to enforce that an OSSAIN QMS MIS server cannot be datafilled in table OANODINV with data path XAETHR. Error messages description updated. Feature A00005160.

#### TOPS13

Field DATALINK has new value IP and new error messages are added by feature A59007458 in functionality MIS Over IP, OSB00001.

#### TOPS10

Feature AF7439 in functionality OSSAIN 10 Enhancements (OSAN0005) makes the following changes:

- Field INDEX, subfield K has new value OSSAIN.
- Field DATALINK is new, which has existing value MPC and new value ETHERNET plus refinements.

#### BCS36

Subfield K was added. Notes were added to field MLCLIST and subfield L.

#### BCS34

Table QMSMIS was introduced.

## QMSTOPS

#### Table name

Queue Management System TOPS Initial Call Type Assignment Table

### **Functional description**

Table QMSTOPS specifies the initial call type for queuing (CT4Q) for calls that route Traffic Operator Position System Queue Management System (TOPS QMS). This table is indexed by the same range of call origination (CO) types used as a key for table TOPS. Datafilled against each CO type is a CT4Q.

Like TOPS, QMSTOPS is a fixed table. No tuples can be added or deleted. Upon initialization, the reserved CT4Q UNSPEC is datafilled against all of the COs.

### **Datafill sequence and implications**

Table CT4QNAMS must be datafilled before table QMSTOPS.

Field CT4Q values used in each tuple must be datafilled in table CT4QNAMS.

### Table size

63 tuples

### Datafill

The following table lists datafill for table QMSTOPS.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
со		alphanumeric	Call origination. Enter a call origination type with the same range as table TOPS.
CT4Q		alphanumeric (1 to 32	Call type for queuing. Enter an initial CT4Q value for call type refinement.
		characters)	This entry must first be defined in table CT4QNAMS.

### **Datafill example**

The following example shows sample datafill for table QMSTOPS.

The example consists of all 60 call originations with the corresponding CT4Qs.

### **QMSTOPS** (continued)

#### MAP display example for table QMSTOPS

	CO	CT4Q
UNS	SPEC	UNSPEC
0110	OH	0_MINUS
	OA	0_PLUS
	DD	1_PLUS
C	CAMA	CAMA
C	DIR	UNSPEC
	CAMA	RCAMA
DE	ELAY	DELAY
	121	GENERAL
	131	GENERAL
	141	GENERAL
	151	GENERAL
	161	GENERAL
	171	GENERAL
	181	GENERAL
	191	GENERAL
-	555	DA_555
	L150 L151	INW_1150 INW_1150
	L151 L152	INW_1150 INW_1150
	L152 L153	INW_1150 INW_1150
	L153	INW_1150 INW_1150
	L155	INW_1150 INW_1150
	L156	INW_1150 INW_1150
	L157	INW_1150
	L158	INW_1150
	L159	INW_1150
	L160	INW_1150
	161	INW_1150
	162	INW_1150
-	TS	GENERAL
1	ISUB	GENERAL
_	APS	GENERAL
	ALM	GENERAL

### QMSTOPS (end)

	CO	CT4Q
		~ ~
	INTC	GENERAL
	211	GENERAL
	311	GENERAL
	411	GENERAL
	511	GENERAL
	611	GENERAL
	711	GENERAL
	811	GENERAL
	911	GENERAL
	MOBILE	GENERAL
	999	GENERAL
	HOM555	DA_555_HOM
	FOR555	DA_555_FOR
	SPARE1	GENERAL
	SPARE2	GENERAL
	SPARE3	GENERAL
	SPARE4	GENERAL
	SPARE5	GENERAL
	00C141	GENERAL
	00C151	GENERAL
	OOCOVS	GENERAL
	OOCMAN	GENERAL
	00C801	GENERAL
	OOCDELAY	GENERAL
	OOCDB	GENERAL
(	INTS	GENERAL

#### MAP display example for table QMSTOPS (continued)

#### Table history NA005

Added call origination type CDIR per functionality Auto Country Direct, ENSV0010.

#### BCS34

Table QMSTOPS introduced

### Supplementary information

This section provides information on datafilling table QMSTOPS for specific applications, and product descriptive information related to table QMSTOPS.

No dump and restore is needed when first applied. Normal dump and restore procedures apply after the first application.

### QPROFILE

#### Table name

ITOPS ACD Operator Call Handling Table

### **Functional description**

Table QPROFILE is used to map the operator identification (ID) or position number to call queues.

Different positions can be assigned different call queues since some positions can be limited in the types of calls they can handle because of hardware requirements. Operators can also be assigned different call queues as required.

For related information, refer to table QPROP.

### **Datafill sequence and implications**

Table QDEF must be datafilled before table QPROFILE.

#### Table size

0 to 4048 tuples

### Datafill

The following table lists datafill for table QPROFILE.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
QPROFKEY		see subfields	Key into table QPROFILE. This field consists of subfields QPROFTYP and QPROFNUM.
	QPROFTYP	OPR or POS	Type of key. Enter OPR for operator or POS for position.
	QPROFNUM	0 to 3099	Operator identification or position number. If the entry in subfield QPROFTYP is OPR, enter the operator identification (ID).
			If the entry in subfield QPROFTYP is POS, enter the position number.
QTEAM		0 to 30	Team number. Enter the team the operator or position belongs to.

### **QPROFILE** (end)

	Subfield or		
Field	refinement	Entry	Explanation and action
QOPTIONS		ALL, EXCL, INCL	Inclusion of queues. Enter one of the following:
			ENTER ALL to indicate that this operator ID or position number can handle all queues defined in table QDEF. No refinements require datafill.
			ENTER EXCL to indicate that this operator ID or position number can handle all queues defined in table QDEF except the queues listed in field QUEUES. Datafill refinement QUEUES.
			ENTER INCL to indicate that this operator ID or position number can handle only those queues listed in field QUEUES, of all the queues defined in table QDEF. Datafill refinement QUEUES.
QUEUES		vector of 0 to 63 queues	Queues. If the entry in field QOPTIONS is EXCL enter the set of queues, each queue known in table QDEF, that this operator ID or position number cannot handle.
			If the entry in field QOPTIONS is INCL enter the set of queues, each queue known in table QDEF, that this operator ID or position number can handle.
			If less than 63 queues are required, end the list with a \$ (dollar sign).

#### Field descriptions (Sheet 2 of 2)

### Datafill example

The following example shows sample datafill for table QPROFILE.

#### MAP display example for table QPROFILE

QPROFKEY QT	ГЕАМ Q	OPTION			$\overline{}$
				QUEUES	
OPR 3099	1	INCL	(17)\$		

### QPROP

#### Table name

ITOPS Automatic Call Distribution Call Properties Table

### **Overview**

The ITOPS Automatic Call Distribution system tables in the following table are available in offices with the ITOPS Enhanced ACD feature.

ITOPS Automatic Call Distribution system tables
---

Table name	Form number	Form title
QPROP	2921A, B	ITOPS ACD Call Properties Table Record
QCLASS	2922A, B	ITOPS ACD Call Classes Table Record
QDEF	2923A, B	ITOPS ACD Call Queues Table Record
QPROFILE	2924A, B	ITOPS ACD Operator Call Handling Table Record

The ITOPS ACD tables for the enhanced call queueing system provide the operating company with an efficient, flexible, call queueing system that is easy to use. The design of the enhanced queueing system is based on call properties, attributes, and classes.

#### Attributes

Call attributes are the functional or physical details of a call. For example, physical attributes may be hotel or coin calls, and functional may be calls booked in the database or calls that are recalled to the operator.

#### **Properties**

A call property is a grouping of call attributes in such a way that each property is independent of the other. The following properties have been defined so far, each containing attributes used to place calls in appropriate queues. The properties are as follows:

- Call Origination
- Service Class
- Recall
- Foreign
- Special

An example of the contents of a given property, such as Service Class is as follows:

- Station
- Hotel
- Coin
- Attendant Pay Station
- Mobile
- Marine

This property defines the physical origination of the call, whether from a hotel, coin phone, or other. The above attributes are unique to Service Class and cannot be defined in any of the other properties.

#### Classes

A call class is a set of attributes from each of the properties which is used to separate calls into different call queues. When a call is routed to operator services, the call must first be placed in a call class. The call class is determined by the attributes in the different properties in the call. For example, if a call arrives with the attribute OH, this generates a set of call classes that can accept this call. If the service class attribute is HOTEL, all the call classes with HOTEL contained in the previously generated set generate a subset of these sets. This process of getting subsets of subsets continues over all the defined properties. The resulting set of call classes will contain one call class or no call classes. If one call class remains, the call is assigned to this call class.

### **Functional description**

Table QPROP defines the properties and the attributes within each property. Table QPROP is used in the enhanced queueing system to define attributes that may be used in call classes. Only attributes defined in this table may be used to datafill the rest of the queueing tables. This table allows the administration to limit the number of properties and attributes so that the queueing of calls is more efficient.

The following rules must be adhered to when mapping attributes to properties in table QPROP.

1. Though a call may have several attributes, the call can only have one attribute from each of the defined properties. For example, a call cannot

have both hotel and coin attributes since they are both from the same property, service class.

- 2. Only attributes defined in table QPROP can be used in other queueing tables as queue selection parameters.
- 3. If an attribute is not defined in table QPROP and a call arrives at a position with this attribute, the attribute is ignored and the call class is determined from other attributes of the call.

### **Datafill sequence and implications**

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

#### Table size

0 to 8 tuples

### Datafill

The following table lists datafill for table QPROP.

#### Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
QPROPKEY		0 to 7	Key into table QPROP. Enter the numeric index for a call property.
ATTRIBS		see subfield	Call attributes. This field consists of subfield QPROPSEL and a set of attributes related to the selector value.
			See the appropriate field name for its definition.

Field	Subfield or refinement	Entry	Explanation and action
	QPROPSEL	CO, FOREIGN, RECALL, SC,	Call attributes selector. Enter one of the following: CO, FOREIGN, RECALL, SC, or SPECIAL.
		or SPECIAL	Enter CO for Call Origination properties and enter the set of call origination attributes in field ATTRIB0.
			Enter FOREIGN for foreign attributes and enter the set of foreign attributes in field ATTRIB3.
			Enter RECALL for recall attributes and enter the set of recall attributes in field ATTRIB2.
			Enter SC for Service Class attributes and enter the set of service class attributes in field ATTRIB1.
			Enter SPECIAL when the attributes cannot be determined from the information received from an incoming call. These attributes can only be added to a call by referencing the tuple in table ITOPATTR that contains these attributes. Referencing is done from either the ITOPS table or the transfer key. Enter the set of special attributes in field ATTRIB4.

#### Field descriptions (Sheet 2 of 5)

### Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
ATTRIB0		ALL, BOOK, DA, DD, DELAY, EST, INT, INW,	Call origination attribute set. Enter NONE, ALL, or a set of attributes listed below, each attribute separated by a blank, and the last attribute followed by a \$.
		NONE, OA, OH, OPER, or SPECIAL	Enter ALL for the whole set of attributes listed above.
		01 2011 12	Enter BOOK for database booking
			Enter DA for directory assistance
			Enter DD for direct dialed
			Enter DELAY for database originated
			Enter EST for estimate charge
			Enter INT for forward party intercept
			Enter INW for call originated by another operator
			Enter NONE for no attributes.
			Enter OA for operator assisted
			Enter OH for operator handled
			Enter OPER for operator originated
			Enter SPECIAL for handle special requirements, for example repairs

	Subfield or		
Field	refinement	Entry	Explanation and action
ATTRIB1		ALL, APS, COIN, HOTEL, MARINE,	Service class attribute set. Enter NONE, ALL, or a set of attributes listed below, each attribute separated by a blank, and the last attribute followed by a \$.
		MOBILE, NONE, or STATION	Enter ALL for the whole set of attributes listed above.
		•••••••	Enter APS for attendant pay station
			Enter COIN for coin
			Enter HOTEL for hotel
			Enter MARINE for marine
			Enter MOBILE for mobile
			Enter NONE for no attributes.
			Enter STATION for station
ATTRIB2		ALL, NFY, NONE, or TAC	Recall attribute set. Enter NONE, ALL, or a set of attributes listed below, each attribute separated by a blank, and the last attribute followed by a \$.
			Enter ALL for the whole set of attributes listed above.
			Enter NFY for notification recall
			Enter NONE for no attributes.
			Enter TAC for time and charges recall

#### Field descriptions (Sheet 4 of 5)

### **QPROP** (end)

Field	Subfield or refinement	Entry	Explanation and action
ATTRIB3		ALL, FOR, or NONE	Foreign attribute set. Enter NONE, ALL, or a set of attributes listed below, each attribute separated by a blank, and the last attribute followed by a \$.
			Enter ALL for the whole set of attributes listed above.
			Enter FOR for foreign
			Enter NONE for no attributes.
ATTRIB4		ALL, NONE, or SPL1 to SPL16	Special attribute set. Enter NONE, ALL, or a set of attributes listed below, each attribute separated by a blank, and the last attribute followed by a \$.
			Enter NONE for no attributes.
			Enter SPL1 to SPL16 for special.
			Enter ALL for the whole set of attributes listed above.

### **Datafill example**

The following example shows sample datafill for table QPROP.

#### MAP display example for table QPROP

QPROPKEY	ATTRIBS
1	C OA OH \$
2	SC HOTEL COIN \$
	FOREIGN FOR \$

### Table history BCS36

Corrected value in field ATTRIB3 (changed FRN to FOR)

# QT0-QT5H

#### Table name

ITOPS Queue Length Threshold High Traffic Table

### **Functional description**

For related information, refer to table QTTIDXH.

Tables QT0H, QT1H, QT2H, QT3H, QT4H, and QT5H contain the queue length threshold value associated with the related Average Work Time (AWT) value during the high traffic period.

### **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table QT0-QT5H.

### Table size

0 to 57 tuples

### Datafill

The following table lists datafill for table QT0-QT5H.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPRANGE		0_0 to 585_600 permitted ranges preprinted on form	Occupied positions range. Preprinted on the form. For a range above any expected in the office put a line through the preprinted value to indicate that it need not be entered, equivalent to setting all the fields associated with this range to 0.
			<i>Note:</i> Field OPRANGE, representing the occupied positions range, is preprinted on the form as the DMS program will only accept the preprinted values. Ranges that are above the maximum range expected in the office may be omitted by putting a line through them equivalent to setting all the fields associated with these ranges to 0.
CWOFF		0 to 255	Call Waiting signal OFF threshold. Enter the number below which the number of calls waiting in the queue must fall to erase the CW signal on all CRTs.

### QT0-QT5H (end)

#### Field descriptions (Sheet 2 of 2)

	Subfield or		
Field	refinement	Entry	Explanation and action
CWON		0 to 255	Call Waiting signal ON threshold. Enter the number which must be reached by the number of calls waiting in the queue to turn on the CW signal on all CRTs.
DEFLECT		0 to 255	Deflect calls threshold. Enter the number that the position of the call in the queue must reach to result in the call being deflected to treatment EMR3 or EMR4.
			If the entry in this field is 0, calls are deflected to EMR4.
			If the entry in this field is other than 0, calls are deflected to EMR3 (see ``Functional description of table TMTCNTL.TREAT" for more information).

### **Datafill example**

The following example shows sample datafill for table QT0-QT5H.

#### MAP display example for table QT0-QT5H

$\left( \right)$	OPRANGE	CWOFF	CWON	DEFLECT	
	81_88	51	75	141	

# QT0-QT5L

#### Table name

ITOPS Queue Length Threshold Low Traffic Table

### **Functional description**

Tables QT0L, QT1L, QT2L, QT3L, QT4L, and QT5L contain the queue length threshold value associated with the related average work time (AWT) value during the low traffic period.

For related information, refer to table QTTIDXH.

### **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table QT0-QT5L.

### Table size

0 to 57 tuples

### Datafill

The following table lists datafill for table QT0-QT5L.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPRANGE		0_0 to 585_600 permitted ranges preprinted on form	Occupied positions range. Preprinted on the form. For a range above any expected in the office, put a line through the preprinted value to indicate that it need not be entered, equivalent to setting all the fields associated with this range to 0 (zero).
			<i>Note:</i> Field OPRANGE, representing the occupied positions range, is preprinted on the form as the DMS program will only accept the preprinted values. Ranges which are above the maximum range expected in the office may be omitted by putting a line through them equivalent to setting all the fields associated with these ranges to 0.
CWOFF		0 to 2565	Call Waiting signal OFF threshold. Enter the number below which the number of calls waiting in the queue must fall to erase the call waiting (CW) signal on all CRTs.

### QT0-QT5L (end)

#### Field descriptions (Sheet 2 of 2)

	Subfield or		
Field	refinement	Entry	Explanation and action
CWON		0 to 2565	Call Waiting signal ON threshold. Enter the number that must be reached by the number of calls waiting in the queue to turn on the CW signal on all CRTs.
DEFLECT		0 to 255	Deflect calls threshold. Enter the number that the position of the call in the queue must reach to result in the call being deflected to treatment EMR3 or EMR4.
			If the entry in this field is 0, calls are deflected to EMR4.
			If the entry in this field is other than 0, calls are deflected to EMR3 (see ``Functional description of table TMTCNTL.TREAT" for more information).

### **Datafill example**

The following example shows sample datafill for table QT0-QT5L.

#### MAP display example for table QT0-QT5L

OPRANGE	CWOFF	CWON	DEFLECT	)
81_88	51	75	141	

## QTHRESH

#### Table name

ITOPS Queue Threshold Limits Table

### **Functional description**

Table QTHRESH is used to define the queue threshold limits for the call queues.

### **Datafill sequence and implications**

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

It is recommended that table QDEF be datafilled before table QTHRESH, but this is not mandatory.

### Table size

0 to 64 tuples

### Datafill

The following table lists datafill for table QTHRESH.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
QNUM		0 to 63	Queue number. Enter the queue number.
QCWN1		0 to 1800	Call waiting prompt on time 1. Enter the value in seconds when the Call Waiting prompt is to be turned on, which applies in time interval 1 (of a 24 h day) defined in field TIME1.
QCWF1		0 to 1800	Call waiting prompt off time 1. Enter the value in seconds when the Call Waiting prompt is to be turned off, which applies in time interval 1 (of a 24 h day) defined in field TIME1.
QCD1		0 to 1800	Call deflection time 1. Enter the value in seconds when calls are to be deflected and the Calls Deflected prompt is to be turned on, which applies in time interval 1 (of a 24 h day) defined in field TIME1.
			The value in field QCD1 must be greater than the value in field QCWN1.

### QTHRESH (continued)

#### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
TIME1		0 to 2400	End time for interval 1. Enter the time in hours and minutes (hhmm) when time interval 1 ends.
			Time interval 1 starts at 0000.
QCWN2		0 to 1800	Call waiting prompt on time 2. Enter the value in seconds when the Call Waiting prompt is to be turned on, which applies in time interval 2 (of a 24 h day) defined in field TIME2.
QCWF2		0 to 1800	Call waiting prompt off time 2. Enter the value in seconds when the Call Waiting prompt is to be turned off, which applies in time interval 2 (of a 24 h day) defined in field TIME2.
QCD2		0 to 1800	Call deflection time 2. Enter the value in seconds when calls are to be deflected and the Calls Deflected prompt is to be turned on, which applies in time interval 2 (of a 24 h day) defined in field TIME2.
			The value in field QCD2 must be greater than the value in field QCWN2.
TIME2		0 to 2400	End time for interval 2. Enter the time in hours and minutes (hhmm) when time interval 2 ends.
			Time interval 2 starts at TIME1.
QCWN3		0 to 1800	Call waiting prompt on time 3. Enter the value in seconds when the Call Waiting prompt is to be turned on, which applies in time interval 3 (of a 24 h day) defined in field TIME3.
QCWF3		0 to 1800	Call waiting prompt off time 3. Enter the value in seconds when the Call Waiting prompt is to be turned off, which applies in time interval 3 (of a 24 h day) defined in field TIME3.

### QTHRESH (continued)

	Subfield or		
Field	refinement	Entry	Explanation and action
QCD3		0 to 1800	Call deflection time 3. Enter the value in seconds when calls are to be deflected and the Calls Deflected prompt is to be turned on, which applies in time interval 3 (of a 24 h day) defined in field TIME3.
			The value in field QCD3 must be greater than the value in field QCWN3.
TIME3		0 to 2400	End time for interval 3. Enter the time in hours and minutes (hhmm) when time interval 3 ends.
			Time interval 3 starts at TIME2.
QCWN4		0 to 1800	Call waiting prompt on time 4. Enter the value in seconds when the Call Waiting prompt is to be turned on, which applies in time interval 4 (of a 24 h day) defined in field TIME4.
QCWF4		0 to 1800	Call waiting prompt off time 4. Enter the value in seconds when the Call Waiting prompt is to be turned off, which applies in time interval 4 (of a 24 h day) defined in field TIME4.
QCD4		0 to 1800	Call deflection time 4. Enter the value in seconds when calls are to be deflected and the Calls Deflected prompt is to be turned on, which applies in time interval 4 (of a 24 h day) defined in field TIME4.
			The value in field QCD4 must be greater than the value in field QCWN4.
TIME4		0 to 2400	End time for interval 4. Enter 2400, the time in hours and minutes (HHMM) when time interval 4 ends.
			Time interval 4 starts at TIME3.

#### Field descriptions (Sheet 3 of 3)

### Datafill example

The following example shows sample datafill for table QTHRESH.

## QTHRESH (end)

MAP display example for table QTHRESH

QNUM	~	~	~	TIME1 TIME3	~	~	~		
0	20 12	10 24	30 45	0600 1200	15 24	10 45	80 60	1200 2400	

## **Table history**

### BCS36

A recommendation to datafill table QDEF before table QTHRESH was added.

## QTTIDXH

### Table name

ITOPS Queue Length Threshold High Traffic Table Index Table

### **Overview**

The following table lists the International Traffic Operator Position System (ITOPS) queue length threshold tables.

Table name	Form number	Form title
QTTIDXH	2798	ITOPS Queue Length Threshold High Traffic Table Index
QT0H to QT5H	2836A, B, C	ITOPS Queue Length Threshold High Traffic Table Record
QTTIDXL	2799	ITOPS Queue Length Threshold Low Traffic Table Index
QT0L to QT5L	2837A, B, C	ITOPS Queue Length Threshold Low Traffic Table Record

It is possible that more calls than can be handled by the ITOPS operator work force is present at a given time in the ITOPS system. If this is the case, those calls waiting to be processed are queued in an appropriate call waiting queue.

In ITOPS, there are six call waiting queues:

- non-transfer queue
- transfer 1 queue
- transfer 2 queue
- non-transfer recall queue
- transfer 1 recall queue
- transfer 2 recall queue

There is a limit on the total number of calls that can be queued in the ITOPS system. This limit is controlled by an office parameter. If this limit is exceeded, the call is deflected to a treatment.

There are also dynamically changing thresholds associated with the queueing of calls. These thresholds are controlled by the system wide average work time for the last 15 min period, the number of occupied positions (headset are seated) in the system, and the number of calls currently queued in the system,

### **QTTIDXH** (continued)

then the new threshold values for the next 15 min period are chosen. There are four threshold values as follows:

#### **CWONTHRESHOLD**

When the number of calls in the call waiting queues is equal to CWONTHRESHOLD value and a new call comes in, this call is put in the queue and <CW> appears at the operators screen, at the In-Charge and assistance positions. This causes the operators to speed up and handle these waiting calls.

#### CWOFFTHRESHOLD

When an operator handles a call that was in the call waiting queues, and the number of the calls in the queue is now equal to CWOFFTHRESHOLD, <CW> is removed from the screens.

#### DEFLECTTHRESHOLD

When the number of calls in the call waiting queues is equal to threshold DEFLECTTHRESHOLD, and a new call comes in, this new call is deflected to a treatment and <CD> appears at the In-Charge and assistance positions. An alarm also sounds in the office.

#### AWTINDEX

This value is used to find out which of the six queue threshold tables is taken for the next 15 min period, according to the average work time (AWT) value of the last 15 min period.

The Administration has the capability of setting these queue threshold values using two sets of queue threshold tables: one for high traffic period and the other for low traffic period. Each set contains seven tables. These high and low table sets are required because at low time the customer must be willing to wait in queue longer, but at high time the customer prefers calls to be handled faster. Tables explained below are high traffic tables. Low traffic tables are QTTIDXL, QT0L, QT1L, QT2L, QT3L, QT4L, QT5L and they have the same ranges as high traffic tables.

At the top is the queue threshold table index table, QTTIDXH, which contains only six tuples. There is a one-to-one correspondence between each of these six tuples and each of six remaining tables: QT0H, QT1H, QT2H, QT3H, QT4H, and QT5H. The only field in table QTTIDXH besides the key (0 to 5) is the average work time (field AWT).

AWT for the last 15 min is compared with the AWT values in table QTTIDXH. The index found maps the table that has the appropriate threshold values to be used for the next 15 min period.

### **QTTIDXH** (continued)

Data stored in these queue threshold tables, together with information on average work time and occupied positions, are used to determine whether a call arriving at an ITOPS switch is to be queued, or deflected to announcement. It is also used to turn calls waiting or deflected display on or off.

The Administration also has an overriding control as to which queue threshold table will be used via input at the FADS device.

The traffic may vary according to the environment that is being served by DMS.

The following office parameters in table OFCENG are used to specify the start times for the high and low traffic periods for the office:

#### ITOPS\_HIGH\_TRAFFIC\_START\_TIME

#### ITOPS\_LOW\_TRAFFIC\_START\_TIME

These office parameters represent the start time of the high and low traffic periods for the office, respectively. The range of these parameters is 0 to 23.

For example, if the current time is the time specified in office parameter ITOPS\_HIGH\_TRAFFIC\_START\_TIME, the queue threshold table set for the high traffic period is used and vice versa. If only one set of tables is required, both parameters can be filled as 0 (zero). In this situation, only low traffic tables are active all the time.

### **Functional description**

Table QTTIDXH is used to define which one of the six Queue Length Threshold High Traffic Tables (QT0H, QT1H, QT2H, QT3H, QT4H, or QT5H) is to be used in the next 15 min based on the AWT in the preceding 15 min.

### **Datafill sequence and implications**

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

### Table size

0 to 6 tuples

## QTTIDXH (end)

## Datafill

The following table lists datafill for table QTTIDXH.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
QTTBL		numeric (0 to 5)	ITOPS queue length threshold high traffic table. Enter the number corresponding to tables QT0H to QT5H respectively.
AWT		numeric (1 to 32766)	Average work time. Enter the length of time, in seconds, used to handle the average call.
			The entries for average work time (AWT) must be entered in table QTTIDXH in ascending numerical order.

## **Datafill example**

The following example shows sample datafill for table QTTIDXH.

#### MAP display example for table QTTIDXH

QTTBL AW	
0 2	5

## QTTIDXL

### Table name

ITOPS Queue Length Threshold Low Traffic Table Index Table

## **Functional description**

Table QTTIDXL is used to define which one of the six queue length threshold low traffic tables (QT0L, QT1L, QT2L, QT3L, QT4L, or QT5L) is to be used in the next 15 min based on the average work time (AWT) in the preceding 15 min.

For related information, refer to table QTTIDXH.

### **Datafill sequence and implications**

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

## Table size

0 to 6 tuples

### Datafill

The following table lists datafill for table QTTIDXL.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
QTTBL		numeric (0 to 5)	ITOPS queue length threshold low traffic table. Enter the number corresponding to tables QT0L to QT5L respectively.
AWT		numeric (1 to 32766)	Average work time. Enter the length of time in seconds, used to handle the average call. The entries for average work time (AWT) must be entered in table QTTIDXL in ascending numerical order.

## **Datafill example**

The following example shows sample datafill for table QTTIDXL.

#### MAP display example for table QTTIDXL

QTTI	ЗL	AWT	
	0	25	

## **R2BILSRV**

### Table name

R2 Billing Service Table

## **Functional description**

Table R2BILSRV reroutes Integrated Business Network (IBN) R2 calls during translations to a Traffic Operator Position System (TOPS) operator based on the billing category of the call.

The routing of an IBN R2 call is determined from the receiving party digits as dialed by the calling party. Once a route is identified, a terminating node requests the calling party digits and the billing category. Once the billing category is received, table R2BILSRV is checked by the system to determine if a new route is set for this billing category. If field SEL (selector) is set to NONE, the route is not changed and the call continues. If field SEL is set to TOPS, the route is changed to TOPS and the call is sent back to the router to determine a new terminator.

## **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table R2BILSRV.

### Table size

0 to 19 tuples

Table size is dynamically determined by the number of tuples added in field BILLCAT.

## Datafill

The following table lists datafill for table R2BILSRV.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action		
BILLCAT		ANI_FAILURE, ATME, COIN, DATA, FREE_CALL, LOCAL_COIN MTC_EQ, OPER, OPER_INTL, PBX, PRIORITY, REGULAR, REGULAR, REGULAR, SHARED_1, SHARED_1, SHARED_2, SHARED_2, SHARED_3, SPARE_CAT1, SPARE_CAT2, TIME_AND_CHG, TOLL_COIN, or UNIT_FEE_COIN (up to 19 entries)	Billing category. Enter up to 19 types of billing category. See table TOPS and table SIGACT for further descriptions of the categories. If less than 19 types are required, end the list with a \$ (dollar sign).		
			<i>Note:</i> All calling categories are ignored when received by the Traffic Operator Position System (TOPS) except the ATME category. ATME is not supported by TOPS and must be taken down if such a call is routed to TOPS.		
			SPARE_CAT1, SPARE_CAT2, TIME_AND_CHG, TOLL_COIN, or UNIT_FEE_COIN	<ul> <li>ANI_FAILURE (automatic number identification [ANI] failure)</li> </ul>	
				TIME_AND_CHG, • ATME (call originate TOLL_COIN, or and measurement e	<ul> <li>ATME (call originated by automatic test and measurement equipment)</li> </ul>
				COIN (coin)	
			DATA (data call)		
				<i>Note:</i> The DATA category prevents all double connections to the call for the call's duration. Data is being transmitted and break-in tones or multiple voice connections cause transmission errors.	
			<ul> <li>FREE_CALL (free call-handled the same as a REGULAR call but call is marked as NOAMA)</li> </ul>		
			<ul> <li>LOCAL_COIN (call originated from local public phone)</li> </ul>		
			MTC_EQ (maintenance equipment)		

## R2BILSRV (continued)

### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BILLCAT (continued)			<i>Note:</i> MTC_EQ calls are any calls originating from the MAP (maintenance and administration position) or by test equipment.
			OPER (operator)
			<ul> <li>OPER_INTL (international operator originated call)</li> </ul>
			<ul> <li>PBX (call from a private branch exchange)</li> </ul>
			PRIORITY (priority subscriber)
			<ul> <li>REGULAR (regular subscriber or subscriber's category is unknown)</li> </ul>
			<ul> <li>REGULAR_INTL (international direct dial call)</li> </ul>
			<ul> <li>SHARED_1, SHARED_2, SHARED_3 (first, second, or third subscriber on a party line)</li> </ul>
			<ul> <li>SPARE_CAT1, SPARE_CAT2 (spare categories)</li> </ul>
			<ul> <li>TIME_AND_CHG (subscriber requested time and charge)</li> </ul>
			<ul> <li>TOLL_COIN (call originated from a long distance public phone)</li> </ul>
			UNIT_FEE_COIN (unit fee coinbox call)
			<i>Note:</i> TOPS does not differentiate between the regular COIN phone and the UNIT_FEE_COIN phone.
SEL		NONE or TOPS	Selector. Enter the type of selector. Enter NONE if the route remains unchanged and the call continues. Enter TOPS if the route is changed to TOPS and the call is sent back to the router for a new terminator.

## Datafill example

The following example shows sample datafill for table R2BILSRV.

## R2BILSRV (end)

MAP display example for table R2BILSRV

BILLCAT SEL

REGULAR NONE

## **Table history**

### BCS36

Entries LOCAL\_COIN and TOLL\_COIN were added to the field descriptions for field BILLCAT.

#### BCS35

Table R2BILSERV was introduced.

## **R2PROT including FDCP**

#### Table name

R2PROT

### **Functional description**

Register signaling systems number 2 (R2) use register signaling to transfer information about a call between two ends of a trunk. R2 systems are multifrequency compelled (MFC) systems that send tones in one direction and return acknowledgement tones. The information transferred is described within a protocol specification.

R2 signaling applies to the DMS-100 and DMS-200 international switches.

Table R2PROT is the head table for the R2 datafill. It provides the indexes into the other R2 tables. Table R2PROT provides the definition of the mappings and activity controllers for each protocol. Table R2PROT is accessed with the protocol index from table TRKGRP and table TRKSGRP.

Table R2PROT is maintained and downloaded by central control (CC) and used in the extended multiprocessor system (XMS)-based peripheral module (XPM).

Different protocols can use the same indexes into R2 tables. New protocols can be added using existing mappings of other protocols by adding a new tuple to table R2PROT.

For related information refer to tables ACTSIG and SIGACT.

#### **Flexible Digital CAS Platform**

FDCP is a new value that is specified in the BASEPROT field of table R2PROT.

The value datafilled in field BASEPROT selects a refinement of the table tuple. A new refinement for R2PROT is associated with the new BASEPROT value FDCP. This new FDCP refinement consists of two fields, a CATIDX field and an OPTIONS field.

#### **CATIDX Field**

This field in the new FDCP refinement of R2PROT identifies data in table CATCLASS. Table CATCLASS handles the billing and calling party category activities for trunks associated with the tuple (via table TRKSGRP). This field follows the existing BASEPROT field.

### **OPTIONS Field**

The options field is reserved for growth and provides no functionality in this first release of FDCP. This field follows the new CATIDX field.

## **Datafill sequence and implications**

The following tables must be datafilled before table R2PROT including FDCP.

- ACTCTL
- ACTSIG
- CATCLASS
- SIGACT

For FDCP and NTR2P, the table CATCLASS is datafilled before FDCP tuples in table R2PROT.

## Table size

1 to 16 tuples

One tuple is permanently allocated for the NIL tuple, and a maximum of 15 tuples can be allocated using the table editor.

Each protocol is represented by one tuple.

## Datafill

The following table lists datafill for table R2PROT including FDCP.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
IDX		alphanumeric (1 to 8 characters)	Index Enter the index into table R2PROT.
PHASES		see subfields	<i>Protocol phases</i> This field consists of subfields OGACTSIG, ICACTSIG, OGSIGACT, and ICSIGACT. It contains the phase change information for the protocol.
			There are 16 sets of four integers corresponding to the indexes into tables SIGACT and ACTSIG for outgoing and incoming trunks. If less than 16 sets are required, end the list of integers with a \$ (dollar sign).
			<i>Note:</i> 0 (zero) is used by the table software as the index value NIL.
	OGACTSIG	0 to 255	<i>Outgoing actsig table index</i> Enter the index into table ACTSIG for outgoing trunks.
	ICACTSIG	0 to 255	Incoming actsig table index Enter the index into table ACTSIG for incoming trunks.
	OGSIGACT	0 to 255	<i>Outgoing sigact table index</i> Enter the index into table SIGACT for outgoing trunks.
	ICSIGACT	0 to 255	Incoming sigact table index Enter the index into table SIGACT for incoming trunks.
OGACTCT L		alphanumeric (1 to 8 characters)	<i>Outgoing actctl table index</i> Enter the index into table ACTCTL for outgoing trunks.
ICACTCTL		alphanumeric (1 to 8 characters)	Incoming actctl table index Enter the index into table ACTCTL for incoming trunks.

#### Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
BASEDATA		see subfield	Base protocol data This field consists of subfield BASEPROT and refinements CATIDX, OPTION, and ACTIVITY. The refined data required is based on the BASEPROT entry.
	BASEPROT	alphanumeric (1 to 8 characters) FDCP	<i>Base protocol value</i> Enter the base protocol. Each base protocol is country specific, except for FDCP.
			If the entry in subfield BASEPROT is NTR2PI or NTR2P or FDCP, go to refinement CATIDX.
			If the entry in this subfield is other than NTR2PI or NTR2P or FDCP, no further datafill is required.
	CATIDX	alphanumeric (1 to 8 characters)	<i>Catclass index</i> If the entry in subfield BASEPROT is NTR2PI or NTR2P or FDCP, datafill this refinement. Enter the index name to access table CATCLASS to obtain class of category information.
	OPTIONS	see subfields	<i>Options</i> If the entry in subfield BASEPROT is NTR2PI or NTR2P, datafill this refinement. This field consists of subfields OPTION and ACTIVITY.
			No options are supported in the first release of FDCP.
			Enter \$ for an empty options list.

### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	DIG_B_ACT, DIG_C_ACT, DIG_D_ACT, DIG_E_ACT, DIG_F_ACT,	<i>Overdecadic-digit activity mappings</i> If the entry in subfield BASEPROT is NTR2PI or NTR2P, enterl this refinement. Up to seven options can be entered. If less than seven options are required, end the list with a \$ (dollar sign).
		NOCLI_PHASE, QUICK_REQ, TARIEE LEN	Enter NOCLI_PHASE to define categories which are CLI request prohibited.
		TARIFF_LEN, or TBI_ACT, QUEUECHG	Enter data for QUICK_REQ to request the calling party category (CPC) or digits before the system collects all called party digits. This field has five refinements. This field is an FDCP option.
			Enter the definition used if a digit greater than zero to nine is encountered. Otherwise, enter TBI_ACT if a toll break in (TBI) can occur.
			Enter TARIFF_LEN for Polish R2 register signaling and datafill refinement TARIFF_LEN. Option TARIFF_LEN must be datafilled if activity RCV_TARIFF is datafilled in table ACTSIG for the incoming trunk or in table SIGACT for the outgoing trunk. TARIFF_LEN must be datafilled when table R2PROT is first datafilled. This option is only supported by the base protocol NTR2PI.
			Enter QUEUECHG to allow the Charge Indicator to be queued at times when the Charge Indicator cannot be processed.
	ACTIVITY	ACC_MTC, CONGESTIN,	<i>Activity</i> Enter the R2 activity.
	CONNECT_ CALL_CHG, or SUB_BUSY	If the entry in subfield OPTION is other than DIG_B_ACT, DIG_C_ACT, DIG_D_ACT, DIG_E_ACT, DIG_F_ACT or TBI_ACT, enter ACC_MTC (access code maintenance).	
			If the entry in subfield OPTION is TBI_ACT, enter CONGESTION (congestion in network), CONNECT_CALL_CHG (connect call charge), or SUB_BUSY (subscriber line busy).

Field	Subfield or refinement	Entry	Explanation and action
	QUICK_REQ	T_REP, ANI_AFTER_1_ DIG, CAT_AFTER_1_ DIG, CAT_AFTER_LA ST_DIG, or CAT_BLNG_IS_ CLNG	Quick Request
			Enter ANI_AFTER_1_DIG if the sytem requires the calling number after collecting one called-party digit.
			Enter CAT_AFTER_1_DIG if the system requires the CPC after collecting one called-party digit.
			Enter CAT_AFTER_LAST_DIG if the system requires the CPC after collecting all called digits.
			Enter CAT_BLNG_IS_CLNG if the calling and billing categories are the same. The system can provide the calling-party category (CPC) on the billing category request. This refinement applies to FDCP trunks.
	TARIFF_ LEN	1 to 9	<i>Tariff digits</i> If the entry in subfield OPTION is TARIFF_LEN, datafill this refinement. Enter the number of tariff digits that can be received on the outgoing trunk

#### Field descriptions (Sheet 4 of 4)

### Datafill example

The following example shows sample datafill for table R2PROT including FDCP.

### MAP display examples for table R2PROT including FDCP

PHASES	OGACTCTL	ICACTCTL	
			BASEDATA

$\left( \right)$		IDX		
	PHASES	OGACTCTL	ICACTCTL	
				BASEDATA
	ICAS			(200 0 200 0)\$
	OGFDCP	ICFDCP		FDCP NIL \$

# Table history

### MMP14

Added refinement NOCLI\_PHASE to subfield OPTION in table R2PROT.

### MMP13

Option QUICK\_REQ and related refinements added to table R2PROT.

#### **EUR009**

Refinement FDCP added to table R2PROT.

### **APC010**

Entry CONNECT\_CALL\_CHG added to option TBI\_ACT.

### R2PROT including FDCP (end)

#### BCS36

The following changes were made:

- Options TARIFF\_LEN and TBI\_ACT added to subfield OPTION.
- Refinements TARIFF\_LEN and subfield ACTIVITY added.

#### BCS34

Table R2PROT introduced.

#### Supplementary information

This section provides information on dump and restore procedures when datafilling table R2PROT.

#### **Dump and restore**

To download option TARIFF\_LEN, the international digital trunk controller (IDTC), and PCM30 Digital Trunk Controller (PDTC) must be busied (BSY) and returned to service (RTS).

The FDCP refinement of table R2PROT requires no reformat actions. All fields and field values that are valid and supported prior to introduction of FDCP are valid and supported after the introduction of FDCP. All changes introduced with FDCP apply only when the BASEPROT field in a R2PROT tuple is datafilled as FDCP. Since the BASEPROT field cannot be datafilled to FDCP in a pre-FDCP load, none of the changes introduced with FDCP apply (to either the old or new sides) during an ONP from a pre-FDCP capable load to a FDCP-capable load.

There is no requirement to populate new R2PROT tuples for FDCP over an ONP.

## RADR

### Table name

Receiver Attachment Delay Recorder Table

## **Functional description**

The system generates test calls. The tests time the interval from the point of original request for attachment to a receiver, to the time of connection.

Table RADR stores the number of test calls to originate each hour. The table stores the two values of delay thresholds (lower and upper) in seconds.

The system displays the percentage of test calls delayed that surpass the lower delay threshold on the network management MAP terminal.

The system also stores a peg count of the following information:

- number of test calls that the system processed
- number of test calls delayed that surpass the lower delay threshold
- number of test calls delayed that surpass the upper delay threshold

The actual receiver attachment delay call rate is different in some events from the call rate specified in field RADCALLR. Use the following equation to calculate the actual rate:

A = [3600 / (b / c)]

where

#### Α

is the actual receiver attachment delay call rate

#### b

is the lower threshold of 3600

#### С

is the value in field RADCALLR

If field RADCALLR is 1100 and field RADLDLYT is 3 the following information is true:

A = [3600 / (3600 / 1100)]

A = 3600 / 3.27 (3.27 rounds to 3)

**RADR** (continued)

A = 1200

This information does not have an effect if the rate is 900, 1200, or 1800.

To disable the RADR test program at any time, set the number of test calls to 0.

Table RADR affects receivers. The table adds a tuple with a non-zero value for field RADCALLR. This process sets up a competition with call processing for receivers. The system provides a protection level of ENGPROT for table RADR. The system cannot turn on the processes when the system a protection level is present. The operating company can modify table RADR. To modify the table, the company loads module ENGWRITE from the nonresident tape and enters the command ENGWRITE ON.

## Datafill sequence and meaning

You must enter data in the following tables after you enter data in table RADR:

- RECEIVER
- REASONS

### **Table size**

0 to 10 tuples

## **RADR** (continued)

## Datafill

Datafill for table RADR appears in the following table.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RADKEY	ATDRCVR ATDUKRCVD GTRCVR DTUKRCVRD T300RCV KSR2IRCV	Receiver attachment delay key. Enter a receiver attachment delay key. Descriptions of these keys follow. These entries are not common language location identifiers (CLLI). These entries are keys to operational measurements (OM) group RADR.	
		MFRCVR MF300RCVor UTRCVR	ATDRCVR (audio tone detector)
			<ul> <li>ATDUKRCV (A-law audio tone detector United Kingdom)</li> </ul>
			DGTRCVR (Digitone)
			<ul> <li>DTUKRCVR (A-law Digitone receiver United Kingdom)</li> </ul>
			<ul> <li>DT300RCV (Digitone for gateway switches)</li> </ul>
			KSR2IRCV (for licensee use only)
			KSR2ORCV (for licensee use only)
			MFRCVR (multifrequency)
		<ul> <li>MF300RCV (mu switches)</li> </ul>	in coorte (main equency for gatemay
			UTRCVR (universal tone receiver)
			<i>Note:</i> You can use UTRCVR as a key to OMs group RADR. You must not enter UTRCVR in table RADR.
RADCALLR		0 to 1800	<i>Receiver attachment delay call rate.</i> Enter the number of test calls that originate each hour.

## RADR (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RADLDLYT		0 to 19	<i>Receiver attachment delay lower delay parameter.</i> Enter the time, in seconds, of the lower delay threshold.
RADUDLYT		0 to 20	<i>Receiver attachment delay higher delay parameter.</i> Enter the time, in seconds, of the upper delay threshold.

### **Datafill example**

Sample datafill for table RADR appears in the following example.

The number of test calls to originate each hour is 900. The lower threshold is the standard value of 3 s. The upper threshold is the standard value of 7 s.

#### MAP example for table RADR

RADKEY	RADCALLR	RADLDLYT	RADUDLYT	
MFRCVR	900	3	7	

# Table history

BCS36

Deleted option ATDARCVR in field RADKEY in BCS36, as table owner advised.

## RAO

### Table name

TOPS Domestic RAO Codes Table

## **Functional description**

Table RAO is used to check the validity of 10-digit "special" numbers. Table RAO cannot be used to check the validity of revenue accounting office (RAO) codes for the 14-digit calling cards. RAO codes for the calling cards must be datafilled in table RAOCHECK so that the same RAO code is valid for one type of number but not the other (that is, the 10-digit numbers but not the 14-digit numbers, or vice-versa). If the RAO code is valid for both types, it must be datafilled in both table RAO and table RAOCHECK.

Table RAO is prepared by Northern Telecom from a file of valid RAO numbers without a data form being prepared. At cutover or extension, however, table RAO must be revised to incorporate recent changes to the master RAO list.

## **Datafill sequence and implications**

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

## Table size

0 to 999 tuples

## Datafill

The following table lists datafill for table RAO.

### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
RAOCODE		0 to 9 (3 digits)	Revenue accounting office code . Enter the revenue accounting office (RAO) number.

## RAO (end)

## **Datafill example**

The following example shows sample datafill for table RAO.

#### MAP display example for table RAO

·				
	RAOCODE			
	201	 	 	 
	321			

## RAOCHECK

### Table name

TOPS RAO Check Table

## **Functional description**

Table RAOCHECK is used with table NPACHECK to perform special digit checks on credit card numbers.

Table RAO is used to check the validity of 10-digit "special" numbers. Table RAO cannot be used to check the validity of revenue accounting office (RAO) codes for 14-digit calling cards. RAO codes for 14-digit calling cards must be datafilled in table RAOCHECK. The same RAO code is valid for one type of number but not the other (that is, the 14-digit number but not the 10-digit number, or vice-versa). If the RAO code is valid for both types, it must be datafilled in both table RAO and table RAOCHECK.

See table HOTLIST for related information.

## **Datafill sequence and implications**

The following tables must be datafilled before table RAOCHECK.

- HOTLIST
- CHKDIGIT
- RAO

## Table size

0 to 999 tuples

## Datafill

The following table lists datafill for table RAOCHECK.

### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
RAOCODE		0 to 9 (3 digits)	Revenue accounting office code . Enter the revenue accounting office (RAO) code for the credit card number.

## RAOCHECK (end)

## **Datafill example**

The following example shows sample datafill for table RAOCHECK.

#### MAP display example for table RAOCHECK

RAOCODE			
727			

## RASLAPPL

#### Table name

Robust Application Session Layer Application Table

### **Functional description**

Switching units with feature package NTX347AA (DMS Base Data Communication CC Software) have table RASLAPPL. Table RASLAPPL requires feature package NTX273AA (Multi Protocol Controller BX.25) to function.

Table RASLAPPL provides a generic application layer interface to different data communications facilities. These facilities include multiprotocol controller (MPC) X250RIG or X2580 Northern Telecom X.25 devices.

Table RASLAPPL defines and governs the mapping between different application network connections (NC) and physical data links. The robust application session layer (RASL), provides a single interface to support the network management (NWM) system.

Table RASLAPPL serves as the black box interface between applications or data communications systems. The system handles events and conditions at the applications level. The RASL interface reports any errors to the applications. The application that uses the interface determines the conditions that use the RASL interface activated utilities.

Table RASLAPPL also defines the RASL network connections that the automatic file transfer (AFT) uses to transfer files to a remote processor. The AFT is an application system. This system transfers Device Independent Recording Package (DIRP) files. The AFT transfers the files through the use of the following:

- data access information system (DAIS)
- safe store tap (SST)
- the RASL

The AFT can interface with the transport layer interface (TLI) instead of RASL. The AFT can run over Ethernet local area network (LAN) and X.25.

### **Datafill sequence and meaning**

You must enter data in the following tables before you enter data in table RASLAPPL.

- MPC
- NX25

- MPCLINK
- MULTILNK

You must enter one of the following tables before table RASLAPPL. The entry of the table depends on the type of application that you use.

- MPC (configures MPC cards)
- MPCLINK (configures MPC links using X250ORG or X2580 cards)

Table GASINFO must be datafilled after table RASLAPPL.

### **Table size**

2 to 30 tuples

Table RASLAPPL requires access to a minimum of two links. You can enter a maximum of 30 network connections in table RASLAPPL.

### Datafill

Datafill for table RASLAPPL appears in the following table.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
NETCON		see subfield	<i>Network connection.</i> This field contains subfield NETCON.
	NETCON	alphanumeric (1 to 16 characters)	<i>Network connection.</i> Enter the identifier for the network connection.

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
APTYPE		ACDIN ACDOUT AFT TESTIN or TESTOUT	<i>Application type.</i> Enter the application type. The correct range of entries for this field depends on the feature package of the operating company.
			The ACDIN and ACDOUT are Automatic Call Distribution (ACD) applications that send ACD reports. The ACD applications are in feature package NTX494AA (Automatic Call Distribution).
			The AFT provides automatic file transfer of DIRP files. The AFT provides automatic file transfer through RASL. The AFT is in feature package NTXV20AA [DMS-100 Automatic File Transfer (AFT).
			The TESTIN and TESTOUT are test applications. These applications are for the use of Northern Telecom only.
BUFFSIZE		2 to 4096	<i>Buffer size.</i> Enter the maximum number of bytes expected in a message received from the far end.

Field	Subfield or refinement	Entry	Explanation and action
NUMBUFFS		1 to 128 (increases by power of 2)	<i>Number of buffers.</i> Enter the number of buffers allocated. The value must be larger for high traffic applications.
ACSINFO		MPCPVC MPCSVC RMLP RSLP SIPC or TLI	Access information. Enter the access information. The correct range of selectors for this field depends on the feature packages of the operating company.
			Enter MPCPVC (MPC permanent virtual circuit [PVC]). Enter data in refinements MPCNO, LINKNO, and PVCLCN in the section "ACSINFO = MPCPVC".
			Enter MPCSVC (MPC switched virtual circuit [SVC]). Enter data in refinements MPCNO, LINKNO, DNA, and USERDATA in the section "ACSINFO = MPCSVC".
			Enter RMLP (RASLAPPL multilink protocol). Enter data in refinement MLGID in the section "ACSINFO = RMLP".
			Enter RSLP (RASLAPPL single link protocol). Enter data in refinement LINKID in the section "ACSINFO = RSLP".
			Enter SIPC (support operating system [SOS] interprocess communication). Additional refinements do not require datafill.
			Enter TLI (transport layer interface). Enter data in refinements COMMODE and WELLKWNADDR in the section "ACSINFO = TLI".

### Field descriptions (Sheet 3 of 3)

### ACSINFO = MPCPVC

If the entry in field ACSINFO is MPCPVC, enter data in refinements MPCNO, LINKNO, and PVCLCN. A description of this process appears in the following table.

Field descriptions for conditional dat	afill
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Field	Subfield or refinement	Entry	Explanation and action
	MPCNO	0 to 255	<i>Multiprotocol controller number.</i> Enter the MPC number. Table MPCLINK must contain a previous entry for the MPC number.
	LINKNO	0 to 3	<i>Link number.</i> Enter the link number. Table MPCLINK must contain a previous entry.
	PVCLCN	0 to 255	<i>Permanent virtual circuit logical channel number.</i> Enter the PVC logical channel number.

### ACSINFO = MPCSVC

If the entry in field ACSINFO is MPCSVC, enter data in refinements MPCNO, LINKNO, DNA, and USERDATA. A description of this process appears in the following table.

#### Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MPCNO	0 to 255	<i>Multiprotocol controller number.</i> Enter the MPC number. A previous entry for this entry must be table MPCLINK.
	LINKNO	0 to 3	<i>Link number.</i> Enter the link number. A previous entry for this entry must be in table MPCLINK.

Field	Subfield or refinement	Entry	Explanation and action
	DNA	numeric (0 to 9) (a maximum of 15 binary-code) decimal digits	<i>Data network address.</i> Enter the digits that represent data network address (DNA).
			For outgoing applications, field DNA represents the remote node address of the location for the connection.
			For incoming applications, field DNA represents the only node address to request, establish, and accept a connection.
	USERDATA	alphanumeric (a maximum of 32 characters)	<i>User data.</i> Enter the datafill that identifies each end-to-end connection. The customer can configure this data.
			<i>Note:</i> For DATAPAC and NTELPAC, there is a limit of eight digits in field DNA.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

### ACSINFO = RMLP

If the entry in field ACSINFO is RMLP, enter data in refinement MLGID. A description of this process appears in the following table.

<b>Field descriptions</b>	for	conditional	datafill
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Field	Subfield or refinement	Entry	Explanation and action
	MLGID	0 to 15	<i>Multilink group</i> . Enter the multilink group.

### ACSINFO = RSLP

If the entry in field ACSINFO is RSLP, enter data in refinement LINKID. A description of this process appears in the following table.

Field	Subfield or refinement	Entry	Explanation and action
	LINKID	0 to 29	<i>Link identifier.</i> Enter a link identifier. Table MPCLINK must contain a previous entry for LINKID.

### ACSINFO = TLI

If the entry in field ASCINFO is TLI, enter data in refinements COMMMODE and WELLKWNADDR. A description of this process appears in the following table.

Field	Subfield or refinement	Entry	Explanation and action
	COMMMODE	C or S	<i>Communication mode.</i> This subfield determines if the enhanced AFT run over the Ethernet LAN acts as a client or a server.
			The S indicates server and C indicates client.
			The S is the default.
			For field transfer to the DMS Accounting Traffic Analysis System (DATAS), AFT must be a server.
	WELLKWNA- DDR	see subfields	Well-known address. This field contains subfields PORT and IPADDR. If AFT is a client, the well-known address is a completely specified transmission control protocol address of the far-end processor.
			If AFT is a server, the well-known address is a completely specified address of the AFT process in DMS.
	PORT	0 to 32767	<i>Port.</i> The AFT has a maximum of three sessions. Each session has a different port number. For file transfer with DATAS, port numbers are predetermined. For example, 30 000 for call detail recording (CDR) stream and 30 001 for trunk operational measurement (TRK_OM) stream.
			Use of the port number in table RASLAPPL can occur only if AFT acts as a client.
	PADDR	see subfields	Internet protocol address. This refinement contains subfields IPADDR1, IPADDR2, IPADDR3, and IPADDR4.

Field	Subfield or refinement	Entry	Explanation and action
	PADDR1	0 to 255	Internet protocol address 1. If AFT acts as a server, enter the internet protocol address of the DMS. If AFT acts as a client, enter the internet address of the far-end processor.
	PADDR2	0 to 255	Internet protocol address 2. If AFT acts as a server, enter the internet protocol address of the DMS. If AFT acts as a client, enter the internet address of the far-end processor.
	PADDR3	0 to 255	Internet protocol address 3. If AFT acts as a server, enter the internet protocol address of the DMS. If AFT acts as a client, enter the internet address of the far-end processor.
	PADDR4	0 to 255	Internet protocol address 4. If AFT acts as a server, enter the internet protocol address of the DMS. If AFT acts as a client, enter the internet address of the far-end processor.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

### Datafill example

Sample datafill for table RASLAPPL appears in the following example.

#### MAP example for table RASLAPPL

(	NETCON	APTYPE	BUFFSIZE	NUMBUFFS			
					A	CSINFO	
	PRIMARYCDR	AFT	2048	4	MPCPVC	131	
/	_						/

### RASLAPPL (end)

### Additional information

This section describes limits that apply to the entry of data in table RASLAPPL.

#### Limits

You can delete or change tuples in table RASLAPPL. The use of the MAP (maintenance and administration position) allows you to perform command interpreter (CI) commands DELETE and CHANGE. You can perform commands after you perform the CI command RASLSTOP on the altered datalink. The command RASLSTOP does not permanently disable the datalink. You can change or delete the information. After a datalink changes, you must perform the command RASLSTART to enable the datalink.

The only fields that can change, if the network connection is closed, are ACSINFO, BUFFSIZE, or NUMBUFFS.

## RATEAREA

### Table name

RATEAREA

## **Functional description**

Feature AU3279, LINEATTR Servord Enhancements, split table LINEATTR (Line Attribute) into three tables to make data management easier:

- LINEATTR
- RATEAREA
- XLAPLAN

Table RATEAREA receives initial datafill in a one night process (ONP) from table LINEATTR. If a specific tuple from table LINEATTR results in a tuple that exists in table RATEAREA, the tuple is not added to table RATEAREA and the RATEAREA key copies back to table LINEATTR. If a specific tuple from table LINEATTR does not result in a tuple that exists in table RATEAREA, the tuple is added to table RATEAREA and the RATEAREA, the tuple is added to table RATEAREA and the RATEAREA key copies back to table LINEATTR.

*Note:* You can delete tuples in table RATEAREA that other tables do not reference.

The LINEATTR Compression Tool feature (59017776) checks for duplicate tuples during the ADD, CHA, and REP commands. A warning message appears before the confirmation to provide an alert of a duplicate tuple. The message only generates if table OFCVAR parameter XLAPLAN\_RATEAREA\_SERVORD\_ENABLED (XRSE) is set to MANDATORY\_PROMPTS. This warning does not prevent datafill validation.

## **Datafill sequence and meaning**

Enter datafill into the tables that follow before you datafill table RATEAREA:

- LATANAME
- LCASCRN or LCAINFO (if using LCA 6-digit screening)
- MRSNAME
- LGASCRN (if using LCAINFO)
- DPCTSCRN (if using LCAINFO)

### Table size

Up to 32 000 tuples

# **RATEAREA** (continued)

# Datafill

The following table lists datafill for the RATEAREA table.

### Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
RTAIDX		alphanumeric (up to 16 characters)	Rate area log key. Enter index into table RATEAREA.
LCANAME		alphanumeric (up to 8 characters) or NLCA	Local calling area screening name. If you require screening of local central office codes (NNX), enter the local calling area screening name assigned to the LINEATTR key. Enter a local calling area screening name provisioned in either table LCASCRCN or LCAINFO. If screening of local NNX codes is not required, enter NLCA.
MRSA		alphanumeric (up to 8 characters) or NIL	Message rate service area. If the switching unit is equipped to provide multiunit message rate (MUMR) services and MUMR billing records are required for calls to numbers resulting in a type of call of NP (no prefix), enter a message rate service area (MRSA) name as datafilled in table MRSANAME field MRSA. If MUMR billing records are not required, enter NIL.
			Calls to numbers resulting in a type of call other than NP result in normal direct dial (DD) or equal access (EA) billing records instead of MUMR billing records.
			A line does not have to be a message rate line, as indicated by its LCC, to be a multiunit message rate line.

# RATEAREA (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
LATANM		alphanumeric (up to 8 characters)	Local access and transport area name. Enter the name of the local access and transport area (LATA) assigned to the LINEATTR key.
ADMININF		alphanumeric (up to 32 characters)	Administration information. Enter any string containing alphabetic characters, numeric characters, or underscores up to 32 characters. This entry provides a short explanation or note regarding the use of the LINEATTR key. The operating company defines the content of this entry.

## **Datafill example**

The figure that follows shows sample datafill for table RATEAREA.

#### MAP display example for table RATEAREA

RTAIDX	LCANAME	MRSA	LATANM	ADMININF	
L613_LATA1_0	L613	NIL	LATA1	\$	

# Table history

### NA014

The LINEATTR Compression Tool feature (59017776) checks for duplicate tuples during the ADD, CHA, and REP commands. A warning message appears before the confirmation to provide an alert of a duplicate tuple. The message only generates if table OFCVAR parameter XLAPLAN\_RATEAREA\_SERVORD\_ENABLED (XRSE) is set to MANDATORY\_PROMPTS.

### LWW0006

Feature 59010108, Line Data and SERVORD Fold-in, incorporated table RATEAREA into DMS-100 Wireless.

### NA011

Table RATEAREA was introduced.

# RATEMOD

### Table name

ITOPS Rating Charge Calculation for Time-Day Discount and Surcharge Table

# **Functional description**

Table RATEMOD is used by the international Traffic Operator Position System (ITOPS) software as a method of defining the discount or surcharge added to or subtracted from the charges for combinations of schedule name and charge modification set factors.

For related information, refer to table ATRIMOD.

# **Datafill sequence and implications**

The following tables must be datafilled before table RATEMOD.

- MODSET
- SCHNAME

## Table size

0 to 64 tuples

# Datafill

The following table lists datafill for table RATEMOD.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCHNAME		alphanumeric (1 to 16 characters)	Schedule name Enter a schedule name that is a valid value in field SCHNAME of table SCHNAME.

Field	Subfield or refinement	Entry	Explanation and action
DISCAREA		see subfield	Discount area This field consists of subfield MODTYPE and refinements.
	MODTYPE	PCENT or QUOTED	<ul> <li>Rate modification type</li> <li>Enter PCENT if the values in fields VALUE1 to VALUE8 are expressed in percentages and datafill refinements RPSB, MODINP, SENSE1, VALUE1, SENSE2, VALUE2, SENSE3, VALUE3, SENSE4, VALUE4, SENSE5, VALUE5, SENSE6, VALUE6, SENSE7, VALUE7, SENSE8, and VALUE8.</li> <li>Enter QUOTED to apply the time period subdivision in table MODSET as an attribute. The rating system continues to process the call in the same manner it would for any other call tagged with an attribute. Datafill refinement RPSB.</li> <li>In BCS36, value TIME was removed; however, the functionality of time modifications can be achieved with quoted discounts by datafilling a new rating data set which contains different initial and subsequent periods for the desired period.</li> </ul>

### Field descriptions (Sheet 2 of 2)

### **MODTYPE = QUOTED**

If the entry in subfield MODTYPE is QUOTED, datafill refinement RRSB as shown below.

Field	Subfield or refinement	Entry	Explanation and action
	RPSB	Y or N	Rate period specific billing algorithm Enter Y (yes) to indicate that the rate period specific billing algorithm is used in calculating charges as follows:
			<ul> <li>A call that starts in one rate period and ends in another uses the discount applicable in the first rate period on the first part of the call, and the discount applicable in the second rate period on the second part of the call.</li> </ul>
			If subfield MODTYPE is QUOTED, RPSB is set to Y.
			Enter N (no) if the rate period specific billing algorithm is not used and the first discount is used for the entire call.

#### Field descriptions for conditional datafill

#### **MODTYPE = PCENT**

If the entry in subfield MODTYPE is PCENT, datafill refinements RPSB, MODINP, SENSE1, VALUE1, SENSE2, VALUE2, SENSE3, VALUE3,

# SENSE4, VALUE4, SENSE5, VALUE5, SENSE6, VALUE6, SENSE7, VALUE7, SENSE8, and VALUE8 as shown below.

Field	Subfield or refinement	Entry	Explanation and action
	RPSB	Y or N	Rate period specific billing algorithm Enter Y to indicate that the rate period specific billing algorithm is used in calculating charges as follows:
			• A call that starts in one rate period and ends in another uses the discount applicable in the first rate period on the first part of the call, and the discount applicable in the second rate period on the second part of the call.
			If subfield MODTYPE is PCENT or TIME, RPSB is set to Y.
			Enter N to indicate that the rate period specific billing algorithm is not used and that the first discount is used for the entire call.
	MODINP	Y or N	Modify initial periodIf subfield MODTYPE is TIME, enter Y to indicate that the discount applies to the combined initial and subsequent charges.
			Enter N to indicate that the discount applies to the subsequent charges only.
	SENSE1	DISC or SUR	Rate modification sense 1 This field is used if field MOD1 to MOD8 in table MODSET is equal to M1. Enter DISC to indicate a discount or SUR to indicate a surcharge.

### Field descriptions for conditional datafill (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	VALUE1	0 to 100	Rate modification value 1 This field is used if field MOD1 to MOD8 in table MODSET is equal to M1.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If field MODINP is Y, the entry is the time in minutes that the initial period is adjusted.
	SENSE2	DISC or SUR	Rate modification sense 2 This field is used if field MOD1 to MOD8 in table MODSET is equal to M2. DISC indicates a discount. SUR indicates a surcharge.
	VALUE2	0 to 100	Rate modification value 2 This field is used if field MOD1 to MOD8 in table MODSET is equal to M2.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time in minutes that the initial period is adjusted.
	SENSE3	DISC or SUR	Rate modification sense 3 This field is used if field MOD1 to MOD8 in table MODSET is equal to M3. DISC indicates a discount; SUR indicates a surcharge.

Field descriptions for conditional datafill (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	VALUE3	0 to 100	Rate modification value 3 This field is used if field MOD1 to MOD8 in table MODSET is equal to M3.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time the initial period is adjusted.
	SENSE4	DISC or SUR	Rate modification sense 4 This field is used if field MOD1 to MOD8 in table MODSET is equal to M4. DISC indicates a discount; SUR indicates a surcharge.
	VALUE4	0 to 100	Rate modification value 4This field is used if field MOD1 to MOD8 in table MODSET is equal to M4.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time the initial period is adjusted.
	SENSE5	DISC or SUR	Rate modification sense 5
			This field is used if field MOD1 to MOD8 in table MODSET is equal to M5. DISC indicates a discount; SUR indicates a surcharge.

### Field descriptions for conditional datafill (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	VALUE5	0 to 100	Rate modification value 5 This field is used if field MOD1 to MOD8 in table MODSET is equal to M5.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time the initial period is adjusted.
	SENSE6	DISC or SUR	Rate modification sense 6 This field is used if field MOD1 to MOD8 in table MODSET is equal to M6. DISC indicates a discount; SUR indicates a surcharge.
	VALUE6	0 to 100	Rate modification value 6This field is used if field MOD1 to MOD8 in table MODSET is equal to M6.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time the initial period is adjusted.
	SENSE7	DISC or SUR	Rate modification sense 7. This field is used if field MOD1 to MOD8 in table MODSET is equal to M7. DISC indicates a discount; SUR indicates a surcharge.

Field descriptions for conditional datafill (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	VALUE7	0 to 100	Rate modification value 7 This field is used if field MOD1 to MOD8 in table MODSET is equal to M7.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time the initial period is adjusted.
	SENSE8	DISC or SUR	Rate modification sense 8 This field is used if field MOD1 to MOD8 in table MODSET is equal to M8. DISC indicates a discount; SUR indicates a surcharge.
	VALUE8	0 to 100	Rate modification value 8 This field is used if field MOD1 to MOD8 in table MODSET is equal to M8.
			If subfield MODTYPE is PCENT, the entry is the percentage surcharge or discount.
			If subfield MODTYPE is TIME, the entry is the time in minutes that the recall period is adjusted.
			If MODINP is Y, the entry is the time the initial period is adjusted.

### Field descriptions for conditional datafill (Sheet 5 of 5)

# **Datafill example**

The following example shows sample datafill for table RATEMOD.

# RATEMOD (end)

MAP display example for table RATEMOD

SCHNAM	E DISCAREA	-							
	MODLTYPE	RPSB	MODINP	SENSE1	VALUE1				VALUE3
				_	_	SENSE4			_
				SENSE5	VALUE5	SENSE6 VA	ALUE6	SENSE7 V	ALUE7
						SENSE8	VALUE	18	
SCHED3	PCENT	Y	Y	DISC	0	DISC	1	DISC	1
						DISC	2 4	+	
				DISC	0	DISC (		DISC	1
				DIDC	0		-		Ŧ
						DISC	2	\$	
1									

# Table history

# BCS36

Removed value TIME in field MODTYPE per feature AJ1901 in functionality Global Operator Services Rating, GOS00001.

### Table name

TOPS Rate Break Map Table

# **Functional description**

Table RBKMAP is used to list the rate break sets used by each rate schedule. Datafill form 2750W (Rate Break Set Worksheet) and transfer the appropriate entries to this form.

Feature V0178 (TOPS Mass Table Control) permits data changes in table RBKMAP 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 RBKMAPI, and then, when all the required changes are entered, swap the contents of table RBKMAP with table RBKMAPI.

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

### **Overseas Operator Center (OOC):**

Table RBKMAP provides the rate break number corresponding to the schedule name for the type of call (station or person) and the call origination day of the week name.

# **Datafill sequence and implications**

The following tables must be datafilled after table RBKMAP:

- DCOUNT
- RBKSET
- SCHED
- SCHNUM

## Table size

The size of table RBKMAP is determined by the value in field SIZE in table SYSDATA for table RBKMAP.

# **RBKMAP** (continued)

# Datafill

The following table lists datafill for table RBKMAP.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
SCHNAME		alphanumeric (1 to 17 characters)	Schedule name. Enter the schedule name as previously datafilled in table SCHED.
SSUN		0 to 63	Rate break set for station-to-station Sunday calls. Enter the rate break set for station-to-station Sunday calls for the schedule (copied from the worksheet).
SSAT		0 to 63	Rate break set for station-to-station Saturday calls . Enter the rate break set for station-to-station Saturday calls for the schedule (copied from the worksheet).
SWKD		0 to 63	Rate break set for station-to-station weekday calls. Enter the rate break set for station-to-station weekday calls for the schedule (copied from the worksheet).
PSUN		0 to 63	Rate break set for person-to-person Sunday calls. Enter the rate break set for person-to-person Sunday calls for the schedule (copied from the worksheet).
PSAT		0 to 63	Rate break set for person-to-person Saturday calls. Enter the rate break set for person-to-person Saturday calls for the schedule (copied from the worksheet).
PWKD		0 to 63	Rate break set for person-to-person weekday calls. Enter the rate break set for person-to-person weekday calls for the schedule (copied from the worksheet).

# **Datafill example**

The following examples show sample datafill for table RBKMAP.

The first example shows datafill for the North American Traffic Operator Position System (TOPS).

#### MAP display example for table RBKMAP

SCHNAME	SSUN	SSAT	SWKD	PSUN	PSAT	PWKD	
SAMPLESCH	H 1	1	2	1	3	2	

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

The values SSUN, SSAT, and SWKD are for station paid calls on Sunday, Saturday, and a weekday, respectively. The values PSUN, PSAT, and PWKD are for person paid calls on Sunday, Saturday, and a weekday, respectively.

As shown in this example, the rate break set to Canada is the same for Saturdays and weekdays but differs for Sundays. Calls to the USA are subject to a different rate break set on Saturdays, Sundays, and weekdays, but local calls only have one rate break set regardless of the day of the week.

#### MAP display example for table RBKMAP

	SCHNAME	SSUN	SSAT	SWKD	PSUN	PSAT	PWKD	
	CANAD	A 1	L	) 9	1	9	9	
	US	A 1	L	3 9	1	3	9	
$\overline{\ }$	LOCA	L 4	4 4	4 4	4	4	4	Ϊ

# **RBKMAPI**

### Table name

TOPS Rate Break Map Inactive Table

# **Functional description**

Feature V0178 (TOPS Mass Table Control) permits data changes in table RBKMAP 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 RBKMAPI, and then, when all the required changes are entered, swap the contents of table RBKMAP with table RBKMAPI.

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

Refer to table RBKMAP.

## **Datafill sequence and implications**

Refer to table RBKMAP.

Table size

Refer to table RBKMAP.

### Datafill

Refer to table RBKMAP.

# **Datafill example**

Refer to table RBKMAP.

### Table name

**TOPS** Rate Break Set Table

## **Overview**

The following table lists all the Traffic Operator Position System (TOPS) rate break tables.

#### **TOPS** rate break tables

Table name	Form number	Form title
	2750W	Rate Break Set Worksheet
RBKSET	2750A, B	Rate Break Set Table Record
RBKMAP	2751A, B	Rate Break Map Table Record

The 24 h of a day are divided into rate periods, the end of each being specified by a rate break. The discounts for each rate period, if any, are also specified. Each set of time division and discounts constitutes a rate break set.

A rate schedule can have up to six different rate break sets: for station-Sunday, -Saturday, -weekday, and person-Sunday, -Saturday, and -weekday.

Different rate schedules can share the same rate break sets. In DMS, up to 63 different rate break sets are allowed.

One worksheet (2750W) and two forms are provided. Worksheet 2750W is used by the operating company to identify the unique rate break sets for each schedule. These unique sets are then listed in form 2750A and B. Forms 2751A and B are then used to list the rate break sets associated with each schedule. Form 2750W does not need to be submitted to Northern Telecom. See the section "Rate break set worksheeet" for further information on the rate break set worksheet.

### Caribbean expansion plan (CEP) International TOPS (ITOPS)

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

There are cases, however, where the charges for 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 for the call. For hotel calls, these charges are reported to the hotel billing information 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)

### 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 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 for a call.

First the date is checked to see whether it is a holiday. This is done by verifying whether the date falls on one of the defined holidays in table HOLDAY. If the date is a holiday, table HOLTRT is accessed to see whether this holiday affects the rate schedule for this call. If a value is not found in

table HOLDAY, the holiday does 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).

Once the origination date has been modified to reflect the holiday treatment (if necessary), table RBKMAP is accessed to determine the rate break set that applies to the call based on the day of the week (weekday, Saturday, or Sunday) and the method of billing (station or person). This rate break set is later used to determine what discount applies to the call. Therefore, a different rate break set must be associated with any origination day that must be treated differently.

Once a rate break set is determined, the date is no longer needed in the charge calculation. However, the origination time of the call is used to determine the actual rate break within the applicable rate break set. The rate breaks are associated with a rate break set in table RBKSET. A maximum of 63 rate break sets can exist, with a maximum of 8 rate breaks in a rate break set.

The rate break identifies the discount that applies to the call, based on the origination time of the call. This discount is an index into another table, table DCOUNT, that maps the rate schedule to the applicable discounts for that schedule. A maximum of six discounts can be specified for a schedule. It is also possible to specify whether discounts apply to the initial period as well as to the overtime periods (specified discounts always apply to the overtime periods, but do not always apply to the initial period).

### Rate break set worksheet

The rate break set worksheet is used by the operating company to identify unique rate break sets. The worksheet ties in closely with the two tables in forms 2750 and 2751. Once this worksheet is completed, the other two forms can be filled out easily.

The operating company examines its rating structure and lists the rate break set for the six different categories shown (SSUN, SSAT, SWKD, PSUN, PSAT, and PWKD [there is no distinction between coin and non-coin calls]). The rate break sets are then compared, and identical ones are assigned the same rate break set number. The same procedure is performed for all schedules, but the comparison must be made with all assigned unique rate break sets.

## **Datafill sequence and implications**

Table DCOUNT must be completed before completing this worksheet, since fields RBK1 to RBK8 must be filled with a discount factor.

# **Datafill (worksheet)**

Field names, subfield names, and valid data ranges for the rate break set worksheet are described below.

Field	Subfield or refinement	Entry	Explanation and action
SCHNAME		alphanumeric (1 to 17 characters)	Schedule name. Enter the name of the rate schedule as previously defined in table SCHNUM.
RBKTYPE	TYPE PSAT, PSUN, PWKD,		Rate break set type. Enter the rate break set type as follows:
		SSAT, SSUN, SWKD	PSAT (person-to-person Saturday)
	owite	PSUN (person-to-person Sunday)	
			PWKD (person-to-person Weekday)
			SSAT (station-to-station Saturday)
			SSUN (station-to-station Sunday)
			SWKD (station-to-station Weekday)
			Each of the above can have a different rate break set (field RBKSET).
RBK1		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.

### Field descriptions (worksheet) (Sheet 1 of 4)

<b>F</b> . 1.1	Subfield or	<b>F</b> actoria	Four law of the sector of the
Field	refinement	Entry	Explanation and action
TIME1		0000 to 2400	Rate break time . Enter the time at the end of a rate break period.
			Field TIME1 denotes the end of the first rate break after midnight. Field TIME2 is the next and so on. If less than eight rate breaks are required (for example, only fields TIME1 through TIME3 need to be datafilled for three rate breaks), the last rate break, (TIME4), must be entered as 2400. If there are eight rate periods, the last rate period is assumed to go from TIME8 to midnight and have a discount of RBK1; that is, a rate break set always terminates at midnight.
			The entries in fields TIME1 to TIME8 must be unique values within a rate break set (field RBKSET).
			Enter 0 (zero) for unassigned fields.
			Time must be in ascending order.
RBK2		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME2		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK3		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME3		0000 to 2400	Rate break time . Enter the time at the end of a rate break period. See additional notes in field TIME1.

### Field descriptions (worksheet) (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
RBK4		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME4		0000 to 2400	Rate break time . Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK5		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME5		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK6		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME6		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK7		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.

### Field descriptions (worksheet) (Sheet 3 of 4)

	Subfield or		
Field	refinement	Entry	Explanation and action
TIME7		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK8		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME8		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.

# **Datafill example (worksheet)**

The following examples show datafill for the rate break set worksheet.

The first example shows datafill for the North American TOPS.

MAP display example for table RBKSET (worksheet)

SCHI	NAME R	BKTYPE	RBK1	TIME1	RBK2	TIME2	RBK3	TIME3	RBK4	TIME4
RBK!	5 TIME	5 RBK6	TIME6	RBK7	TIME7	RBK8	TIME8	RBKSI	ΞT	
SAM	PLESCH	I SSUN	D2	800	D1	1800	ND	2400	ND	0
ND	0	ND	0	ND	0	ND	0		1	
$\mathbf{X}$										

The second example shows datafill for the CEP ITOPS.

MAP display example for table RBKSET (worksheet)

RBK5 TIME5 RBK6 TIME6 RBK7 TIME7 RBK8 TIME8 RBKSETCANADA SSUN D2 800 D1 1800 ND 2400 ND 0ND0ND0ND0001	(	SCHNA	ME RB	KTYPE	RBK1	TIME1	RBK2	TIME2	RBK3	rime3	RBK4	TIME4
		RBK5	TIME5	RBK6	TIME6	RBK7	TIME7	RBK8	TIME8	RBKSI	ΞT	
ND 0 ND 0 ND 0 ND 0 1		CANA	DA	SSUN	D2	800	D1	1800	ND	2400	ND	0
		ND	0	ND	0	ND	0	ND	0		1	

# Functional description of table RBKSET

Table RBKSET is used to list all the unique rate break sets. The rate break set worksheet (2750W) is used to identify all the unique rate break sets. This list is then copied onto forms 2750A and B.

Refer to the Overview section for a detailed description of the rate break tables.

See the section "Rate break set worksheet" for more information on the rate break set worksheet.

#### **TOPS Mass Table Control**

Feature V0178 (TOPS Mass Table Control) permits data changes in table RBKSET 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 RBKSETI, and then, when all the required changes are entered, swap the contents of table RBKSET with table RBKSETI.

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

#### **Overseas Operator Center (OOC):**

Table RBKSET provides the applicable discount factor for each rate break number (obtained from table RBKMAP) over a specific time period within the 24-h period. The type of discount factor obtained is ND (no discount), QUOTED (quoted), or D1 to D6.

### **Datafill sequence**

Table SYSDATA must be datafilled before table RBKSET. Also, table DCOUNT must be completed before table RBKSET, since fields RBK1 to RBK8 must be filled with a discount factor.

### Table size

The size of table RBKSET is determined by the value in field SIZE of table SYSDATA.

# Datafill

The following table lists datafill for table RBKSET.

### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RBKSET		0 to 63	Rate break set. This field is the key to the table. Enter a number to identify each rate break set consisting of a unique combination of field values.
			On the worksheet some rate break types have the same rate break set number.
RBK1		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME1		0000 to 2400	Rate break time . Enter the time at the end of a rate break period.
			Field TIME1 denotes the end of the first rate break after midnight. Field TIME2 is the next and so on. If less than eight rate breaks are required (for example, only fields TIME1 through TIME3 need to be datafilled for three rate breaks), the last rate break, (TIME4), must be entered as 2400. If there are eight rate periods, the last rate period is assumed to go from TIME8 to midnight and have a discount of RBK1; that is, a rate break set always terminates at midnight.
			The entries in fields TIME1 to TIME8 must be unique values within a rate break set (field RBKSET).
			Enter 0 (zero) for unassigned fields.
			Time must be in ascending order.

<b>Field descriptions</b>	(Sheet 2 of 3)
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Field	Subfield or refinement	Entry	Explanation and action
RBK2		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME2		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK3		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME3		0000 to 2400	Rate break time . Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK4		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME4		0000 to 2400	Rate break time . Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK5		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.

	Subfield or		
Field	refinement	Entry	Explanation and action
TIME5		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK6		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME6		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK7		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME7		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.
RBK8		ND or D1 to D6	Discount factor. This entry points to fields D1 to D6 in table DCOUNT. If there is no discount for the rate period, enter ND. If the discount shown in D1 Quoted table is used in table CHARGE, enter D1 and so on. When fields TIME1 to TIME8 = 0, RBK1to RBK8= ND.
TIME8		0000 to 2400	Rate break time. Enter the time at the end of a rate break period. See additional notes in field TIME1.

### Field descriptions (Sheet 3 of 3)

# **Datafill example**

The following examples show datafill for the rate break set worksheet.

The first example shows datafill for the North American TOPS.

### **RBKSET** (end)

In the example, if a coin call connects at 23:59:30 and RBKSET 2 is used to determine the discount, discount D3 applies to this call. Since there is a 30 s start time coin allowance, the system compares discounts D1 and D3 and the higher discount applies (D3). In this case, the system coin time allowance pushed the start time of the call into the next RBKSET (D3 2400).

#### MAP display example for table RBKSET

					TIME2	RBK3	TIME3	RBK4	TIME4	RBK5	TIME5	RBK6	TIME6
BK /	11	ME/F	KBK8 I.	LME8									
	1	D4	2400	ND	0	ND	0	ND	0	ND	0	ND	0
ND		0	ND	0									
	2	D3	800	ND	1700	D1	2300	D3	2400	ND	0	ND	0
ND		0	ND	0									
	r	50	000	1 ص	1700	50	2400	ND	0	ND	0	ND	0
ND	3	D2 0	800 ND	0	T/00	DZ	∠400	ND	0	ND	0	ND	0
	ND ND	BK7 TI ND ND 3	BK7 TIME7 F 1 D4 ND 0 2 D3 ND 0 3 D2	BK7 TIME7 RBK8 T 1 D4 2400 ND 0 ND 2 D3 800 ND 0 ND 3 D2 800	BK7 TIME7 RBK8 TIME8 1 D4 2400 ND ND 0 ND 0 2 D3 800 ND 0 ND 0 3 D2 800 D1	BK7 TIME7 RBK8 TIME8 1 D4 2400 ND 0 ND 0 ND 0 2 D3 800 ND 1700 0 ND 0 3 D2 800 D1 1700	BK7       TIME7       RBK8       TIME8         1       D4       2400       ND       0       ND         ND       0       ND       0       ND       0       ND         ND       2       D3       800       ND       1700       D1         ND       0       ND       0       0       D1       1700       D2	BK7 TIME7 RBK8 TIME8         1       D4       2400       ND       0       ND       0         ND       0       ND       0       ND       0       ND       0         ND       2       D3       800       ND       1700       D1       2300         ND       0       ND       0       0       1700       D1       2300         3       D2       800       D1       1700       D2       2400	BK7 TIME7 RBK8 TIME8         1       D4       2400       ND       0       ND       0       ND         ND       0       ND       0       ND       0       ND       0       ND         ND       2       D3       800       ND       1700       D1       2300       D3         ND       0       ND       0       1700       D1       2400       ND         3       D2       800       D1       1700       D2       2400       ND	BK7       TIME7       RBK8       TIME8         1       D4       2400       ND       0       ND       0       ND       0         ND       0       ND       0       ND       0       ND       0       ND       0         ND       2       D3       800       ND       1700       D1       2300       D3       2400         ND       3       D2       800       D1       1700       D2       2400       ND       0	BK7       TIME7       RBK8       TIME8         1       D4       2400       ND       0       ND       0       ND       0       ND         ND       0       ND       0       ND       0       ND       0       ND       0       ND         ND       2       D3       800       ND       1700       D1       2300       D3       2400       ND         ND       0       ND       0       1700       D2       2400       ND       0       ND	BK7       TIME7       RBK8       TIME8         1       D4       2400       ND       0       ND <td>1       D4       2400       ND       0       ND       0</td>	1       D4       2400       ND       0       ND       0

The second example shows datafill for the CEP ITOPS.

In table RBKSET, rate break set has two rate breaks. From 8:00 to 24:00, D1 is in effect; from 24:00 to 8:00, D2 is in effect.

#### MAP display example for table RBKSET

1	BKSET BK7 T	T RE TIME		TIME1 BK8 TI		TIME2	RBK3	TIME3	RBK4	TIME4	RBK5	TIME5	RBK6	TIME6
	ND	1	D2 0	800 ND	D1 0	1800	ND	2400	ND	0	ND	0	ND	0
	ND	2	D3 0	800 ND	ND 0	1700	D1	2300	D3	2400	ND	0	ND	0
	ND	3	D2 0	800 ND	D1 0	2400	ND	0	ND	0	ND	0	ND	0
	ND	4	D2 0	800 ND	ND 0	2400	ND	0	ND	0	ND	0	ND	0
	ND	9	D2 0	800 ND	ND 0	2400	ND	0	ND	0	ND	0	ND	0

# RBKSETI

# Table name

TOPS Rate Break Set Inactive Table

# **Functional description**

Feature V0178 (TOPS Mass Table Control) permits data changes in table RBKSET 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 RBKSETI, and then, when all the required changes are entered, swap the contents of table RBKSET with table RBKSETI.

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

Refer to table RBKSET.

# **Datafill sequence and implications**

Refer to table RBKSET.

Table size

Refer to table RBKSET.

## Datafill

Refer to table RBKSET.

# **Datafill example**

Refer to table RBKSET.

# RCCINV

### Table name

Remote Cluster Controller Inventory

## **Overview**

Table RCCINV contains the inventory data except the P-side link assignments for the remote cluster controller (RCC). Table RCCPSINV contains only the P-side link assignments.

The RCC name (field RCCNAME) is the key for tables RCCINV, RCCPSINV (RCC P-Side Inventory), IRLNKINV (Interlink Inventory), and SYLNKINV (Synchronous Link Inventory). Adding a tuple in table RCCINV automatically creates a corresponding tuple in tables RCCPSINV, IRLNKINV, and SYLNKINV. Deleting a tuple in table RCCINV automatically deletes the corresponding tuple in tables RCCPSINV, IRLNKINV, and SYLNKINV.

# **Functional description**

Table RCCINV is used to maintain a list of RCC types that are datafilled in the DMS switch. The table information identifies where the RCC is located, the load and executive (exec) programs required, and the network link connections. There must be a minimum of three C-side ports datafilled in table RCCINV to connect the remote center offshore 2 (RCO2) type to the network.

The remote switching center (RSC) with an RCC supports one remote maintenance module (RMM) and up to eight line concentrating modules (LCM). An RSC with RCC2 or RCO2 supports two RMMs and up to eight enhanced LCM(E). All of these components are located at the same site. Some of the LCM(E)s can be replaced by remote LCMs (RLCM) located apart from the RSC. The RSC can be placed up to 240 km (150 miles) from its DMS-100 host or with extended distance capability (EDC) up to 500 miles. The RSC and DMS-100 host are interconnected by a DS-1 or PCM30 links.



### CAUTION

RCC supports a maximum of nine P-side peripherals RCC2 and RCO2 support a maximum of ten peripherals The total amount of peripheral nodes, including LCM(E)s, RLCMs, SMSRs, RMMs, and remote modules configured on RCCs can not exceed these limits. Attempts to datafill more than the maximum P-side nodes (peripherals) on RSCs will be rejected.

## **RCCINV** (continued)

The Meridian cabinet remote module (MCRM) is used for the cabinetized Meridian SL-100 RCC, with product engineering code (PEC) 6X1201.

The RCC2 is an enhanced single-shelf RCC with an MX77 or AX74 processor. The RCC2 has ports for up to 20 C-side links and 54 P-side ports.

RCCs and RCC2s are remote line trunk controllers (LTC) that connect to a host LTC on its C-side by DS-1 links. For valid host LTC P-side link assignment rules, refer to table LTCPSINV (LTC P-Side Inventory). The RCC is physically similar to an LTC; the major difference is that the LTC has a DS30 interface on its C-side, but the RCC has a DS-1 interface.

The message (MSG) links (first and third entries in field CSLNKTAB) must be assigned to different line group array (LGA) or line trunk array (LTA) shelf arrays to ensure that the RSC is not affected by corruption or power failure in either the LGA or LTA shelf array.

The RCO2 peripheral module type of the DMS-100 Family differs physically from the RCC. On a functional level, the RCO2 and the RCC perform in the same manner. The PCM30 line group controller (PLGC) is the host node of an RCO2 with a maximum of 16 PCM30 links. An RCO2 is a double processor configuration of extended multiprocessor system (XMS)-based PMs (XPM) that use PCM30 carriers in their C-side links. The basic differences between the RCC and RCO2 are summarized in the following table.

#### Differences between RCC and RCO2 peripheral modules

PM type	RCC	RCO2
C-side PM type	LTC, LGC	PLGC
C-side ports	DS-1	PCM30
Optional cards	UTR14, UTR16, UTR18	UTR14, UTR16, ISP, RAM6X69
C-side PM type of RMM	RCC	RCO2

Table RCCINV lists the following data assignment for each bay associated with an RCC unit:

- a three-part key field composed of site name (also datafilled in table SITE), PM type (ARCC, RCC, RCC2, SRCC, or RCO2) and PM number
- an administration number associated with a given PM

# RCCINV (continued)

- the frame type and frame number on which the PM is physically mounted
- the floor, row, frame position, and shelf position for each unit associated with a line concentrating equipment (LCE) frame
- the equipment PEC for the PM
- the issue name of the PM software
- the terminal types and corresponding executive programs for all the PM terminals used
- the PM type and number to which the RCC is attached
- the RCC C-side link assignments
- an emergency standalone (ESA) option, if equipped
- intra-switching, if allowed
- optional cards, if equipped
- the TONESET value used in the PM
- the PECs of processor cards in units 0 and 1. The PEC entered for each unit must be the PEC that has the minimum firmware capabilities in the processor complex.

### **Optional cards**

The following optional cards are supported and are used for various applications:

### **CONTINUITY - NT6X70**

This is a common channel interoffice signaling (CCIS) card for use with C6 or N6 applications.

### UTR8, UTR9, UTR14, UTR15, UTR16, UTR17, UTR18 - NT6X92

These are universal tone receiver (UTR) cards. If UTR8 is datafilled, it indicates a UTR card is equipped in slot 8. Both UTR8 and UTR9 are for international digital trunk controller (IDTC) applications. For LTC, line group controller (LGC), and DTC applications, two UTR cards can be equipped either in slot 15, 16, or 17. For RCC applications, two UTR cards can be equipped in slot 14, 16, or 18.

## ISP4, ISP - NTBX01

This is the ISDN signaling preprocessor and is used for common peripheral modules (CPM). The ISP is equipped in slot 4 for RCO2, RCC2, and SONET RCC (SRCC) applications. When the ISP is not provisioned, slots 4 and 24 are equipped with 0X50 filler faceplates. The ISP is datafilled as ISP for most XPM applications prior to NA008. From NA008 on, the ISP is datafilled to

reflect the actual slot number where the ISP resides in unit 0; for example, ISP4.

### MSGMX76

The MSGMX76 is the NTMX76AA messaging interface card. It provides DMSX and HDLC messaging capability between host and remote peripherals. DMSX is a half-duplex message protocol implemented on DS30 and DS-1 links. It is used to transfer messages between a remote CPM and an XPM+. The HDLC protocol is a full-duplex messaging protocol, which is more efficient than the DMSX messaging protocol. The HDLC protocol is supported only on an RCC2 with a host LTC+. The HDLC protocol is required when the round-trip delay between the host and the remote is over 2 ms (EDC).

### MSG6X69

The MSG6X69 is the NT6X69 messaging interface card. It provides DMS-X messaging capability between host and remote peripherals. DMSX is a half-duplex message protocol implemented on DS30 and DS-1 links. It is used to transfer messages between a remote CPM and an XPM+.

*Note:* Only one messaging interface card type is provisioned. Use the MSGMX76 for HDLC protocol with extended distance capability (EDC), or the MSG6SX69 for DMS-X protocol without EDC functionality.

### NT7X05

The NT7X05 peripheral remote loader (PRL) provides the ability to reduce XPM simplex time. This is done by allowing XPM software loads to be transferred to the XPM and stored locally within an XPM unit while the unit is in-service. Reducing XPM simplex time allows an existing loadfile to be replaced with a newer loadfile. During the process of replacing a loadfile, the last image is still available for recovery actions if required. The local storage mechanism is the NT7X05 circuit pack.

### TONE6X79

The initial version of the NT6X69 message card (version AA) requires a tone generator card, the NT6X79, on the shelf. In this case, TONE6X79 must be specified in field OPTCARD. The subsequent version of the NT6X69 card (version AB) has its tone generator chip on the card. As of BCS34, the NT6X43 message card is no longer supported and MSG6X43 is not specified in field OPTCARD because the NT6X69 message card is being used.

### RAM6X69

If RAM6X69 is specified in field OPTCARD, a downloadable tone set is used in field TONESET. Card RAM6X69 must be used for the RCO2.

# RCCINV (continued)

### CMR13, CMR15, CMR16, CMR17, CMR18, CMR19 - NT6X78

This is the CLASS modem resource card that is used to provide the Calling Number Delivery feature.

### ETSBX69

Enhanced time switch (ETS) corresponds to an increase in P-side capacity that is implemented in a later feature.

### **Datafill sequence and implications**

Table PMLOADS must be datafilled with the PM load information before table RCCINV can be datafilled.

Also, the following datafill must exist before RCO2 can be datafilled in table RCCINV:

- The host PLGC is datafilled in table LTCINV and there are enough C-side links on the PLGC for the additional RCO2.
- A template for PLGC D30 carriers is present in table CARRMTC.
- At least two D30 carriers on different shelves of the PLGC are datafilled to connect to the RCO2.
- A remote location (for example, REM1) is datafilled in table SITE.

The value DFI that is datafilled in field XPMTYPE of table RCCINV must first be datafilled in tables LTCINV and LTCPSINV.

The RCC name (field RCCNAME) is the key for tables RCCINV, RCCPSINV, IRLNKINV, and SYLNKINV. Adding a tuple in table RCCINV automatically creates a corresponding tuple in tables RCCPSINV, IRLNKINV, and SYLNKINV. This tuple contains the RCC name, a false value for the BITS definition boolean, the nilport symbol (\$) for the vector of BITS links, and a false value for the revertive switching boolean. Deleting a tuple in table RCCINV automatically deletes the corresponding tuple in tables RCCPSINV, IRLNKINV, and SYLNKINV.

*Note:* The tuple RCCINV creates in tables RCCPSINV, IRLNKINV, and SYLNKINV enters a false value for building integrated timing system (BITS). This value must remain false because BITS is not supported.

## Table size

0 to 255 tuples

Memory is dynamically allocated for this table.

# Datafill

The following table lists datafill for table RCCINV.



## DANGER

Entering incorrect shelf information can result in a valid unit going out of service

Entering an incorrect shelf position (field SHPOS) results in log data that incorrectly identifies a faulty XPM shelf. This error can cause a valid unit to be taken out of service, and may cause an E1 condition.

#### Field descriptions (Sheet 1 of 8)

Field	Subfield or refinement	Entry	Explanation and action					
RCCNAME		see subfields	Remote cluster controller name. This field consists of subfields SITENM, PMTYPE, and RCCNO.					
			<i>Note:</i> All RCC nodes entered in this table are also displayed in tables RCCPSINV, IRLNKINV, and SYLNKINV.					
	SITENM	alphanumeric	Site name. Enter the site name assigned to the remote location. This entry must also appear in table SITE.					
	PMTYPE	ARCC, RCC2, RCC, SRCC, or RCO2	Peripheral module type. Enter the type of PM. ARCC is the Austrian version of the remote cluster controller.					
	<i>Note:</i> When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message							

physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

# RCCINV (continued)

#### Field descriptions (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	RCCNO	numeric (0 to 255)	Remote cluster controller number. Enter the PM number.
			<i>Note:</i> This number is unique by office and not by site. Any entry outside this range is invalid.
ADNUM		numeric (0 to 4095)	Administration number. This field contains the external administrative number associated with a PM. Enter a numerical value that is unique among all other PMs in an office.
FRTYPE		CRSC, MCRM, MCRMS, RCE, RCEI	Frame type. Enter the frame type on which the PM equipment is mounted. Frame type MCRMS is valid with RCC2 and requires datafill of refinement EXTFRTYP with an entry of MCRMS.
FRNO		numeric (0 to 511)	Frame number. Enter the number of the frame on which the PM is mounted.
SHPOS		numeric (0 to 77)	Shelf position. Enter the position of the lower of the two shelves on the frame unit, in inches above the floor (1 in = 25.4 mm). (See Warning at beginning of table.)
FLOOR		numeric (0 to 99)	Floor. Enter the number of the floor on which the PM frame is located.
ROW		A to Z and AA to ZZ (except I, II, O, and OO)	Row. Enter the row in which the PM equipment frame is located.
FRPOS		numeric (0 to 99)	Frame position. Enter the bay position of the PM equipment frame.

*Note:* When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

# RCCINV (continued)

Field	Subfield or refinement	Entry	Explanation and action
EQPEC		6X12AA, 6X1201, 6X12DA, 6X12DB, 6X12GA, FX17JB, MX85AA, 6112SI	<ul> <li>Equipment product engineering code. Enter the PEC of the PM as follows:</li> <li>Enter MX85AA if the entry in field PMTYPE is RCC2, RCO2, or SRCC.</li> <li>Enter 6112SI if the entry in field PMTYPE is ARCC.</li> </ul>
LOAD		alphanumeric (vector of up to eight characters)	Load. Enter the name given to the issue of PM software. Table PMLOADS must be datafilled first with the load used.
EXECTAB		see subfields	Executive table. This field consists of subfields TRMTYPE and EXEC.
			<i>Note:</i> More than one field TRMTYPE and field EXEC combination (up to 8) can be used for a given PM.
physical interfa links by the nur DS30A, or PCI on the same ir	ace card. When the mber of links on the ir M-30. Table control	interface card sup nterface cards. Thi will issue a warning ning message links	ssage links are not assigned to the same ports two or more links, separate the message is applies to all interface link types; DS-1, DS30, g if an attempt is made to assign message links s to the same interface card can cause an E1

### Field descriptions (Sheet 3 of 8)

### Field descriptions (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action														
	TRMTYPE	AB250, ABTRK,	Terminal type. Enter the type of PM terminals used as follows:														
		ESALINES, KEYSET, M5X09, M5X12, POTS, R1_TERM, RMM_TERM	AB250 for DMS-250 trunks														
			ABTRK for regular trunks														
			POTS, R1_TERM,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	POTS,	<ul> <li>ESALINES for emergency standalone lines</li> </ul>
				KSBAEX for ISDN ARCCs													
					KEYSET for P-phone and data lines												
			<ul> <li>M5X09 and M5X12 for Meridian 9- and 12-button sets</li> </ul>														
			POTS for regular lines														
			R1_TERM for DTC300 trunks														
			RMM_TERM for remote lines														
<i>Note:</i> When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.																	

Field	Subfield or refinement	Entry	Explanation and action	
	EXEC	EXEC DCM250, DTC300, DTCEX,	Executive programs. Enter the set of executive programs required for the PM specified in field TRMTYPE as follows:	
		ESAEX, FXODTC, KSBAEX,	<ul> <li>Enter DCM250 if the entry in field TRMTYPE is AB250.</li> </ul>	
		KSETEX, POTSEX,	<ul> <li>Enter DTC300 if the entry in field TRMTYPE is R1_TERM.</li> </ul>	
		RSMEX	RSMEX	<ul> <li>Enter DTCEX or FXODTC (depending on type of trunking) if the entry in field TRMTYPE is ABTRK. (FXODTC is for RCC types only - not RCC2)</li> </ul>
			<ul> <li>Enter ESAEX if the entry in field TRMTYPE is ESALINES.</li> </ul>	
			<ul> <li>Enter KSETEX if the entry in field TRMTYPE is KEYSET, M5X09, or M5X12.</li> </ul>	
			<ul> <li>Enter POTSEX if the entry in field TRMTYPE is POTS.</li> </ul>	
			<ul> <li>Enter RSMEX if the entry in field TRMTYPE is RMM_TERM.</li> </ul>	
CSPM		see subfields	C-side peripheral module. This field consists of subfields XPMTYPE and XPMNO.	
	XPMTYPE	DFI, LGC, LTC, PLGC	Peripheral module type. Enter the type of PM to which the RCC C-side is attached. Only DFI can be used for SRCC.	
			<i>Note:</i> Datafill for an LGCO or an LGCOi is always PLGC.	

#### Field descriptions (Sheet 5 of 8)

*Note:* When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

#### Field descriptions (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	XPMNO	numeric (0 to 255)	Peripheral module number. Enter the number of the PM to which the RCC C-side is attached. Entries outside the range 0 to 255 are invalid.
CSLNKTAB		numeric (0 to 19) or NILPORT	C-side link table. This field is a vector of up to 16 entries. Enter the LTC P-side DS-1 links (0 to 19) to which the RCC C-side is assigned.
			<i>Note:</i> All the links from an RCC must go to the same LTC.
			MSG links (1st and 3rd entries) of the RSC must be assigned to different LGA or LTA shelf arrays to ensure that the RSC is not affected by corruption or power failure in either the LGA or LTA shelf array.
			Field CSLNKTAB can also contain the PLGC links (0 to 15) on which the RCO2 is assigned. The PLGC links correspond to the RCO2's C-side link 0 to 15. The minimum number of links for an RCO2 is two. The first link entered for each unit (0 and 1) is used as the messaging link.
			To connect the RCC2 and RCO2 to the network requires a minimum of three C-side links.
			An entry of NILPORT is used to skip links; ports 0 and 2 can be equipped and port 1 can be left unequipped by using the NILPORT option.

*Note:* When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

Field	Subfield or refinement	Entry	Explanation and action
ESA		Y or N	Emergency stand-alone. Enter Y (yes) and datafill field WXSWACT if the RSC has the emergency stand-alone (ESA) option. Otherwise, enter N (no).
			ESA is applicable to non-ISDN lines only in an RCC2 and is not supported within an RCO2.
	WSXWACT	Y or N	Warm exit switch activity. This field becomes active only if the entry in field ESA is Y. Enter Y if RCC type supports warm ESA exit.
			The default value for this field is N.
INTRASW		Y or N	Intra-switching. Enter Y if intra-switching on the RCC or RCC2 is allowed. Otherwise, enter N.
<i>Note:</i> When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.			

### Field descriptions (Sheet 7 of 8)

#### Field descriptions (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action	
ADDLMSGL		Ν	Additional message link. Additional message links are not supported.	
			<i>Note:</i> When changing the ADDLMSGL field from Y to N, the RCC2 AML links must be either manual busy (ManB) or offline (Offl).	
OPTCARD		CMR5, CMR13,	Optional card. This field is a vector of up to 10 entries. Enter the optional card as follows:	
	CMR15, CMR16, CMR17	,	<ul> <li>Enter CONTINUITY if equipped with NT6X70 for CCIS C6 or N6 application.</li> </ul>	
		CMR17, CMR18, CMR19, CONTINUITY, ETSBX69, ISP, MSGMX76, MSG6X69, NT7X05AA, RAM6X69, TONE6X79, UTR6, UTR7, UTR8, UTR9, UTR14,	CMR18, CMR19, CONTINUITY, ETSBX69, ISP, MSGMX76, MSG6X69, NT7X05AA, RAM6X69,	• Enter UTR8, UTR9, UTR14, UTR15, UTR16, UTR17 or UTR18 if equipped with UTR cards in slots 8, 9, 14, 15, 16, 17 or 18 respectively.
				<i>Note 1:</i> MSGMX76 messaging interface card is used for HDLC protocol and EDC. MSG6X69 is used for DMS-X protocol and does not allow EDC.
			<i>Note 2:</i> NT7X05AA is a peripheral remote loader (PRL) card. Refer to subfield SLOT_NUMBER.	
		UTR15, UTR16, UTR17, UTR18	<i>Note 3:</i> UTR8 and UTR9 are for IDTC applications; UTR15, UTR16, and UTR17 are for LTC, LGC, and DTC applications; and UTR14, UTR16, and UTR18 are for RCC applications.	

*Note:* When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types; DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

### **OPTCARD = CMRnn**

If the entry in field OPTCARD is CMR*nn* (where *nn* is equivalent to 8, 9, or 14 to 18), datafill field CMRLOAD.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CMRLOAD	alphanumeric (vector of up to eight characters)	Class model resource load. Enter the appropriate CMR software load name.

### **OPTCARD = ISPnn**

If the entry in field OPTCARD is ISP, datafill subfield SLOT\_NUMBER as described in the following table. Then, go to field TONESET to continue datafill for table RCCINV.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SLOT_NUMBER	3 to 19	Slot number. The recommended optional slot number for most North American XPMs is 16.

### **OPTCARD = MSGMX76**

If the entry in field OPTCARD is MSGMX76, datafill field MX76INFO.

#### Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MX76INFO	see subfield	MX76 information. This field consists of subfields MX76LOC and PROTOCOL.
	MX76LOC	HOST or REM	MX76 location. Enter REM if the card is located in a remote peripheral and datafill field PROTOCOL. Any entry other than REM is invalid for table RCCINV.

Field	Subfield or refinement	Entry	Explanation and action
	PROTOCOL	DMSX or HDLC	Protocol. Enter the protocol for host-to-remote communication. The default is DMSX. When changing the messaging protocol from DMSX to HDLC, the RCC2 C-side links can be InSv. A DMSX to HDLC dynamic upgrade is not allowed in the inactive CM.
			<i>Note:</i> When changing field PROTOCOL from DMSX to HDLC, calls may be established on channels dedicated to HDLC during a dynamic upgrade. The central control (CC) checks to see if there are calls on these channels and sends a warning to the MAP display that existing calls will be dropped. The user must confirm with Y before the protocol can be changed. The PM state is then changed to in-service trouble (ISTb) until all HDLC links are synchronized.

Field descriptions for conditional datafill (Sheet 2 of 2)

# **OPTCARD = NT7X05AA**

If the entry in field OPTCARD is NT7X05AA, datafill subfield SLOT\_NUMBER as described in the following table, then go to field TONESET to continue datafill for table RCCINV.

<b>Field descriptions</b>	for condition	onal datafill
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Field	Subfield or refinement	Entry	Explanation and action
	SLOT_NUMBER	numeric (3 to 19, see explanation)	Slot number. If the entry in field PMTYPE is RCC, enter slot number 12. Slot numbers 14, 16, and 18 are also allowed if they are not occupied by other cards.
			If the entry in field PMTYPE is RCC2, enter slot number 5 or 7 (card must be placed in slot pairs 5 and 23 or 7 and 21).

### All cards

For all optional cards, continue datafill for table RCCINV as described in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action	
TONESET		AUS100, AUS300, AUSTRIA,	Tone set. Enter the tone set appropriate for the ARCC, RCC, RCC2, SRCC, or RCO2 PM.	
		CEP, CHINA, EIREDTC, EIRELGC,	Tone sets NORTHAM, TURKEY, UK, MCL, SPAIN, CEP, AUSTRIA, HUNGARY, and CHINA are ROM tone sets.	
		HUNGARY, INDIA, JAPAN, JAPAN1, MALAYSIA, MALYADSI, MCL, MOROCCO, NA_RAM, NORTHAA, NORTHAA, NORTHAA, NORTHAA, NORTHAM, NZDTC, NZLGC, PHILADSI, PHILTONE, SPAIN, SRILANKA, SRILADSI, TURK300, TURKEY, UK, UK100, UK300, UKADSI	The downloadable RAM tone sets are JAPAN, MALAYSIA, MALYADSI, MOROCCO, TURK300, AUS300, EIRELGC, EIREDTC, AUS100, UK300, UK100, UKADSI, NZLGC, NZDTC, PHILADSI, PHILTONE, SRILADSI, SRILANKA, INDIA, JAPAN1, and NA_RAM (North American RAM-based tone set). Entries outside this range are invalid.	
			NZLGC, PHILADSI, PHILTONE, SPAIN, SRILANKA,	The default value for domestic RCC is NORTHAM.
				SPAIN, SRILANKA, SRILADSI,
			Tone set MALYADSI supports the Bellcore-defined analog display services interface (ADSI) tone.	
			Tone set PHILADSI supports the Bellcore-defined (ADSI) tone.	
			Tone set SRILADSI supports the Bellcore-defined (ADSI) tone.	

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
PROCPEC		6X45AA, 6X45AB, 6X45AC, 6X45CA, 6X45AD, 6X45AE, 6X45AF, 6X45AF, 6X45BA, 6X45BB,	Processor equipment product engineering code. Enter the PEC of the 6X45 card in unit 0 and 1 of the RCC. The PEC entered in each unit must be the card with the minimum firmware capabilities in the processor complex of each unit. The PECs listed have increasing firmware capabilities. For RCO2, the 6X45BC card must be used for
		6X45BC, MX77AA,	CSP02 and below. For CSP03 and up, MX77AA or AX74AA is supported.
		AX74AA, SX05AA	For RCC2, the PEC is MX77AA or AX74AA.
		3703AA	For RCC, the PEC MX77AA can also be used and is referred to as an RCC plus.
			An SX05AA can only be datafilled on an RCC2 and cannot be datafilled in combination with a 6X45 processor. When the SX05AA is datafilled, the corresponding PRL card must be datafilled as well. Valid values are
			• \$ - for the filler packlet (no functionality)
			<ul> <li>SX06BA - for 32 Mbyte PRL memory packlet</li> </ul>
			<ul> <li>SX06CA - for 64 Mbyte PRL memory packlet</li> </ul>
			<ul> <li>SX06DA - for 128 Mbyte PRL memory packlet</li> </ul>
			<i>Note:</i> If an SX05AA processor is datafilled in both units, an NT7X05AA is not allowed in the OPTCARD field.
E2LOAD		alphanumeric (vector of up to eight characters)	EEPROM load name. Enter the erasable electronic programming read only memory (EEPROM) load name. If the shelf is equipped with a processor that is different from NTMX77, field E2LOAD is automatically datafilled with the string NILLOAD.

Field	Subfield or refinement	Entry	Explanation and action
EXTINFO		see subfields	Extension shelf information. This field consists of subfields EXTSHELF, EXTFRTYP, EXTFRNO, EXTSHPOS, EXTFLOOR, EXTROW, EXTFRPOS, EXTEQPEC, and EXTSIDE.
	EXTSHELF	Y or N	Extension shelf. Enter Y if the CPM has an extension shelf and continue datafill for this table. This is true only for RCC2 or RCO2. Otherwise, enter N; no other datafill is required.
	EXTFRTYP	CEXT, MCRMS, RCEI	Extension frame type. Enter the type of frame in which the extension shelf is located. RCC2 must have an EXTFRTYP of CEXT.
	EXTFRNO	numeric (0 to 511)	Extension frame number. Enter the frame number of the frame type in which the extension shelf is placed.
	EXTSHPOS	numeric (0 to 77)	Extension shelf position. Enter the shelf position in inches above the floor.
	EXTFLOOR	numeric (0 to 99)	Extension shelf floor location. Enter the floor on which the extension shelf is located.
	EXTROW	A to Z (except I and O)	Extension shelf row location. Enter the row in which the extension shelf is located.
	EXTFRPOS	numeric (0 to 99)	Extension shelf frame position. Enter the extension shelf position within the frame.
	EXTEQPEQ	MX86AA	Extension shelf equipment PEC. Enter the extension shelf equipment PEC.
	EXTSIDE	L or R	Extension shelf side. Enter L (left) or R (right) to indicate on which half of the physical shelf the logical extension shelf is located.

#### Field descriptions (Sheet 3 of 3)

# **Datafill example**

The example shows assignments for RCC 1 located at site HOST. This RCC is controlled by LTC 7 located in the host office. There are eleven DS-1 links in use between this controller and the host office.

The RCC does not have the ESA option and intra-switching is not allowed. Universal tone receiver cards are equipped in slots 15 and 16. The PEC of unit 0 and 1 of the RCC is 6X45AC.

With regard to vectors, note that EXECTAB has two members, CSLNKTAB has eleven members, and OPTCARD has two members. The \$ sign indicates the end of the vector.

This example has one continuous record.

#### MAP display example for table RCCINV

RCCNAM								
ADNUM	FRTYPE	FRNO	SHPOS	FLOOR	ROW	FRPOS	EQPEC	LOAD
								EXECTAB
CSPM								
								CSLNKTAB
ESA IN								CDLINTID
ESA IN	ILKASW							
								OPTCARD
TONES	SET PROC	PEC	E	2LOAD				EXTINFO
								RI
M1	RCC	1						
2	RCE	2	4	1	В	0	6X12AA	ESR06BB \$
ר ב- ע די היי היי היי היי היי היי היי היי היי	POTSEX)	( RMN		- RGMFX)	 (אדע)			ABTRK DTCEX)
•		•		10001022 /	(1(1)1	DEI ROE	1022) ( 2	ADIRC DICEN)
	NES ESAE	Δ)Ş						
LTC	7							
(0)(1)	(2)(3)(4	)(5)(6	)(7)(8)	(9)(10)	(11)(	12)(13)	(14)(15)	(16)(17)(18)(19):
Y	Y N							
- דיד ( דיד	R14 ) (	UTR16			12032V	( እምን	X0533 17	) ( MSG6X69 )\$
•	, ,						MUJAA II	
NORTH	IAM MX	.77AA M	IX / / AA	NILLO	AD			N \$
(								

# **Table history**

#### MMP13

Added new values MALYADSI, PHILADSI, and SRILADSI to field TONESET.

#### NA010

Added information supporting 20 DS-1 C-side links.

#### **APC009**

Added values INDIA and SRILANKA to field TONESET.

### NA008

The following changes were made for NA008 to table RCCINV:

- Changed the PEC6X45 field name to PROCPEC to support various processors including the NTMX77, NTAX74, and NTSX05.
- Added datafill options for NTAX74 and NTSX05 in PROCPEC field.
- Removed restrictions on support for the NT7X05 PRL card when the NTAX74 card is datafilled in PROCPEC for an RCC2.

Table RCCINV has been updated for the NA009 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the NA008 timeframe.

### **XPM08**

Added message link assignment warnings.

### GL03.1

Added datafill to allow for support of an RCO2 hosted by an LGCO+ in China (without ISDN or EDC).

### NA007

Added a warning note to table RCCINV on datafilling field CSLNKTAB. A message is displayed by table control if an attempt is made to datafill multiple message links that are assigned to the same interface card.

### APC07

Reference to "Intra-switching calls not supported within an RCO2" in table RCCINV was removed.

The options MALAYSIA and PHILTONE were added to field TONESET.

### NA005

The following changes were made to table RCCINV:

- added information to explanation column of fields ADDLMSGL and OPTCARD for feature AN1548, InSv Upgrade DMSX to HDLC
- added information on the MSGMX76 optional card

### NA004

The following changes were made to table RCCINV:

- added information under "Overview" regarding table interactions between table RCCINV and table SYLNKINV
- added table SYLNKINV to note under field RCCNAME

- added entry NT7X05AA for subfield OPTCARD
- added refinement SLOT\_NUMBER for subfield OPTCARD entry NT7X05AA
- removed references to PRCC and RCCI PM types that are no longer supported

### NA002

The following changes were made to table RCCINV:

- A paragraph was added under "Functional description" for the RCC2.
- Field ADDLMSGL was added.
- The entry NORTHAA (North American ADS-1) was added for field TONESET.

### BCS36

Field ADNUM was added.

# Supplementary information

When references to data changes affecting RCC link information in table RCCINV are made, the following warning applies.

### WARNING

**Call processing to the PLGC and RCO2 can be affected** If the data change affects link information to a PCM30 line group controller (PLGC) hosting an RCO2, this can result in static data changes to the PLGC and RCO2. Such changes can affect call processing to both the PLGC and RCO2 and must only be done during low traffic periods. If a static data mismatch condition occurs on the RCO2 (the RCO2 shows an in-service trouble (ISTb) condition). Two warm switches of activity (SWACT) must be performed to update the static data in both units of the RCO2.

Mapping of links from an RCO2 through the PLGC takes precedence over any requirements for channels for call processing in the PLGC itself. The affect of any changes to link configuration on call processing of the PLGC and RCO2 must be fully understood before proceeding.

Any change in C-side or P-side links must be made very carefully. Ensure that enough call processing C-side capacity remains in the PLGC and RCO2.

### RCCINV (end)

Dynamic C-side link reconfiguration of the RCO2 is not supported. Such an operation is blocked when there is at least one network special connection (SPECCONN) going through that particular RCO2. If the user tries to alter a C-side link in table RCCINV when at least one SPECCONN uses that XPM, the tuple change is not permitted and the following error message is displayed:

ERROR: Delete Network SPECCONN connections before changing CSLINKS

Similarly, dynamic C-side link reconfiguration of the RCO2 can corrupt time-division multiplexing (TDM) connections using the equipped C-side port to the PLGC. If a Basic Rate Interface (BRI) ISDN TDM connection is using the port that the user is adding, deleting or changing, then the following message is printed, and the user is advised to delete the related ISDN lines before resuming dynamic C-side link reconfiguration on the RCO2:

C-SIDE PORT XXX IS BEING USED FOR ISDN CONNECTIONS. IF FULL UTILIZATION OF THIS PORT IS DESIRED, THE FOLLOWING LENS ASSOCIATED WITH WITH THESE ISDN CONNECTIONS MUST BE DELETED AND RE-DATAFILLED AFTER THIS LINK CHANGE IS COMPLETE.

TDM connections using intraswitching channels are not connected to a host channel. As a result, they are not affected by an RCO2 C-side link change.

When datafilling message links in RCCINV, separate links by a minimum of slots equal to the number of links on the interface card. Ensure that both message links are *not* assigned to the same interface card. An E1 outage can occur if both message links are assigned to a card that fails.

Both c-side message links assigned to the same XPM interface card. If this card becomes disabled it WILL cause an \*\*\* OUTAGE \*\*\*. Links on the same card include: {0 1}, {2 3}, {4 5}, {6 7}, {8 9}, {10 11}, {12 13}, {14 15}, {16 17}, {18 19}. Each message link should be on a different card.

# RCCPSINV

### Table name

Remote Cluster Controller P-Side Link Inventory Table

# **Functional description**

Table RCCPSINV contains peripheral-side (P-side) link assignments for remote cluster controller (RCC) peripheral modules (PM). The table has a three-part key consisting of a site name (as datafilled in table SITE), PM type, and PM number.

A corresponding default tuple is automatically added in table RCCPSINV if a PM is datafilled in table RCCINV. In this default tuple, all P-side links for the PM are initially defined as NILTYPE. P-side links that do not have hardware assigned must remain as NILTYPE. Unequipped, software-assigned P-side links generate service problems.

The following PM types are supported by table RCCPSINV:

- ARCC (Austrian remote cluster controller)
- RCC (remote cluster controller)
- RCC2 (compact RCC)
- RCO2 (remote switching center offshore 2)
- SRCC (SONET RCC)

The following table shows the sequence in which the RCC P-side ports must be assigned to ensure correct operation of the remote. This sequence table does not apply to RCC2 P-side port assignments.

#### P-side port assignments for RCC

Port number	Sequence
0,1	DS30A links to remote maintenance module (RMM) only
2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	DS-1 links
19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2,	DS30A links for line concentrating modules (LCM)

D-channel handlers (DCH) can reside in odd-numbered ports only.

The RCC2 is datafilled with up to 54 (0-53) multiples of P-side link information. Valid RCC2 link types are DS30A, DS-1, DCH, and NILTYPE.

When an extension shelf is added, there are datafill restrictions for RCC2 P-side links connected to the extension shelf. The DS-1 and DCH links connected to the extension shelf are datafilled only if the extension shelf is datafilled in table RCCINV. All links connected to the extension shelf must be changed in table RCCPSINV from DS-1 or DCH to NILTYPE prior to deleting the extension shelf from table RCCINV.

Some of the DCH and DS-1 interface cards occupy the same physical slots, and therefore cannot coexist. The following pairs of links cannot be datafilled for the same extension shelf:

- DCH link 14 and any of the DS-1 links 24 to 31
- DCH link 15 and any of the DS-1 links 32 to 39
- DCH link 13 and any of the DS-1 links 40 to 47

Up to ten DCH cards can be datafilled in table RCCPSINV for an RCC2.

### ATTENTION

ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) and remote switching center (RSC) configurations in the NA007/XPM08 timeframe. ILDR is first available for remote line concentrating module (RLCM), outside plant module (OPM), and outside plant access cabinet (OPAC) configurations in the NA008/XPM81 timeframe.

When changing the carrier of a link connected to an ILDR-equipped RLCM, the new carrier must allow 64 kbit/s clear channel.

For related information, refer to tables RCCINV and IRLNKINV.

### **Datafill sequence and implications**

The following tables must be datafilled before table RCCPSINV:

- RCCINV
- SITE
- CARRMTC

### Table size

0 to 255 tuples

# Datafill

The following table lists datafill for table RCCPSINV.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RCCNAME		see subfields	Remote cluster controller name. This field consists of subfields SITENM, PMTYPE, and RCCNO.
	SITENM	alphanumeric (up to four characters)	Site name. Enter the site name assigned to the remote location. This entry must also appear in table SITE.
	PMTYPE	ARCC, RCC, RCC2, RCO2,	Peripheral module type. Enter the type of peripheral module (PM) as follows:
		or SRCC	ARCC (Austrian remote cluster controller)
			RCC (remote cluster controller)
			RCC2 (compact RCC)
			RCO2 (remote switching center offshore 2)
			SRCC (SONET RCC)
	RCCNO	0 to 255	Remote cluster controller number. Enter the RCC number (defined in table RCCINV).
			<i>Note:</i> This number is unique by office and not by site.
PSLNKTAB		see subfields	P-side link table. This field consists of subfields PSLINK and PSDATA.
	PSLINK	0 to 53	P-side link. Enter the P-side port number of the remote cluster controller (RCC).
	PSDATA	see subfield	P-side data. This subfield consists of subfield AREASELCT.

Field	Subfield or refinement	Entry	Explanation and action
	AREASELCT	ASELCT D30, DCH, DS1, DS30A,	Area selector. Enter D30 for ARCC and RCO2, and datafill refinements CARRIDX and ACTION.
		or NILTYPE	Enter DCH for RCC2, SRCC, and RCO2.
			Enter DS1 for links to remotes of a remote and for RCC, RCC2, and SRCC, and datafill refinements CARRIDX and ACTION.
			Enter DS30A for all links to remote maintenance modules (RMM) and line concentrating modules (LCM).
			Enter NILTYPE for RCC2 P-side links 0 and 8 if dual configuration is defined in table IRLNKINV.
			Enter NILTYPE for all other unequipped links.
	CARRIDX	alphanumeric (up to 16 characters)	Carrier index. If the entry in subfield AREASELCT is D30 or DS1, datafill this refinement. Enter the name to index into table CARRMTC for maintenance information of the carrier. Enter DEFAULT for the default template in table CARRMTC.
	ACTION	Y or N	Action. If the entry in subfield AREASELCT is D30 or DS1, datafill this refinement. Enter Y (yes) to remove the carrier from service if the out-of-service limit (OL) for frame, slip, errored-second, or severe-errored-second is exceeded. Otherwise, enter N (no).

### Field descriptions (Sheet 2 of 2)

# **Datafill example**

An example of datafill for table RCCPSINV follows.

1-442 Data schema tables

# RCCPSINV (end)

MAP display example for table RCCPSINV

RCCNAME PSLNKTAB 0 REM2 RCC (0 DS30A ) (1 DS30A ) (2 DS30A ) (3 DS30A ) (4 DS30A ) (5 DS30A ) (6 DS30A) (7 DS1 DEFAULT N) (8 DS1 DEFAULT N) (9 DS1 DEFAULT N) (10 DS30A ) (11 DS1 DEFAULT N) (12 DS1 DEFAULT N) (13 DS1 DEFAULT N) (14 DS30A ) (15 DS1 DEFAULT N) (16 DS30A ) (17 DS30A ) (18 DS30A ) (19 DS1 DEFAULT N) \$ rem3 RCC 1 (0 DS30A ) (1 DS30A ) (2 DS1 DEFAULT N) (3 DS1 DEFAULT N) (4 DS30A ) (5 DS30A ) (6 DS1 DEFAULT N) (7 DS1 DEFAULT N) (8 DS30A ) (9 DS30A ) (10 DS1 DEFAULT N) (11 DS1 DEFAULT N) (12 DS30A ) (13 DS30A ) (14 DS1 DEFAULT N) (15 DS1 DEFAULT N) (16 DS1 DEFAULT N) (17 DS1 DEFAULT N) (18 DS1 DEFAULT N) (19 DS1 DEFAULT N) \$

# Table history

#### NA008

Table RCCPSINV has been updated for the NA011 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the NA008 timeframe.

#### NA007

New restrictions have been added as a result of the introduction of the ILDR.

#### NA004

The following changes were made to table RCCPSINV:

- added two paragraphs to "Functional description" regarding RCC2 P-side side links 0 and 8
- added explanation to subfield AREASELCT, entry NILTYPE
- removed references to PRCC and RCCI PM types that are no longer supported

#### BCS36

The following changes were made to table RCCPSINV:

- added PM type ARCC
- added value D30 to and corrected values for field AREASELCT

# RCFCLI

### Table name

Remote Call Forwarding Calling Line Identification Table

# **Functional description**

This table lists up to a maximum of eight serving numbering plan areas (NPAs) and directory numbers of the base station for a remote call forwarding line with the calling line identification option.

The operating company uses the Remote Call Forwarding Calling Line Identification Table Record (form 2203) to record input data for table RCFCLI.

# **Datafill sequence and implications**

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

### Table size

Memory is automatically allocated for the eight entries.

# Datafill

The table that follows lists datafill for table RCFCLI.

### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
INDEX		1 to 8	Index
			Enter the table index. Use RCFINDEX to find the next available index.
SNPA		numeric (3 digits)	Serving numbering plan area
			Enter the serving NPA assigned to the base station.
LCLDN		numeric (1 to 13	Directory number
		digits, 0 to 9)	Enter the directory number assigned to the base station.

# **Datafill example**

The figure that follows shows datafill for table RCFCLI.

# RCFCLI (end)

The example is for directory number 225-4983 in serving NPA 613 assigned to index number 2.

#### MAP display example for table RCFCLI

INDEX SNPA LCLDN

 $2\ \ 613\ 2254983$ 

#### Table history MMP14

Changed the entry for field LCLDN from "(7 digits)" to "(1 to 13 digits, 0 to 9)" for feature E.164 Compliance for Redirection Services (REDIRSRV ARCHID).

# RCNAME

### Table name

ISDN Routing Characteristic Name Table

# **Functional description**

The different ISDN routing characteristic names for an ISDN central office switch appear in table RCNAME. These names appear in other tables used to process calls with ISDN routing characteristics. Table RCNAME is the first of a series of tables. The user uses the table series for the installation of Bellcore TR-448, ISDN Routing and Digit Analysis.

Each routing characteristic-name points to an index in table RTECHAR. This element is the first step in the ISDN call translation process.

The value of RCNAME determines the translation path of the call. When RCNAME contains the value NILNAME, the call proceeds. The call proceeds to Meridian Digital Centrex (MDC) or plain ordinary telephone service (POTS) translations. Other values of RCNAME indicate that the call proceeds to ISDN translation.

See table RTECHAR for additional information.

### **Datafill sequence and meaning**

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

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

- HNPACONT.RTEMAP
- FNPACONT.RTEMAP
- INBRTE
- IBNRT2
- IBNRT3
- IBNRT4
- IBNXLA
- INWOMAP
- INWTMAP
- OFRT
- OFR2
- OFR3

# RCNAME (continued)

- OFR4
- OFRTMAP
- OFRTMA2
- OFRTMA3
- OFRTMA4
- PXLAMAP
- RTECHAR
- IBNMAP
- UNIMAP
- XLANAME

# Table size

0 to 256 tuples

The system allocates data store for 64 tuples in table RCNAME.

# Datafill

Datafill for table RCNAME appears in the following table.

### xxxField descriptions

Field	Subfield or refinement	Entry	Explanation and action
NAMEKEY		alphanumeric (1 to 8 characters)	Routing characteristic name key. Enter the routing characteristic name.

# **Datafill example**

Sample datafill for table RCNAME appears in the following example.

# RCNAME (end)

#### MAP example for table RCNAME

NAMEKEY

BC64PIRQ BC64PIPR BC64PINR BC31PIRQ BC31PIPR

# **Release history**

### NA016

Feature 59029017 adds table FNPACONT.RTEMAP to the datafill sequence of this table.

# RCSINV

### Table name

Remote Concentrator Subscriber Inventory Table

### **Functional description**

The Remote Concentrator Subscriber, also called the Remote Concentrator SLC-96 (RCS), is a line peripheral used by the SLC-96 system (a Western Electric product designed to serve a cluster of up to 96 subscribers in a remote location).

A Subscriber Module SLC-96 is a peripheral module (PM) that provides a direct digital interface from the RCS to the DMS-100 host (SMS supports up to six RCS modules).

Table RCSINV lists the following data assignment for each RCS module:

- site name as assigned by the operating company to the remote location (this entry is not optional and there is no default value assigned to it)
- frame/unit combination, which uniquely defines the RCS module number
- frame type on which the PM is physically mounted
- frame number, is unique by office (when this option applies)
- floor, row on floor, frame position in row, and shelf position for each unit associated with a remote concentrator equipment frame
- the issue name of the PM software (for the RCS, this field is always datafilled as NO\_LOAD)
- PM type and number to which the RCS attaches
- mode of operation of shelf groups AB and CD
- SMS P-side and DS-1 lines connectivity information
- coded, superimposed, and frequency ringing data
- type of alarm control unit
- protection line if required
- port for the protection line
- Scan and signal distribution (SD) group numbers and scan and SD points used within these groups for the inhibit lead function.

RCS modules on different frames can share a metallic test pair. This is done by multiplying the tip and ring outputs on the Main Distribution Frame (MDF). When Central Office terminals are co-located with SMS modules, this method uses the inhibit lead to indicate busy/idle of the test pair. Field SCSDUSED is

datafilled with Y (yes), and the same SC and SD points are assigned to each (site) frame multiplied on the MDF. The scan and SD groups are defined in tables SCGRP and SDGRP respectively. An SD point activates ground on the inhibit lead associated with a metallic test pair, so that no more than one RCS or COT accesses a shared metallic test pair at one time. A scan point scans the inhibit lead to determine if ground exists; if ground exists, other RCS modules are prevented from accessing the metallic test pair.

- whether PCM Looping Test is run for a Mode II RCS
- alarm severity and text for power/miscellaneous alarm.

The RCS has four line shelves named A, B, C and D. Shelves A and B make up the shelf group AB, while shelves C and D make up the shelf group CD. Each shelf group operates independently of the other and can be operated in one of the following modes:

- Mode1 Non-concentrated Shelf group, primarily intended for single and multiparty lines. One or two DS-1 lines connect to a shelf group in this mode, depending on whether one or two shelves are equipped.
- Mode2 Concentrated Shelf group, where up to 48 lines of each shelf group are concentrated onto 24 channels. One DS-1 line connects to a shelf group in this mode.
- Mode3 Non-concentrated Shelf group, where the entire shelf group is dedicated to coin, data lines, or other special service lines. One DS-1 line connects to a shelf group in this mode.

The mode of a particular shelf group is dependent upon cards installed in the SLC-96 system (it cannot be changed under program control).

C-side link information in the RCS is dependent upon the mode of one or two C-side links for a shelf group while in modes 2 and 3 operation of each of the two shelf groups. In mode 1 there can be only one C-side link per shelf group.

The RCS has two types of alarm control unit (ACU) cards called WP1 and WP1B. The difference between the two cards is the format of the alarms message sent to the office through the Derived Data Link (DDL).

A protection line (PROT LINE) is a standby DS-1 link between the SMS and RCS. Only one RCS is assigned to a single PROT LINE. Depending on the mode of operation of the shelf groups, the ratio of PROT LINEs to normal DS-1 links (normlines) can be 1:2, 1:3, or 1:4. A protection switch preserves calls in the talking state, and for POTS and coin lines, calls in the ringing state. If any DS-1 line is part of a nailed-up cross-connection, that DS-1 cannot be used as a protection line. This impacts datafill for table RCSINV, since the

SMS P-side port to which a protection line connects is datafilled and cannot be datafilled as the protection line port.

Before changing the C-side peripheral to which a RCS (SLC96) is attached, the PROT LINE must be offline. The following error message is generated depending upon which peripheral (SMS or SMSR) fails the port status check. If the SMS/SMSR to which the RCS is currently attached has the port that the PROT LINE uses in an inservice state, the following error message appears at the MAP:

PROT LINK MUST BE OFFL/MBSY

If the port of the SMS/SMSR that the PROT LINE is moving to is in a state other than OFFLINE, the following message appears at the MAP:

PROT LINK OF THE RCS MUST BE OFFLINED

If any DS-1 line has channels that are part of a nailed-up cross-connection, that is, the endpoint in table PSNAILUP is listed as a channel rather than a line, no RCS can be attached to this line in table RCSINV.

The SMSR specified in the PMT field must already have been datafilled in tables LTCRINV and LTCRPINV.

Changing the fields ABINFO, CDINFO, or CSPMNO disables call processing on the associated RCS, even after it is returned to service. When one or more of these fields are changed, the following message appears at the MAP:

WARNING: STATIC DATA NOT UPDATED FOR SMS (SMS number) YOU MUST BSY AND RTS THE SMS

To restore call processing on the RCS, the SMS must be busied and returned to service, the inactive unit of the SMS must be busied and returned to service followed by two consecutive SWACTs.

Changing other fields in table RCSINV does not disable call processing on the associated RCS, but if Central Control is not able to communicate with the SMS because the SMS is busy, static data is not updated, and the following message appears at the MAP:

WARNING: STATIC DATA NOT UPDATED FOR SMS (SMS number)

Returning the SMS to service properly updates static data.

Some special notes on datafilling the table RCSINV follow:

When an inhibit lead is used, tables SCGRP and SDGRP must be datafilled before table RCSINV.

If operating company personnel try to add a new peripheral with the same SITE/FRAME/UNIT information as an existing peripheral, the following error message appears:

ERROR: KEY has already been used KEY RCSNO of type LINE\_MODULE\_KEY must be unique Use different SITE/FRAME/UNIT

An SMS DS-1 interface card has two ports for DS-1 lines. Two DS-1 lines leading from the same SMS DS-1 card should connect to different RCS modules. With one DS-1 line connected, an interface card can be removed without disrupting ongoing calls as the connected DS-1 links are protection switched.

To reposition a DS-1 link on a RCS, all DS-1 links on the RCS must be repositioned. The DS-1 links, except the one that needs repositioning, can be returned to their original positions after the move. When all DS-1 links (SMS ports) are being used and one link must be repositioned, the RCS must be deleted, then added to the system.

When the entry for the SCSDUSED field is Y (yes), indicating that a test pair inhibit lead is used, additional fields must be datafilled. Field INHSCGRP indicates which scan group of table SCGRP contains the scan point used for the inhibit lead function. This scan point is datafilled in field INHSCPT. Field INHSDGRP indicates which SD group in table SDGRP contains the SD point used for the inhibit lead function. This SD point is datafilled in field INHSDPT.

SD and scan circuit packs each contain two groups. A group holds seven points. Previously, if one scan or SD point was used for the inhibit lead function, all points in that group became dedicated to the inhibit lead function. With the four fields INHSCGRP, INHSCPT, INHSDGRP, and INHSDPT used for datafill, entire scan or SD groups need not be dedicated for the inhibit lead function.

All spaces in the text string entered in field MISCTEXT must be represented by underscores. The underscores are replaced by blanks before being displayed. If blanks are used instead of underscores, all text after the blank is truncated. For example, a text such as DOOR OPEN would appear as DOOR, while text such as DOOR\_OPEN would appear as DOOR. The text string must not exceed 16 characters.

When the alarm occurs to which the text string applies, the DMS switch generates a PM128 log that contains the text string. Similarly, posting the RCS on which the alarm has occurred and entering the command string QUERYPM FLT results in the text appearing at the MAP display.

The MTAOWNER field no longer exists in table RCSINV. Refer to tables MTAVERT, MTADRVE, and MTAHORIZ for details on configuring a metallic test access with remote and peripheral modules. Attempting to delete an RCS that is associated with a vertical in table MTAVERT results in the following error response:

CANNOT BE DELETED UNTIL UNASSIGNED FROM VERTICAL ON MTA

Frequency selective ringing is supported for single-party, two-party, four-party, and Meridian Digital Centrex lines. The frequencies used depend on how an option plug is set on the FSR card.

If the RCS or one of its dependencies failed to register with the system recovery controller (SRC), the following message appears. The tuple is rejected because there are no adequate means of recovering nodes that are not registered with the SRC during restarts and SWACTs.

The message also can be displayed when adding a new RCS or when attempting a tuple change to reregister an RCS that has been deregistered from the SRC because of a dependency corruption during a previous node relocation attempt:

Could not register the RCS to the system recovery controller.

If, while attempting to move an existing RCS to a new C-side peripheral (SMS or SMSR), corruption of the node's C-side dependency occurs and the node is deregistered from the SRC, the following error message appears. The tuple is rejected. Attempt a nil change on the tuple so that an attempt is made to register the node with the SRC.

Node has been deregistered from the System Recovery Controller. Attempt a nil change on the tuple to register the node with the SRC.

If a failure occurs in the SRC while attempting to move an existing RCS to a new C-side peripheral (SMS or SMSR), the following error message appears. When this message appears, either the dependency on the old C-side peripheral could not be deleted or the dependency on the new C-side peripheral could not be added. The tuple is rejected.

Could not update system recovery dependency.

# **Datafill sequence and implications**

The following tables must be datafilled before table RCSINV.

- SITE
- LTCPSINV

An entry in table LTCPSINV is added automatically when an XPM is added to table RCSINV. All the corresponding P-side links in table LTCPSINV initially default to NILTYPE. P-side links that do not have hardware assigned must remain NILTYPE. The existence of unequipped software assigned P-side links generates service-affecting problems such as no dial tone, cutoff issues and noisy transmissions.

### Table size

Memory is dynamically allocated for up to 255 entries for the NT40 switch and 1000 entries for SuperNode switches.

# Datafill

The following table lists datafill for table RCSINV

#### Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
RCSNO		see subfields	Remote concentrator module number
			This field consists of subfields SITE, FRAME, and UNIT.
	SITE	alphanumeric (4 characters)	Site
			Enter the location of the RCS. There is no default value, and the first character of the site name must be alphabetic.
			<i>Note:</i> Valid SITE names are dependent on the value of parameter UNIQUE_BY_SITE_NUMBERING in table OFCENG.

### Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	FRAME	0 to 127or0 to	Frame
		511	Enter the remote concentrator module frame number, which is not a physical frame but a software identity. All RCS modules sharing the same metallic test pair are assigned the same frame number. The maximum frame number is 127 for NT40 switches and 511 for SuperNode switches.
	UNIT	0 to 9	Unit
			Enter the remote concentrator module unit number.
ADNUM		0 to 4095	Administrative number
(BCS35-)			Enter a number between 0 and 4095 to represent the administrative number for an associated PM.
FRTYPE		RCE	Frame type
			Enter the frame type on which the peripheral module equipment is mounted.
FRNO		0 to 511	Frame number
			Enter the frame number of the RCS. This number should be unique by office.
SHPOS		0 to 77	Shelf position
			Enter the position of the RCS control shelf in inches above the floor level.
FLOOR		0 to 99	Floor
			Enter the floor on which the peripheral module frame is located.
ROW		A to HJ to NP	Row
		to ZAA to HHJJ to NNPP to ZZ	Enter the row on the floor in which the peripheral module equipment frame is located.

Field	Subfield or refinement	Entry	Explanation and action
FRPOS		0 to 99	Frame position
			Enter the position in the row of the peripheral module equipment frame.
LOAD		alphanumeric	Load
			Enter the name given to the issue of peripheral module software. The RCS does not require a load, so this field is datafilled as No_Load.
CSPMNO		see subfields	C_side peripheral module number
			This field consists of subfields PMT and EXTPMNO.
	PMT	SMS or SMSR	Peripheral module type
			Enter the type of peripheral module to which the RCS is attached.
	EXTPMNO	0 to 127	Peripheral module number
			Enter the peripheral module number to which the RCS is attached.
			An entry outside of this range is invalid.
ABINFO		see subfields	AB shelf group information
			This field is composed of subfields SHLFGRPMODE, XPMPORT and SHLFGRPMODE(MODE2) refinement field LOOPTEST.
	SHLFGRPMOD	MODE1,MOD	Mode
	E E2, MODE3, or NILMODE	Enter the mode of operation of shelf group AB. NILMODE is technically unsupported and not recommended. If Mode2 is entered, the LOOPTEST field is prompted for and must be datafilled.	

### Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	XPMPORT	vector of up to 2 (0 to 19) entries	C-side link information
			Enter the SMS P-side ports to which C-side links ABLK0 to ABLK1 of the RCS are assigned. Since this is a vector (at least one entry or at most two entries), enter \$ to terminate the vector. For MODE2 and MODE3 use only ABLK0, while for MODE1 use ABLK0 when equipped with one shelf or ABLK0 and ABLK1 when equipped with two shelves.
	LOOPTEST	Y or N	PCM looping test
			Enter Y (yes) if the PCM Looping Test is run on a DS-1 channel when it is assigned to handle a call. Otherwise, enter N (no). This test consists of the SMS sending known PCM samples over the DS-1 channel to the RCS, which returns complemented samples back to the SMS. The SMS compares the sent and received samples, and if satisfactory, the test passes.
			If the test fails, a minor alarm is raised, and the DS-1 channel and associated line card are locked out from further call processing. The DS-1 channel and line card are tested periodically for proper operation and returned to service if they pass.
			If a second PCM Looping Test fails on a shelf group, a major alarm is raised, and the shelf group is taken from service. A steady PCM Looping Test failure on one DS-1 channel/card combination indicates a bad line card. Failures on multiple channels indicate a bad TAU card.
CDINFO		see subfields	CD shelf group information
			This field consists of subfields SHLFGRPMODE, XPMPORT and SHLFGRPMODE(MODE2) refinement field LOOPTEST.

Field	Subfield or refinement	Entry	Explanation and action
	SHLFGRPMOD	MODE1	Mode
	E	MODE2MOD E3orNILMOD E	Enter the mode of operation of shelf group CD. NILMODE is technically unsupported and not recommended as datafill. If MODE2 is entered, the LOOPTEST field is prompted for and must be datafilled.
	XPMPORT	vector up to 2	C-side link information
		(0 to 19) entries	Enter the SMS P-side ports to which C-side links CDLK0 to CDLK1 of the RCS are assigned. Since this is a vector (at least one entry or at most two entries), enter \$ to terminate the vector. For MODE2 and MODE3 use only CDLK0, while for MODE1 use CDLK0 when equipped with one shelf or CDLK0 and CDLK1 when equipped with two shelves.
	LOOPTEST	Y or N	PCM looping test
			Enter Y (yes) if the PCM Looping Test is run on a DS-1 channel when it is assigned to handle a call. This test consists of the SMS sending known PCM samples over the DS-1 channel to the RCS, which returns complemented samples back to the SMS. The SMS compares the sent are received samples, and if satisfactory, the test passes.
			If the test fails, a minor alarm is raised, and the DS-1 channel and associated line card are locked out from further call processing. The DS-1 channel and line card are tested periodically for proper operation and returned to service if they pass.
			If a second PCM Looping Test fails on a shelf group, a major alarm is raised, and the shelf group is taken from service.
			A steady PCM Looping Test failure on one DS-1 channel/card combination indicates a bad line card. Failures on multiple channels indicate a bad TAU card.

### Field descriptions (Sheet 5 of 7)

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### Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
RNGTYPE		C, F, S,	Ring type
		UNASSIGNE D, C30, CSR, or C3D	Enter the type of ringing assigned to the remote concentrator module: coded (C), frequency (F), superimposed (S), unassigned (UNASSIGNED), C30 or coded superimposed ringing (CSR). Field RNGDATA must be datafilled C3D for Japan. This provides the Japanese ringing scheme of 1 on and 2 off for a 3 second basic cycle. The C3D value is only datafillable in loads containing the NTXZ08AA feature package.
ACU		WP1, WP1B	<i>Alarm control unit</i> Enter the type of alarm control unit card.
PROTINFO		see subfields	Protection information
			This field consists of subfield PROT and PROT(Y) refinement subfield PORT.
	PROT	Y or N	Protection
			Enter Y (yes) if the RCS has a protection line. Otherwise, enter N (no). If the entry for this field is Y, then enter the PORT number.
	PORT	0 to 19	Port
			Enter the SMS P-side port of the protection line.
SCSDINFO		see subfields	Scan and SD point information
			This field consists of subfield SCSDUSED and SCSDUSED(Y) refinement subfields INHSCGRP, INHSCPT, INHSDGRP and INHSDPT.
	SCSDUSED	Y or N	Scan and SD points used
			Enter whether an inhibit lead (SD and scan points used) is required for the RCS. If the entry for this field is Y (yes), then the remaining fields in this table must be datafilled.

Field	Subfield or refinement	Entry	Explanation and action
	INHSCGRP	0 to 511	Inhibit scan group
			Enter the number of the scan group, defined in table SCGRP, that contains the scan point used for the inhibit lead function.
	INHSCPT	0 to 6	Inhibit scan point
			Enter the number of the scan point used for the inhibit lead function.
	INHSDGRP	0 to 511	Inhibit signal distribution group
			Enter the number of the SD group, defined in table SDGRP, that contains the SD point used for the inhibit lead function.
	INHSDPT	0 to 6	Inhibit signal distribution point
			Enter the number of the SD Point used for the inhibit lead function.
MISCTEXT		alphanumeric	Miscellaneous text
		(up to 16 characters)	Enter the text associated with the power/miscellaneous alarm. Use the underscore (_) in place of blanks, otherwise, text appearing after the blanks is truncated. The underscores are converted to blanks prior to being displayed. The text entered appears in PM128 logs and in selected MAP displays when the associated alarm occurs.
ALMSEVER		major or minor	Alarm severity
			Enter the severity associated with the alarm.
LOCATION		alphanumeric (up to 32 characters)	Location
			Identify the remote location, or address, of the RCS.

#### Field descriptions (Sheet 7 of 7)

### **Datafill example**

The example shows assignments for RCS module 1, unit 2 located at site REM2 and linked to the host office by ports 17 and 18 in MODE1 and port 12 in MODE2 of SMS 9. The PCM Looping Test is not enabled for the Mode2 shelf group. SMS 9 has no protection line equipped. The RCS uses an inhibit

## RCSINV (end)

lead, and the scan and SD points used for this lead are located in scan group 9 and SD group 8, respectively. The text for the power/miscellaneous alarm is DOOR OPEN. It is a minor alarm. The remote location, or address of the RCS is GARB.

Input is shown vertically due to space limitations.

#### MAP display example for table RCSINV

	1001		CSPMNO		FRNO SHPOS FLOOR ROW FRPOS LOAD ABINFO CDINFO RNGTYPE A
PROTI	NFO		SCSI	DINFO	MISCTEXT ALMSEVER
				L	OCATION
rem2	01	2	2	RCE	29 48 2 A 4 NO LOAD
1111112		_	_	-	—
		MS	9	MODE.	1 (17) (18)\$ MODE2 (12)\$ N S
WP1			~ 4	0 0	
WP1	Ν	Y	94	80	DOOR OPEN MINOR

# Table history

### NA005

Added several error messages to indicate that a tuple was rejected because some part of the SRC registration process failed.

#### BCS36

Added field LOCATION for the purpose of identifying the remote location, or address, of the RCS, in accordance with feature AF4936.

### Supplementary information

This section contains dump and restore information for table RCSINV.

#### **Dump and Restore**

Prior to BCS35, tuples in peripheral OM groups LMD and UTR were grouped together by node type and these groups of tuples had a defined order within the OM group. For upgrades from a BCS less than BCS35 to a BCS35 or greater, the ADNUMs will be sequentially assigned using this method. Any subsequent upgrades after the ADNUMs have been assigned will preserve the currently assigned ADNUM.

## **RCTALM**

### Table name

Remote Concentrator Terminal Alarm Table

## **Functional description**

Table RCTALM defines the alarms and their reporting for the remote concentrator terminal (RCT).

This table is datafilled by default. Changes are needed if the character strings that are required to be written to the logs and displayed in the top banner of the MAP display are different from the default form.

Operating-company-defined log and top banner character strings must be representative of the alarm. Datafill for table RCTALM is only required for user assignable alarms. Alarms that are supported by table RCTINV are listed in table Table, "Alarms supported by table RCTALM" on page -461.

RCTALM	Source	Alarm description
AC	Rectifier	Loss of AC voltage, rectifier failure or shutdown
BAT	Battery	Battery voltage below 47 volts
CPF	5 to 12v converter	Loss of output voltage
DFA	A DIGR circuit card	Loss of frame synchronization in digroup A
DFB	B DIGR circuit card	Loss of frame synchronization in digroup B
DOOR	Switch on door	Door open
FUSE	Fuse	Defective fuse
LFA	A RPTR circuit card (see note 1)	Signal loss or high bipolar violation rate on DS-1 line A
LFB	B RPTR circuit card (see note 1)	Signal loss or high bipolar violation rate on DS-1 line B
LFP	Protection repeater circuit card (note 1)	Signal loss or high bipolar violations on protection DS-1
	e alarms are generated only RCT's alarm cards.	if the repeaters are capable of providing correct

#### Alarms supported by table RCTALM (Sheet 1 of 2)

outputs to the RCI's alarm cards.

Note 2: The ring generator excessive load or grounded alarm is available only with QPP430B generator cards.

## RCTALM (continued)

#### Alarms supported by table RCTALM (Sheet 2 of 2)

Source	Alarm description
Line power converter	Power converter shutdown
Ringing fuse	Defective ringing distribution fuse
Ring generator (see note 2)	Loss of ringing voltage or synchronization; grounded or excessive load (major alarm)
Ring generator	Failure of one of the two generators (minor alarm)
Thermostats	Temperature over 50°C or under 0°C
user assignable	User assignable
	Line power converter Ringing fuse Ring generator (see note 2 ) Ring generator Thermostats

*Note 1:* These alarms are generated only if the repeaters are capable of providing correct outputs to the RCT's alarm cards.

*Note 2:* The ring generator excessive load or grounded alarm is available only with QPP430B generator cards.

## **Datafill sequence and implications**

The following tables must be datafilled before table RCTALM.

- LTCPSINV
- RCTINV

### Table size

0 to 255 tuples

Memory for this table is dynamically allocated.

## **RCTALM** (continued)

## Datafill

The following table lists datafill for table RCTALM.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
RCTALM		AC, BAT,	Remote concentrator terminal alarm
		CPF, DFA, DFB, DOOR, FUSE, LFA,	Enter the key for the alarm to be changed or assigned.
		LFB, LFP, LPF, RFA, RMJ, RMN, TEM, SPARE1, SPARE2, SPARE3, SPARE4	See the 1st table, "Alarms supported by table RCTALM" for a description of each alarm.
LOGDISP		alphanumeric (1 to 32 characters)	Log display
			Enter the log entry character string required for the specified alarm key.
MTCDISP		alphanumeric	Magnetic tape center display
		(1 to 6 characters)	Enter the top banner display character string required for the specified alarm key.
ALMTYPE		CR, MJ, MN,	Alarm type
	or NA		Enter the alarm type as follows: CR (critical alarm), MJ (major alarm), MN (minor alarm), or NA (no alarm).

## **Datafill example**

The default datafill for table RCTALM is shown below. Datafill information other than the RCTALM key field can be modified by the operating company.

## RCTALM (end)

### MAP display example for table RCTALM

RCTA	LM	LC	GDISP	MT	CDISP	ALMTYP
DFA	Digroup A failure		RCTG	IG	MJ	
DFB	Digroup B failure		RCTD	IG	MJ	
LFA	DS1 line A failure	RCT	LFA	MN		
LFB	DS1 line prot failu	re	RCTL	FB	MN	
LFP	DS1 line prot failu	re	RCTL	FP	MN	
LPF	Line power failure	RCT	LPC	MJ		
RMJ	Ring generator fail	RCT	RNG	MJ		
RMN	Ring generator fail	RCT	RNG	MN		
CPF	Power converter fai	1	RCTC	$\mathbf{PF}$	MJ	
AC	Power fail	RCT	AC	MN		
BAT	Battery Failure	RCT	BAT	MJ		
TEM	Temperature alarm		RCTT	ΕM	MJ	
DOOR	Door alarm		RCTD	OR	MN	
FUSE	Fuse alarm		RCTF	US	MJ	
RFA	Ring fuse alarm	RCT	FUS	MJ		
SPARE1	*	* *		* *		
SPARE2	*	* *		* *		
SPARE3	*	* *		* *		
SPARE4	*	* *		* *		

## RCTINV

### Table name

Remote Concentrator Terminal Inventory Table

## **Functional description**

Table RCTINV lists information for remote concentrator terminal (RCT) line peripheral modules (PM). Remote Concentrator Terminals (RCT) are line PMs used by the DMS-1 system that can handle traffic for up to 256 lines. The DMS-1 concentrator system consists of an RCT and a control concentrator terminal (CCT). The subscriber carrier module-100 rural (SMR) PM replaces the CCT and provides a direct digital interface between RCTs and the DMS-100 host.

Table RCTINV lists the following assignment data for each RCT unit:

- the site name of the remote location as assigned by the operating company
- the frame/unit combination that uniquely defines the RCT module number
- the administrative number associated with the PM
- the frame type on which the PM is physically mounted
- the frame number of the RCT
- the floor, row on the floor, frame position in the row, and the shelf position for each unit associated with an RCT equipment frame
- the PM type and number to which the RCT attaches
- the RCT C-side to SMR P-side link assignments
- the coded, superimposed, and frequency ringing data
- the type of test capability (digital or metallic)
- the protection switching information

Subscriber loop testing is optional. The RCTs are capable of performing subscriber line test digital (SLTD) tests, subscriber line test access (SLTA) tests, or no tests.

The SLTD capability is synonymous with RCT card QPP423. It provides test equipment in the RCT to measure and digitize the standard voltage, resistance, and capacitance of the subscriber loop.

The SLTA capability is provided by LTA card QPP568A used with a shelf bypass assembly (ED7208-32G6). This capability enables metallic test access (MTA) and bridging onto subscriber lines. The SLTA configuration can use a

line test unit (LTU) and trunk test unit (TTU) as part of subscriber loop and line card test procedures.

A protection line is a DS-1 line that occupies one DS-1 P-side port of an SMR. This line connects up to six RCTs in daisy-chain fashion and serves as a spare DS-1 that can be rapidly switched into use to replace a failed DS-1.

Although a protection line can connect to more than one RCT, no two RCTs can be simultaneously connected to the same protection line. Field PRIORITY in table RCTINV indicates which RCT connects to the protection line if links to more than one RCT fail. The SMR P-side ports must have access to this protection information to update the node table used for message routing and to correctly interpret autonomous RCT protection switches.

If connected to the same SMR, RCTs that use frequency selective ringing must use the same set of frequencies.

### **Datafill sequence and implications**

The following tables must be datafilled after table RCTINV.

- LTCINV
- LTCPSINV

### Table size

0 to 255 tuples

## Datafill

The following table lists datafill for table RCTINV.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
RCTNO		see subfield	Remote concentrator terminal number. This field consists of subfields SITE, FRAME, and UNIT.
	SITE	alphanumeric (1 to 4 characters)	Site. Enter the site name of the RCT location. No default value exists. The first character of the site name must be alphabetic. The entry here must also appear in table SITE.

Field	Subfield or refinement	Entry	Explanation and action
	FRAME	numeric (0 to 511)	Frame. Enter the remote concentrator terminal frame number. For NT40, the range is 0 to 127. For SuperNode, the range is 0 to 511.
	UNIT	numeric (0 to 9)	Unit. Enter the remote concentrator terminal unit number.
ADNUM		numeric (0 to 4095)	Administrative number. Enter the administrative number associated with the PM.
FRTYPE		RTR	Frame type. Enter the frame type on which the PM equipment is mounted.
FRNO		numeric (0 to 511)	Frame number. Enter the frame number of the RCT. This number must be unique for each office.
SHPOS		numeric (0 to 77)	Shelf position. Enter the position of the RCT control shelf, measured in inches above the floor level.
FLOOR		numeric (0 to 99)	Floor. Enter the floor on which the PM frame is located.
ROW		A to A, AA to ZZ, except I, II, O, OO	Row. Enter the row on the floor in which the PM equipment frame is located.
FRPOS		numeric (0 to 99)	Frame position. Enter the bay position in the row of the PM equipment frame.
LOAD		alphanumeric (up to 8 characters)	Load. Enter the NO_LOAD for all RCTs.
CSPMNO		see subfields	C-side peripheral module number. This field consists of subfields PMT and EXT_PMNO.
PMT		SMR, RCC2, or SRCC	Peripheral module type. Enter the type of PM to which the RCT is attached.

### Field descriptions (Sheet 2 of 4)

### Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
EXT_PMNO		numeric (0 TO 63)	Peripheral module number. Enter the PM number to which the RCT is attached. Other values are not valid.
LKINFO		numeric (0 to 19) (vector of up to 2 entries)	C-side link information. Enter the SMR port numbers on which the RCT is assigned (a vector of up to two entries). The SMR port numbers correspond to C-side links LK0 to LK1 of the RCT. Terminate the vector with \$.
CONTMARK		+ or \$	Continuation mark. Enter + if additional data for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.
RNGDATA		see subfields	Ring data. This field consists of subfields RNGTYPE and FRQUENCY.
	RNGTYPE	C, C30, C3D, CSR, F, S, UNASSIGN-E D	Ring type. Specify the type of ringing assigned to the remote concentrator module (RCM). Enter C (coded at 20 Hz), CSR (coded special ringing), C30 (coded at 30 Hz), C3D, F (frequency) and datafill refinement FRQUENCY, S (superimposed), or UNASSIGNED (no ring type assigned).
	FRQUENCY	numeric (0 to 255)	Ringing frequencies. If the entry in field RNGTYPE is F, enter a vecotr of four values from 0 to 255. This field consists of subfields A, B, C, or D. See table LMRNG for the definition of each frequency. All RCTs that employ frequency selective ringing and are connected to the same SMR must use the same set of frequencies.
SLTINFO		see subfield	Subscriber loop test information. This field consists of subfield SLTMODE.

Field	Subfield or refinement	Entry	Explanation and action
SLTMODE		SLTA, SLTD, NONE	Subscriber loop test mode. Enter SLTA for subscriber line test access, SLTD for subscriber line test digital, or NONE for no testing capability.
LINEAUDT		Y or N	Line audit. Enter Y (yes) for a running audit in the SMR background or manual test mode. Enter N (no) to disable the background audit and stop manual requests of the audit.
			<i>Note:</i> Manual test mode is invoked by the command TST at the LTU or TTU levels of the MAP display.

### **Datafill example**

An example of datafill for table RCTINV follows. The example shows assignments for an RCT that is located at site REM1. The frame designation is 01 and the unit number is 2. The PM administrative number is 1. The RCT links to SMR 9 through SMR ports 17 and 18. The RCT employs frequency selective ringing and SLTA (metallic test access). RCT 2 does not have protection switching. An RCT common equipment audit is enabled from the MAP display with field LINEAUDT.

#### MAP display example for table RCTINV

(	RCTNO	ADNU	M FI	RTYPE FR	NO SHP	OS	FLOC	R F	ROW F	RPOS		LOAD	
			CSPI	MNO	LKINFO				RNG	DATA	SLTI	NFO	
	LINEAU	DT											
	REM1	01 2	1	RTR	29	48	3	2	A		4 NC	_LOAD	-
		SMR		9 (17)	(18)\$		F	20	30	40	50	SLTA	
	Y												

## Table history NA007

Warning message is added to table RCTINV, field LKINFO. The message is displayed when only two DS-1 message links assigned in table RCTINV and both DS-1 message links are assigned to the same host DS-1 pack. In table RCTINV all C-side links can be message links.

#### NA005

Error message was added to indicate that a tuple is being rejected because some part of the SRC registration process failed.

### **Supplementary information**

The following errors and warnings can occur in table RCTINV when datafill protocol is violated.

Both c-side message links assigned to the same XPM interface card. If this card becomes disabled it WILL cause an \*\*\* OUTAGE \*\*\*. Links on the same card include: {0 1}, {2 3}, {4 5}, {6 7}, {8 9}, {10 11}, {12 13}, {14 15}, {16 17}, {18 19}. Each message link should be on a different card.

Action: When datafilling message links in RCTINV, separate the DS-1 message links by a minimum of two slots to ensure that both message links are *not* assigned to the same host DS-1 card. An E1 outage occurs if both message links are assigned to the same faulty card.

CANNOT BE DELETED UNTIL UNASSIGNED FROM VERTICAL ON MTA

Action: Remove an RCT from MTAVERT before adding it to table RCTINV.

WARNING: CHANGING THIS RCT'S SLTMODE REQUIRES IT BE REMOVED FROM TABLE MTAVERT

Action: If an RCT is associated with a vertical in table MTAVERT, remove the RCT from table MTAVERT before changing field SLTMODE in table RCTINV.

ERROR: KEY has already been used KEY RCTNO of type LINE\_MODULE\_KEY must be unique Use different SITE/FRAME/UNIT

Action: Do not add a new peripheral with the same SITE/FRAME/UNIT information as an existing peripheral.

Node has been deregistered from the System Recovery Controller. Attempt a nil change on the tuple to register the node with the SRC.

Action: While attempting to move an existing RCT to a new C-side peripheral (SMS or SMSR), if corruption of the node's C-side dependency occurs and the

## RCTINV (end)

node is deregistered from the system recovery controller (SRC), the tuple is rejected. Attempt a nil change on the tuple to register the node with the SRC.

## RCUALRMS

#### Table name

Remote Carrier Urban Alarms Table

## **Functional description**

Table RCUALRMS contains a list of 12 spare alarm codes and text strings for each remote carrier urban (RCU). The specified text strings appear in log reports and on MAP displays when the problems they describe occur. The following information appears in table RCUALRMS:

- The site name of the remote location (as assigned by the user) is listed. This site name, which must also exist as an entry in table SITE, has no default value and must be datafilled.
- The frame number is listed. This is a logical number used to map the RCU in memory.
- The unit number is listed. This is a logical number used to map the RCU in memory. Each RCU has a unit number.
- The spare alarm code is listed. This is a value from 120 to 131 that corresponds to a particular spare alarm.
- The alarm text is listed. Alarm text consists of either a default or customer-assigned text string that is associated with the alarm. The default text strings appear in table Table , "Alarm default text strings" on page -472. Enter the string NIL\_TEXT in table RCUALRMS to obtain these defaults.

Code	Category	Default text	Alarm description
1 20	Major	Open door	Spare 1 or open door
1 21	Major	Low battery voltage	Spare 2 or low battery voltage
1 22	Major	Temperature alarm	Spare 3 or temperature too high or low
1 23	Major	Blown fuse or TSU failed	Spare 4, fuse on QPP373 blown, or timing supply unit failed
1 24	Major	Loss of power or AC rectifier failed	Spare 1, AC rectifier failed, or loss of commercial power

Alarm default text strings (Sheet 1 of 2)

### **RCUALRMS** (continued)

Code	Category	Default text	Alarm description
1 25	Major	Blown fuse or bypass breaker alarm	Spare 2, fan or actuator fuse, or bypass breaker operation alarm
1 26	Major	Spare 3 alarm	Spare 3
1 27	Major	Spare 4 alarm	Spare 4
1 28	Major	Spare 5 alarm	Spare 5
1 29	Major	Spare 6 alarm	Spare 6
1 30	Major	Spare 5 alarm	Spare 5
1 31	Major	Spare 6 alarm	Spare 6

#### Alarm default text strings (Sheet 2 of 2)

Consider the following when datafilling table RCUALARMS:

- Entering a tuple in table RCUINV results in the allocation of a tuple in table RCUALRMS. Similarly, deletion of a tuple in table RCUINV results in the deletion of the corresponding tuple (as identified by the RCU) from table RCUALRMS. Tuples cannot be added to or deleted from table RCUALRMS directly.
- All spaces must be represented by underscores in any text string entered into table RCUALRMS. The underscores are replaced with spaces before being displayed. If underscores are not used, the text display is truncated at the first blank. For example, SMOKE\_DETECTED appears as SMOKE DETECTED, but SMOKE DETECTED appears as SMOKE.
- Initially, all spare alarms are set with the text string NIL\_TEXT. When NIL\_TEXT is associated with a spare alarm, the default text string is used for that alarm.
- Up to 25 unique text strings can be entered in table RCUALRMS (using the same unique string for multiple RCU modules counts as one unique string).
- Spare alarm text strings entered in table RCUALRMS must be between 1 and 16 characters in length.

The following errors and warnings can occur when datafill protocol is violated:

STORE UNAVAILABLE FOR MORE UNIQUE ALARM TEXTS. CHECK EXISTING TEXTS IN TABLE

## RCUALRMS (continued)

The system prevents the assignment of another unique spare alarm text string in table RCUALRMS when the maximum of 25 have already been assigned.

ADDITIONS/DELETIONS NOT ALLOWED IN RCUALRMS

Tuples cannot be added to or deleted from table RCUALRMS; they can only be updated.

### **Datafill sequence and implications**

Table DRCUINV must be datafilled before table RCUALRMS.

### Table size

Each RCU spare alarm text string requires eight words of memory. Since 25 unique alarm texts can be entered in table RCUALRMS and two words are required for a protected text counter and string range type, the maximum store required for the table is 202 words of memory.

### Datafill

The following table lists datafill for table RCUALRMS.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RCUNO		see subfields	Remote carrier urban number
			This is the key field of the table. It uniquely identifies each RCU entry. This field consists of subfields SITE, FRAME, and UNIT.
	SITE	alphanumeric (4 characters)	Site
			Enter the site name to indicate the location of the RCU. The first character of the site name must be alphabetic, and the site name must exist in table SITE.
			No default value exists for this field.
	FRAME	0 to 511	Frame
			Enter the logical frame number of the RCU.
	UNIT	0 to 9	Unit
			Enter the logical unit number of the RCU.

## RCUALRMS (continued)

Field	Subfield or refinement	Entry	Explanation and action
RCUSPALM		see subfields	Remote carrier urban spare alarm
			This field is a vector of up to 12 multiples of subfields ALMCODE and TEXT. Datafill subfields ALMCODE and TEXT to assign each spare alarm.
			Enter + in the CONTMARK subfield if additional subfield multiples follow on the next line. Enter \$ in the CONTMARK field following the last ALMCODE and TEXT entries.
	ALMCODE	120 to 131	Alarm code
			Enter the alarm code corresponding to a spare alarm.
	TEXT alphanumeric	Alarm text string	
		(vector of up to 16 characters)or NIL_TEXT	Enter a text string for the specified alarm code. Use underscores instead of blanks to avoid truncation of the text after the first blank. To use the default text string, enter NIL_TEXT.
CONTMARK		+ or \$	Continuation mark
			Enter + if additional information for this vector is contained in the next record. Otherwise, enter \$ to indicate the end of the vector.

#### Field descriptions (Sheet 2 of 2)

### **Datafill example**

The following is an example datafill for table RCUALRMS.

- The RCU is RCU0 00 0.
- Two spare alarms are assigned to this RCU.
- The first alarm uses the default text string associated with alarm code 120. The default text string for this code is OPEN DOOR.
- The second alarm has the customer-assigned text FLOODING.

## RCUALRMS (end)

### MAP display example for table RCUALRMS

R	CUNO			RCUSPALM	
RCU0 0	0 0	(120	NTT TEVE) (101		
		(120	NIL_TEXT) (121	FLOODING)Ş	

## RCUINV

### Table name

Remote Carrier Urban Inventory Table

## **Functional description**

Table RCUINV contains an inventory of remote carrier urban (RCU) modules attached to a DMS-100 switch and information on each RCU.

## **Datafill sequence and implications**

The following tables must be datafilled before table RCUINV.

- LTCINV
- LTCPSINV
- SITE

The subscriber carrier module-100 urban (SMU) to which the RCU attaches must be datafilled in table LTCINV. P-side ports of the SMU must be datafilled as DS-1 links in table LTCPSINV. The site name assigned to the host or remote switching unit must be datafilled in field NAME in table SITE.

### Table size

0 to 253 tuples (for NT40)

0 to 1000 tuples (for SuperNode)

Table RCUINV is initially set to 0 (zero) tuples. When the first tuple is entered, the DMS system automatically allocates memory for 20 entries. Each RCU requires 96 words of data store. When tuples are changed and data is added to, or deleted from table RCUINV, static data must be updated in the SMU.

## Datafill

The following table lists datafill for table RCUINV.

#### Field descriptions for table RCUINV (Sheet 1 of 8)

Field	Subfield or refinement	Entry	Explanation and action
RCUNO		see subfields	Remote carrier urban number. This is the key field of table RCUINV and uniquely identifies each RCU entry. This field consists of subfields SITE, FRAME, and UNIT.
	SITE	alphanumeric( 4 characters)	Site. Enter the site name. Site is the location of the RCU. No default value exists, and the first character of the site name must be alphabetic. The site must be entered in table SITE.
	FRAME	numeric (0 to 511 or 0 to 127)	Frame. Enter the logical frame number (0 to 511 for DMS SuperNode or 0 to 127 for NT40).
	UNIT	numeric (0 to 9)	Unit. Enter the logical unit number of the RCU.
ADNUM		numeric (0 to 4095)	Administrative number. Enter the administrative number associated with a given peripheral module (PM).
FRTYPE		RUB or RUC	Frame type. Enter the frame type of the RCU: RUB or RUC. RCU modules use either a bay-type frame (RUB) or a cabinet-type frame (RUC).
			Any other entry is invalid.
FRNO		numeric (0 to 511)	Frame number. Enter the frame number of the RCU.
SHPOS		numeric (0 to 77)	Shelf position. Enter the shelf position of the RCU.

Field	Subfield or refinement	Entry	Explanation and action
FLOOR		numeric (0 to 99)	Floor. Enter the floor position of the RCU.
ROW		A to HJ to NP to ZAA to HHJJ to NNorPP to ZZ	Row. Enter the row position of the RCU.
FRPOS		numeric (0 to 99)	Frame position. Enter the RCU position within the row.
CSPMNO		see subfields	C-side peripheral module number. This field consists of subfields PMTYPE and EXTPMNO.
	PMTYPE	SMU	Peripheral module type. Enter the type of peripheral module attached to the RCU: SMU (subscriber carrier module-100 urban).
	EXTPMNO	numeric (0 to 127)	Peripheral module number. Enter the SMU number.
CSLNKTAB		see subfields	C-side link table. This field is a vector of up to eight multiples of subfields CSLINK and SMUPORT. If less than eight entries (links) are entered, enter \$ (dollar sign) to indicate the end of the list. At least one link must be entered (a message link). If only two links are added, they must both be message links.
	CSLINK	numeric (1 to 8)	C-side port number. Enter the C-side port number of the RCU corresponding to links 1 through 8 to which the SMU attaches through DS-1 links.
	SMUPORT	numeric (0 to 19)	SMU P-side port number. Enter the P-side port number of the SMU to which DS-1 links attaches to the RCU.

#### Field descriptions for table RCUINV (Sheet 2 of 8)

*Note:* When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types: DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

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Field	Subfield or refinement	Entry	Explanation and action
RNGDATA		see subfield	Ring data. This field consists of subfield RINGTYPE.
	RNGTYPE	C to F	Ring type. Enter the type of ringing employed by the RCU to ring its attached subscriber lines. The RCU supports coded ringing and frequency selective ringing (FSR).
			If all subscribers have plain old telephone service (POTS), enter C or F.
			Enter C for coded ringing and go to field LTA
			Enter F for FSR and datafill refinement FRQUENCY.
			Entries outside the range indicated for this field are invalid.
	FRQUENCY	17, 25, 34, 50, 67, 20, 30, 42, 54, 66, 16, 30, 42, 54, 66, 20, 30, 40, 50, 60	Frequencies. If the entry in subfield RNGTYPE is F, datafill this refinement. Enter four frequencies from one of the sets of frequencies (the line card supports four different frequencies). For example, choose the group containing frequencies 17, 25, 34 50, and 67. Datafill four frequencies from this group, for example, 17, 25, 50, and 67.
			RCU modules connecting to the same SMU that use FSR to ring subscriber lines must us the same frequencies in the same order in which they were datafilled. For example, if a RCU module attached to SMU 5 uses FSR and the datafilled frequencies are 20, 30, 40 50, all other RCU modules connecting to SMU 5 that use FSR ringing must also be datafilled 20, 30, 40, 50 in field FREQUENCIES.

#### Field descriptions for table RCUINV (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
LTA		Y or N	Line test access. Enter Y (yes) if a line test access (LTA) card is present on the power shelf of the RCU. Otherwise, enter N (no).
RLTP		Y or N	Remote line test processor. Enter Y if the card is present in slots 9 and 10 of the RCU's power shelf. This card allows remote line testing and fault reporting through the modem. It also uses the LTA card slot and contains LTA functionality. Otherwise, enter N.
			The default value is N.
RTAC		Y or N	Remote test access card. Enter Y if the remote test access card is present. Otherwise, enter N.
LINESHF1		Y or N	Line shelf 1. Enter Y if line shelf 1 is equipped; otherwise, enter N. If N is entered, links 1 and 2 cannot be datafilled as equipped.
CTRLSHF2		Y or N	Control shelf 2. Enter Y if control shelf 2 is equipped; otherwise, enter N. To equip control shelf 2, line shelf 1 must be equipped. DS-1 links need not be attached to line shelf 1.
			If N is entered, configuration alarms are suppressed for CE cards (CP extension, switch, digroup, and supervisory), and links 7 and 8 cannot be datafilled as equipped.

#### Field descriptions for table RCUINV (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
LINESHF2		Y or N	Line shelf 2. Enter Y if line shelf 2 is equipped. Otherwise, enter N. To equip line shelf 2, control shelf 2 must be equipped. DS-1 links need not be attached to control shelf 2.
			If N is entered, configuration alarms for the digroup cards are suppressed and links 1 and 2 cannot be datafilled as equipped.
SSM1		Y or N	Special service module 1. Enter Y if special service module (SSM) 1 is provisioned. This SSM occupies shelf 6 and has a corresponding bus extender equipped to control shelf 1 in slot 1.
SSM2		Y or N	Special service module 2. Enter Y if SSM 2 is provisioned. This SSM occupies shelf 7 and has a corresponding bus extender equipped on control shelf 1 in slot 2.
SYSTMOPT		see subfield	System options. This field consists of subfield SYSOPT.
	SYSOPT	O or S	System options. To specify each system option, enter the letter O and datafill refinements AUTOTEST, INITALRM, FAILSEN, and SSPRI.
			To select system default values, enter S and go to field DRTUTEST.

#### Field descriptions for table RCUINV (Sheet 5 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	AUTOTEST	Y or N	Automatic system testing. If the entry in field SYSOPT is O, datafill this refinement. Enter Y to enable automatic system testing, which executes switchover of RCU common equipment (MP card excluded) and tests RCU line and associated CE cards.
			Enter N to disable automatic system testing. Only switchover of common equipment occurs when testing is invoked.
			The default value is N.
	INTALRM	Y or N	Initialization alarm display. If the entry in field SYSOPT is O, datafill this refinement. Enter Y to enable alarm output to the maintenance card faceplate during initialization. Enter N to disable alarm output.
			The default value is N.
	FAILSEN	Y or N	Failure sensitivity level. If the entry in field SYSOPT is O, datafill this refinement. Enter Y to enable the display of line card alarms (types 1 through 4) produced by the automatic system test.
			The default value is N.
			<i>Note:</i> If field AUTOTEST is set to Y, set field FAILSEN to Y as well.
physical inte links by the r DS30A, or F	erface card. When the number of links on the i PCM-30. Table control	interface card nterface cards. will issue a wa	message links are not assigned to the same supports two or more links, separate the message This applies to all interface link types: DS-1, DS30, rning if an attempt is made to assign message links links to the same interface card can cause an E1

#### Field descriptions for table RCUINV (Sheet 6 of 8)

outage (failure of all message links) if the card fails.

Field	Subfield or refinement	Entry	Explanation and action
	SSPRI	Y or N	Special services priority. If the entry in field SYSOPT is O, datafill this refinement. Enter Y to enable special-service priority. This allows special-service calls to replace POTS calls during channel reassignment. If all DS-1 channels are correctly operating DS-1 links are occupied. Enter N to disable special-service priority.
			The default value is N.
	DRTUTEST	Y or N	Digital remote test unit test. If the entry in field SYSOPT is S, datafill this refinement. Enter Y to enable the digital remote test unit (DRTU) test equipment and datafill refinements DRTURCU and CBCKLEN. Enter N if there is no DRTU equipped on the RCU and go to field LOCATION.
DRTURCU		see subfields	DRTU location. This field identifies the RCU on which the DRTU is equipped and consists of subfields SITE, FRAME, and UNIT.
	SITE	alphanumeric( 4 characters)	Site. Enter the site name. Site is the location of the RCU. No default exists and the first character of the site name must be alphabetic. Site must be entered in table SITE.
	FRAME	numeric (0 to 511 or 0 to 127)	Frame. Enter the logical frame number (0 to 511 for DMS SuperNode or 0 to 127 for NT40).
	UNIT	numeric (0 to 9)	Unit. Enter the logical unit number of the RCU.

#### Field descriptions for table RCUINV (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
CBCKLEN		see subfields	Call back LEN. This field identifies the line circuit (LC) to which the DRTU connects the call back path and consists of subfields SITE, FRAME, UNIT, LSG, and CIRCUIT.
	SITE	alphanumeric( 4 characters)	Site. Enter the site name. No default exists and the first character of the site name must be alphabetic. Site must be entered in table SITE.
	FRAME	numeric (0 to 511 or 0 to 127)	Frame. Enter the logical frame number (0 to 511 for DMS SuperNode or 0 to 127 for NT40).
	UNIT	numeric (0 to 9)	Unit. Enter the logical unit number.
	LSG	numeric (0 to 23)	Line subgroup. Enter the number of the line subgroup.
	CIRCUIT	numeric (0 to 31)	Line card circuit number. Enter the line card circuit number of the line subgroup where the card is assigned.
LOCATION		alphanumeric (up to 32 characters)	Location. Enter the remote location (or address) of the RCU in the DMS-100 switch.

#### Field descriptions for table RCUINV (Sheet 8 of 8)

*Note:* When datafilling field CSLNKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. This applies to all interface link types: DS-1, DS30, DS30A, or PCM-30. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

## **Datafill example**

An example of RCU assignment in table RCUINV follows.

The first part of the entry is the site, which is not optional in this case because remotes are involved.

Next in the entry is the frame, which is a number between 0 and 511. This frame number is logical and does not refer to an actual frame occupied by the

RCU. In this example, the frame number is 01. Following the frame number is the unit field. In this example, it is 0 (zero).

The next six entries show the physical location of the RCU: frame type and number, RCU shelf, floor, row, and row position. This is physical location information and fields such as row or floor are often not relevant.

Following the location fields, fields PMTYPE and PMNO show that the RCU connects to the SMU 60.

Field CSLNKTAB shows that RCU links 1 through 8 connect to the SMU. The SMU P-side ports to which these links connect are shown.

The RCU employs coded ringing and has an LTA card. Line shelves 1 and 2 and control shelf 2 are provisioned. The standard system options are used.

The location is MER.

*Note:* Except for SSPRI, these system options require the maintenance card.

The following example shows sample datafill for table RCUINV.

RCUNO	ADNUM	FRTYPE	FRNO	SHPOS	FLOOR	ROW	FRPOS		CSPMNO		
CSLNKT	ГАВ		DMOD							a	
SSM1			RNGDA	ATA LT	A RLTP	RTAC	: LINES.	HFI C	TRLSHF2 LINE	SHFZ	
SSM2 SYSTMOPT DRTUTEST											
	LOCATION										
									HOST	01 0	
0 RUE	з 0 (	0 0 A	0								
SMU	60										
(1 1)	(22)	(33)	(44)	(55)	(66)	(77	7) (8 8	) \$			
				С	у ү	2	<u>C</u>	Y	Y	Y	
Ν											
Ν		S					N				
					MER						

#### MAP display example for table RCUINV

### Table history NA007

AUU/

Added a warning note to table RCUINV on datafilling field CSLNKTAB. A message is displayed by table control if an attempt is made to datafill multiple message links that are assigned to the same interface card.

#### NA005

Error messages were added to indicate that a tuple is being rejected because some part of the system recovery controller (SRC) registration process failed.

#### BCS36

Field LOCATION was added to table RCUINV in accordance with feature AF4935 (TA RCUINV: New Tuple for Equipment Location). Additional error and system response messages were added in accordance with feature AF4252 (ESMV ISDV SPECCOVV Link Reconfiguration).

### Supplementary information

This section provides information on datafilling table RCUINV for specific applications, and product descriptive information related to table RCUINV.

If the RCU or one of its dependencies fails to register with the SRC, the following error message appears. The tuple is rejected because there are no adequate means of recovering nodes that are not registered with the SRC during restarts and SWACTs.

Could not register the RCU to the system recovery controller

If a failure occurs in the SRC while attempting to move an existing RCU to a new SMU or ESMU, the following error appears. This message implies that either the dependency on the old SMU could not be deleted or the dependency on the new SMU could not be added. The tuple is rejected.

Could not update system recovery dependency

The following message appears if a failure occurs in the SRC while attempting to move an existing RCU to a new SMU or ESMU. This message indicates that either the dependency on the old SMU could not be deleted or the dependency on the new SMU could not be added. An attempt was made to restore the old dependencies, but that attempt failed. The tuple is rejected and the RCU is deregistered from the SRC because the dependencies are corrupt. Attempt a nil change on the tuple so that an attempt is made to register with the SRC.

The RCU has been deregistered from the System Recovery Controller.

The following error message appears if operating company personnel try to add a new peripheral with the same SITE/FRAME/UNIT information as an existing peripheral:

ERROR: KEY has already been used KEY RCUNO of type LINE\_MODULE\_KEY must be unique Use different SITE/FRAME/UNIT

The following errors and warnings can occur when datafill protocol is violated:

The following message occurs when a switch operator tries to datafill an SMU P-side port against an RCU C-side port, but the SMU port was previously datafilled against another RCU or LDT.

EITHER ANOTHER RCU OR AN LDT IS USING SMU PORT X.

Table LTCPSINV contains DS-1 link information for the RCU. If datafilling link information in table RCUINV, the information must match the information in table LTCPSINV. DS-1 links must be datafilled as such in table LTCPSINV.

ATTEMPT TO ATTACH LINK TO A NON-DS-1 PORT.

The switch operator must datafill at least one message link in table RCUINV. If not, the following message appears:

AT LEAST ONE MESSAGE LINK MUST BE CONFIGURED.

The first message link added to the RCU cannot be deleted.

CANNOT DELETE MESSAGE LINK XX.

Two C-side RCU ports cannot be datafilled against the same SMU P-side port in field CSLNKTAB.

CANNOT ATTACH BOTH LINKS TO THE SAME SMU PORT.

When FSR lines are datafilled in table LNINV for an RCU, the switch operator cannot change the frequencies for that RCU. If an attempt is made to change the frequencies, the following message appears:

CANNOT CHANGE FREQUENCIES WITH FSR LINES ATTACHED.

When FSR or MPDR lines are datafilled in table LNINV for an RCU, the switch operator cannot change the ring type for that RCU. If an attempt is made to change the ring type, the following message appears:

CANNOT CHANGE RNGTYPE WHILE X LINES ARE ATTACHED TO RCU.

Line shelf 1 must be equipped before control shelf 2 can be equipped. DS-1 lines need not be attached to line shelf 1. If an attempt is made to equip control shelf 2 first, the following error message appears:

CONTROL SHELF 2 MAY BE EQUIPPED ONLY IF GROUP 1 LINE SHELF IS EQUIPPED.

The DS-1 link must be placed offline using the MAP command OFFL before adding it to table RCUINV. If not, the following message appears:

DS-1 CARRIER MUST BE OFFLINE TO ADD AN RCU.

The SMU port connected to the first message link (DS-1) added to the RCU must be offline. If not, the following error message appears:

DS-1 CARRIER MUST BE OFFLINE WHEN UPDATING LINK XX.

If the switch operator tried to add a tuple, but the SMU (C-side PM) does not exist as identified in the newly added tuple, the following message appears:

FAILED TO GET INDEX TO C-SIDE PM.

The RCU resides either on a bay-type frame (RUB) or a cabinet-type frame (RUC).

FRAME TYPE MUST BE OF TYPE RUB OR RUC.

Every RCU employing frequency selective ringing and connected to the same SMU must be datafilled with the same frequencies in the same order. If not, the following message appears:

FREQUENCY MISMATCH. ALL RCUS ATTACHED TO THE SAME SMU WITH FREQUENCY RINGING MUST USE THE SAME FREQUENCIES IN THE SAME ORDER. THE FOLLOWING FREQUENCIES WERE USED INSTEAD OF THE ONES ENTERED X X X X.

If the key already exists, indicating that the RCU has already been datafilled in table RCUINV, the following message appears:

KEY ALREADY EXISTS.

The RCU must be placed offline using the MAP command OFFL before deleting the RCU from table RCUINV. If not, the following message appears:

LINES STILL ATTACHED TO RCU.

At least one message link must be datafilled in table RCUINV. The first DS-1 channel of physical DS-1 links 3 and 4 contain message channels.

LINK 3 or 4 MUST BE CONFIGURED.

Control shelf 2 must be equipped before line shelf 2 can be equipped. DS-1 lines need not be attached to control shelf 2.

LINE SHELF 2 MAY BE EQUIPPED ONLY IF GROUP 2 CONTROL SHELF IS EQUIPPED.

The DS-1 links or the RCU module must be manually busied, or the RCU module must be taken offline before changing or deleting DS-1 links in table RCUINV. If not, the following message appears:

LINKS THAT ARE BEING DELETED/CHANGED MUST BE MBSY OR THE RCU OFFLINE/MBSY.

If more than two DS-1 links are datafilled in table RCUINV, both message links must be datafilled because a backup message link must be present.

MUST CONFIGURE BOTH MESSAGE LINKS 3 AND 4 WHEN CONFIGURING TWO OR MORE LINKS.

If changing links from an RCU to another SMU, the RCU must be manually busied or offline, and SMU links (as shown in the table LTCPSINV: P-side ports) must be offline.

NEW LINKS MUST BE OFFLINE AND RCU OFFL/MBSY TO CHANGE CSPMNO. ONLY  $_{\rm XXX}$  RCUs MAY BE ATTACHED TO A PARTICULAR SMU. COUNT EXCEEDED ON SMU XX.

Only C or F can be datafilled for the field RNGTYPE in table RCUINV. If an entry other than C or F is datafilled, the following message appears:

RCU RNGTYPE MUST BE C OR F.

The PMTYPE datafilled in table RCUINV must be SMU. If not, the following message appears:

RCU CAN BE ADDED TO SMU ONLY.

The RCU must be taken offline using the MAP command OFFL before deleting it from table RCUINV. If the RCU is not taken offline, the following message appears:

RCU MUST BE OFFLINE TO DELETE.

The site name must be a remote site name for RCU modules. If not, the following message appears:

SITE DATA INCONSISTENT.

The RCU to be deleted is still assigned to a vertical in table MTAVERT. The RCU must first be disassociated from this vertical before it can be deleted from table MTAVERT. If the RCU is not disassociated from the vertical, the following message appears:

CANNOT BE DELETED UNTIL UNASSIGNED FROM VERTICAL ON MTA.

An RCU that uses a DS-1 link with channels that are end-points on a special-service connection cannot be added to table RCUINV.

SMU PORT PART OF NAILED-UP CONNECTION.

The DMS switch displays the next three errors at different times when the switch operator tries to datafill a tuple in table RCUINV.

The switch operator tries to delete a tuple that was already deleted. If so, the following error message appears:

TUPLE HAS ALREADY BEEN DELETED.

At least one message link must be datafilled in table RCUINV. If not, the following message appears:

THERE MUST BE AT LEAST ONE MESSAGE LINK.

Links (X X) cannot be added to a shelf (Y) that is datafilled as unequipped.

Y MUST BE DEQUIPPED IF LINKS X X ARE CONFIGURED.

If field SSPRI is enabled in table RCUINV, then special-service calls have priority over POTS calls during channel reassignment. Channel reassignment occurs when faults occur on one or more DS-1 links, and the calls are reassigned to free DS-1 channels on properly functioning DS-1 links. Sometimes no free channels exist on properly functioning DS-1 links; when this occurs, special-service calls replace POTS calls if field SSPRI is enabled. The replaced POTS calls are dropped.

WARNING: XX CALLS MAY BE DROPPED IF SSPRI IS ENABLED.

A bus extender cannot be provisioned on an RCU that has lines datafilled in table LNINV for the slot in which the bus extender is to be equipped.

LINES ALREADY DATAFILLED IN SLOT <1, 2>.

Channel units associated with SSMs must be deleted from table LNINV before SSMs can be deleted. If channel units are not deleted, the following message appears:

SSM <1, 2> CHANNEL UNITS MUST BE DELETED IN LNINV.

If operating company personnel datafill fields AUTOTEST and FAILSEN with Y and RCU firmware is pre-RU30, the RCU can make the entire line card line module busy (LMB). Some line cards have two lines. When one line fails the autotest and the card is LMB, both lines will fail. The following FAILSEN warning alerts the personnel to this possibility.

WARNING\*\*lines may be LMBed if FAILSEN is enabled and the RCU firmware version is pre-RU30.

The following message indicates that another request to change the RCU tuple in table RCUINV is currently being processed. The existing request must be processed before a new request can proceed.

ONLY ONE RECONFIGURATION IS ALLOWED. TRY LATER.

The following message indicates that insufficient DSPROT store could be allocated. Check DSPROT store to determine if there is enough memory on the switch. If so, data corruption may have occurred. Collect logs from previous reconfiguration and inform your NT representative.

FAILED TO ALLOCAT CONFIG TABLES

The following message indicates that at least one logical terminal identifier (LTID) is datafilled on the RCU when trying to reconfigure it to a different C-side SMU. In table LTMAP, remove all LTIDs on that RCU.

ALL LTIDS MUST BE REMOVED

The following message indicates that there are insufficient C-side links in the new configuration. Add more links or delete some time-division multiplexing (TDM) or B connections. To determine which connections to delete, use commands QDCH and CTKLOC on the ISDN lines.

NOT ENOUGH RCU CSIDE CAPACITY

The following message indicates that an insufficient number of ISDN signaling group (ISG) channels on the new C-side SMU are available to support all existing TDM connections. Create new ISG basic rate access (BRA) channels on the new C-side SMU.

NOT ENOUGH ISG CHANNELS ARE FREE ON THE NEW SMU

The following messages provide status information to operating company personnel.

The following message indicates that preliminary checks passed and reconfiguration started.

RECONFIGURATION IN PROGRESS MAY TAKE A FEW MINUTES

The following message indicates that reconfiguration to a new SMU is successful. The P-side links of the new SMU must be put into a return to service (RTS) manual busy (ManB) state to return the RCU to service.

\*\*WARNING: MUST RTS NEW PSIDE LINKS TO THE RCUS\*\*

The following error messages indicate software errors:

COULD NOT GET SMU NODE NUMBER DELETION OF NODE FAILED LADD NODE FAILED COULD NOT GET LINK STATUS ADD CARRIER FAILED DELETION OF CARRIER FAILED FAILED TO IDENTIFY C-SIDE PM FAILED TO ASSIGN OFFICE MODULE NUMBER

Two additional rules follow:

- Multiparty divided ringing lines cannot be datafilled on RCU modules that employ frequency selective ringing.
- Lines with FSR cannot be datafilled on RCU modules that employ coded ringing.

If updating table RCUINV, special guidelines must be followed for six of the fields.

#### **Field CSPMNO**

When changing the SMU to which the RCU attaches in field CSPMNO, the RCU must be manually busied (ManB) or offline (OFFL). The DS-1 links on the SMU to which the RCU is being transferred must be datafilled as DS-1 links in table LTCPSINV and they must be OFFL (the state of DS-1 links connecting other RCU modules to this SMU are not affected). DS-1 links are placed offline at the PM level of the MAP display. Use command TRNSLT to list the DS-1 links attached to a module and their states in the MAP display.

Field CSLNKTAB in table RCUINV needs to be updated after the transfer to reflect the new P-side ports of the SMU to which DS-1 links now attach. This is not necessary if both SMU modules used the same P-side port designations. After the update is complete, the SMU (to which the RCU was moved) is busied and returned to service. These actions cause the central control (CC) to send the RCU static data to the SMU. The DS-1 links and the RCU must also be returned to service.

#### Field CSLNKTAB

When datafilling message links in RCCINV, separate links by a minimum of slots equal to the number of links on the interface card. Ensure that both message links are *not* assigned to the same interface card. An E1 outage can occur if both message links are assigned to a card that fails.

The following message indicates that two message links were assigned to the same interface card. Some interface card types can have four or more links per card, requiring assignment separations of four or more.

```
Both c-side message links assigned to the same XPM interface card. If this card becomes disabled it WILL cause an *** OUTAGE ***. Links on the same card include: {0 1}, {2 3}, {4 5}, {6 7}, {8 9}, {10 11}, {12 13}, {14 15}, {16 17}, {18 19}. Each message link should be on a different card.
```

If moving existing DS-1 links within an SMU-RCU subsystem using field CSLNKTAB of table RCUINV, either the links must be ManB, or the RCU must be ManB or OFFL. Additionally, the P-side ports of the new SMU to which the links are being moved must also be OFFL. The shelves to which the links are being moved must also be offcl.

If adding DS-1 links to table RCUINV using field CSLNKTAB, these links must be datafilled in table LTCPSINV as DS-1 links, and they must be OFFL. The shelves to which the links are added must be datafilled as equipped.

When deleting DS-1 links from table RCUINV, the links to be deleted must be ManB. The RCU can remain in-service if the update does not require deleting both message links (DS-1 links 3 and 4); if both message links are deleted, the links must be ManB and the RCU must be ManB or OFFL.

#### Fields RNGDATA and FREQUENCIES

RCU modules that employ FSR and are assigned to the same SMU must be datafilled with the same frequencies in the same order.

### RCUINV (end)

To change field RNGTYPE in table RCUINV, no lines associated with the current ringing type can remain datafilled in table LNINV. For example, when changing field RNGTYPE from F to C, no FSR lines for the RCU can remain datafilled in table LNINV. Similarly, when changing the FREQUENCIES field in table RCUINV, no FSR lines can remain datafilled in table LNINV.

#### Field CTRLSHF2

Control shelf 2 can be equipped only if line shelf 1 is equipped. This does not mean that links need to be attached to line shelf 1.

#### Field LINESHF2

Line shelf 2 can be equipped only if control shelf 2 is equipped. This does not mean that links need to be attached to control shelf 2.

*Note 1:* To avoid configuration alarms, digroup cards are not needed if the associated link is not attached to the shelf. This is true even if the shelf is marked as equipped.

*Note 2:* If changing fields CSLNKTAB, CSPMNO, RNGDATA, or FREQUENCIES of table RCUINV, the following message appears at the MAP terminal after the fields are changed:

WARNING: STATIC DATA NOT UPDATED FOR SMU xx

where

#### ХХ

is the number of the SMU

If static data is not updated, the DMS switch cannot use the changed data. This can impact call processing. To ensure that static data is updated, busy the inactive unit of the SMU and return it to service, execute a warm switch of activity (SWACT), then busy the newly inactive unit of the SMU and return it to service. An alternative is to busy and return to service the entire SMU. A warm SWACT preserves calls that are in the talking state.

# RDTINV

## **Table name**

Remote Digital Terminal Inventory

# **Functional description**

Table RDTINV is a hardware inventory table that allows the end user to datafill remote digital terminals (RDT) and their corresponding integrated digital terminals (IDT) in the DMS-100 switching office. Table RDTINV contains the central control side (C-side) connectivity information and RDT configuration information.

The term *RDT* signifies an intelligent network element that provides an interface from subscriber terminal devices in homes and office buildings to digital transmission facilities at a central switching site.

The following types of RDTs are supported by a DMS-100 switching office.

- S/DMS AccessNode (AccessNode)—a multi-service platform that supports copper-based and fiber-based services side by side. The AccessNode network includes remote fiber terminals (RFT) that support locally switched services, non-locally switched services, and non-switched services.
- multivendor interface (MVI) RDT—a network element that uses an industry-standard TR-303 interface to support copper-based services. This device is also known as a generic time slot management channel (GENTMC) RDT.

In addition to the RDTs defined above, the DMS-100 supports a third type of IDT provisioned in table RDTINV. This IDT is the integrated channel bank (ICB).

• integrated channel bank (ICB)—a communications device that multiplexes voice signals and integrates support of subscriber lines served by D4 channel banks into the SMA2. The ICB supports one to four DS-1 links that terminate directly to the SMA2.

The AccessNode terminates up to 1344 subscriber lines. The MVI RDT terminates up to 2048 subscriber lines. The ICB terminates up to 96 subscriber lines. By using these three IDT connections, traffic on subscriber lines is carried to and from a DMS-100 switching office.

## **Datafill sequence and implications**

The following tables must be datafilled before table RDTINV.

- SITE
- LTCINV
- LTCPSINV
- MTAVERT
- MTAHORIZ

In addition, when an SPM hosts IDTs, the following tables must be datafilled before table RDTINV.

- PMLOADS
- MNPRTGRP
- MNNODE
- MNSHELF
- MNCKTPAK
- MNLINK
- MNHSCARR

### **Table size**

The maximum table size is 1000 IDTs. Only 255 of the 1000 can be RFT or MVI IDTs. Each IDT counts toward the switch limit of 1000 line concentrating devices (LCD). If an office has 1000 IDTs, that office cannot have any other type of LCD (line concentrating module, for example). The 1000 LCD limit applies to devices listed in tables RDTINV, LCMINV, RCSINV, RTCINV, LMINV, and DLMINV.

An SMA supports RFT and MVI IDTs. The SMA does not support ICBs. Because the SMA has only 20 P-side DS-1s, operating company personnel cannot provision an RDT with more than 20 DS-1s.

As SMA2 supports all three types of IDTs. RFT and MVI RDTs support up to 28 DS-1s each. ICB IDTs support one to four DS-1s depending on the value in the LINK\_CAPACITY subfield of the ICB VARTYPE field.

An SMA or SMA2 is limited to 5376 subscriber lines. The SMA and SMA2 is limited to eight RFT or GENTMC RDTs. The eight RFT or GENTMC limit decreases to seven if the SMA or SMA2 uses any DCH cards. The SMA2 supports a maximum of 48 ICBs, subject to line capacity and link availability.

Operating company personnel must consider the P-side port capacity of the SMA2 when engineering the SMA2 with RDTs of type GENTMC, RFT, and ICB together. Refer to section "SMA ICB Links" in the *XPM Translations Reference Manual*, 297-8321-815.

## Signal distribution (SD) points

The operating company specifies a set of eight SD points it prefers to activate for an RDT or a group of RDTs in field SDPOINTS. By entering the names of SD point functions (RDTSD1 through RDTSD8), the operating company dictates the combination of SD points that are activated if an alarm arises on the RDTs. An RDT alarm causes the associated IDT to have an in-service trouble (ISTb) status. At this occurrence, a PM128 log is generated.

The eight SD point functions that indicate the RDT raising the alarm and the three SD point functions that indicate the severity of the alarm being raised must be datafilled in table ALMSD. The scan point function for RDT alarm cut-off must be datafilled in table ALMSC. The three software alarms are datafilled by default by table SFWALARM.

### Allowable test head combinations in subfield TSTHDUSR

The following table lists ten allowable test head combinations for metallic test access (MTA) points in subfield TSTHDUSR. These datafill combinations apply to MTA points for an integrated remote test unit (IRTU) and for a test bypass pair (TBP).

External remote test unit (ERTU) is an MTA point that can only be used for no test trunk (NTT) testing and does not require datafill in subfield TSTHDUSR.

Note: An IRTU cannot be provisioned on an MVI RDT.

	IRTU			
Example	RTU1	RTU2	ТВР	ERTU
1	NTTIF	MAPIF	MAPIF	N/A (not available)
2	BOTH	MAPIF	MAPIF	N/A
<i>Note 1:</i> RTU1 and TBP cannot be used simultaneously because they use the same internal test bus.				
Note 2:	Although three test	heads can be p	provisioned, only	two can be active.

#### Allowable test head combinations for subfield TSTHDUSR (Sheet 1 of 2)

	IRTU			
Example	RTU1	RTU2	ТВР	ERTU
3	MAPIF	NTTIF	MAPIF	N/A
4	MAPIF	BOTH	MAPIF	N/A
5	MAPIF	MAPIF	NTTIF	N/A
6	MAPIF	MAPIF	BOTH	N/A
7			BOTH or NTTIF	N/A
8			MAPIF	Provisioned (NTT only)
9	MAPIF	BOTH or NTTIF		N/A
10	BOTH or NTTIF	MAPIF		
<i>Note 1:</i> RT same internal		not be used sim	ultaneously beca	ause they use the
Note 2: Alth	Although three test heads can be provisioned, only two can be active.			

#### Allowable test head combinations for subfield TSTHDUSR (Sheet 2 of 2)

# Datafill

The following table lists datafill for table RDTINV.

# Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
RDTNAME		see subfields	Remote digital terminal name. This is the key to this table. It is used to uniquely identify the RDT to the system. This field contains subfields SITE, FRAME, and UNIT.
			<i>Note:</i> If an RDT is added to table RDTINV, a corresponding IDT is also created by the DMS switch software. If an RDT is deleted from table RDTINV, the corresponding IDT is also deleted.
	SITE	alphanumeric	Site. Enter the four-character site name assigned to the remote location. This entry should also appear in table SITE.
			Note 1: The SITE cannot be HOST.
			<i>Note 2:</i> Valid SITE names are dependent on the value of parameter UNIQUE_BY_SITE_NUMBERING in table OFCENG.
	FRAME	numeric (0 to 511)	Frame number. Enter the logical frame number of the SMA to which the RDT is connected.
	UNIT	numeric (0 to 9)	Unit number. Enter the logical unit number of the SMA to which the RDT is connected.
	GROUP	numeric (0 to 3)	Group number. Enter the logical group number of the SMA to which the RDT is connected.
ADNUM		numeric (0 to 4095)	Administration number. This field contains the external administrative number associated with a PM, and remains fixed over dump and restore. Enter a numerical value that is unique among all other PMs in an office.

Field descriptions (Sheet 2 of 4)
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Field	Subfield or refinement	Entry	Explanation and action
IDTNAME		see subfields	Integrated digital terminal name. This field identifies the SMA and the IDT to which the RDT is connected. This field contains subfields XPMNAME and EXTIDNO.
			<i>Note:</i> The IDT must be offline to change this field.
	XPMNAME	see subfields	Extended multiprocessor system-based peripheral module (PM) name. This subfield contains subfields XPMTYPE and XPMNO.
	XPMTYPE	SMA, SMA2, SPM	Extended multiprocessor system-based peripheral module type. This subfield identifies the type of PM connected to the RDT. Enter SMA for the subscriber carrier module-100 access. Enter SMA2 for Expanded SMA.
	XPMNO	numeric (0 to 255)	Extended multiprocessor system-based peripheral module number. This subfield identifies the SMA to which the RDT is connected.
	EXTIDTNO	numeric (0 to 999)	External integrated digital terminal number. This subfield identifies the IDT to which the RDT is connected. Enter a number from 0 to 999.
			<i>Note:</i> The IDT cannot be deleted if there are lines attached to it.

Field	Subfield or refinement	Entry	Explanation and action
NENAME		alphanumeric (up to 20 characters) or \$	Network element name. Enter the name of the external operation support system that identifies the RDT. The default value is \$.
			<i>Note 1:</i> This field is datafilled automatically by the system when a maintenance connection to the RDT is established if the entry in field VARTYPE is RFT (remote fiber terminal), and the entry in field EOC is O or S.
			<i>Note 2:</i> Manual datafill is ignored while the maintenance connection is established. Any non-nil changes made to this field result in a warning message. Manual datafill is allowed while the maintenance connection is not established, but any changes are overwritten when the maintenance connection is established.
PRIMOPC		alphanumeric (up to 20 characters) or \$	Primary operations controller identifier. Enter the name of the primary operations controller (OPC) that controls the RDT. The default value is \$ if no OPC controls the RDT.
BACKOPC		alphanumeric (up to 20 characters) or \$	Backup operations controller identifier. Enter the name of the backup OPC for the RDT. The default value is \$ if no backup OPC is available.
		•	<i>Note:</i> Datafill is rejected if the backup OPC is entered without a primary OPC.

## Field descriptions (Sheet 3 of 4)

# Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
VARTYPE		see subfield	Integrated digital loop carrier variant type. This field specifies the type of integrated digital loop carrier.
	RDTVAR	RFT, GENTMC, GENCSC, ICB	RDT variable.
			RFT refers to AccessNode.
			<ul> <li>GENTMC (generic TR-303 timeslot management channel) refers to MVI RDT.</li> </ul>
			GENCSC is not used.
			ICB refers to integrated channel bank
			<i>Note:</i> This field cannot be changed. The tuple must be deleted and added again.

## RDTVAR = RFT

If the entry in subfield RDTVAR is RFT (refers to AccessNode), datafill the following table.

## Field descriptions for conditional datafill RFT

Field	Subfield or refinement	Entry	Explanation and action
RFT	SHELFSLT	see subfields	Remote digital terminal shelf slot. This field consists of subfields MINSHELF, MAX_RDT_SHELF, MINSLOT, and MAX_RDT_SLOT. These subfields are entered as one field when adding tuples individually using the DMS-100 table editor.
			<i>Note:</i> A typical value for SHELFSLT is 1 7 1 96 where 1 is MINSHELF, 7 is MAX_RDT_SHELF, 1 is MINSLOT, and 96 is MAX_RDT_SLOT. The MAX_RDT_SHELF field can be changed to control the RFT line capacity. The other three fields are constants and any attempt to change these fields results in a warning message.
	MINSHELF	numeric (0 to 1)	Minimum shelf value. This subfield specifies the minimum allowable value for the shelf of a line equipment number (LEN). The only allowable value for AccessNode RDTs is 1.
	MAX_RDT_ SHELF	numeric (0 to 31)	Maximum shelf value. This subfield specifies the maximum allowable value for the shelf of a LEN. The range is 0-31. For the RFT, this range is 1-31. The maximum value for AccessNode is 22.
	MINSLOT	numeric (0 to 1)	Minimum slot value. This subfield specifies the minimum allowable value for the slot of a LEN. The only allowable value for AccessNode RDTs is 1.
	MAX_RDT_ SLOT	numeric (0 to 99)	Maximum RDT slot value. This subfield specifies the maximum allowable value for the slot of a LEN. The only allowable value for AccessNode RDTs is 96.
			<i>Note:</i> For the last shelf, MAX_RDT_SLOT has a value of 32 because of the maximum line limit on RDTs/RFTs is 2048.

# **RDTVAR = GENTMC**

If the entry in subfield RDTVAR is GENTMC (refers to MVI RDT), datafill the following table.

Field	Subfield or refinement	Entry	Explanation and action
GENTMC	RDTPPLNK	numeric (0 to 28)	RDT path protection link. This subfield specifies the RDT path protection link. Enter a number from 1 to 28.
	MAXLINES	numeric (0 to 2048)	Maximum number of lines. This subfield specifies the maximum number of lines that an MVI RDT supports. Enter a number from 1 to 2048. In addition, existing RDTs can be upsized or downsized based on engineering requirements.
			Up to eight MVI RDTs having line capacities in the range of 96 to 2048 can be provisioned on an SMA2, or seven RDTs when supporting ISDN.
			When provisioning integrated channel banks (ICB), up to 48 can be provisioned each having a line capacity of 24 lines. The total number of lines for each SMA2 cannot exceed 5376.
			<i>Note 1:</i> It is recommended that line size changes made to RDTs subtending the SMA2 be made in increments of 96 to preclude fragmentation of the terminal identifiers (TID) numbers in the TID table.
			<b>Note 2:</b> When increasing the line capacity of an RDT, refer to the procedure for upsizing an RDT in the appropriate SMA or SMA2 section of <i>Extended Peripheral Module Translations Reference Manual</i>
			<i>Note 3:</i> When decreasing the line capacity of an RDT, verify table LNINV to ensure that the required number of lines are deleted before allowing an update to field MAXLINES. Before deleting a tuple from table LNINV, the lines are cleared from other tables such as IBNLINES, KSETLINE, KSETINV, LENLINES, and SPECCONN. Because of provisioning delays and the condition of the EOC channels, tuples deleted from table LNINV may still be present in table RDTLT, and will need to be checked.

## Field descriptions for conditional datafill GENTMC (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	INHLINE	Y or N	Inherent lines. This subfield specifies whether the MVI RDT supports the creation of the analog and access side of ISDN line instances by entities other than the DMS-100 switch. Enter Y if another entity creates the analog and access side of line instances at the RDT. Enter N if line instances are created by the DMS-100 switch.
	BRIDGING	Y or N	Bridging. Indicates if the ChangeToBridged action is supported by the RDT. The ChangeToBridged action is optional for TR-303 MBS lines. Default value is N.

### Field descriptions for conditional datafill GENTMC (Sheet 2 of 2)

# RDTVAR = ICB

If the entry in subfield RDTVAR is ICB (refers to integrated channel bank), datafill the following table.

#### Field descriptions for conditional datafill ICB

Field	Subfield or refinement	Entry	Explanation and action
ICB			RDT variable. Enter ICB for an integrated channel bank.
	LINK_CAPACITY	1 or 4	Link capacity. This subfield indicates the maximum number of links available to the ICB. The number of links provisioned in LINKTAB cannot exceed LINK_CAPACITY.

# VARTYPE = all entries

For all entries in field VARTYPE, datafill the following table.

## Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CLAPDFLT		see subfield	C-side link access procedure on D-channel default. This field contains subfield CLAPDDEF.
			<i>Note:</i> If "N" is chosen, non-default values can be entered for the TMC LAPD parameters. However, a warning message is displayed along with the default values for the CLAPDPAR subfield when non-default values are entered for the N201 and T200 parameters. If the RDT is to support MBS services, the N201 and T200 values should be changed to the values displayed in the following warning message.
			WARNING: EBS lines will not work on this RDT. For EBS lines to work on this RDT N201 parameter must be >= 52 and T200 parameter must be >=25.
	CLAPDDEF	Y, N, or NA	C-side link access procedure on D-channel default. Enter Y for the use of default access procedures. Otherwise, enter N, and datafill subfield CLAPDPAR for non-standard access procedure parameters. If the ICB variant is datafilled in VARTYPE, enter NA to indicate that a choice of default LAPD parameters does not apply.

## Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	CLAPDPAR	alphanumeric	C-side link non-standard access procedure parameters. Enter the selected link access procedure and complete the refinements identified in the following by entering:
			• N201 and a number from 1 to 256. Selector N201 selects the maximum number of octets allowed in the information field on an information frame. The maximum number is 256.
			<ul> <li>N200 and a number from 1 to 10. Selector N200 selects the maximum number of retransmissions of a pulse frame allowed. The maximum number is 10.</li> </ul>
			• K and a number from 1 to 7. Selector K selects the maximum number of outstanding unacknowledged pulse frames allowed. The maximum number is 7.
			• T203 and a number from 10 to 300. Selector T203 selects the maximum time allowed in minutes without frame pulses being exchanged at transmission end points before a transmission time-out occurs. The maximum time between frame pulses is 300 ms.
			• T200 and a number from 100 to 350. Selector T200 selects the maximum time in milliseconds that a data link layer entity waits for an acknowledgement of a transmitted pulse frame. The maximum time is 350 ms.

Field	Subfield or refinement	Entry	Explanation and action
MTSTACPT		TBP, ERTU, IRTU, \$	Metallic test access point. This field specifies the types of MTA points configured on the RDT. A maximum of six metallic test access points is available for each RDT (although only three can be datafilled). The entries for this field include:
			TBP (test bypass pair)
			ERTU (external remote test unit)
			IRTU (integrated remote test unit)
			\$ (no entry, or stopping)
			<i>Note 1:</i> AccessNode supports all three available MTA points. MVI RDT supports only TBP and ERTU.
			<i>Note 2:</i> MAP terminal testing is provided by TBP or IRTU. NTT testing can use one of the three available MTA points.

#### Field descriptions (Sheet 3 of 4)

### Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			It is possible to have two different test heads accessing the AccessNode at the same time. (Three test heads can be provisioned, but only two can be active.) The following combinations are possible:
			TBP individually
			MAP terminal and NTT testing are performed over the TBP.
			ERTU individually
			Only NTT testing is performed over the ERTU.
			IRTU individually
			One or both test heads are defined; only one test head can be defined for NTT use.
			TBP with ERTU
			TBP provides MAP terminal testing; ERTU provides NTT testing.
			TBP with IRTU
			RTU1 and RTU2 can be used with TBP.
			<i>Note:</i> RTU1 and TBP cannot be used simultaneously because they use the same internal test bus.

# MTSTACPT = TBP

The TBP entry allows the MTA to bypass maintenance trunk module (MTM) test heads or to connect to NTT access. NTT access requires a horizontal cross-connection at the MTA.

# If the entry in field MTSTACTP is TBP, datafill the following table.

#### Field descriptions for conditional datafill TBP

Field	Subfield or refinement	Entry	Explanation and action
ТВР		see subfields	Test bypass pair. This selector identifies the MTA point that is configured to supply metallic test bypass for MTM-based test heads or NTT access that requires a horizontal cross-connect at the MTA. This selector contains subfields TSTHDUSR, VERTID, TSTACCPA, and SCSDUSED.
	TSTHDUSR	MAPIF, NTTIF, BOTH	Test head user. This subfield is used to identify which test system (MAP, NTT or BOTH) uses the test head.
			<i>Note:</i> Refer to "Allowable test head combinations for subfield TSTHDUSR" earlier in this section for a listing of the possible test head combinations for TBP access.
	VERTID	numeric (0 to 1023)	Vertical identifier. (This subfield replaces the VERTID section of the prompt PT_CONNECTION_INFO.) Enter the number that represents the vertical in the MTA matrix where the control path is tied.
	TSTACCPA	TAP1, TAP2, TBPP	Test access path. For MVI RDT, enter TAP1 (test access point 1). For AccessNode, enter TBPP (test bypass pair point).
			<i>Note:</i> TAP1 and TAP2 are four-wire interfaces; TBPP is a two-wire interface.
	SCSDUSED	Y or N	Scan point/signal distributor (SD/SD) point used. Enter Y if SD/SD points are used and provide the multiple containing:
			INHSCGRP—point range of 0 to 511
			INHSCPT—point range of 0 to 6
			INHSDGRP—point range of 0 to 511
			INHSDPT—point range of 0 to 6
			Otherwise, enter N.

# MTSTACPT = ERTU

If the entry in field MTSTACTP is ERTU, datafill the following table.

#### Field descriptions for conditional datafill ERTU

Field	Subfield or refinement	Entry	Explanation and action
ERTU		see subfields	External remote test unit. This field identifies an external metallic test head on the RDT for NTT testing. This selector is compatible with the TBP selector, which is used for MAP terminal testing. This selector contains subfields VERTID, TSTACCPA, and SCSDUSED.
	VERTID	numeric (0 to 1023)	Vertical identifier. Enter a number that represents the vertical identifier in the MTA matrix where the control path is tied.
	TSTACCPA	TAP1, TAP2, TBPP	Test access path. For MVI RDT, enter TAP1. For AccessNode, enter TAP1, TAP2, or TBPP.
			<i>Note:</i> TAP1 and TAP2 are four-wire interfaces; TBPP is a two-wire interface.
	SCSDUSED	Y or N	Scan point/signal distributor point used. Enter Y if SD/SD points are used and provide the multiple containing:
			INHSCGRP—range of 0 to 511
			INHSCPT—range of 0 to 6
			INHSDGRP—range of 0 to 511
			INHSDPT—range of 0 to 6
			Otherwise, enter N.

# MTSTACPT = IRTU

If the entry in field MTSTACTP is IRTU, datafill the following table.

## Field descriptions for conditional datafill IRTU (Sheet 1 of 2)

[			
Field	Subfield or refinement	Entry	Explanation and action
IRTU		see subfields	Integrated Remote Test Unit. This selector identifies an IRTU on the RDT for NTT or MAP testing. This field contains subfields RTUNUM, TSTHDUSR, TSTACCPA, and SCSDUSED.
	RTUNUM	RTU1 or RTU2	RTU number. This subfield is used to determine which test head on the IRTU is to be defined.
	TSTHDUSR	NTTIF, MAPIF, BOTH	Test head user. This subfield identifies which test system (MAP, NTT or BOTH) uses the test head. Depending on which test head user is entered, subfields ALTUSE and VERTID must be datafilled.
			<i>Note:</i> Refer to "Allowable test head combinations for subfield TSTHDUSR" for a listing of the possible test head combinations for IRTU access.
	ALTUSE	Y or N	Automatic line test (ALT) use. Enter Y to use the IRTU for ALT; otherwise, enter N. ALTUSE is required if TSTHDUSR is MAPIF or BOTH.
	VERTID	numeric (0 to 1023)	Vertical identifier. (This subfield replaces the VERTID section of the prompt PT_CONNECTION_INFO.) Enter a number that represents the vertical in the MTA matrix where the control path is tied. VERTID is required if TSTHDUSR is NTTIF or BOTH.

Field	Subfield or refinement	Entry	Explanation and action
	TSTACCPA	TAP1 or TAP2	Test access path. RTU1 is connected to TAP1. RTU2 is connected to TAP2.
			<i>Note:</i> TAP1 and TAP2 are four-wire interfaces.
	SCSDUSED	Y or N	Scan point/signal distributor point used. Enter Y if SD/SD points are used and provide the multiple containing:
			INHSCGRP—range of 0 to 511
			INHSCPT—range of 0 to 6
			INHSDGRP—range of 0 to 511
			INHSDPT—range of 0 to 6
			Otherwise, enter N.

# Field descriptions for conditional datafill IRTU (Sheet 2 of 2)

# **MTSTACPT** = all entries

For all entries in field MTSTACPT, datafill the following table.

### Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
NTTOPT		Y or N	No test trunk signature option. This field indicates whether the no test trunk (NTT) direct current (dc) voltage signature is enabled for a particular RDT. If the value is "Y", then the dc signature for POTS, coin, and multi-party lines will be provided; otherwise, the signature will not be provided for any of the line types.
			<b>Note:</b> When the NTTOPT field is datafilled as "N" or changed to "N", the following message is output at the MAP terminal:
			NTT signature will not be provided during line maintenance.
LINKTAB		see explanation	Link assignment table. This is a vector, with up to 20 entries, that defines the mapping of the C-side links of the RDT (logical link) to the P-side links (physical link) of the SMA. This field contains subfields RDTLINK and XPMLINK and is entered as one entry.
			If LINK_CAPACITY is equal to four, operating company personnel can enter up to four entries for ICBs.
	RDTLINK	numeric	Remote digital terminal link number. Enter an
		(1 to 28)	RDT link number from 1 to 28.

interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

<b>Field descriptions</b>	(Sheet 2 of 5)
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Field	Subfield or refinement	Entry	Explanation and action
	XPMLINK	numeric (0 to 181)	Extended multiprocessor system-based peripheral module link number. Enter an XPM link number. Up to 20 RDT XPM link pairs can be datafilled. (However, DCH provisioning in table LTCPSINV reduces the number of XPMLINK pairs available.) Use values greater than 47 only if an SPM hosts the link.
			<b>Note:</b> If the P-side DS-1s added to this field do not have Extended Superframe Format (ESF) framing, and the entry in field VARTYPE is GENTMC, an error is displayed.
PROT		Y or N	Facility protection switching. Specifies whether protection switching is supported. Enter N. (An entry of Y is not supported.)
POTSPAD G		STDLN, UNBAL	POTS pad group. The acceptable values are UNBAL and STDLN.
EOC		see subfields	Embedded operations channel. This field specifies whether EOC is present, and whether standard or LAPD parameters are used. This field contains subfields EOCTYPE and ELAPDPAR.
			<i>Note:</i> The IDT and the channel must be offline to be changed.
	-		sage links are not assigned to the same physical

**Note:** When datafilling field LINK I AB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

Field	Subfield or refinement	Entry	Explanation and action	
	EOCTYPE	S, O, or N	EOC type. This subfield specifies whether EOC is present, and whether standard or optional LAPD parameters are used. Enter one of the following:	
			S for standard LAPD parameters	
			<ul> <li>O for optional LAPD parameters. Subfield ELAPDPAR must be datafilled.</li> </ul>	
			<ul> <li>N for no EOC channel, as in the case of the ICB</li> </ul>	
			For ICB configurations, the value of EOC is "N".	
			<i>Note:</i> The LAPD parameters of the EOC/CSC can be changed when the IDT and the channel are manually-busied or offline.	
	ELAPDPAR	N201, N200, K, T203, T200	EOC parameters. This subfield appears when O is entered in subfield EOCTYPE. Specify the optional LAPD parameters. Enter five values, with a space between each value.	
			• N201 and a number from 1 to 256	
			• N200 and a number from 1 to 10	
			• K and a number from 1 to 7	
			• T203 and a number from 10 to 300	
			• T200 and a number from 100 to 350	
interface of number of assign me	<b>Note:</b> When datafilling field LINKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.			

## Field descriptions (Sheet 3 of 5)

<b>Field descriptions</b>	(Sheet 4 of 5)
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Field	Subfield or refinement	Entry	Explanation and action		
SDPOINTS		RDTSD1, RDTSD2, RDTSD3, RDTSD4, RDTSD5, RDTSD6, RDTSD7, RDTSD8	Signal distribution point. Enter the SD point that corresponds to this RDT. There is a maximum of 255 different combinations of activated SD points to indicate that the RDT is raising an alarm. This field can be used to group RDTs together by assigning the same points to multiple RDTs.		
			<b>Note:</b> Each of the SD points must first be datafilled in table ALMSD (Alarm Signal Distributor Point). If field SDPOINTS is set to \$ (nil) to indicate that no SD points for RDT alarms are datafilled, the SD points that indicate alarm severity (RDTCRIT, RDTMAJOR, RDTMINOR) are not activated.		
RDTDN		see subfields	RDT distinguished name. This is a vector of one to four elements for the RDT_RDN. Each element represents a relative distinguished name (RDN) for the RDT.		
<b>Note:</b> When datafilling field LINKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.					

ield	Subfield or refinement	Entry	Explanation and action	
	RDN_TYPE	NETWORK_ID, SYSTEM_ID,	Relative distinguished name. Enter the RDN o the RDT. The range of values is as follows:	
		NETWORK ELEMENT ID,	NETWORK_ID	
		EQUIPMENT_ID	SYSTEM_ID	
			NETWORKELEMENT_ID	
			EQUIPMENT_ID	
			For MVI IDTs, use only NETWORK_ID and NETWORKELEMENT_ID. For RFT RDTs, use all four types. For ICB IDTs, leave the RDTDN field empty.	
			<b>Note 1:</b> For RFT IDTs, make sure that the NETWORKELEMENT_ID matches the value in the RDT or the maintenance connection does not establish.	
			<i>Note 2:</i> For an AccessNode RDT of type RFT the NETWORK_ID, SYSTEM_ID, and EQUIPMENT_ID values must be set to 1 to correspond to the values on the RFT. If the values in this table are not set to 1, a warning message is displayed and the values are automatically reset to 1.	
			<i>Note 3:</i> For MVI IDTs, operating company personnel can change the NETWORK ELEMENT_ID with no side effects. For RFT IDTs, the IDT must be OffL or both EOCs must be ManB before a change to NETWORK ELEMENT_ID.	
	RDN_VAL	numeric	Relative distinguished name value. Enter the	
		(0 to 32 767)	numerical value for the RDN.	

#### Field descriptions (Sheet 5 of 5)

*Note:* When datafilling field LINKTAB, ensure message links are not assigned to the same physical interface card. When the interface card supports two or more links, separate the message links by the number of links on the interface cards. Table control will issue a warning if an attempt is made to assign message links on the same interface card. Assigning message links to the same interface card can cause an E1 outage (failure of all message links) if the card fails.

# **Datafill example**

The following example shows sample datafill for table RDTINV.

MAP display example for table RDTINV

(					
RDTNAME	ADNUM	IDTNAME		NENAME	
	PRIMOPC		BACKOPC		
VARTYPE			CLAPDFLT	MTSTACE	ንጥ
NTTO	OPT			MIDIACE	T
				LINKTA	٩Β
PROT	POTSPADG		EOC		
				SDPOINT RDTD	
				KDIL	/11
AN07 00 0	26	SMA 4	7 R07_XTLM	OPCM301	
	\$			\$	
	RFT 1 7 1 96 Y			م. \ d	
(IRTU RTU Y	J1 MAPIF Y TAP1	N) (IRTU RTU	Z MAPIF N TAPZ	N)Ş	
-			(1 2) (2 0	) (33) (41)	\$
Ν	STDLN	S			
				204)	\$ \$
(NETWORK	ID 1) (SYSTEM	T) (NELW	ORKELEMENT_ID	304)	Þ

# Table history

# SN06 (DMS)

Additional error condition statement added by Q00773480.

# SP14

The following changes were made for feature 59012232.

- Increased from 47 to 181 the maximum value for the XPMLINK field.
- Added SPM to the values for the XPMTYPE field.
- Added eleven additional error messages to the supplemental information section.
- Added a list of SPM provisioning tables to the datafill sequence and limitations section.

# NA012

Added field LINK\_CAPACITY for the integrated channel bank.

### NA010

The following changes were made to table RDTINV:

- changed the number of lines the S/DMS AccessNode supports
- changed the allowable values for subfields MAX\_RDT\_SHELF and MAX\_RDT\_SLOT in field RDTVAR, subfield SHELFSLT

#### NA008

The following changes were made to table RDTINV:

- added information about resizing RDTs and adding ICBs in subfield MAXLINES
- added information about LAPD parameters to support EBS lines in field CLAPDFLT
- added new subfield BRIDGING to indicate RDT "ChangedToBridged" support for MBS lines for MVI RDTs
- added new field NTTOPT to enable the no test trunk direct current (dc) voltage signature
- removed reference to system limit of 240 RFTs. The correct limit is 255 RDTs, whether they are MVI RDTs or RFTs.

### NA007

Added a warning to table RDTINV, field LINKTAB, subfield XPMLINK to indicate that an E1 outage can occur when both DS-1 message links are assigned to the same interface card.

### NA005

The following changes were made to table RDTINV:

- added error message to indicate that a tuple is being rejected because some part of the system recovery controller (SRC) registration process failed
- removed restriction from subfield ALTUSE (field MTSTACPT) requiring the entry for the second RTU test head to be N

### NA004

The following changes were made to table RDTINV:

- added entry SMA2 to subfield XPMTYPE
- added refinement GENTMC and its refinements to subfield RDTVAR
- expanded range for MAXLINES to include up to 2048 lines for refinement GENTMC

- increased range of subfield XPMLINK to 47 link numbers
- added error and warning messages to Supplementary information section

#### BCS36

The following changes were made to table RDTINV:

- added field ADNUM
- deleted field SID and replaced it with field NENAME, and added fields PRIMOPC and BACKOPC
- added field POTSPADG
- added note to field XPMLNK

#### BCS35

Field SDPOINTS was revised.

### Supplementary information

This section provides information on datafill error messages for table RDTINV.

#### **Datafill error messages**

If the IDTNAME field does not contain either SMA, SMA2, or SPM, the following error message is displayed:

Error: IDT Host must be of the type SMA, SMA2, or SPM.

If the VERTYPE field is ICB and the IDTNAME field is neither SMA2 nor SPM, the following message is displayed.

Error: IDT Host must be of type SMA2 or SPM for ICB IDTs.

If table MNHSCARR does not contain entries matching the SPM number in the IDTNAME field and the XPMLINK number in the LINKTAB field, the following message is displayed:

 $\operatorname{Error}$  SPM nn XPMLINK yyy (CCTNO in table MNHSCARR) was NOT found.

Note: "nn" and "yyy" vary depending on actual datafill.

If the IDTNAME field is SPM and the XPMLINK number in the LINKTAB field is not of the correct type (DS1P), the following message is displayed:

Error: Invalid link. SPM nn XPMLINK yyy (CCTNO in table MNHSCARR) much have CARRTYPE of DS1P.

*Note:* "nn" and "yyy" vary depending on actual datafill. "nn" is the SPM number, and "yyy" is the link number of the SPM.

If the SPM number (0 to 63) for a given SPM node number (0 to 4095) canot be found in the SPM OAM database, the following message is displayed:

Error: Inconsistent MNNODE table data found when translating SPM nn to it's internal SPM OAM database index. Consult SWERR Logs.

*Note:* "nn" varies depending on actual datafill. "nn" is the SPM number.

If the number of lines exceeds the allowed maximum value of 21504, the following message is displayed:

Error: Cannot have more than 21504 lines for this SPM.

If the class type of the SPM cannot be determined, the following message is displayed:

Error: Could not determine CLASS type for SPM nn.

Note: "nn" varies depending on actual datafill. "nn" is the SPM number.

If the SPM specified in the IDTNAME field does not have a class type of DMSCP indicated in table MNNODE, the following message is displayed:

Error: Invalid SPM type. SPM nn must have a CLASS type of DMSCP in table MNNODE to host IDTs.

Note: "nn" varies depending on actual datafill. "nn" is the SPM number.

The following message will be displayed during provisioning if the IDT cannot be successfully registered with the CPP subsystem. The CPP subsystem reroutes call processing messages to IDTs subtending SPM nodes.

Error: Failed to register IDT with CPP.

The following message will be displayed during provisioning if the IDT cannot be successfully de-registered with the CPP subsystem.

Error: Failed to deregister IDT from CPP.

If there is no available protected memory store to allocate for SMALINKMAP in IDT\_INFO\_TYPE, the following message is displayed:

Error: NO STORE for IDT HOST LinkMap DATA BLOCK.

The following warning message is displayed on the MAP (maintenance and administration position) terminal if field LINKTAB, subfield XPMLINK is a DS-1 link (0-19) and the first two links (messaging links) are on the same DS-1 pack. An E1 outage occurs if both message links are assigned to the same faulty card.

```
Both c-side message links assigned to the same XPM interface card. If this card becomes disabled it WILL cause an *** OUTAGE ***. Links on the same card include: {0 1}, {2 3}, {4 5}, {6 7}, {8 9}, {10 11}, {12 13}, {14 15}, {16 17}, {18 19}. Each message link should be on a different card.
```

The following warning message is displayed on the MAP terminal if the dynamic static data downloads fail:

Warning: Additional static data not updated for SMA 0

where

SMA is SMA or SMA2 0 is 0 or 1

The following error message is displayed on the MAP terminal if an attempt is made to change LAPD parameters or field EOCTYPE while the IDT is system busy (SysB):

```
Error: IDT # is SysB
```

where

#### #

is an IDT number

#### SysB

is the IDT state

If the IDT has only one link, and field PROT is set to Y, the following error message is displayed on the MAP display:

Error: Cannot have PROT link: IDT # has only one link

If dynamic static data updates complete, the following message is displayed on the MAP display:

Additional Static data updates completed for <PM type>

where

#### <PM type> is SMA or SMA2

If static data in the PM is updated on only one SMA unit, or link changes are attempted while the PM is in service, error messages are displayed on the MAP terminal as follows:

Static data update required for SMA 0 UNIT 0 Static data update required for SMA 0 UNIT 1

The following warning message is displayed on the MAP terminal if field ALTUSE is changed from Y to N:

Warning: ALL ALT test streams expecting to use the previously defined &\$ will no longer run. Redefine the scheduled ALT tests.

where

&\$

is RTU1, RTU2 or TBP

The following warning message is displayed on the MAP terminal if field ALTUSE is changed from N to Y:

Warning: Previously defined ALT tests will not make use of this LTE until these ALT tests have been redefined.

The following warning message is displayed on the MAP terminal if an attempt is made to use RTU1 and TBP simultaneously:

Warning: TBP and RTU1 cannot be used to run simultaneous test.

The following error message is displayed on the MAP terminal if adding or updating the RDTINV entry fails because the request for nail-up of the SMA DCH channels and the RDT CSC, TMC or EOC channels has failed:

Error: Nailup of CSC/TMC/EOC channels failed

The following error message is displayed on the MAP terminal if tuple deletion was performed. Removal of the nail-up connection between the RDT CSC, TMC, or EOC channels and the SMA DCH channels failed:

Error: CSC/TMC/EOC channel nail-up removal failed

The following warning message is displayed on the MAP terminal if adding or updating the nail-up connections, and a failure occurs in the addition of a connection. In restoring the original state of the connections, another failure occurred and the original connection could not be restored.

Warning: CSC/TMC/EOC channel nail-up corrupt

For NA006 and back, the following error message is displayed if, when adding tuples, an attempt occurred to datafill subfield MAXLINES with more than 672 lines on an SMA for small capacity-sized RDTs. Datafill is blocked.

Error: Cannot have more than 672 lines for this RDT. Only RDTs of SMALL size are allowed on this SMA.

For NA006 and back, the following error message is displayed if, when adding tuples, an attempt occurred to datafill subfield MAXLINES with more than 1344 lines on an SMA for medium capacity-sized RDTs. Datafill is blocked.

Error: Cannot have more than 1344 lines for this RDT. Only RDTs of MEDIUM size are allowed on this SMA.

The following error message is displayed if, when adding tuples, an attempt occurred to datafill a ninth RDT on an SMA for small-sized RDTs. Datafill is blocked.

Error: Cannot have more than 8 RDTs on this host peripheral.

The following error message is displayed if, when adding tuples, an attempt occurred to datafill a fifth RDT on an SMA for medium capacity-sized RDTs. Datafill is blocked.

Error: Cannot have more than 4 RDTs on this host peripheral.

The following error message is displayed if, when adding tuples, an attempt occurred to datafill a third RDT on an SMA for large capacity-sized RDTs. Datafill is blocked.

Error: Cannot have more than 2 RDTs on this host peripheral.

The following error message is displayed if, when updating tuples, an attempt occurred to datafill subfield MAXLINES with more than 672 lines on an SMA for small capacity-sized RDTs. Datafill is blocked.

Error: Cannot have more than 672 lines for this RDT. Only RDTs of SMALL size are allowed on this SMA.

The following error message is displayed if, when updating tuples, an attempt occurred to datafill subfield MAXLINES with more than 1344 lines on an SMA for medium capacity-sized RDTs. Datafill is blocked.

Error: Cannot have more than 1344 lines for this RDT. Only RDTs of MEDIUM size are allowed on this SMA.

The following error message is displayed if , when adding a tuple the maximum number of 32 EISP channels allowed for each SMA2 is exceeded. Four channels are required for each IDT and 1 channel is required for each DCH already provisioned on a SMA2. Datafill is blocked.

Error: Cannot add this RDT. Exceeds resources available for the current number of RDTs and DCHs provisioned.

The following error message is displayed if an attempt occurred to datafill more than 255 RDTs. Datafill is blocked.

 $\mbox{Error:}$  Cannot add this RDT. Only 255 RDTs can be datafilled per office.

The following error message is displayed if an attempt occurred to datafill more than 40 RDTs with variant type RFT. Datafill is blocked.

Error: Cannot add this RDT. Only 40 RDTs with RDTVAR=RFT per office can be datafilled.

The following error message is displayed if an attempt occurred to update a tuple in table RDTINV that does not exist.

Error: Cannot update a non-existent tuple.

The following warning message is displayed if an attempt occurred to assign a non-zero number to field ADNUM while adding or updating a tuple when office parameter USE\_OM\_ADMIN\_NUMBER is set to False. The software automatically enters 0 in field ADNUM.

Warning: ADNUM is being changed to 0.

The following error message is displayed if an attempt occurred to update a tuple after the new administration number had been allocated and the old

administration number could not be retrieved. The old administration number from the physical store is changed to the value of the new administration number from the logical tuple.

```
Error: Failed to restore the old ADNUM.
```

The following warning message is displayed, along with the default values for field CLAPDFLT, if an attempt occurred to enter non-default values for subfield N201. If the RDT is to support electronic business service (EBS), the values entered for subfield N201 should be changed to the specified values in the following warning message.

```
Warning: EBS lines will not work on this RDT. For EBS lines to work on this RDT, N201 parameter must be \geq 52.
```

The following warning message is displayed on the MAP terminal if an attempt occurred to assign a value other than 1 7 1 96 in subfield SHELFSLT for refinement RFT in field VARTYPE. The software automatically corrects the error.

Warning: SHELFSLT is being changed to 1 7 1 96.

The following error message is displayed during a table audit when a corrupted tuple is found with non-default values for subfield SHELFSLT:

Error: For RFT the SHELFSLT is 1 7 1 96.

The following warning message is displayed if an attempt occurred to datafill more than the maximum number of test points:

Warning: Exceeds the maximum limit of Metallic Test Access Points.

The following error message is displayed if an attempt occurred to change a field for an RFT tuple when an IDT is not offline. Datafill is blocked:

Error: RDT <IDT\_index> must be offline to change <field>.

where

```
<IDT_index>
0 to 255<field>
LINKTAB, PPS_ENABLE, IDTNAME, RDTDN
```

The following error message is displayed if, while attempting to move an existing RDT to a new C-side peripheral (SMS or SMSR), corruption of the node's C-side dependency occurred and the node was deregistered from the system recovery controller (SRC). The tuple is rejected. Attempt a nil change on the tuple so that an attempt is made to reregister the node with the SRC.

Node has been deregistered from the System Recovery Controller. Attempt a nil change on the tuple to register the node with the SRC.

The following error message is displayed if an attempt occurred to change field RDTDN to a non-unique value for an RFT tuple when an IDT is offline. Datafill is blocked. (However, values that are unique for an RFT tuple but are not unique for non-RFT tuples are not blocked.)

Error: The specified RDTDN is already assigned to another RDT.

The following warning message is printed if an attempt occurred to change field RDTDN to a value that is unique to all RFT tuples when an IDT is offline. Datafill is not blocked. (Use the RDTRROV tool, REPROV <IDT\_number>, to reprovision the lines on this RDT.)

Warning: Use extreme caution when changing the RDTDN field. This change will cause loss of service on all lines on this IDT. The REPROV command in the RDTPROV increment must be used after this change to restore service to the lines. Changes to the RDTDN field must be accompanied by corresponding changes to the distinguished name at the RDT. Failure to match these values will prevent the establishment of a maintenance connection to another RDT.

The following error message is displayed if an attempt occurred to add or change an RFT tuple with more than one NETWORK\_ID value in subfield RDN\_TYPE of field RDTDN. Datafill is blocked.

Error: Invalid RDT DN - RDNs missing or out of order.

The following error message is displayed if an attempt occurred to datafill an RDT with more than 20 links when the host peripheral is an SMA. Datafill is blocked.

Error: Peripheral type SMA only supports 20 links.

The following error message is displayed if an attempt occurred to datafill an ICB without including a value for LINKTAB. Datafill is blocked.

Error: Linktab field is empty.

The following error message is displayed if an attempt occurred to datafill an ICB with LINKTAB entries greater than LINK\_CAPACITY. Datafill is blocked.

Error: number of LINKTAB entries exceeds link capacity in VARTYPE field. Error: Link capacity in VARTYPE field must be 1 or 4. Error: ICB LINKTAB rdtlink values cannot be greater than the link capacity.

The following error message is displayed if an attempt occurred to change the value of LINK\_CAPACITY for a previously provisioned ICB. Datafill is blocked.

Error: Link capacity in the ICB VARTYPE field may not be changed.

The following error message is displayed if an attempt occured to delete a link to an ICB with lines on the link. Datafill is blocked.

Error: Link <link\_number> cannot be removed, it is associated with provisioned lines.

The following error message is displayed if an attempt occured to delete a link to an ICB that is not at the end of the LINKTAB field. Datafill is blocked.

Error: LINKTAB IDT must be MANBsy before RDTLINK <link\_number> can be deleted.

The following error message is displayed if an attempt occured to add a link to an ICB that is not at the end of the LINKTAB field. Datafill is blocked.

Error: LINKTAB IDT must be MANBsy before RDTLINK <link\_number> can be added.

**RDTINV** (continued)

The following table lists RDT datafill error conditions and error explanations.

RDT datafill error condition and error explanation table (Sheet 1 of 3)

Error condition	Error explanation
An RDT must have RDTLINK 1 configured.	RDTLINK 1 must be present in LINKTAB.
The peripheral module (PM) type of the C-side XPM is not datafilled.	Host XPM must be of type SMA.
The C-side XPM is not datafilled.	Host XPM is unequipped.
IDT is already used for another RDT.	IDT used by RDT <site> <frame/><unit>.</unit></site>
A C-side link specified for the RDT is not a DS-1.	SMA link <link number=""/> must be DS-1.
A C-side link specified for the RDT is already in use by another PM.	SMA link <link number=""/> in use.
A C-side link added to the RDT is not offline (Offl).	SMA link <link number=""/> must be offline.
RDT variant is GENCSC, GENTMC, or GENRBS, and ring type is not frequency selective, superimposed, or coded, or RDT variant is RFT, and ring type is not frequency selective, superimposed, coded, or coded special.	Illegal ring type for this PM.
The site field is HOST.	Site cannot be HOST.
Maximum number of line controlling devices in system exceeded.	Failed to assign office module number.
C-side link removed from RDT is not manual busy (ManB) or offline (Offl).	SMA link <link number=""/> must be offline to delete.
IDT is not Offl, and an attempt was made to delete its entry in table RDTINV.	IDT must be offline to delete.

# **RDTINV** (continued)

Error condition	Error explanation	
IDT is not Offl or ManB, and	IDT must be ManB or OFFL to change	
<ul> <li>an attempt was made to change field EOC</li> </ul>	<field_name>.</field_name>	
<ul> <li>an attempt was made to change field PROT</li> </ul>		
<ul> <li>an attempt was made to change field LINKTAB</li> </ul>		
<ul> <li>an attempt was made to change field IDTNAME</li> </ul>		
Field LINKTAB has entries with the same XPMLINK.	Field LINKTAB has duplicate XPMLINK entries.	
Field LINKTAB has entries with the same RDTLINK.	Field LINKTAB has duplicate RDTLINK entries.	
An attempt was made to add a ninth RDT to an SMA.	Too many RDTs for this host XPM.	
An RDT with field RDTVAR equal to GENCSC, GENTMC, or RCU can have field MTSTACPT equal to TBP, ERTU, or no entry.	IRTU type not allowed for this PM.	
Any RDT cannot have more than one external test configuration.	Field MTSTACPT configurations not allowed.	
No duplicate entries of TBP in field MTSTACPT for an RDT.	Field MTSTACPT has duplicate entry of type TBP.	
No duplicate entries of ERTU in field MTSTACPT for an RDT.	Field MTSTACPT has duplicate entry or type ERTU.	
Any RDT can have a scan point (SC) datafilled that shares a single vertical between multiple RDTs including integrated digital loop carrier (IDLC) and UDLC type systems.	Invalid scan (SC) group.	

#### RDT datafill error condition and error explanation table (Sheet 2 of 3)

# RDTINV (end)

#### RDT datafill error condition and error explanation table (Sheet 3 of 3)

Error condition	Error explanation
Any RDT can have an SD datafilled that shares a single vertical between multiple RDTs including IDLC and UDLC type systems.	Invalid SD group.
Field VERTID must be unique for each MTSTACPT of an RDT entry.	Duplicate VERTIDs for field MTSTACPT configuration.

## RDTLT

#### Table name

Remote Digital Terminal Line Termination Table

### **Functional description**

Table RDTLT contains information relating to the ongoing operations that are being performed on a line connected to the remote digital terminal (RDT) by the object provisioning process.

Table RDTLT is a read-only table. Data cannot be added or deleted by manual data modification orders (DMO).

A tuple to table RDTLT is added when a new line is datafilled for RDT in table LNINV. A tuple is deleted from table RDTLT when a line connected to the RDT is deleted.

Entries in field SITE must match entries in table SITE.

For related information, refer to table RDTINV.

### **Datafill sequence and implications**

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

#### Table size

0 to 262144 tuples

Table RDTLT allows for up to 256 RDTs.

Memory is dynamically allocated for each entry in table RDTLT.

Table RDTLT updates are made through table LNINV software control or through the line provisioning process software except during the dump and restore process.

The following message is displayed at the maintenance and administration position (MAP) video display terminal (VDU) if a manual update to table RDLT is attempted:

MANUAL UPDATE TO TABLE RDTLT NOT ALLOWED

## Datafill

The following table lists datafill for table RDTLT.

#### Field descriptions (Sheet 1 of 9)

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.
			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.
ACCESS		see below	Line provisioning process operation
			This field identifies the operation performed by the line provisioning process for an RDT line.
		ACCESS_NIL	No operations are required.
		I_ACCESS_DONE	Line objects provisioning for ISDN line done.
		I_CHA_IPTIS_	Waiting for response to message:
		CONF	CHANGE PRIMARY STATE OF ISDN PATH TERMINATION (PT) TO IN SERVICE
		I_CHA_IPTIS_	Send message:
		REQ	CHANGE PRIMARY STATE OF ISDN PT OBJECT TO IN SERVICE
		I_CHA_IPTOOS_	Waiting for response to message:
		CONF	CHANGE PRIMARY STATE OF ISDN PT TO OUT OF SERVICE

### Field descriptions (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
		I_CHA_IPTOOS_	Waiting for response to message:
		CONF1	CHANGE PRIMARY STATE OF ISDN PT TO OUT OF SERVICE
		I_CHA_IPTOOS_	Send message:
		REQ	CHANGE PRIMARY STATE OF ISDN PT OBJECT TO OUT OF SERVICE
		I_CHA_IPTOOS_	Send message:
		REQ1	CHANGE PRIMARY STATE OF ISDN PT OBJECT TO OUT OF SERVICE
		I_CHA_LTIS_	Waiting for response to message:
		CONF	CHANGE PRIMARY STATE OF ISDN LINE TERMINATION (LT) TO IN SERVICE
		I_CHA_LTIS_REQ	Send message:
			CHANGE PRIMARY STATE OF ISDN LT OBJECT TO IN SERVICE
		I_CHA_LTO-OS_	Waiting for response to message:
		CONF	CHANGE PRIMARY STATE OF ISDN LT TO OUT OF SERVICE
		I_CHA_LTO-OS_	Waiting for response to message:
		CONF1	CHANGE PRIMARY STATE OF ISDN LT TO OUT OF SERVICE
		I_CHA_LTO-OS_	Send message:
		REQ	CHANGE PRIMARY STATE OF ISDN LT OBJECT TO OUT OF SERVICE
		I_CHA_LTO-OS_	Send message:
		REQ1	CHANGE PRIMARY STATE OF ISDN LT OBJECT TO OUT OF SERVICE
		I_CRE_A1DCT_	Waiting for response to message:
		CONF	CREATE FIRST DS-0 CHANNEL TERMINATION (CT) OBJECT

### Field descriptions (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
		I_CRE_A1DCT_	Send message:
		REQ	CREATE FIRST DS-0 CT OBJECT
		I_CRE_A2DCT_	Waiting for response to message:
		CONF	CREATE SECOND DS-0 CT OBJECT
		I_CRE_A2DCT_	Send message:
		REQ	CREATE SECOND DS-0 CT OBJECT
		I_CRE_AQDCT_	Waiting for response to message:
		CONF	CREATE QDS-0 CT OBJECT
		I_CRE_AQDCT_ REQ	Send message:
		REQ	CREATE QDS-0 CT OBJECT
		I_CRE_ICT_	Waiting for response to message:
		CONF	CREATE ISDN CT OBJECT
		I_CRE_ICT_REQ	Send message:
			CREATE ISDN CHANNEL TERMINATION (CT) OBJECT
		I_CRE_IPT_	Waiting for response to message:
		CONF	CREATE ISDN PT OBJECT
		I_CRE_IPT_REQ	Send message:
			CREATE ISDN PATH TERMINATION (PT) OBJECT
		I_CRE_LT_CONF	Waiting for response to message:
			CREATE ISDN LT OBJECT
		I_CRE_LT_REQ	Send message:
			CREATE ISDN LINE TERMINATION (LT) OBJECT
		I_DEL_IPT_CONF	Waiting for response to message:
			DELETE PT AND ALL SUBTENDING OBJECTS

### Field descriptions (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
		I_DEL_IPT_	Waiting for response to message:
		CONF1	DELETE PT AND ALL SUBTENDING OBJECTS
		I_DEL_IPT_REQ	Send message:
			DELETE ISDN PT AND ALL SUBTENDING OBJECTS
		I_DEL_IPT_REQ1	Send message:
			DELETE ISDN PT AND ALL SUBTENDING OBJECTS
		I_DEL_IPT_	Waiting for response to message:
		CONF1	DELETE PT AND ALL SUBTENDING OBJECTS
		I_DEL_IPT_REQ	Send message:
			DELETE ISDN PT AND ALL SUBTENDING OBJECTS
		I_DEL_IPT_REQ1	Send message:
			DELETE ISDN PT AND ALL SUBTENDING OBJECTS
		I_DEL_LT_CONF	Waiting for response to message:
			DELETE LT AND ALL SUBTENDING OBJECTS
		I_DEL_LT_	Waiting for response to message:
		CONF1	DELETE LT AND ALL SUBTENDING OBJECTS
		I_DEL_LT_REQ	Send message:
			DELETE ISDN LT AND ALL SUBTENDING OBJECTS
		I_DEL_LT_REQ1	Send message:
			DELETE ISDN LT AND ALL SUBTENDING OBJECTS

Field	Subfield or refinement	Entry	Explanation and action
		P_ACCESS_ DONE	Line objects provisioning for analog or electronic business set (EBS) line done.
		P_CHA_LTIS_	Waiting for response to message:
		CONF	CHANGE PRIMARY STATE OF LINE TO IN SERVICE
		P_CHA_LTIS_	Send message:
		REQ	CHANGE PRIMARY STATE OF LINE TO IN SERVICE
		P_CHA_LTOOS_	Waiting for response to message:
		CONF	CHANGE PRIMARY STATE OF LINE TO OUT OF SERVICE
		P_CHA_LTOOS_	Waiting for response to message:
		CONF1	CHANGE PRIMARY STATE OF LINE TO OUT OF SERVICE
		P_CHA_LTOOS_	Send message:
		REQ	CHANGE PRIMARY STATE OF LINE TO OUT OF SERVICE
		P_CHA_LTOOS_	Send message:
		REQ1	CHANGE PRIMARY STATE OF LINE TO OUT OF SERVICE
		P_CRE_LT_	Waiting for response to message:
		CONF	CREATE ANALOG OR EBS LT OBJECT
		P_CRE_LT_REQ	Send message:
			CREATE ANALOG OR EBS LINE TERMINATION (LT) OBJECT
		P_DEL_LT_CONF	Waiting for response to message:
			DELETE LT AND ALL SUBTENDING OBJECTS

### Field descriptions (Sheet 5 of 9)

### Field descriptions (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
		P_DEL_LT_	Waiting for response to message:
		CONF1	DELETE LT AND ALL SUBTENDING OBJECTS
		P_DEL_LT_REQ	Send message:
			DELETE LT AND ALL SUBTENDTING OBJECTS
		P_DEL_LT_REQ1	Send message:
			DELETE LT AND ALL SUBTENDTING OBJECTS
		P_MOD_LT_	Waiting for response to message:
		CONF	MODIFY LT OBJECTS
		P_MOD_LT_REQ	Send message:
			MODIFY ANALOG OR EBS LINE TERMINATION OBJECT
Note: The abo	ve mentioned va	lues that end with 1 a	re for delete and create operations.
TRANSP		see below	Rdt line processor transport states
			This field identifies the next operation to be performed by the line provisioning process for creating the objects for the transport portion of the cross-connect.
		TRANSP_NIL	No operations are required.
		TRANSP_DONE	All operations complete.
		I_ADD_TDPT_	Waiting for response to message:
		CONF	UPDATE DS-0 CT OBJECT
		I_ADD_TDPT_	Send message:
		REQ	UPDATE TRANSPORT SIDE DS-0 CT OBJECT TO INCLUDE DS0 PT OBJECT
		I_CHA_TDPTIS_ CONF	Waiting for response to message:
			CHANGE PRIMARY STATE OF DS-0 PT TO OUT OF SERVICE

Field	Subfield or refinement	Entry	Explanation and action
		I_CHA_TDPTIS_	Send message:
		REQ	CHANGE PRIMARY STATE OF DS-0 PT OBJECT TO IN SERVICE
		I_CHA_XCOOS_ CONF1	No current use.
		I_CHA_XCOOS_ REQ1	No current use.
		I_CRE_TDPT_	Waiting for response to message:
		CONF	CREATE DS-0 PT OBJECT
		I_CRE_TDPT_	Send message:
		REQ	CREATE TRANSPORT SIDE DS-0 PATH TERMINATION (PT) OBJECT
		I_CRE_TQDCT_	Waiting for response to message:
		CONF	CREATE QDS-0 CT OBJECT
		I_CRE_TQDCT_	Send message:
		REQ	CREATE TRANSPORT SIDE QDS-0 CT OBJECT
		I_CRE_XC_CONF	Waiting for response to message:
			CROSS CONNECTION OBJECT
		I_CRE_XC_REQ	Send message:
			CREATE TRANSPORT SIDE CROSS CONNECTION OBJECT
		I_DEL_TDPT_	Waiting for response to message:
		CONF	DELETE DS-0 PT OBJECT
		I_DEL_TDPT_	Send message:
		REQ	DELETE DS-0 PT OBJECT
		I_DEL_TQDCT_	Waiting for response to message:
		CONF	DELETE QDS-0 CT OBJECT

### Field descriptions (Sheet 7 of 9)

### Field descriptions (Sheet 8 of 9)

Field	Subfield or refinement	Entry	Explanation and action
		I_DEL_TQDCT_	Waiting for response to message:
		CONF1	DELETE QDS-0 CT OBJECT
		I_DEL_TQDCT_	Send message:
		REQ	DELETE QDS-0 CT OBJECT
		I_DEL_TQDCT_	Send message:
		REQ1	DELETE QDS-0 CT OBJECT
		I_DEL_XC_CONF	Waiting for response to message:
			DELETE CROSS CONNECTION OBJECT
		I_DEL_XC_	Waiting for response to message:
		CONF1	DELETE CROSS CONNECTION OBJECT
		I_DEL_XC_REQ	Send message:
			DELETE CROSS CONNECTION OBJECT
		I_DEL_XC_REQ1	Send message:
			DELETE CROSS CONNECTION OBJECT
Note: The abo	ve mentioned va	lues that end with 1 a	re for delete and create operations.
CONTMARK		+ or \$	Enter + if additional information for this tuple is contained in the next record. Otherwise, enter \$ to indicate the end of the tuple.
REQUESTR		see below	Requesting process
			This field allows table control to display the process that is using RDTLT resources.
			The information below allows the table control software to determine where the request was initiated from.
		REQUESTOR_ NIL	No requestor
		REQUESTOR_ RDTLP	Request initiated from RDTLP process.

# RDTLT (end)

Field	Subfield or refinement	Entry	Explanation and action
		REQUESTOR_ DUMPREST	Request initiated from dump and restore process.
		REQUESTOR_ JFILE	Request initiated from journal file update process.
CRV		0 to 4095	Call reference value range
			This field represents the call reference value range.
LOPDONE		Y or N	Line object provisioning done
			This field is set to Y (yes) when all line object provisioning is complete.
DELALL		Y or N	Delete all tuples
			This field is set to Y (yes) when a request has been accepted by the table control software to delete all entries in table RDTLT.
LTIS		Y or N	Line termination in-service
			This field is set to Y (yes) when the line termination object (LTO) is in service.
INSMOD		Y or N	In service modifier
			This field is set to Y (yes) to identify if a request to update the in service attributes of the LTO is sent.

#### Field descriptions (Sheet 9 of 9)

# **Datafill example**

The following example shows sample datafill for table RDTLT.

#### MAP display example for table RDTLT

 RDTLTKEY
 ACCESS
 TRANSP
 NAILUP1

 NAILUP2
 REQUESTR CRV
 LOPDONE DELALL LTIS INSMOD

 LTCLASS QDS0INFO
 XCINFO

 RDT1 00 0 6 11
 P\_CRE\_LT\_REQ
 TRANSP\_NIL

 REQUESTER\_NIL 2
 Y
 Y

## REASONS

#### Table name

Business Set Reason Display Table

### **Functional description**

This table displays feature and call progress information messages on display electronic telephone sets (ETS).

Different reason sets are available for each customer group. Operating company personnel can form their own reason sets. To create displays in different languages, datafill a separate reason set. The maximum number of reason sets is identical to the maximum number of customer groups (that is, 4095).

Switching units with feature package NTX108AA (IBN Display Features) contain this table.

## **Datafill sequence and implications**

The following tables must be datafilled after table REASONS.

- KSETINV
- CUSTSTN

#### **Table size**

58 to 237 568 tuples

## Datafill

The following table lists datafill for table REASONS.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
REASNSET		alphanumeric (1 to 16	Reason set
		characters)	Enter the name of the reason set.
REASONID		ACBARRMSG,	Reason identification
			Enter the name of the reason. Any entry outside of the range indicated for this field is invalid.
		AUTODSPMSG, BARGEINMSG,	Enter ACBARRMSG for Automatic Call Back/Automatic.
		CAMPONMSG, CAMPRLMSG, CONFMSG,	Enter AINRSNNAMEP for Private Name.
		CPKRMSG, CXRMSG,	Enter AINRSNNAMEO for Unknown Name.
		CXRRMSG, EMWMSG, EXTERNALMSG, INSPAAB, INSPACB, INSPACTGRP, INSPAUD, INSPAUL,	Enter AINRSNNUMBERP for Private Number.
			Enter AINRSNNUMBERO for Unknown Number.
			Enter AUTODSPMSG for Automatic Display Message.
		INSPBLF,	Enter BARGEINMSG for Barge In.
		INSPCALLMWT, INSPCANTINSP,	Enter CAMPONMSG for Camp On.
		INSPCCV,Enter CAMPFINSPCFW,Recall.INSPCNFKEY,Enter CONFMNSPCNF6,Enter CPKRMINSPCNF10,Enter CPKRMINSPCNF14,Enter CXRMSINSPCNF18,Enter CXRMS	Enter CAMPRLMSG for Camp On Recall.
			Enter CONFMSG for Conference.
			Enter CPKRMSG for CPK Recall.
			Enter CXRMSG for CXR Message.
	INSPCNF: INSPCNF: INSPCNF: INSPCPK INSPCPU INSPCWT INSPEBO		Enter CXRRMSG for CXR Recall.
		INSPCNF26, INSPCNF30, INSPCPK, INSPCPU, INSPCWT, INSPEBO, INSPEMW,	Enter EMWMSG for Executive Message Waiting.

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# **REASONS** (continued)

### Field descriptions (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
REASONID (continued)		INSPFXDQCK, INSPFXR,	Enter EXTERNALMSG for Outside Call.
		INSPGIC, INSPHF,	Enter INSPAAB for Auto Answer.
		INSPHFMUTE, INSPICM,	Enter INSPACB for Inspect Automatic Call Back Key.
		INSPIHOLD, INSPLVM, INSPMADN,	Enter INSPACTGRP for Inspect Active Group.
		INSPMCH, INSPMMI,	Enter INSPAUD for Inspect Automatic Dial.
		INSPMODE, INSPMRF, INSPMSB, INSPMUTE,	Enter INSPAUL for Inspect Automatic Line.
		INSPMWIDC, INSPMWQRY,	Enter INSPBLF for Inspect Busy Lamp Field.
		INSPMWT, INSPNOCALL, INSPNONAME,	Enter INSPCALLMWT for Inspect NN Messages Waiting.
		INSPNOMSG, INSPNOTPROVD,	Enter INSPMADN for Inspect Shared Number.
		INSPNOTPGMED, INSPPGMQCK,	Enter INSPMCH for Malicious Hold.
		INSPPRESS,	Enter INSPMMI for Display Demo.
		INSPPRL, INSPPRV,	Enter INSPMODE for Inspect Mode.
		INSPQBS, INSPQTD,	Enter INSPMRF for Inspect Ring Forward.
		INSPRAG, INSPSCL, INSPSCS.	Enter INSPMSB for Inspect Make Set Busy.
		INSPSCU, INSPSOFTKEY,	Enter INSPMUTE for Inspect Mute Key.
		INSPSPMSG, INSPTME, INSPTWC, INSPUHOLD, INSPUNASSIGN, INSPWIDC, MBGDISPLAY, NFAVOICEDIR, NOCPUMSG, ORIGCPUMSG, ORIGFWDMSG, OUTBOUNDMSG,	Enter INSPMWIDC for Inspect Message Waiting Indication Key.
			Enter INSPMWQRY for Inspect Message Waiting Query Key.
			Enter INSPMWT for Inspect Message Waiting.
			Enter INSPNOCALL for Inspect No Calls.

# **REASONS** (continued)

Field	Subfield	Entry	Explanation and action
REASONID (continued)		TERMCFBMSG, TERMCFDMSG,	Enter INSPNONAME for Inspect No Name.
		TERMCFUMSG, TERMCPUMSG, UNKNOWNMSG	Enter INSPNOMSG for Inspect No Messages.
			Enter INSPNOTPOVD for Inspect Not Provided.
			Enter INSPNOTPGMED for Inspect Not Programmed.
			Enter INSPPGMQCK for Inspect programmable Quick Conference Key.
			Enter INSPPRESS for Inspect Press a Key.
			Enter INSPPRL for Inspect Privacy Release.
			Enter INSPPRV for Inspect Privacy Key.
			Enter INSPQBS for Inspect Query Station.
			Enter INSPQTD for Inspect Query Time/Date.
			Enter INSPRAG for Inspect Ring Again.
			Enter INSPSCL for Inspect Speedcall Long.
			Enter INSPSCS for Inspect Speedcall Short.
			Enter INSPSCU for Inspect Speedcall User.
			Enter INSPSOFTKEY for Inspect Softkey.
			Enter INSPSPMSG for Inspect Enter Cell #.
			Enter INSPTME for Power Features.
			Enter INSPTWC for Inspect Three Way Call.

## **REASONS** (continued)

### Field descriptions (Sheet 4 of 4)

Field	Subfield	Entry	Explanation and action
REASONID (continued)			Enter INSPUHOLD for Inspect On Hold - Remote.
			Enter INSPUNASSIGN for Inspect Unassigned Key.
			Enter INSPWIDC for Message Indicator.
			Enter MBGDISPLAY for Multi-switch Business Group Display.
			Enter NFAVOICEDIR for NFA Voice Directory.
			Enter NOCPUMSG for Call Pickup Failure.
			Enter ORIGCPUMSG for Picked Up.
			Enter ORIGFWDMSG for Forward.
			Enter OUTBOUNDMSG for CompuCall Feature.
			Enter TERMCFBMSG for Busy Forward.
			Enter TERMCFDMSG for No Answer Forward.
			Enter TERMCFUMSG for Call Forward.
			Enter TERMCPUMSG for Pick Up.
			Enter UNKNOWNMSG for No Call Information.
MESSAGE		alphanumeric (up to	Displayed message
		15 characters)	Enter a descriptive message to program the option. Enter an underscore between words to insert a blank space between words. The underscore does not appear on the display.

# Datafill example

The following example shows sample datafill for table REASONS.

## REASONS (end)

#### MAP display example for table REASONS

REASNSET	REASONID	MESSAGE	
 WYLIE	EXTERNALMSG	OUTSIDE CALL	
FURGIE	CONFMSG MBGDISPLAY	CONFERENCE NETWORK CALL	
DEFAULTSET NEWSET	AINRSNNAMEP	AIN_PRIVATE_NAM	

# Table history

#### NA012

Added reason ids: AINRSNNAMEP, AINRSNNAMEO, AINRSNNUMBERP, and AINRSNNUMBERO.

#### NA004

Added new entry NFAVOICEDIR to field REASONID, for Speech Activated Intelligent Dialing (SAID) on Meridian business set (MBS).

### RECEIVER

### **Table name**

**Receiver Table** 

## **Functional description**

Table RECEIVER contains the following information for each audio tone detector, DIGITONE, multifrequency receiver, and mechanized calling card service:

- the code assigned to the equipment in table CLLI ٠
- analog equipment for COMMON or GATEWAY switching ٠
- digital switching equipment •
- the equipment location of the circuit •
- the product engineering code (PEC) of the receiver

The pseudo fixed codes in table CLLI for these circuits appear in the following

Title	Code	Code applicability
DIGITONE receiver	RCVRDGT	COMMON switches
multifrequency receiver	RCVRMF	COMMON switches
mechanized calling card receiver	RCVRMCCS	COMMON switches
audio tone detector	RCVRATD	COMMON switches
DMS-300 DIGITONE receiver	DGT300	gateway switches only
DMS-300 multifrequency receiver	MF300	gateway switches only
R2 signaling	KSR2OCVR	for licensee use only
R2 signaling	KSR2ICVR	for licensee use only
automatic toll coin service	RCVRCOIN	TOPS switches only
A-law automatic tone detector	RCVATDUK	UK operating companies only
A-law DIGITONE receiver	RCVRDTUK	UK operating companies only
receiver coin detection circuit	RCVRCDC	restrictions do not apply

#### Ps

#### **RECEIVER** (continued)

The audio tone detector contains a trunk card with PEC NT5X29AC. The detector is an option for IBN switching units. Other types of switches do not require the detector.

Implementation of RCVRCOIN occurs on the NT3X08 card. Each NT3X08 card supports a maximum of eight RCVRCOIN circuits. For every NT3X08 card in the system, this table can contain a maximum of eight entries. Use card code 3X08AA for feature package NTX208AA (Automatic Coin Toll Service). Use card code 3X08AB for feature package NTX208AB.

Field CARDCODE indicates the PEC of the receiver. The different groups of CARDCODE, CLLI, and RCVRTYPE appear in the following table.

The RCVRKEY field accepts a receiver coin detection circuit in the range of values. The field accepts the circuit to determine the number of five-cent deposits collected on each call. Enter data in this field in table CLLI.

CARDCODE	CLLI	RCVRTYPE
2X48AA	MF300	D
2X48AA	RCVRMF	D
2X48AB	RCVRMCCS	D
2X48AB	RCVRDGT	D
2X48AB	DGT300	D
2X48CA	RCVRMF	D
2X48CB	RCVRDGT	D
2X48CC	RCVRDTUK	D
3X08AA	RCVRCOIN	D
3X08AB	RCVRCOIN	D
3X80AA	RCVRCDC	D
5X29AB	RCVRATD	A
5X29AC	RCVRATD	D
5X29BA	RCVATDUK	D

CARDCODE, CLLI, and RCVRTYPE correlation

#### **RECEIVER** (continued)

The maximum number of circuits of each type is 1024.

The system allocates memory for the total number of circuits for the following fixed pseudo codes. Field TRKGRSIZ in table CLLI indicates the total number of circuits.

- code DGT300
- code KSR2ICVR
- code KSR2OCVR
- code MF300
- code RCVRATD
- code RCVRDGT
- code RCVRMCCS
- code RCVRMF

#### **Datafill sequence and meaning**

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

#### **Table size**

You can use data to increase table size. To increase table size, change field TRKGRSIZ in table CLLI for the following fixed pseudo codes:

- code DGT300
- code KSR2ICVR
- code KSR2OCVR
- code MF300
- code RCVRATD
- code RCVRDGT
- code RCVRMCCS
- code RCVRMF

#### Activation

To allow datafill changes in table RECEIVER to activate:

- you can increase table size without a restart after you change the receiver data of fixed pseudo codes. A load that depends on CSP02 software (post BCS36) contains the fixed pseudo codes.
- a warm restart is a requirement in BCS36 and earlier versions. Perform the RESTART to allow the ACTS feature to function. If you do not perform the RESTART, TRAPs occur for each attempt to attach to a RCVRCOIN.

## Datafill

Datafill for table RECEIVER appears in the following table.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RCVRKEY		see subfields	Receiver key. This field contains subfields CLLI and NUM. This field is the key to the table.
	CLLI	RCVRATD RCVRDGT RCVRMF	Common language location identifier. This field indicates the common language location identifier (CLLI) for the circuit type.
		RCVRMCCS DGT300 MF300 KSR2OCVR KSR2ICVR RCVRCOIN RCVRCOIN RCVRDTUK or RCVRCDC	Enter RCVRATD for an audio tone detector circuit.
			Enter RCVRDGT for a DIGITONE digital receiver circuit.
			Enter RCVRMF for a multifrequency receiver circuit.
			Enter RCVRMCCS for a mechanized calling card receiver circuit.
			Enter DGT300 for a DIGITONE circuit for GATEWAY.
			Enter MF300 for a multifrequency receiver circuit for GATEWAY.
			Enter KSR2OCVR or KSR2ICVR for an R2 signaling circuit for licensee use only.
			Enter RCVRCOIN for an automatic coin toll service receiver.
			Enter RCVADTUK for an A-Law audio tone detector circuit acceptable for use in the UK.

# **RECEIVER** (continued)

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Enter RCVRDTUK or an A-Law digitone receiver circuit acceptable for use in the United Kingdom.
			Enter RCVRCDC for a receiver coin detection circuit.
			Only the entries that appear are correct.
	NUM	0 to 1023	Circuit number. Enter the number assigned to the circuit. Entries out of the 0 to 1023 range are not correct.
RCVRTYPE		A or D	Receiver type. Enter the type of circuit, analog (A) for COMMON and GATEWAY, or digital (D) for switching units.
ТМТҮРЕ		MTM, T8A, TM2, TM4 or TM8	Trunk module type. Enter the type of trunk module where the circuit mounts. Only the entries that appear are correct.
ΤΜΝΟ		0 to 2047	Trunk module number. Enter the number of the trunk module where the circuit mounts. If the trunk module type is TM2, TM4, TM8, or T8A, the range is 0 to 2047. If the trunk module type is MTM, the range is 0 to 255.

## **RECEIVER** (end)

Field	Subfield or refinement	Entry	Explanation and action
TMCKTNO		0 to 29	Trunk module circuit number. Enter the trunk module circuit number assigned to the circuit. For an analog receiver, the range is even numbers 0 to 28 only. For a digital receiver mounted on trunk module type TM2, TM4, TM8 or T8A, the range is 0 to 29. For a digital receiver or audio tone detector mounted on an MTM, the range is 0 to 24.
CARDCODE		2X48AA 2X48AB 2X48CA 2X48CB 2X48CC 3X08AA 3X08AB 5X29AB 5X29AC or 5X29BA	Card code. Enter the PEC of the receiver card. Only the entries are correct.

#### Field descriptions (Sheet 3 of 3)

### **Datafill example**

Sample datafill for table RECEIVER appears in the following example.

#### MAP example for table RECEIVER

RCV	RKEY	RCVRTYPE	TMTYPE	TMNO	TMCKTNO	CARDCODE
RCVRMF	0	D	MTM	11	16	2X88AA
RCVRMF	1	D	MTM	11	17	2X88AA
RCVRMF	2	D	MTM	11	18	2X88AA
RCVRDGI	. 0	D	MTM	4	14	2X88AA
RCVRDGI	. 1	D	MTM	4	15	2X88AA
RCVRDGI	2	D	MTM	4	16	2X88AA

## Table history CSP02

The system does not require a restart to increase table size after you change the receiver data of fixed pseudo codes.

## REGNUM

#### Table name

**TOPS Region Name Table** 

## **Functional description**

Table REGNUM is used to associate domestic region names with third numbers and credit card numbers. A region is a labelled area within the North American dialing plan. More than one number can be mapped to a region name, but the region names in this table must have already existed in table DOMBILL. If a number does not appear in table REGNUM, its region is assumed to be the United States or Canada and domestic billing restrictions do not apply. Table REGNUM is to be used with other regions within the North American dialing plan, such as Jamaica, Mexico, or the Caribbean.

For related information, refer to table HOTLIST.

### **Datafill sequence and implications**

Table DOMBILL must be datafilled before table REGNUM.

## Table size

The table size of table REGNUM is dynamic and is subject to the system's store requirements for digilators.

## Datafill

The following table lists datafill for table REGNUM.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
DOMNUM		0 to 9 (up to 18 digits)	Domestic number. Enter the domestic third number or credit card number to be mapped to a region. This number consistd of a numbering plan area (NPA) or revenue accounting office (RAO) number followed by three digits in the format NPA Nxx, RAO 0xx, or RAO 1xx (where N = 2 to 9 and x = 0 to 9). More than one number can be mapped against a region name. As of BCS36, the NPA has a range of 200 to 999.
REGION		alphanumeric (1 to 16 characters)	Region name. Enter the region name as previously datafilled in table DOMBILL.

## **REGNUM** (end)

## **Datafill example**

The following example shows sample datafill for table REGNUM.

#### MAP display example for table REGNUM

DOMNUM REGION

234158 CANADA

# **Table history**

### BCS36

Range information was added for NPA in field DOMNUM.

### REMNACD

### Table name

Remote Network Automatic Call Distribution Table

## **Functional description**

Table REMNACD provides the routing information associated with a network automatic call distribution (NACD) group on a remote switch.

For related information, refer to table ACDGRP.

### **Datafill sequence and implications**

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

### Datafill

The following table lists datafill for table REMNACD.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
REMGROUP		alphanumeric (1 to 16 characters)	Remote ACD group. Enter the name assigned to the remote ACD group.
REMOTEDN		10 digits	Remote directory number. Enter the 10-digit primary directory number of the remote ACD group.
ROUTE		see subfields	Route. This field consists of subfields TABNAME and INDEX.
	TABNAME	IBNRTE, IBNRT2, IBNRT3, IBNRT4	Table name. Enter the table name (IBNRTE, IBNRT2, IBNRT3, or IBNRT4) to which translation routes.
	INDEX	1 to 1023	Index. Enter the number assigned to the route list in table IBNRTE, IBNRT2, IBNRT3, or IBNRT4 to which translation routes. Any entry outside of the range indicated for this field is invalid.

# REMNACD (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS		NONDMS	Options. If the remote NACD group is for a non-DMS switch, then enter NONDMS and datafill refinement TRGTRI.
TRGTRI		0 to 255	Target resource index. If the entry in field OPTIONS is NONDMS, then enter the hard-coded resource index for the non-DMS remote NACD group. Any entry outside of the range indicated for this field is invalid.

### **Datafill example**

The following example shows sample datafill for table REMNACD.

In this example, ACD group RSWB5 has a DN of 6135554500, and routes to IBNRTE 3 and to a DMS switch.

#### MAP display example for table REMNACD

REMGROUP	REMOTEDN	ROUTE	OPTIONS	
RSWB5	6135554500	IBNRTE	3	\$

## REMOTLAC

#### Table name

Remote Location Area Code Table

## **Functional description**

Table REMOTLAC determines the new routeset for a mobile subscriber (MS) in a different location area. The current visitor location register (VLR) or mobile switching center (MSC) does not always serve the new location area. In this event, entry of the new location area does not occur in table LAC. The system queries table REMOTLAC. The system can request a VLR number to identify the correct close VLR. The system can request an MSC number that identifies the correct close MSC.

See table LAC for related information.

### **Datafill sequence and meaning**

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

You cannot enter a location area code (LAC) entered in table LAC in table REMOTLAC. You cannot enter a LAC entered in table REMOTLAC in table LAC.

#### **Table size**

0 to 2432 tuples

# **REMOTLAC** (continued)

## Datafill

Datafill for table REMOTLAC appears in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LAC		1 to 65 535	<i>Location area code.</i> This field is the key field that identifies the location area in which the mobile roams.
VLRNUM		see subfields	<i>Visitor location register number.</i> This field contains the VLR address of the old VLR in ISDN (E.164) format. This field contains subfields VLRCC, VLRNDC, and VLRSN. Separate each subfield with a single space.
			The entry in field VLRNUM can be the same as the entry in field MSCNUM. Each number must identify a VLR.
	VLRCC	0 to 9 (one to three digits)	Visitor location register country code. Enter the visitor location register country code (CC). An entry of 0 cannot be the first digit in the number.
	VLRVDC	0 to 9 (a maximum of six digits)	Visitor location register national destination code. Enter the VLR national destination code (NDC).
	VLRSN	0 to 9 (a maximum of 13 digits)	<i>Visitor location register subscriber number.</i> Enter the VLR subscriber number (SN).
MSCNUM		see subfield	<i>Mobile switching center number.</i> This field contains the MSC address of the new MSC to serve the mobile in ISDN (E.164) format. This field contains subfields MSCCC, MSCNDC, and MSCSN. Separate each subfield with a single space.
			The entry in field MSCNUM can be the same as the entry in field VLRNUM. Each number must identify a VLR.
	MSCCC	0 to 9 (1 to 3 digits)	Mobile switching center country code. Enter the MSC CC. An entry of 0 cannot be the first digit in the number.

# **REMOTLAC** (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MCSNDC	0 to 9 (a maximum of 6 digits)	<i>Mobile switching center national destination code.</i> Enter the MSC NDC.
	MSCSN	0 to 9 (a maximum of 13 digits)	<i>Mobile switching center subscriber number.</i> Enter the MSC SN.

### **Datafill example**

Sample datafill for table REMOTLAC appears in the following example.

#### MAP example for table REMOTLAC

LAC	VLRNUM	MSCNUM	
3 783	1 214 6845582 678 1 1	1 214 6845539 678 1 129455	

#### Table history BCS36

Table REMOTLAC was introduced in BCS36.

# **Additional information**

This section provides information on dump and restore procedures for table REMOTLAC.

#### **Dump and restore**

Normal dump and restore procedures apply.

# REPLCODE

### Table name

Replace Code Table

## **Functional description**

Table REPLCODE is used in replacing one-, two-, or three-digit codes with a sequence of digits for a given feature (presently only number service code [NSC]).

The dialed cell number is replaced with the actual digits that would have been dialed if speed calling were not in effect.

### **Datafill sequence and implications**

The following tables must be datafilled before table REPLCODE.

- REPLNAME
- COSMAP

### Table size

The maximum size of table REPLCODE depends upon the datafill in table REPLNAME. The memory size for both tables is allocated dynamically. There can be 0 to 1024 tuples in table REPLNAME, and each tuple can be referenced 1000 times in table REPLCODE. Consequently, the size of table REPLCODE can grow to be 1 024 000 tuples.

## Datafill

The following table lists datafill for table REPLCODE.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
REPLCDKY		see subfields	Replace code key
			This field consists of subfields REPLNAME and REPLNO.
	REPLNAME	alphanumeric	Replace name
			Enter the unique name, predefined in table REPLNAME, field REPLNMKY.
	REPLNO	0 to 999	Replace number
			Enter the cell number to be replaced.

## REPLCODE (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
REPLDIGS		numeric	Replace digits
		(vector of up to 30 digits)	Enter the actual digits that replace the cell number.
REPLDATA		see subfields	Replace data
		This field consists of subfields REPSEL and COSMAP.	
	REPLSEL	REPLorNSC	Replace selector
			Enter the value matching the entry used in field REPLNAME. This entry must match the one in field REPLSEL in table REPLNAME.
	COSMAP	alphanumeric	Class-of-service mapping name
			If the entry in filed REPLSEL is NSC, enter the name used to screen and map the network class of service (NCOS) for a given network speed call. This name must be datafilled in table COSMAP.

# Datafill example

An example of datafill for table REPLCODE is shown below.

Call processing software takes the cell numbers 14 and 123 and replaces them with 63674118 and 96225214. It uses the COSMAP1 and COSMAP2 mapping from table COSMAP to validate the current NCOS and possibly update it, then retranslates using the new NCOS with these replaced digits.

#### MAP display example for table REPLCODE

REPLCDKY		REPLDIGS REPL	DATA	
NSCIBN1	14	63674118 NSC	COSMAP1	

### REPLNAME

#### Table name

Replace Name Table

### **Overview**

For related information, refer to table REPLCODE.

Feature package NTX432AA (Network Speed Calling) permits the customer to define a list of up to 1000 network speed calling (NSC) numbers for each customer group on the assumption that all use the new translation selector devised for NSC. This selector, namely NSC, is defined in table IBNXLA.

NSC numbers have priority and restriction class marks available so that low priority users can have their calling class upgraded for pre-programmed business destinations.

Electronic Switched Network (ESN) supports a mixture of two- and three-digit speed numbers plus access code. A suggested dialing plan for speed numbers is

IMXX IRX

where M = 1 through 0 R = 1 through 0 while R and M cannot conflict

The two suggested access codes, namely IMXX and IRX, are only a subset of what is possible.

The access code for network speed call is followed by the cell number to indicate which speed call number is desired.

Access codes are implemented through Integrated Business Network (IBN) translation, using table IBNXLA. The speed call cell number itself can be handled as an access code from the viewpoint of translation.

Different customer groups can have different translators and hence different access codes.

Access to NSC list can be made available to IBN originators of any kind: lines, trunks, attendant consoles, directory numbers (DN), and so on. However, it is possible to restrict the use of particular NSC numbers according to the network class of service (NCOS) of the originator.

Calls that require retranslation (for example, calls via a Virtual Facility Group) cannot be routed to make a Network Speed Call.

#### **REPLNAME** (continued)

### **Functional description**

Table REPLNAME is used to predefine all the valid names for particular access codes that can be used in table REPLCODE. Once a predefined name is associate with a particular selector, that is, NSC, it forces the user to allocate each name for only one purpose. Finally, a maximum number of allowable entries (in table REPLCODE) for each name-selector combination is identified.

One could look at table REPLNAME as the control or head table and table REPLCODE as the subtable.

### **Datafill sequence and implications**

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

### Table size

1 to 2040 tuples

### Datafill

The following table lists datafill for table REPLNAME.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
REPLNMKY		alphanumeric (up to 16 characters)	Replace name key
			Define a unique name to be used in conjunction with a particular feature (for example network speed call) access code.
REPLSEL		REPLorNSC	Replace selector
			Enter the feature that uses the above REPLNMKY in table REPLCODE.
			Enter REPL for features that make use of replacement digits and have no specific data requirements.
			Enter NSC for network speed call.
NOITEMS		1 to 1000	Number of items
			Enter the maximum number of entries to be datafilled in table REPLCODE for the above REPLNMKY.

# **REPLNAME** (end)

# **Datafill example**

Since this table is used only in conjunction with the NSC feature, verify first that table IBNXLA has TRSEL = NSC.

An example of datafill for table REPLNAME is shown below.

#### MAP display example for table REPLNAME

REPLNMKY	REPLS	EL NOITEMS	
NSCINB1	NSC	300	
NSCINB1	NSC	100	

# REROUTE

## Table name

Network Management Reroute Control Table

# **Functional description**

Refer to subtable REROUTE.NWMRROUT.

# **Datafill sequence and implications**

Refer to subtable REROUTE.NWMRROUT.

## Table size

Refer to subtable REROUTE.NWMRROUT.

# Datafill

An example of datafill for table REROUTE is shown below.

#### MAP display example for table REROUTE

RRTNO	NWMRI	ROUT	
0	(	3)	

# **REROUTE.NWMRROUT**

### Table name

Network Management Reroute Subtable

# **Functional description**

The following table lists all the network management reroute tables.

#### **Network Management Reroute Tables**

Table name	Form number	Form title
REROUTE	No form	
REROUTE.NWNRROUT	2190	Network Management Reroute Subtable Record

Subtable REROUTE.NWMRROUT redirects a percentage of traffic on a normal route to another route.

Table REROUTE and subtable REROUTE.NWMRROUT are accessed during translation of a call as follows:

- 1. Translation through a route table, such as table OFRT or subtable HNPACONT.RTEREF, encounters a route element with field RTESEL set to T, field TABID set to RRTE3, and field KEY set to the required reroute number.
- 2. DMS translation now determines whether the Network Management Reroute feature for the required reroute number is activated and proceeds as described in subset a or subset b below.
  - a. Network Management Reroute feature is not activated for the reroute number. No calls are redirected, and all calls proceed to the next route element in the route list of the route table.
  - b. Network Management Reroute feature is activated for the reroute number; the Network Management Reroute feature activation command (at the NWM level of a MAP) has the following form:

REROUT APPLY rrteno rrtesub {level}

where

## rrteno

is the reroute number

# REROUTE.NWMRROUT (continued)

#### rrtesub

is the index into subtable REROUTE.NWMRROUT where the percentage of calls to redirect is found in field LEVEL and the routing of redirected calls is found in fields TABID and KEY {level} if specified, it overrides the percentage of calls to redirect specified in field LEVEL in subtable REROUTE.NWMRROUT

Subtable REROUTE.NWMRROUT lists the routes to which traffic is rerouted for a given percentage of busy traffic. Only 1 of the 16 entries can be activated at one time.

For foreign numbering plan area (FNPA) with six-digit translation, subtable REROUTE.NWMRROUT can only be applied to foreign NPAs with a route list. An example is FNPAs that are provided with route reference subtables by datafilling input forms 2432A and B.

The operating company datafills one form 2190 for each reroute subtable up to a maximum of 1024 tuples.

## **Datafill sequence and implications**

The following tables must be datafilled before table REROUTE.NWMRROUT.

- IBNRTE
- IBNRT2
- IBNRT3
- IBNRT4

# REROUTE.NWMRROUT (continued)

# Table size

0 to 1024 tuples

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
RRTSUB		0 to 15	Reroute subtable index
			Enter the index into subtable REROUTE.NWMRROUT.
NEWROUTE		see subfields	New route
			This field consists of subfields TABID and KEY.
	TABID	IBNRTE	Table identification
		IBNRT3	In a local/toll office enter table OFRT (Office Route) or one of the four IBNRTE (Integrated Business Network Route) tables to which the percentage of traffic (level) is redirected if the Reroute feature is activated.
			In a DMS-300 office, enter OVR0 to OVR9 (Overseas Route) to which the percentage of traffic (level) is redirected if the Network Management Reroute feature is activated.
			Any entry outside this range is invalid.
	KEY	0 to 1023	Key
			Enter the index into table specified in field TABID.
LEVEL		0 to 100	Level
			Enter the percentage of traffic redirected when the Network Management Reroute feature is activated.

# **Datafill example**

An example for datafill for subtable REROUTE.NWMRROUT is shown below.

# REROUTE.NWMRROUT (end)

In this example

- Memory is internally allocated in table REROUTE.
- The input data is for one subtable that is numbered 0 (zero).
- Memory is internally allocated for the reroute values in subtable NWMRROUT 0.
- If Network Management Reroute Feature is activated for reroute subtable 0 (RRTSUB 0), 35% of the traffic is rerouted by table OFRT, index 3.
- If Network Management Reroute Feature is activated for reroute subtable 1 (RTSUB 1), 40% of the traffic is rerouted by table OFRT, index 3.
- If Network Management Reroute Feature is activated for reroute table 2 (RRTSUB 2), 45% of the traffic is rerouted by table OFRT, index 4.

*Note 1:* In any one reroute subtable, only one RRTSUB can be activated at any time.

*Note 2:* For definition of commands see the *Basic Translations Tools Guide*.

#### MAP display example for table REROUTE.NWMRROUT

	RRTSUB	NEWRO	UTE L	EVEL		
	0	OFRT	3	35		
	1	OFRT	3	40		
	2	OFRT	4	45		
$\langle$						

Data shema tables

# RESFEAT

## Table name

**Residential Line Feature** 

# **Functional description**

Table RESFEAT contains the assignment of custom local area signaling services (CLASS) features for residential lines.

CLASS features are as follows:

- Automatic Call Blocking (ACB)
- Anonymous Caller Rejection (ACRJ)
- Analog Display Services Interface (ADSI)
- Automatic Recall (AR)
- Call Logging (CALLOG)
- CLASS Message Waiting Indicator (CMWI)
- Calling Name Delivery Blocking (CNAB)
- Calling Name Delivery (CNAMD)
- Calling Number Delivery (CND)
- Calling Number Delivery Blocking (CNDB)
- Customer Originated Trace (COT)
- Deluxe Spontaneous Call Waiting Identification (DSCWID)
- Dialable Number Delivery (DDN)
- Distinctive Ringing Call Waiting (DRCW)
- Redirecting Number and Reason Delivery (RND)
- Selective Call Acceptance (SCA)
- Selective Call Forwarding (SCF)
- Selective Call Rejection (SCRJ)
- Spontaneous Call Waiting Identification (SCWID)

*Note 1:* CND and DDN are incompatible features and are mutually exclusive.

*Note 2:* Assign Screening List Editing (SLE) features (DRCW, SCA, SCF, SCRJ) to directory numbers (DNs) on integrated services digital network (ISDN) sets. SLE features assigned to ISDN sets are in the index by the

logical terminal identification (LTID). There is one tuple for each DN key that has the SLE feature.

*Note 3:* As of BCS36, CLASS features can be assigned to data units.

The following paragraphs describe the CLASS features available for residential lines.

### Automatic Call Back (ACB)

This feature allows a subscriber to place a call to the last station the subscriber called. If the destination line is busy, ACB monitors the line until it becomes idle and can accept the call.

### **Anonymous Caller Rejection (ACRJ)**

This feature allows the subscriber to reject incoming calls from callers who have intentionally blocked their caller identification information.

The ACRJ option requires NT1X77AA and NT1X79AA digital recorded announcement (DRA) cards for recording customized announcements, including rejection and activation/deactivation confirming announcements.

ACRJ can be assigned to the pilots and individual members of multiline hunt (MLH) and distributed line hunt (DLH) groups. ACRJ must be assigned to directory number hunt (DNH) groups on an individual basis. ACRJ may be assigned to only the primary member of a multiple access directory group (MADN).

ACRJ can be used with Meridian Business sets but not with Integrated Voice and Data Sets or ISDN sets.

## Analog Display Services Interface (ADSI)

This feature is used to distinguish between the audio and visual types of access for SLE features. When ADSI is assigned to a line with the SLE feature, Visual Screen List Editing (VSLE) is accessed if the customer premises equipment (CPE) acknowledges the CPE alerting signal (CAS) or query tone with a dual-tone multifrequency (DTMF) A tone. The host peripheral module (PM) on the line must have a unified processor (UP), a universal tone receiver (UTR), a CLASS modem resource card (CMR), and the 6X69AD tone and messaging card. Access to the ADSI line option is allowed in table RESOFC when the ADSI tuple is enabled.

The SLE function allows subscribers to screen specific incoming calls for special treatment. In a VSLE session, using the ADSI protocol and the ADSI-compatible display set, the main list editing level is replaced with a

visual display of feature status information. The subscriber uses scrolling softkeys that move through items in the screening list.

The ADSI feature is always assigned with subfield AMA set to NOAMA and subfield STATUS set to ACT (active).

# Automatic Recall (AR)

This feature allows a subscriber to place a call to the last station that called the subscriber. If the destination line is busy, AR monitors it until it becomes idle and can accept the call.

AR can also be activated as a two-level procedure featuring three types of announcements depending on the type of the incoming call: the DN announcement, the private DN announcement, and the invalid DN announcement. With the DN announcement, the subscriber hears an announcement stating the DN of the last incoming call as well as the date and time of that call. The subscriber is then instructed to dial the digit 1 to activate AR or hang up to abort AR.

# Call Logging (CALLOG)

This feature provides the subscriber with information related to busy, unanswered, or forwarded calls.

The subscriber accesses this feature by dialing an appropriate activation code and views the information using softkeys on SESAME customer premise equipment (CPE). Upon viewing, the subscriber receives the following information for each call:

- the DN and name of the calling party, when available
- the time and date of the call's arrival
- the number of times the calling party called
- the status (unanswered, forwarded, or busy) of the subscriber's line when the call was logged

The CALLOG option is not allowed on an MLH/DLH hunt member.

# CLASS Message Waiting Indicator (CMWI)

This feature builds on the Message Waiting (MWT) feature. The MWT feature allows users to have a list of messages stored against their station in the DMS switch or at a message center. When a message is queued against the user's station, the message waiting indicator associated with the station is activated. When the last message is retrieved by the user, the message waiting indicator is deactivated.

The CMWI feature provides a means of controlling the message waiting indicator on a CLASS set.

Subscribers must have option MWT assigned to their lines before option CMWI can be added.

The subscriber must be equipped with a set capable of receiving and understanding CLASS modem transmissions. The CLASS Modem Resource (CMR) card is used to transmit the lamp/display information to the set.

The CMWI feature is activated when enabled in the office and assigned to the line. The CMWI subscribers can activate or deactivate the ringing option by dialing the CMWIRING activation and deactivation codes from their sets.

### Calling Name Delivery Blocking (CNAB)

This feature allows delivery of the calling name to be blocked.

When feature package NTXE46AA is present, the CNAB options provide the ability to activate the CNB (Calling Number Blocking), CNNB (Calling Name Number Blocking), and CNND (Calling Name Number Delivery) options.

#### Calling Name Delivery (CNAMD)

This feature delivers the calling party's name, current time, and date to the terminating line between the first two rings of every incoming call, provided the host PM on the line has a CMR card and CNAMD is turned on for the switching unit in table RESOFC.

Feature CNAMD with automatic message accounting (AMA) allows subscription usage sensitive pricing (SUSP) for CNAMD. An AMA record is generated for each delivery of calling information on calls terminating to the line. The user must dial the CNAMD SUSP activation code datafilled in table IBNXLA to activate CNAMD with AMA. AMA is only available if field SUSP in table AMAOPTS is set to ON.

For ISDN basic rate interface (BRI) lines, use the Aggregate CND Recording (ACR) line option to generate ISDN-specific AMA billing records. Option ACR differentiates between voiceband information (VI) and circuit-mode data (CMD) calls in the AMA records it produces. Option ACR is an extension of the CND feature. Option ACR requires that the line has the CND feature and that CND is enabled for the switch in table RESOFC. Feature CNAMD is optional for use with the ACR line option.

No activation code is required if the line has feature CNAMD with no AMA. Delivery of calling name information is automatic.

*Note:* All CLASS display features (CNAMD, CND, and DDN) with AMA use the same CND SUSP activation or deactivation code datafilled in table IBNXLA. Dialing the CND SUSP activation code activates all display features with AMA. The subscriber cannot turn on or off a single display feature leaving others unaffected.

## Calling Number Delivery (CND)

This feature indicates that the line receives calling information on calls terminating to the line, provided the host PM on the line has a CMR card and CND is turned on for the switching unit in table RESOFC.

Table LTCINV or table RCCINV must be datafilled with a CMR card in field OPTCARD for the host PM of the line.

*Note:* If table LTCINV or table RCCINV is not datafilled, the CND feature is still added to the line.

Feature CND with AMA allows SUSP for the feature. An AMA record is generated for each delivery of calling information on calls terminating to the line. The user must dial the CND SUSP activation code that is datafilled in table IBNXLA to activate CND with AMA. AMA is only available if the SUSP option in table AMAOPTS is set ON.

For ISDN BRI lines, use the ACR line option to generate ISDN-specific AMA billing records for VI and CMD. Option ACR differentiates between VI and CMD calls in the AMA records it produces. Option ACR is an extension of the CND feature. Option ACR requires that the line has the CND feature and that CND is enabled for the switch in table RESOFC.

## Calling Number Delivery Blocking (CNDB)

This feature allows delivery of the calling number to be blocked.

The CNDB option cannot be assigned to Meridian business sets (MBS).

When feature package NTXE46AA is present, the CNDB options provide the ability to activate the CNB (Calling Number Blocking), CNNB (Calling Name Number Blocking), and CNND (Calling Name Number Delivery) options.

## **Customer Originated Trace (COT)**

This feature allows the recipient of a harassing call to request an automatic trace of the call.

#### Deluxe Spontaneous Call Waiting Identification (DSCWID)

This feature allows a subscriber to receive calling party information during Call Waiting (CWT) and control the treatment of incoming calls with a set of disposition options. The host PM must have a CMR card, and the DSCWID feature must be turned on for the switching unit in table RESOFC. The disposition options are available through softkeys on an ADSI-compliant CPE. The term softkey refers to the context-sensitive keys on the CPE that change function according to the type of service and the menu levels within the service.

The DSCWID subscriber receives one of two types of CWT alerting sequences: subscriber alerting signal (SAS) or a SAS followed by a CPE alerting signal (CAS). The SAS is the normal CWT tone that a subscriber hears. The SAS followed by a CAS is necessary to alert the CPE to display the DSCWID options on the ADSI-compliant CPE as well as to send caller identification (CID) to the CPE if a CID feature, such as CND, DDN, or CNAMD, is assigned to the DSCWID subscriber's line.

After the CWT tone indicates to the DSCWID subscriber that a call is waiting, the CPE displays calling party information (name, number, or both name and number) and softkey options from which the subscriber can choose a disposition for the waiting call.

The DSCWID subscriber can choose one of the following options for treating the second (incoming) call:

- Answer the new call and put the existing call on hold.
- Disconnect the existing call and answer the new call.
- Connect the new call to a busy announcement.
- Forward the new call.
- Put the new call on hold after connecting to a hold announcement.
- Conference the new call with the existing call.

#### **Dialable Number Delivery (DDN)**

This feature indicates that the line receives calling information in the form of a dialable DN on calls terminating to the line. The information is delivered, provided that the host PM of the line has a CMR card and that feature DDN is turned on for the switching unit in table RESOFC.

Feature DDN is an enhancement to the CLASS CND feature. The DDN feature delivers the calling number to the subscriber with the digits the subscriber dials to reach the calling party. When feature DDN with NOAMA is assigned to a line, delivery of calling information is automatically activated.

No AMA records are generated for delivery of calling information to a DDN NOAMA line.

Feature DDN with AMA allows SUSP for feature DDN. An activation code CND SUSP datafilled in table IBNXLA must be dialed in order to activate delivery of calling information. Once this activation code has been dialed, an AMA record is generated each time the calling information is delivered to the line. Feature DDN with the AMA option is also referred to as DDN SUSP.

Table LTCINV or table RCCINV must be datafilled with a CMR card in field OPTCARD for the host PM of the line.

*Note:* If table LTCINV or table RCCINV is not datafilled, the CND is still added to the line.

## **Distinctive Ringing/Call Waiting (DRCW)**

This feature allows a subscriber to identify a list of directory numbers by receiving distinctive alerting treatment. The DNs, given distinctive alerting treatment, are built into a list through the SLE facility. These terminating alerting treatments are different from standard power ringing and call-waiting tone. The caller only receives standard audible ringing.

The distinctive alerting is given when a call is received from a DN that is on the list of numbers referred to as the DRCW list. If a call is made to a DRCW subscriber's line while it is busy, the distinctive call waiting tone is given if the following conditions apply.

- The line has standard call waiting assigned to it.
- A call can be waited.
- The calling DN is on the operating company's DRCW list. Calling DNs not on the DRCW list are identified using standard call waiting treatment.

Distinctive call waiting is the same as Call Waiting, except during alerting treatment. If DNs of the incoming calls cannot be identified or do not exist on the DRCW screening list, then standard alerting treatment is provided for these incoming calls.

Feature DCRW supports the lines that are connected to the following PMs:

- line concentrating modules (LCM)
- remote LCMs (RLCM)
- outside plant modules (OPM)
- line modules (LM)

- remote LMs (RLM)
- subscriber carrier modules (SCM)
  - subscriber carrier module urban (SCM-100U/RCU)
  - subscriber carrier module SLC-96 (SCM-100S/RCS)
  - subscriber carrier module rural (SCM-100R/RCT)

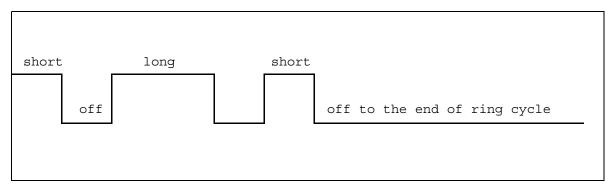
The ring types supported are coded, superimposed, and frequency selective ringing, shown in the following table below with the different PMs.

#### **Ring types**

PM types	Ring type
LCM	Coded
LM	Coded
ОРМ	Coded
RLCM	Coded
RLM	Coded
SCM-100S/RCS	Frequency selective
SCM-100R/RCT	Superimposed
SCM-100U/RCU	Coded

DCRW ringing pattern varies according to the ring type. For coded and superimposed frequencies, the ringing pattern is on-off-on-off as shown in the figure below.

#### Ringing pattern for coded and superimposed frequencies



The duration of the ringing components for the coded and superimposed ring types vary according to the following conditions.

If the subscriber line is connected to an LCM, LM, OPM, RLCM, or RM, then durations are as shown in the following table.

LCM, LM, OPM, RLCM, RM ringing duration

Ringing type	Short ring	Long ring	Inter-ring silence		
Coded 20 Hz	500 ms	1000 ms	500 ms		
Coded 30 Hz	450 ms	900 ms	450 ms		
Coded 30 Hz (see Note)	500 ms	1000 ms	500 ms		
Superimposed	460 ms	920 ms	460 ms		
<i>Note:</i> If the optional package NTX101 (IBN Enhanced Services) is present in the office, Coded 30 Hz is the same as Coded 20 Hz.					

If the subscriber line is connected to an SCM, then the durations are as shown in the following table.

#### SCM ringing duration

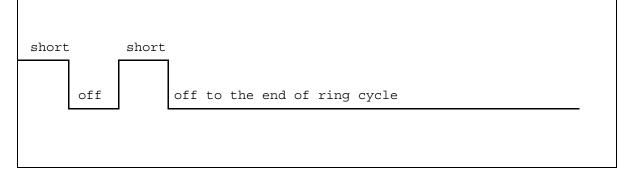
Ringing type	Short ring	Long ring	Inter-ring silence
Coded 20 Hz	500 ms	1000 ms	500 ms
Coded 30 Hz	500 ms	1000 ms	500 ms
Superimposed	500 ms	1000 ms	500 ms

## Frequency selective ringing

For frequency selective ringing, the DRCW ring pattern is on-off-on as shown in the figures below.

If the subscriber line is connected to an LCM, LM, OPM, RLCM, or RLM, the pattern heard by the subscriber is short-short as shown in the figure below.

Ringing pattern for subscriber line connected to LCM, LM, RLCM, RLM



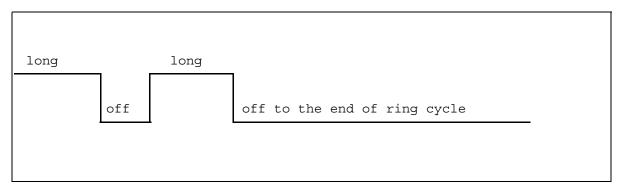
The duration of the ringing components is shown in the following table.

#### **Duration of components**

	First short	Second short	Inter-ring silence
Frequency selective	600 ms	640 ms	700 ms

If the subscriber is connected to an SCM, then the pattern heard by the subscriber is long-long as shown in the figure below.

### Ringing pattern for subscriber line connected to SCM



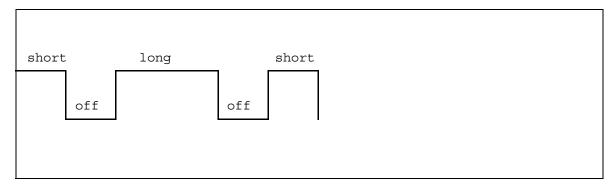
The duration of the ringing components is shown in the following table.

#### Duration of components for SCM

	First long	Second long	Inter-ring silence
Frequency selective	1000 ms	1000 ms	500 ms

The distinctive call waiting tone of the DRCW feature consists of different length bursts of 440 Hz tone. The pattern provided is on-off-on-off-on as shown in figure below.

#### Ringing pattern for coded and superimposed frequencies



The duration for each segment is shown in the following table.

#### Segment durations

Short tone	Long tone	Inter-tone silence
100 ms	500 ms	100 ms

#### **Redirecting Number and Reason Delivery (RND)**

This feature allows redirecting number and reason delivery for ISDN call forwarding. Add option RND to the DN by SERVORD to set RND for an ISDN line as flat-rate or SUSP. SERVORD automatically updates table RESFEAT with a tuple for each DN assigned the RND option.

Enter Y in the ENABLED subfield for the RND tuple in table RESOFC to enable the RND line option Universal access does not apply to RND. Set field ACCESS to SUBSCR for subscription access only billing.

#### Selective Call Acceptance (SCA)

This feature allows a subscriber to selectively accept calls arriving from a set of DNs as specified in an SCA list that is built using the SLE facility. The customer activates feature SCA by dialling the SCA access code that is datafilled in table IBNXLA and enters the SLE session.

Any call that terminates to a line with feature SCA is screened by the SCA feature before any other terminating feature is enabled. If feature SCA is active and the incoming call's DN is not on the SCA list, the caller is given SCA treatment. Any toll call is charged for the call if specified in table RESOFC. If screening cannot be applied owing to system failure, lack of resources, or the calling DN is not available, the call is given SCA treatment. Feature SCA only allows calls that can be screened to terminate.

The exception to SCA screening is any incoming call from an operator no-test trunk. This provides a limited capability to allow completion of emergency calls to an SCA line that originates from lines not on the SCA list. The operator can then inform the SCA user of the emergency call. Handling of the call at that point is up to the discretion of the SCA user.

When DND\_ONLY=Y callers on the SCA list will bypass DND when it is active, provided RES00102 is active. When DND\_ONLY=N, then callers on the SCA list will not terminate when DND is active. For information on the Enhanced DND feature, refer to *DMS-100 Family NA100 Translation Guide*.

#### Selective Call Forwarding (SCF)

This feature allows a subscriber to selectively forward calls arriving from a set of DNs as specified in an SCF list built using the SLE facility. The subscriber activates feature SCF by dialing the SCF access code datafilled in table IBNXLA and entering the SLE sessions.

Feature SCF takes precedence over other kinds of call forwarding. For example, if a line has both features SCF and CFU active and the calling DN appears on the line's SCF list, the call is forwarded to both the SCF feature and the DN.

Tuples for feature SCF in table RESFEAT cannot be added or deleted. Each tuple can only be modified. Tuples are automatically added or deleted to this table when feature SCF for the lines is added in table IBNFEAT.

#### Selective Call Rejection (SCRJ)

SCRJ allows a subscriber to selectively reject calls arriving from a limited set of previously identified DNs. The rejected DNs are built into a list by the SLE facility. Calls that are rejected are given treatment SCRJ.

The subscriber initiates an SCRJ SLE session by dialing the SCRJ code. The access code is specified in table IBNXLA. The subscriber with SCRJ is not advised, in any way, that calls are being rejected. When the incoming call screened is a forwarded call, the originating DN, not a forwarding station's DN, is screened.

## Spontaneous Call Waiting Identification (SCWID)

This feature allows a subscriber to receive calling party information in conjunction with a call waiting tone.

To assign SCWID to a line, CWT must be assigned to the line either at the same time or before SCWID is added. At least one display option (DDN, CND, or CNAMD) must be assigned to the line either at the same time or before SCWID is added.

If the CWT option is deleted from a SCWID line, the SCWID option must be removed first. SCWID must be deleted either at the same time or before the last display option is removed.

If RES\_SO\_SIMPLIFICATION is TRUE, the SCWID line option can be added to lines that have been assigned the RES, 1FR, or 1MR line class code.

With feature package NTXE58AA, SCWID can be assigned to lines with an LCC of IBN.

With feature package NTXE64AA, SCWID can be assigned to LCCs of OWT, EOW, INW, 2WW, and ETW.

# **Datafill sequence and implications**

The following tables must be datafilled before table RESFEAT:

- RESOFC
- IBNLINES

# Datafill

The following table lists datafill for table RESFEAT.

Field	Subfield	Entry	Explanation and action
LINE		see subfields	Line Equipment Number
			This field is the key to table RESFEAT. It is identical to field LEN. Field LEN 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		0 to 76	Key
			This field contains the possible physical keys for a DN appearance on a Meridian business set (MBS). A non-MBS set always has a key of 0 (zero). All keysets have range of 1 to 69.

Field	Subfield	Entry	Explanation and action			
FEAT		ACB, ACRJ,	CLASS feature			
		ADSI, AR, CALLOG, CMWI, CNAB,	Enter ACB for Automatic Call Back.			
			Enter ACRJ for Anonymous Caller Rejection.			
		CNAMD, CND, CNDB, COT, DDN,	Enter ADSI for Analog Display Services Interface.			
		DRCW,	Enter AR for Automatic Recall.			
		DSCWID, RND, SCA,	Enter CALLOG for Call Logging.			
		SCF, SCRJ, SCWID	Enter CMWI for CLASS Message Waiting Indicator.			
			Enter CNAB for Calling Name Delivery Blocking.			
			Enter CNAMD for Calling Name Delivery.			
			Enter CND for Calling Number Delivery.			
			Enter CNDB for Calling Number Delivery Blocking.			
					Enter COT for Customer Origin Trace.	Enter COT for Customer Originated Trace.
			Enter DDN for Dialable Directory Number.			
			Enter DRCW for Distinctive Ringing Call Waiting.			
			Enter DSCWID for Deluxe Spontaneous Call Waiting Identification.			
				Enter RND for Redirecting Number and Reason Delivery.		
			Enter SCA for Selective Call Acceptance.			
			Enter SCF for Selective Call Forwarding.			
			Enter SCRJ for Selective Call Rejection.			
			Enter SCWID for Spontaneous Call Waiting Identification.			

Field	Subfield	Entry	Explanation and action
VAR		see subfields	Variable data
			This field consists of subfields DF, AMA, STATUS, FDN, DTYPE, DEFTRMT, DAMA, CONFPEGS, AVAILDLY, UNAVAILDLY, CMDAVAILDLY, and CMDUNAVAILDLY.
	DF	ACB, ACRJ,	CLASS feature
		ADSI, AR, CALLOG, CMWI, CNAB, CNAMD, CND, CNDB, COT, DDN, DRCW, DSCWID, RND, SCA, SCF, SCRJ, SCWID	Enter the same value as field FEAT.
	AMA	AMA AMA, NOAMA	Automatic message accounting
			Enter AMA if an automatic message accounting (AMA) record is generated for the feature. The SUSP (subscriber usage sensitive pricing) feature in table AMAOPTS must be set ON for AMA generation.
			Enter NOAMA if no AMA record is required.
	STATUS	ACT,	Status
		INACT, UNIVA, UNIVI	Enter ACT (active) if the feature is active on the line. Otherwise, enter INACT (inactive).
			The entries UNIVA and UNIVI indicate the feature is activated or inactivated by a universal user.
			Enable the feature for the office in table RESOFC.

Field	Subfield	Entry	Explanation and action
	FDN	1 to 30 digits	SCF DN
			If the entry in subfield DF is SCF, datafill this refinement. Enter the forward-to DN for SCF calls when SCF is active.
	DTYPE	PROPRITY,	DSCWID type
		ADSITIME, ADSICID, NODATA, NOCIDCW,	If the entry in subfield DF is DSCWID, datafill this refinement. The DSCWID type is the name defined in table DSCWDTYP.
		COMPLETE, DEF, or	Enter the name of the DSCWID type assigned to the line as follows:
		others as defined	The PROPRITY tuple indicates the proprietary DSCWID type.
			<ul> <li>The ADSITIME tuple indicates that only time data is transmitted and only standard CWT is available to non-ADSI sets.</li> </ul>
			• The ADSICID tuple indicates that both CID and time data are transmitted, based on the CID features present on the line, and only standard CWT is available to non-ADSI sets.
			• The NODATA tuple indicates that CID and time data are not transmitted, and both ADSI and non-ADSI sets have all DSCWID options.
			<ul> <li>The NOCIDCW tuple indicates that only time data is transmitted, and both ADSI and non-ADSI sets have all DSCWID options.</li> </ul>
			• The COMPLETE tuple indicates both CID call waiting (CIDCW) and time data are transmitted, and both ADSI and non-ADSI sets have all DSCWID options.
			<i>Note:</i> You cannot use the PROPRITY value when adding DSCWID to a line.

Field	Subfield	Entry	Explanation and action
	DEFTRMT	RING, FWD,	Default treatment
		ANNC, or DEF	If the entry in subfield DF is DSCWID, datafill this refinement. Enter the default treatment to be applied when no DSCWID option is chosen. Enter RING to apply ringing, ANNC to apply an announcement, and FWD to forward the call to a valid CFDA number. Enter DEF to apply the same treatment datafilled in table RESOFC.
	DAMA	NONE, CONF, or DEF	DSCWID AMA
			If the entry in subfield DF is DSCWID, datafill this refinement. Enter the type of AMA recording status for DSCWID lines. Enter CONF to record on use of the CONFERENCE option, NONE for no AMA recording, and DEF to apply the same AMA status datafilled in table RESOFC.
	CONFPEGS	0 to 32767	Conference pegs
			If the entry in subfield DF is DSCWID, datafill this refinement. Enter the number of successful DSCWID conference attempts made when subfield DAMA is set to CONF since the last aggregation interval. This field cannot be changed by the operating company. It should be reset at the close of the aggregation interval or when subfield DAMA is reset to NONE.

Field	Subfield	Entry	Explanation and action
	AVAILDLY	0 to 32767	Available delivery
			If the entry in subfield DF is CNAMD, CND, DDN, or RND datafill this refinement. This field holds the unrecorded counts for voice deliveries where information was available but not recorded in a Bellcore AMA format record. This count only increments when the feature has AMA enabled in table RESOFC and option SUSP is ON in table AMAOPTS.
			If the entry in subfield DF is CNAMD, this field holds the number of times that both a calling name and a calling number are delivered.
			If the entry in subfield DF is CND or DDN, this field holds the number of times a calling name, but not a calling number is delivered.
			If the entry in subfield DF is RND, this field holds the number of times the redirecting number is delivered.
			The default is 0 (zero).

Field	Subfield	Entry	Explanation and action
	UNAVAILDLY	0 to 32767	Unavailable delivery
			If the entry in subfield DF is CNAMD, CND, DDN, or RND datafill this refinement. This field holds the unrecorded counts for voice deliveries where information was suppressed, private, or otherwise unavailable for the feature. These were not recorded in a BELLCORE format. This count only increments when the feature has AMA enabled in table RESOFC and option SUSP is ON in table AMAOPTS.
			If the entry in subfield DF is CNAMD, this field holds the number of times that neither a calling name nor a calling number is delivered.
			If the entry in subfield DF is CND or DDN, this field holds the number of times a calling number, but no calling name is delivered.
			If the entry in subfield DF is RND, this field holds the number of times that no redirecting number is delivered.
			The default is 0 (zero).

Field	descri	ptions
1 1010	400011	

Field	Subfield	Entry	Explanation and action
	CMDAVAILDLY	0 to 32767	Circuit-mode data (CMD) available delivery
			For ISDN BRI, the Calling Number Identification Service (CNIS) billing feature includes the SERVORD option Aggregate CND Recording (ACR). Option ACR generates call type-specific AMA records for CND or CNAMD, or both.
			SERVORD option ARR (Aggregate RND Recording) generates call type-specific AMA records for the RND feature. If RND is on the line, ARR is required.
			If the entry in subfield DF is CNAMD or CND, datafill this refinement. This field holds the unrecorded counts for deliveries where information was available but not recorded in a BELLCORE AMA format record. This count only increments when the feature has AMA enabled in table RESOFC and option SUSP is ON in table AMAOPTS.
			This field holds CMD counts for ISDN BRI only. The AVAILDLY subfield holds all voice and non-ISDN counts.
			If subfield DF contains CNAMD, this field indicates how often the switch delivered both a calling name and a calling number.
			If subfield DF contains CND, this field indicates how often the switch delivered a calling name but not a calling number (that is, CNAMD-only deliveries).
			If subfield DF contains RND, this field indicates the number of times a redirecting number is delivered.
			The default is 0 (zero).

Field	Subfield	Entry	Explanation and action
	CMDUNAVAILDLY	0 to 32767	Circuit-mode data (CMD) unavailable delivery
			For ISDN BRI, the CNIS billing feature includes the SERVORD option ACR. Option ACR generates call type-specific AMA records for CND or CNAMD, or both.
			If the entry in subfield DF is CNAMD or CND, datafill this refinement. This field holds the unrecorded counts for deliveries where information was available but not recorded in a BELLCORE AMA format record. This count only increments when the feature has AMA enabled in table RESOFC and option SUSP is ON in table AMAOPTS.
			SERVORD option ARR generates call type-specific AMA records for the RND feature. If RND is on the line, ARR is required.
			This field holds CMD counts for ISDN BRI only. The UNAVAILDLY subfield holds all voice and non-ISDN counts.

Field	Subfield	Entry	Explanation and action
			If subfield DF contains CNAMD, this field indicates how often the switch did not deliver a calling name or a calling number.
			If subfield DF contains CND, this field indicates how often the switch delivered a calling number but no calling name (that is, CND-only deliveries).
			If subfield DF contains RND, this field indicates the number of times that no redirecting number is delivered.
			The default is 0 (zero).
DND_ONLY	DF Refinement (DF=SCA)	{Y, N}	Enter Y if SCA applies only when DND is active.
			Enter N when using standard SCA.
			Do Not Disturb Only
			If the entry in subfield DF is SCA, then enter Y, as SCA applies only when DND is active.
			Enter N when using the standard SCA.

#### **Field descriptions**

# Datafill example

The following example shows sample datafill for table RESFEAT.

## MAP display example for table RESFEAT

LINE			KEY	FEAT	VAR
HOST	00 0 11	08	1	SCRJ	
HOST	00 1 03	15	0	DSCWID	SCRJ NOAMA INACT DSCWID NOAMA ACT COMPLETE FWD CONF 5
HOST	01 1 14	22	0	CND	CND NOAMA ACT 0000
HOST	00 1 08	05	0	SCA	SCA NOAMA ACT Y

## Supplementary information

This section provides information on possible error messages when datafilling table RESFEAT.

#### **Error messages**

For feature CND, table LTCINV or table RCCINV must be datafilled with a CMR card in field OPTCARD for the host PM of the line. If this is not the case, then the following warning is output:

```
***WARNING** CND ASSIGNED TO LINE WITH NO CMR BOARD ACCESSIBLE.
```

If the option is added to a line whose host PM is not one of LTC, LGC or RCC, then the following error message is displayed and the feature is not added to the line:

```
CND NOT ALLOWED FOR LINES ON THIS PERIPHERAL TYPE
```

For feature DDN, table LTCINV or table RCCINV with a CMR card in the OPTCARD field for the host peripheral module of the line. If this is not the case then the following warning is output:

```
***WARNING** CND/DDN ASSIGNED TO LINE WITH NO CMR BOARD ACCESSIBLE
```

If the feature is added to a line whose host peripheral module is not one of LTC, LGC, or RCC types, then the following error message is displayed and the feature is not added to the line:

CND/DDN NOT ALLOWED FOR LINES ON THIS PERIPHERAL TYPE

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 has been 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*.

## Table history

#### SN07 (DMS)

DND\_ONLY field added SCA data feature to support A00002196.

#### NA011

Added option RND for feature AF7736, Redirecting Number and Reason Delivery for ISDN Call Forwarding.

## NA010

Added refinements CMDAVAILDLY and CMDUNAVAILDLY as subfields of field VAR in accordance with feature AF7454, CNIS Billing without Intra/Inter BBG Segregation.

### NA005

Added error message information to "Error messages" section in accordance with feature AN1653, Enforcement of SERVORD.

## NA004

The following changes were made to table RESFEAT:

- The Deluxe Spontaneous Call Waiting Identification (DSCWID) feature was added to the "Functional description" section.
- The following features were added as new line options assignable to RES and IBN lines in field FEAT and subfield DF:
  - ACB
  - ACRJ
  - AR
  - CALLOG
  - CMWI
  - CNAB
  - CNDB
  - СОТ

# **RESFEAT** (end)

- DSCWID
- SCWID
- Refinements DTYPE, DEFTRMT, DAMA, CONFPEGS were added as subfields of field VAR.
- Subfield FDN of field VAR was increased to 30 digits.

#### NA002

The Analog Display Services Interface (ADSI) feature was added to the "Functional description" section. ADSI was added as a new line option assignable to RES and IBN lines in field FEAT and subfield DF.

### BCS36

A paragraph was added to the "Functional description" section that data units can now be datafilled in table RESFEAT. Clarification of fields AVAILDLY and UNAVAILDLY was added.

# RESGROUP

## Table name

**Resource Group Table** 

# **Functional description**

Table RESGROUP contains data that is common to all resource members within a group. One entry is datafilled in table RESGROUP for each resource group defined. Currently, the data consists of modem pool and maintenance modem pool formats.

For related information, refer to table RESINV.

## **Datafill sequence and implications**

Table CLLI must be datafilled before table RESGROUP.

# Table size

0 to 2048 tuples

## Datafill

The following table lists datafill for table RESGROUP.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	Resource group key
			This field consists of subfield CLLI.
	CLLI	alphanumeric (up to 16 characters)	Common language location identifier
			Enter a common language location identifier (CLLI) to serve as the key to table RESGROUP.
GDATA		see subfields	Resource group data
			This field consists of subfields GRPTYP, TMODE, and SPEED.
	GRPTYP	MMP or MP	Resource group type
			Enter MMP for maintenance modem pool or MP for modem pool.

# **RESGROUP** (continued)

Field	Subfield or refinement	Entry	Explanation and action
	TMODE	FULL or HALF	Transmission mode
			Enter FULL if the modems are full duplex or HALF if they are half duplex.
	SPEED	300, 1200, 2400 4800, 9600, or 19200	Modem speed
			Enter the baud rate of the modem in bits per second.
OVFLDATA		see subfields	Overflow data
			This field consists of subfields OVFL and OVFLCLLI.
	OVFL	Y or N	Group overflow
			Enter Y (yes) if an overflow CLLI is required and datafill subfield OVFLCLLI. Otherwise, enter N (no) and leave subfield OVFLCLLI blank.
	OVFLCLLI	alphanumeric (up to 16 characters)	Group overflow CLLI
			Enter the CLLI of another resource group to which calls overflow if all members in the current group are busy.
MTCDATA		see subfield	Maintenance data
			This field consists of subfield MTC.
	MTC	Y or N	Maintenance
			Enter Y if modem pool maintenance data is required and datafill refinements MTCCLLI and MTCMODE. Otherwise, enter N and leave refinements MTCCLLI and MTCMODE blank.

## Field descriptions (Sheet 2 of 3)

# **RESGROUP** (end)

### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	MTCCLLI	alphanumeric (up to 16 characters)	Maintenance CLLI
			Enter the CLLI of the maintenance modem pool. This is used as a default for performing bit error rate tests (BERT).
	MTCMODE	IN, OUT, or BOTH	Maintenance test mode
			This field specifies the direction in which the modem pool is tested. Enter IN if the modem pool processes inbound calls. Enter OUT if the modem pool processes outbound calls. Enter BOTH if the modem pool handles calls in both directions.

# **Datafill example**

The following example shows sample datafill for table RESGROUP.

#### MAP display example for table RESGROUP

MTCDA	GRPKEY TA	GDATA		OVFLDATA	
	OMP1200A	MP FULL 1200	Y	OMP1200B Y ATTKDKA1	
OUT BOTH	OMP1200B	MP FULL 1200		N Y ATTKDKA1	
вотн	ATTKDKA1	MMP FULL 1200		N Y ATTKDKA1	

## Table history BCS36

Subfield CLLI was added.

### Table name

Resource Inventory Table

# **Functional description**

Table RESINV contains the line equipment numbers (LEN) of all the resources defined in the office, and specifies the type of resources. Any resource members added to table RESMEM must first be defined as valid resources in table RESINV.

Table RESMEM is capable of handling many input data formats, but at present only two exist: one for modem pool modems and one for modem pool data units.

The network resource selector (NRS) system provides modem pooling for data unit (DU) data transmission and the capability to select a variety of modems with different speeds. Modem pools are stored, processed, and manipulated by the NRS system.

Datapath modem pooling maintenance enables integrated testing of modem pools to be performed by the operating company, with the bit error rate test (BERT) commands in the LTPDATA level of the MAP (maintenance and administrative position).

There are three related resource tables:

- table RESINV stores inventory data on all office resources
- table RESGROUP stores group data
- table RESMEM stores member data

### **Datafill sequence and implications**

The following tables must be datafilled before table RESINV.

- LNINV
- KSETINV

### Table size

0 to 1000 tuples

# **RESINV** (continued)

# Datafill

The following table lists datafill for table RESINV.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RESKEY		see subfields	Resource key
			This field consists of subfield LEN. Currently, only modems and data units are valid.
	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.
RESDATA		see subfields	Resource data
			This field consists of subfields RESSEL and DETSEL.
	RESSEL	MPDU or	Resource selector
		MPMD	This field specifies the type of resource to which the LEN belongs. Enter MPDU if the resource is a modem pool data unit. Enter MPMD if the resource is a modem pool modem.

# **RESINV** (continued)

Field	Subfield or refinement	Entry	Evaluation and action
Field	refinement	Entry	Explanation and action
	DETSEL	Y or N	Detail selector
			The entry in this field indicates whether the resource line has been associated with its mating resource pair and assigned in table RESMEM as a member of a resource group.
			A value of Y (yes) indicates that the line has been mated and assigned in a resource group. This field and fields LEN, GRPCLLI, and SEQNO are updated by table control when the resource line is datafilled in table RESMEM.
			A value of N (no) indicates that the resource line has not been mated yet. Always enter N in this field if adding a new resource line, and leave the remaining fields LEN, GRPCLLI, and SEQNO blank.
	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 is the other half of a DU-modem pair and consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.

### Field descriptions (Sheet 2 of 3)

### **RESINV** (continued)

#### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	GRPCLLI	alphanumeric	Group CLLI
		(up to 16 characters)	This field is not datafilled and is shown for information only. This field specifies the common language location identifier (CLLI) of the resource group to which the member belongs.
	SEQNO	0 to 255	Resource member sequence
			This field is not datafilled and is shown for information only. This field indicates the position of the member within the group.

### **Datafill example**

The following example shows sample datafill for table RESINV.

The example below contains datafill for a modem pool data unit with LEN 00 0 15 01 and a modem pool modem with LEN 00 0 03 01.

#### MAP display example for table RESINV

	RESKEY	RESDATA
HOST	00 0 15 01	MPDU N
HOST	00 0 03 01	MPMD N

The example below shows table RESINV after table RESMEM has been datafilled. Although the headings do not appear, the datafill for fields LEN, GRPCLLI, and SEQNO are shown since table control updates these fields after table RESMEM is datafilled. The group CLLI is BELL212A1200 and the resource member number is 0.

# **RESINV** (end)

#### MAP display example for table RESINV

(	RESKE	Y			RESDATA	
				00 0 03 01	BELL212A1200 0	
HOST	00 0 03 0	)I MPMD	Y HOST	00 0 15 01	BELL212A1200 0	

# RESMEM

### Table name

Resource Member Table

# **Functional description**

Table RESMEM contains data for each of the resource members in a resource group. Table RESMEM is capable of handling many input data formats, but only a modem pool format currently exists.

For related information, refer to table RESINV.

### **Datafill sequence and implications**

The following tables must be datafilled before table RESMEM:

- CLLI
- DPROFILE
- RESINV
- RESGROUP

### Table size

0 to 256 tuples

# Datafill

The following table lists datafill for table RESMEM.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MEMKEY		see subfields	Resource member key
			This field consists of subfields CLLI and SEQNO.
	CLLI	alphanumeric	Resource group CLLI
		(up to 16 characters)	Enter the common language location identifier (CLLI) of the resource group to which the member belongs.
	SEQNO	0 to 255	Resource member sequence number
			Enter the position of the member within the group.

# **RESMEM** (end)

Field	Subfield or refinement	Entry	Explanation and action
MDATA		see subfield	Resource member data
			This field consists of subfield GRPTYP
	GRPTYP	MP or MMP	Group type
			This field indicates the type of resource. Enter MP for modem pool or MMP for maintenance modem pool.
	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.

#### Field descriptions (Sheet 2 of 2)

# Datafill example

The following example shows sample datafill for table RESMEM.

#### MAP display example for table RESMEM

MEMKEY						Μ	DATA	
	0 1			 	 HOST 00 HOST 00			

# RESOFC

### Table name

Residential Line CLASS Office Data

# **Functional description**

Table RESOFC contains data for Custom Local Area Signaling Services (CLASS) features. CLASS features are public network features targeted for the residential market.

*Note:* As of NA008, this table applies to office-wide control of existing features for Integrated Services Digital Network (ISDN) subscribers.

For each CLASS feature, table RESOFC controls office-wide feature activation. When you assign and disable a feature, CLASS lines cannot use that feature. Table RESOFC also controls the attributes associated with each feature.

The CLASS features that are supported follow:

- Automatic Call Back (ACB)
- Anonymous Call Rejection (ACRJ)
- Analog Display Services Interface (ADSI)
- Automatic Recall (AR)
- Call Logging (CALLOG)
- 800 Calling Number Identification (CID)
- CLASS Message Waiting Indicator (CMWI)
- Calling Name Delivery Blocking (CNAB)
- Calling Name Delivery (CNAMD)
- Calling Number Delivery (CND)
- Calling Number Delivery Blocking (CNDB)

*Note:* The CIDSSUP and CIDSDLV features for ISDN BRI lines are controlled through the CNDB tuple. A value of UNIVER enables UA for these ISDN features.

- Customer Originated Trace (COT)
- Calling Number Delivery Dialable Number (DDN)
- 800 Dialed Number Identification Delivery (DNID)
- Distinctive Ringing/Call Waiting (DRCW)

- Deluxe Spontaneous Call Waiting Identification (DSCWID
- Redirecting Number and Reason Delivery (RND)

*Note:* Changing from pre-NA011 to NA011 or higher adds the CLASS option RND to table RESOFC. This option is added as RND N SUBSCR RND \$.

- Selective Call Acceptance (SCA)
- Selective Call Forwarding (SCF)
- Selective Call Rejection (SCRJ)
- Spontaneous Call Waiting Identification (SCWID)

*Note:* The external symbols for options CID and DNID are NTS\_CID and NTS\_DNID. Use these external symbols when accessing line options in SERVORD and entering data in table RESOFC.

For more information on these features, refer to the *Feature Description Reference Manual*.

The system adds a default tuple to this table during initialization of the software package implementing the CLASS feature. Operating companies can modify tuples only, not add or delete tuples.

### **Datafill sequence and implications**

The following tables must be datafilled before table RESOFC:

- CLLI
- ANNS
- ANNMEMS
- DRAMTRK

The system automatically adds the call logging entry in table RESOFC.

To have repeat announcements for AR two-level activation, you must set fields BADIGITS and TIMEOUT to a nonzero value.

### Table size

The system statically allocates memory for this table. You cannot extend this table.

The expanded size of the tuple accommodates a maximum of four new announcement identifiers. The expanded internal data storage table accommodates nine more protected data words.

# Datafill

The following table lists datafill for table RESOFC.

Field	Subfield	Entry	Explanation and action
KEY		see	Key
		subfield	This field consists of subfield FEATNAME.
	FEATNAME	see below	Class feature name
			This field is the key to the table. Enter a CLASS feature as described below:
		ACB	ACB (Automatic Call Back) (See note.)
		ACRJ	ACRJ (Anonymous Call Rejection). This entry controls the ACRJ feature for ISDN BRI subscribers. (See note.)
		ADSI	ADSI (Analog Display Services Interface)
		AR	AR (Automatic Recall) (See note.)
		CALLOG	CALLOG (Call Logging)
		CID	CID (800 Calling Number Identification)
		CMWI	CMWI (CLASS Message Waiting Indicator)
		CNAB	CNAB (Calling Name Delivery Blocking)
		CNAMD	CNAMD (Calling Name Delivery). This tuple controls the CNAMD feature for ISDN BRI subscribers.
		CND	CND (Calling Number Delivery) (See note.)
		CNDB	CNDB (Calling Number Delivery Blocking). This tuple controls the CIDSSUP and CIDSDLV features for ISDN BRI subscribers. (See note.)
		СОТ	COT (Customer Originated Trace)
Note: This tu	ple controls feat	ure access for	ISDN BRI lines.

Field	Subfield	Entry	Explanation and action
		DDN	DDN (Calling Number Delivery Dialable Number)
		DNID	DNID (800 Dialed Number Identification Delivery)
		DRCW	DRCW (Distinctive Ringing/Call Waiting)
		DSCWID	DSCWID (Deluxe Spontaneous Call Waiting Identification)
			NTS_CID (800 Calling Number Identification)
			NTS_DNID (800 Dialed Number Identification Delivery)
			The external symbols for options CID and DNID are NTS_CID and NTS_DNID. Use these symbols when accessing the line options in SERVORD and entering data in table RESOFC.
		RND	RND (Redirecting Number and Reason Delivery). (See note.)
		SCA	SCA (Selective Call Acceptance). (See note.)
		SCF	SCF (Selective Call Forwarding). (See note.)
		SCRJ	SCRJ (Selective Call Rejection). (See note.)
		SCWID	SCWID (Spontaneous Call Waiting Identification)
ENABLED		Y or N	Enabled
			Enter Y (yes) to specify that the feature is enabled within the office. Enter N (no) to indicate the feature deactivation.
			<i>Note:</i> The DSCWID and the BRI in RES features are available only when you set field ENABLED to Y.
FEATDATA		see	Feature data
		subfield	This field consists of subfield FEATNAME.
	FEATNAME	see below	Class feature name
			Enter a CLASS feature and provide datafill for its subfields as described below:

### Field descriptions (Sheet 2 of 4)

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# Field descriptions (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
		ACB	Enter ACB and provide datafill for subfields.
		ACRJ	Enter ACRJ and provide datafill for subfields.
		ADSI	Enter ADSI and do not provide datafill for subfields. Field ACCESS is set to SUBSCR.
		AR	Enter AR and provide datafill for subfields.
		CALLOG	Enter CALLOG and provide datafill for subfields.
		CMWI	Enter CMWI and provide datafill for subfields.
		CNAB	Enter CNAB and provide datafill for subfields.
		CNAMD	Enter CNAMD. No subfields require datafill.
		CND	Enter CND and provide datafill for subfields.
		CNDB	Enter CNDB and provide datafill for subfields.
		COT	Enter COT and provide datafill for subfields.
		DDN	Enter DDN. No subfields require datafill.
		DRCW	Enter DRCW and provide datafill for subfields.
		DSCWID	Enter DSCWID and provide datafill for subfields.
		NTS_CID	Enter NTS_CID. No subfields require datafill.
		NTS_DNID	Enter NTS_DNID. No subfields require datafill.
		RND	Enter RND and provide datafill for subfield ACCESS.
		SCA	Enter SCA and provide datafill for subfields.
		SCF	Enter SCF and provide datafill for subfields.
		SCRJ	Enter SCRJ and provide datafill for subfields.
Note: This tur	ple controls feat	ure access for I	SDN BRI lines.

Field	Subfield	Entry	Explanation and action
		SCWID	Enter SCWID and provide datafill for subfields.
	ACCESS	SUBSCR	Feature access
		or UNIVER	This field determines who can access the feature. Enter SUBSCR for subscribers only. Enter UNIVER for all residential (RES) line access to the feature.
			Enter SUBSCR only for RND.
			<i>Note 1:</i> When you change the SUBSCR and UNIVER field of a tuple, you change all of data field ACCESS. Reenter all of the data for these features.
			<i>Note 2:</i> This entry controls Universal Access for COT for IBN lines.
			<i>Note 3:</i> This entry controls Universal Access for ISDN BRI subscribers.
			<i>Note 4:</i> The SCWID and DSCWID features are available when you assign SUBSCR in field ACCESS.
			<i>Note 5:</i> The CNAB feature is available when you assign UNIVER in field ACCESS.
Note: This tuple controls feature access for ISDN BRI lines.			

#### Field descriptions (Sheet 4 of 4)

FEATNAME = ACB

If the entry in field FEATNAME is ACB, provide datafill for subfields T2, T4, T5, T6, T10, TSCAN, N, RINGCYCL, RINGAPPL, TERMSCAN,

# COINLINE, HUNTLINE, PBXLINE, and TCAP\_QUERY\_ENABLED as described below. After adding the datafill, go to field FNALANN.

Field	Subfield	Entry	Explanation and action
ACB	T2	3 to 12	Time 2
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the length of time (in minutes) that the originating switch waits between stopping recall ringing and sending out a message request to reactivate the queue position.
			The default is 5.
	Τ4	0 to 15	Time 4 - Intraswitch guard time
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter a positive value for T4 to enable the intraswitch guard time. (For example, set T4 to six seconds.) Intraswitch guard time is disabled if T4 is set to zero.
			The default is zero.
	Т5	2 to 10	Time 5
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the length of time (in seconds) that the originating switch allows for a response from the terminating switch.
			The default is 3.
	Т6	5 to 35	Time 6
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the length of time (in minutes) that the originating switch scans or waits for a free notification from the terminating switch.
			The default is 30.
	T10	60 to 180	Time 10
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the length of time (in minutes) for the queue sanity timer for the originating and terminating switches.
			The default is 180.

#### Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
	TSCAN	30 to 120	Time scanning
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the length of time (in seconds) between busy/idle queries when the originator performs originating scanning.
			<i>Note:</i> T11 in the terminating node is set equal to subfield TSCAN plus 5 s.
			The default is 120.
	Ν	0 to 10	N
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the tolerance timer for aligning values of T6 timer and queue entry timer (T7) at the terminating switch. If the entry in subfield T6 is greater than the entry in subfield N when the originator receives a service timeout message from the terminating switch, the system sends a message to reset T7 to use what is left of T6.
			The default is 5.
	RINGCYCL	2 to 7	Ring cycle
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the number of 6-s ring cycles that recall ringing is given.
			<i>Note:</i> T8 is set equal to field RINGCYCL X 6 plus 5 s.
			The default is 5.
	RINGAPPL	1 to 12	Ring apply
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter the number of times unanswered recall ringing is given to a calling party.
			The default is 2.

### Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
	TERMSCAN	Y or N	Terminating scan
			If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter Y if the originating switch requests terminating scan. Otherwise, enter N if the switch never requests a terminating scan.
			The default is Y.
	COINLINE	ACCEPT	Coin line
		or DENY	If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter whether the originating switch accepts or denies an ACB for a return line type of coin line and directory number (DN) match or no match.
			The default is DENY.
	HUNTLINE	ACCEPT	Hunt line
		or DENY	If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter whether the originating switch accepts or denies an ACB for a return line type of hunt line and DN match or no match.
			The default is DENY.
	PBXLINE	ACCEPT	Private branch exchange line
		or DENY	If the entry in field FEATNAME is ACB, provide datafill for this subfield. Enter whether the originating switch accepts or denies an ACB for a return line type of private branch exchange (PBX) line and DN match or no match.
			The default is DENY.
	TCAP_QUERY	Y or N	TCAP query enabled
	_ENABLED		If the entry in field FEATNAME is ACB, AR, DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter Y to enable TCAP query. Enter N to disable TCAP query.
			The default is Y.
			If you change the value of the TCAP_QUERY_ENABLED field from Y to N and do not activate the SOC option RES00073, the system displays the following message: "Change will not be active until SOC option RES00073 is turned ON."

# Field descriptions for conditional datafill (Sheet 3 of 3)

### FEATNAME = ACRJ

If the entry in field FEATNAME is ACRJ, provide datafill for subfield ACRJ\_ANSWRSUP as described below. After adding the datafill, then go to field FNALANN.

#### Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
ACRJ	ACRJ_	Y or N	ACRJ answer supervision
	ANSWRSUP		If the entry in field FEATNAME is ACRJ, provide datafill for this subfield. Enter Y when you need answer supervision. Otherwise, enter N.

### FEATNAME = AR

If the entry in field FEATNAME is AR, provide datafill for subfields ACTLEVEL, T2, T4, T5, T6, T10, TSCAN, RINGCYCL, RINGAPPL, TERMSCAN, COINLINE, HUNTLINE, PBXLINE, TCAP\_QUERY\_ENABLED, and ACTLEVEL as described below. After adding the datafill, go to field FNALANN.

#### Field descriptions for conditional datafill (Sheet 1 of 5)

Field	Subfield	Entry	Explanation and action
AR	ACTLEVEL	ONELEVEL	Activation level
		or TWOLEVEL	If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter ONELEVEL if the subscriber can access the feature by dialing the feature access code. Enter TWOLEVEL if the system prompts the subscriber to dial 1 after dialing the feature access code.
			The default is ONELEVEL
	T2	3 to 12	Time 2
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the length of time (in minutes) that the originating switch waits between stopping recall ringing and sending out a message to request to reactivate the queue position.
			The default is 3.

Field	Subfield	Entry	Explanation and action
	T4	0 to 15	Time 4 - Intraswitch guard time
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter a positive value for T4 to enable the intraswitch guard time. (For example, set T4 to six seconds.) Intraswitch guard time is disabled if T4 is set to zero.
			The default is zero.
	T5	2 to 10	Time 5
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the length of time (in seconds) that the originating switch allows for a response from the terminating switch.
			The default is 3.
	T6	5 to 35	Time 6
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the length of time (in minutes) that the originating switch scans or wait for a free notification from the terminating switch.
			The default is 30.
	T10	60 to 180	Time 10
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the length of time (in minutes) for the queue sanity timer for the originating and terminating switches.
			The default is 180.
	TSCAN	30 to 120	Time scanning
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the length of time (in seconds) between busy/idle queries when the originator performs originating scanning.
			<i>Note:</i> T11 in the terminating node is set with a value equal to field TSCAN + seconds.
			The default is 120.

# Field descriptions for conditional datafill (Sheet 2 of 5)

Field	Subfield	Entry	Explanation and action
	Ν	0 to 10	Ν
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the tolerance timer for aligning values of T6 timer and queue entry timer (T7) at the terminating switch. If the entry in subfield T6 is greater than the entry in subfield N when the originator receives a service timeout message from the terminating switch, a message is sent to reset T7 to use what is left of T6.
			The default is 5.
	RINGCYCL	2 to 7	Ring cycle
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the number of 6-s ring cycles that recall ringing is given.
			<i>Note:</i> T8 is set equal to the entry in RINGCYCL multiplied by 6 + seconds.
			The default is 5.
	RINGAPPL	1 to 12	Ring apply
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter the number of times unanswered recall ringing is given to a calling party.
			The default is 5.
	TERMSCAN	Y or N	Terminating scan
			If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter Y if the originating switch requests a terminating scan. Enter N if a terminating scan is never requested.
			The default is 2.
	COINLINE	ACCEPT or	Coin line
		DENY	If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter whether the originating switch accepts or denies an AR for a return line type of coin line and directory number (DN) match or no match.
			The default is DENY.

### Field descriptions for conditional datafill (Sheet 3 of 5)

Field	Subfield	Entry	Explanation and action
	HUNTLINE	ACCEPT or	Hunt line
		DENY	If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter whether the originating switch accepts or denies an AR for a return line type of hunt line and DN match or no match.
			The default is DENY.
	PBXLINE	ACCEPT or	Private branch exchange line
		DENY	If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter whether the originating switch accepts or denies an AR for a return line type of private branch exchange (PBX) line and DN match or no match.
			The default is DENY.
	TCAP_QUERY	Y or N	TCAP query enabled
	_ENABLED		If the entry in field FEATNAME is ACB, AR, DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter Y to enable TCAP query. Enter N to disable TCAP query.
			The default is Y.
			If the value of the TCAP_QUERY_ENABLED field is changed from Y to N, and the SOC option RES00073 is not on, then the following message will be displayed: "Change will not be active until SOC option RES00073 is turned ON."
	ACTLEVEL	ONELEVEL	Activation level
		or TWOLEVEL	If the entry in field FEATNAME is AR, provide datafill for this subfield. Enter ONELEVEL if the subscriber accesses the feature by dialing the feature access code. Enter TWOLEVEL if the subscriber is prompted to dial a 1 after dialing the feature access code and provide datafill for subfields BADIGITS and TIMEOUT.

# Field descriptions for conditional datafill (Sheet 4 of 5)

Field	Subfield	Entry	Explanation and action
	BADIGITS	0 to 7	Bad digits
			If the entry in field FEATNAME is AR and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. This field is used to determine the number of times that a subscriber may enter the wrong input during two-level activation. If this number is exceeded then the call is routed to NACK treatment.
	TIMEOUT	0 to 7	Time out
			If the entry in field FEATNAME is AR and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. This field determines the number of times that a subscriber may allow two-level digit collection to time out. If this number is exceeded then the call is routed to NACK (nil acknowledgment) treatment.

#### Field descriptions for conditional datafill (Sheet 5 of 5)

#### FEATNAME = CALLOG

If the entry in field FEATNAME is CALLOG, provide datafill for subfields CALLOG\_TIMEOUT, and CALLOG\_PRIMARY\_DATA as described below. After adding the datafill, then go to field FNALANN.

Field descriptions for	r conditional datafill
------------------------	------------------------

Field	Subfield	Entry	Explanation and action
CALLOG	CALLOG_	2 to 30	Call logging timeout
	TIMEOUT		If the entry in field FEATNAME is CALLOG, provide datafill for this subfield. The values 2 to 30 indicate how long the call log feature waits for input before terminating the call log session. The value is in minutes.
	CALLOG_	NAME or	Call logging primary data
	PRIMARY_ DATA	NUMBER	If the entry in field FEATNAME is CALLOG, provide datafill for this subfield. This field indicates if the name or number is displayed in the first field of the call logging item on the SESAME terminal. If NAME is entered, the name is displayed in the first field of a call log item at the SESAME set. Likewise, if NUMBER is entered, the number is displayed in the first field of the call log item at the SESAME set.

### FEATNAME = CMWI

If the entry in field FEATNAME is CMWI, provide datafill for subfields MSGTYPE and RETRSMIT as described below. After adding the datafill, then go to field FNALANN.

Field	Subfield	Entry	Explanation and action
CMWI	MSGTYPE	PE SINGLE or MULTIPLE	Message type
			If the entry in field FEATNAME is CMWI, provide datafill for this subfield. Enter either SINGLE or MULTIPLE depending on how the CMWI subscriber in the office receives message waiting information.
	RETRSMIT	0 to 14	Retransmit
			If the entry in field FEATNAME is CMWI, provide datafill for this refinement. Enter the maximum number of attempts that are allowed for transmission of the message waiting information to the subscriber's set.
			After reaching the maximum, the CMWI message is discarded until the next lamp audit process executes and verifies that the lamp should be turned on. A CMWI message is then sent to the set by the lamp audit process.

### FEATNAME = CNAB

If the entry in field FEATNAME is CNAB, provide datafill for subfields ANNCS, CNABANNC, and ANNCLLI as described below. After adding the datafill, then go to field FNALANN.

Field descriptions for co	onditional datafill	(Sheet 1 of 2)
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Field	Subfield	Entry	Explanation and action
CNAB	ANNCS	alphanumeric (1 to 16 characters) or \$	Announcement If the entry in field FEATNAME is CNAB, provide datafill for this subfield. This field is datafilled with a \$ (dollar sign) if special dial tone is used for confirmation of successful CNAB activation.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	CNABANNC	CNABCONF	Calling name delivery blocking announcement
			If the entry in field FEATNAME is CNAB, provide datafill for this subfield. Enter the CNAB announcement CNABCONF.
	ANNCLLI	alphanumeric (1 to 16	Announcement common language location identifier
		characters)	If the entry in field FEATNAME is CNAB, provide datafill for this subfield. Enter the announcement common language location identifier (CLLI) name.

#### FEATNAME = CND

If the entry in field FEATNAME is CND, provide datafill for subfield CND\_MSGTYPE as described below. After adding the datafill, then go to field FNALANN.

#### Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
CND	CND_ MSGTYPE	SINGLE or MULTIPLE	CND message type
	WOOTTE	MOLTIFLE	If the entry in field FEATNAME is CND, provide datafill for this subfield. Enter whether the data message format sent to the CPE (customer premises equipment) is single or multiple.

### FEATNAME = CNDB

If the entry in field FEATNAME is CNDB, provide datafill for subfields ANNCS, CNDBANNC, and ANNCLLI as described below. After adding the datafill, then go to field FNALANN.

Field descr	iptions for	conditional	datafill
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Field	Subfield	Entry	Explanation and action
CNDB	ANNCS	see subfields	Announcement
			If the entry in field FEATNAME is CNDB, provide datafill for this subfield. This field consists of subfields CNDBANNC and ANNCLLI.
	CNDBANNC	CNDBCONF	CNDB announcement
			If the entry in field FEATNAME is CNDB, provide datafill for this subfield. Enter CNDBCONF for CNDB confirmation.
	ANNCLLI alp	alphanumeric	Announcement common language location identifier
		(1 to 16 characters)	If the entry in field FEATNAME is CNDB, provide datafill for this subfield. Enter the announcement CLLI datafilled in tables CLLI, ANNS, ANNMEMS, and DRAMTRK for CNDB confirmation.

### FEATNAME = COT

If the entry in field FEATNAME is COT, provide datafill for subfields ACTLEVEL, ANNCS, COTANNID, and COTCLLI as described below. After adding the datafill, then go to field FNALANN.

<b>Field descriptions</b>	s for condit	tional datafill
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Field	Subfield	Entry	Explanation and action
СОТ	ACTLEVEL	ONELEVEL or TWOLEVEL	Activation level
			If the entry in field FEATNAME is COT, provide datafill for this subfield. Enter ONELEVEL to allow the subscriber to access the feature by dialing the feature access code and provide datafill for subfields SECLANG, SANNCS, COTANNID, and COTCLLI.
			Enter TWOLEVEL if the subscriber is prompted to dial a 1 after dialing the feature access code to enable the COT feature and provide datafill for subfields EXPIRIES, BADIGITS, COTPRMT1, COTPRMTN, and SECLANG.
	ANNCS	alphanumeric	Announcement
		(1 to 16 characters)	If the entry in field FEATNAME is COT, provide datafill for this subfield. Enter up to two announcement common language location identifiers (CLLI). If less than two CLLIs are required, end the list with a \$ (dollar sign).
	COTANNID	COTCONF or COTFAIL	Customer originated trace announcement identifier
			If the entry in field FEATNAME is COT, provide datafill for this subfield. Enter COTCONF for a successful trace. Otherwise, enter COTFAIL for a partial trace.
			If COTCONF is not entered, the hard coded feature confirmation tone (2 beeps) is given for a successful COT trace. Similarly, if COTFAIL is not entered, then the feature recorder tone (fast busy tone) for 5 s is given.
	COTCLLI	alphanumeric	Customer originated trace tone CLLI
		(1 to 16 characters)	If the entry in field FEATNAME is COT, provide datafill for this subfield. Enter the announcement CLLI for the COTCONF and COTFAIL.
			<i>Note:</i> The announcement for table CLLI must be previously datafilled in tables CLLI, ANNS, ANNMEMS, and DRAMTRK.

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# ACTLEVEL = ONELEVEL

If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is ONELEVEL, provide datafill for subfields SECLANG, SANNCS, COTANNID, and COTCLLI as described below.

Field	Subfield	Entry	Explanation and action
ONELEVEL	SECLANG	Y or N	Second language
			The field appears on the switch as SECOND_LANGUAGE. If the entry in field FEATNAME is COT, and the entry in subfield ACTLEVEL is ONELEVEL, provide datafill for this subfield. Enter Y if the secondary language announcement is available for the COT feature and provide datafill for subfield SANNCS. Otherwise, enter N (no) and provide datafill for subfield COTANNID.
	SANNCS	alphanumeric (1 to 16	Announcement common language location identifier
		characters)	If the entry in field FEATNAME is COT, the entry in subfield ACTLEVEL is ONELEVEL, and the entry in subfield SECLANG is Y, provide datafill for this subfield. Enter up to two announcement CLLIs. If less than two CLLIs are required, end the list with a \$ (dollar sign).

Field descriptions for conditional datafill (S	heet 1 of 2)
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Field	Subfield	Entry	Explanation and action
	COTANNID	SCOTCONF or SCOTFAIL	Customer originated trace announcement identification
			If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is ONELEVEL, provide datafill for this subfield. Enter SCOTCONF for a successful trace. Otherwise, enter SCOTFAIL for a partial trace.
			If SCOTCONF is not entered, then the hard coded feature confirmation tone (2 beeps) is given for a successful COT trace. Similarly, if SCOTFAIL is not entered, then the feature recorder tone (fast busy tone) is given for5 s.
	COTCLLI	alphanumeric	Customer originated trace CLLI
		(1 to 16 characters)	The field appears on the switch as SECOND_LANGUAGE. If the entry in field FEATNAME is COT, and the entry in subfield ACTLEVEL is ONELEVEL, provide datafill for this subfield. Enter the announcement CLLI for the COTCONF and COTFAIL.
			<i>Note:</i> The announcement for table CLLI must be previously datafilled in table CLLI, ANNS, ANNMEMS, and DRAMTRK.

#### Field descriptions for conditional datafill (Sheet 2 of 2)

# ACTLEVEL = TWOLEVEL

If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for subfields EXPIRIES, BADIGITS, COTPRMT1, COTPRMTN, and SECLANG as described below.

Field	Subfield	Entry	Explanation and action
TWOLEVEL	EXPIRIES	0 to 5	Expiries
			If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter the number of times the two level digit collection is allowed to time-out. If this number is exceeded, the call is routed to negative acknowledge (NACK) treatment.
	BADIGITS	0 to 5	Bad digits
			If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter the number of times two level activation wrong provide datafill for is allowed. If this number is exceeded, the call is routed to NACK treatment.
	COTPRMT1	alphanumeric	Customer originated trace for prompt 1
		(1 to 16 characters)	If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter the CLLI of the first prompting announcement provided to the user during a two level activation. This CLLI must be previously datafilled in tables CLLI, ANNS, and ANNMEMS.
	COTPRMTN	alphanumeric	Customer originated trace for prompt n
		(1 to 16 characters)	If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter the CLLI of the repeat prompting announcement provided to the user during a two level activation. This CLLI must be previously datafilled in tables CLLI, ANNS, and ANNMEMS.

Field descriptions for conditional	datafill (Sheet 1 of 4)
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Field	Subfield	Entry	Explanation and action
	SECLANG	Y or N	Second language
			The field appears on the switch as SECOND_LANGUAGE. If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter Y if the secondary language announcement is available for the COT feature and provide datafill for subfields SANNCS, COTANNID, COTCLLI, SCOTPRMT1, and SCOTPRMTN.
			Otherwise, enter N and provide datafill for subfields COTANNID and COTCLLI as described below.
			<i>Note:</i> The following five fields are for secondary language announcement for successful trace and unsuccessful trace.
			They can be datafilled as follows in accordance with the COT announcements value (field SANNCS):
			<ul> <li>For 0 (zero) COT announcements, which is for the secondary language, both entries of a vector are empty.</li> </ul>
			<ul> <li>For 1 COT announcement, only one vector entry is datafilled. It is qualified with SCOTCONF for successful trace announcement. Otherwise, it is qualified with SCOTFAIL for unsuccessful trace announcement.</li> </ul>
			• For 2 COT announcements, both vector entries are datafilled. They are qualified with SCOTCONF for successful trace announcement and with SCOTFAIL for unsuccessful trace announcement.

### Field descriptions for conditional datafill (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
	SANNCS	alphanumeric (1 to 16	Announcement common language location identifiers
		characters)	If the entry in field FEATNAME is COT, the entry in subfield ACTLEVEL is TWOLEVEL, and the entry in subfield SECLANG is Y, provide datafill for this subfield. Enter up to two announcement CLLIs. If less than two CLLIs are required, end the list with a \$ (dollar sign).
	COTANNID	SCOTCONF or SCOTFAIL	Customer originated trace announcement identification
			If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter SCOTCONF for a successful trace. Otherwise, enter SCOTFAIL for a partial trace.
			If SCOTCONF is not entered, then the hard coded feature confirmation tone (2 beeps) is given for a successful COT trace. Similarly, if SCOTFAIL is not entered, then the feature recorder tone (fast busy tone) is given for5 s.
	COTCLLI	alphanumeric	Customer originated trace CLLI
		(1 to 16 characters)	If the entry in field FEATNAME is COT and the entry in subfield ACTLEVEL is TWOLEVEL, provide datafill for this subfield. Enter the announcement CLLI for the SCOTCONF and SCOTFAIL.
			<i>Note:</i> The announcement for table CLLI must be previously datafilled in table CLLI, ANNS, ANNMEMS, and DRAMTRK.

# Field descriptions for conditional datafill (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
	SCOTPRMT1	alphanumeric	Second language COT prompt for feature 1
		(1 to 16 characters)	If the entry in field FEATNAME is COT, the entry in subfield ACTLEVEL is TWOLEVEL, and the entry in subfield ACTLEVEL is TWOLEVEL, and the entry in subfield SECLANG is Y, provide datafill for this subfield.
			Enter a secondary language announcement for initial prompt for two level activation of COT feature I.
	SCOTPRMTN	alphanumeric (1 to 16	Second language customer originate trace prompt for Nth level
		characters)	If the entry in field FEATNAME is COT, the entry in subfield ACTLEVEL is TWOLEVEL, and the entry in subfield ACTLEVEL is TWOLEVEL, and the entry in subfield SECLANG is Y, provide datafill for this subfield.
			Enter a secondary language announcement for Nth level prompt for two level activation of COT feature.

#### Field descriptions for conditional datafill (Sheet 4 of 4)

#### FEATNAME = DRCW

If the entry in field FEATNAME is DRCW, provide datafill for subfield MAXSIZE and TCAP\_QUERY\_ENABLED as described below. After adding the datafill, then go to field FNALANN.

Field descr	ptions for	conditional	datafill
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Field	Subfield	Entry	Explanation and action
	MAXSIZE	0 to 8191	Maximum size
			If the entry in field FEATNAME is DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter the maximum size of the selective call list for the office. The recommended size is 31. The lesser of this field and parameter SLE_ITEMS_IN_SEGMENT in table OFCENG controls the maximum size of the list.
	TCAP_QUERY	Y or N	TCAP query enabled
	_ENABLED		If the entry in field FEATNAME is ACB, AR, DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter Y to enable TCAP query. Enter N to disable TCAP query.
			The default is Y.
			If you change the value of the TCAP_QUERY_ENABLED field from Y to N, and do not activate the SOC option RES00073, the system displays the following message: "Change will not be active until SOC option RES00073 is turned ON."

#### FEATNAME = DSCWID

If the entry in field FEATNAME is DSCWID, provide datafill for subfields DTYPE, DEFTRMT, AMA, BUSYANNC, BUSYSUPV, DFLTANNC, DFLTSUPV, HOLDANNC, HOLDSUPV, REMINDER, TFLASH, TDEFAULT, THOLD, SYNC\_CPE, DELETE\_CWT, and CFDCHECK, then go to field FNALANN.

*Note 1:* Field ENABLED must be datafilled Y to allow delivery of calling party identification during call waiting for DSCWID subscribers.

*Note 2:* Subfields WAITANNC, REALERT, and DATETIME are no longer active.

Field	Subfield	Entry	Explanation and action
DSCWID WAITANNC (-NA003)	WAITANNC	alphanumeric	Wait announcement
	(-NA003)	(1 to 16 characters)	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the announcement CLLI. This is the announcement received by the waiting party when the WAIT option is chosen by the DSCWID subscriber.
	REALERT	Y or N	Realert
	(-NA003)		If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter Y when you need a realert. Otherwise, enter N.
			The default for this field is Y.
	DATETIME	Y or N	Date and time
	(NA002-003)		If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter Y or N. Y allows the switch to send date and time information to the DSCWID subscriber CPE along with the calling party identification information.
			The default for this field is Y.

Field descriptions for conditional datafill (Sheet 1 of 6)

Field	Subfield	Entry	Explanation and action
	DTYPE	PROPRITY,	DSCWID type
	(NA004-)	ADSITIME, ADSICID, NODATA, NOCIDCW, COMPLETE, or others as defined	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. The possible entries are PROPRITY, ADSITIME, ADSICID, NODATA, NOCIDCW, and COMPLETE, plus up to 14 other tuples that can be defined by the operating company.
			Enter the name of the DSCWID type assigned to the line as follows:
			The PROPRITY tuple indicates the proprietary DSCWID type.
			<ul> <li>The ADSITIME tuple indicates that only time data is transmitted and only standard Call Waiting (CWT) is available to non-ADSI sets.</li> </ul>
			<ul> <li>The ADSICID tuple indicates that both CID and time data are transmitted, based on the CID features present on the line, and only standard CWT is available to non-ADSI sets.</li> </ul>
			<ul> <li>The NODATA tuple indicates that CID and time data are not transmitted, and both ADSI and non-ADSI sets have all DSCWID options.</li> </ul>
			• The NOCIDCW tuple indicates that only time data is transmitted, and both ADSI and non-ADSI sets have all DSCWID options.
			• The COMPLETE tuple indicates both CID call waiting (CIDCW) and time data are transmitted, and both ADSI and non-ADSI sets have all DSCWID options.

Field descriptions for conditional datafill (Sheet 2 of 6)

Field	Subfield	Entry	Explanation and action
	DEFTRMT	RING, FWD,	Default treatment.
	(NA004-)	ANNC	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the default treatment to be applied when no DSCWID option is chosen. Enter RING for the calling party to hear ringing, FWD to forward the calling party to another number, or ANNC to apply an announcement.
			The default for this field is RING.
		NONE or CONF	Automatic message accounting
	(NA004-)		If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the type of AMA recording status for use on the CONFERENCE option. Enter CONF to allow recording or NONE to disallow recording.
			The default for this field is NONE.
	BUSYANNC (NA004-)	CLLI announcement name or NILWAITANNC	Busy announcement
			If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the CLLI name for the announcement that is applied to the calling party when the BUSY option is chosen. If no BUSYANNC CLLI is datafilled, disconnect (DSCN) treatment is applied.
			The default for this field, NILWAITANNC, indicates that no announcement has been defined.
	BUSYSUPV	Y or N	Busy supervision
	(NA004-)		If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter Y to apply answer supervision when first connecting to the busy announcement; enter N for no supervision.
			The default for this field is N.

### Field descriptions for conditional datafill (Sheet 3 of 6)

Field	Subfield	Entry	Explanation and action
	DFLTANNC	CLLI	Default announcement
	(NA004-)	announcement name or NILWAITANNC	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the default announcement name defined in table CLLI that is applied to the calling party when no DSCWID option is selected and the subscriber's default treatment is set to ANNC.
			The default for this field, NILWAITANNC, indicates that no announcement has been defined.
	DFLTSUPV	Y or N	Default supervision
	(NA004-)		If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter Y to apply answer supervision when first connecting to the DEFAULT announcement; enter N for no supervision.
			The default for this field is N.
	HOLDANNC	CLLI	Hold announcement
	(NA004-)	announcement name or NILWAITANNC	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the CLLI name of the announcement that is applied to the calling party when the HOLD option is chosen.
			The default for this field, NILWAITANNC, indicates that no announcement has been defined.
	HOLDSUPV	SUPV_BEFORE,	Hold supervision
	(NA004-)	SUPV_AFTER, NO_SUPV	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter SUPV_BEFORE to apply answer supervision before and SUPV_AFTER to apply answer supervision after connecting to the HOLD announcement.
			The default for this field is NO_SUPV.

# Field descriptions for conditional datafill (Sheet 4 of 6)

Field	Subfield	Entry	Explanation and action
	REMINDER	CLLI	Reminder
	(NA004-)	announcement name or NILWAITANNC	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the CLLI name of the announcement that is applied to the calling party when the T-HOLD timer expires. This announcement is used to remind the caller to stay on the line.
			The default for this field, NILWAITANNC, indicates that no announcement has been defined.
	TFLASH	10 to 80	Timer flash
	(NA004-) (increments of 5 in units of 0.1 s)	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the number of seconds allowed for the subscriber to conference a waiting call after a flash. TFLASH is only used for the HELD call state. TFLASH is for use with non-ADSI-compliant CPE only. When TFLASH expires, the RETURN option is applied	
			The default for this field is 15 s.
	TDEFAULT	0 to 110	Timer default
	(NA004-)	(increments of 1 in units of 1.0 s)	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the number of seconds (after realert) before the default treatment type is applied to the calling party during a DSCWID session.
			The default for this field is 15 s.
	THOLD	0 to 12	Timer hold
	(NA004-)	(increments of 1 in units of 10 s)	If the entry in field FEATNAME is DSCWID, provide datafill for this subfield. Enter the number of seconds between announcements while a call is on hold due to the HOLD option. When THOLD expires, the REMINDER announcement is started and the timer is reinitialized.
			The default for this field is 60 s.

### Field descriptions for conditional datafill (Sheet 5 of 6)

Field	Subfield	Entry	Explanation and action
	SYNC_CPE	TR_COMP,	Synchronize CPE
		UPGRADE	This subfield specifies the type of out-of-sync functionality. Enter TR_COMP for TR-compliant out-of-sync functionality or UPGRADE for the proprietary out-of-sync functionality.
	DELETE_CWT	Y or N	Delete Call Waiting
	(NA006)		This subfield provides the option to prevent Call Waiting from being deleted from a line when DSCWID is removed. Enter Y to delete CWT from a line when DSCWID is removed. Otherwise enter N.
	CFDCHECK	Y or N	Call forward don't answer check
	(NA009)		This field indicates whether or not to add DSCWID to the line using single or dual USOC method. Enter N to add DSCWID to the line regardless of CFDA/CFD feature assignment. Enter Y to assign CFDA/CFD for all types of DSCWID other than type proprietary, and for FWD default treatment. The default is Y.

## Field descriptions for conditional datafill (Sheet 6 of 6)

## FEATNAME = SCA or SCRJ

If the entry in field FEATNAME is SCA or SCRJ, provide datafill for subfields MAXSIZE, ANSWRSUP, and TCAP\_QUERY\_ENABLED as described below. After adding the datafill, then go to field FNALANN.

<b>Field descr</b>	iptions for	conditional	datafill
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Field	Subfield	Entry	Explanation and action
SCA or SCRJ	MAXSIZE	0 to 8191	Maximum size
			If the entry in field FEATNAME is DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter the maximum size of the selective call list for the office.
			The recommended size is 31. The lesser of this field and parameter SLE_ITEMS_IN_SEGMENT in table OFCENG controls the maximum size of the list.
	ANSWRSUP	Y or N	Answer supervision
			Enter Y when answer supervision is returned when a rejected call for SCA goes to SCA treatment or for SCRJ goes to SCRJ treatment; otherwise, enter N. This applies long distance charges for the call.
	TCAP_QUERY _ENABLED	Y or N	TCAP query enabled
			If the entry in field FEATNAME is ACB, AR, DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter Y to enable TCAP query. Enter N to disable TCAP query.
			The default is Y.
			If the value of the TCAP_QUERY_ENABLED field is changed from Y to N, and the SOC option RES00073 is not on, then the following message will be displayed: "Change will not be active until SOC option RES00073 is turned ON."

### FEATNAME = SCF

If the entry in field FEATNAME is SCF, provide datafill for subfields MAXSIZE, as described below. After adding the datafill, then go to field FNALANN.

If the entry in field FEATNAME is SCF and ACCESS equals UNIVER, provide datafill for subfields SCRNCL, RINGMEM, NUMCALLS, and

TCAP\_QUERY\_ENABLED as described below. After adding the datafill, then go to field FNALANN.

#### Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
SCF	MAXSIZE	0 to 8191	Maximum size
			If the entry in field FEATNAME is SCF, provide datafill for this subfield. Enter the maximum size of the selective call list for the office. The recommended size is 31. The lesser of this field and parameter SLE_ITEMS_IN_SEGMENT in table OFCENG controls the maximum size of the list.
	SCRNCL	NSCR	Screening class
	(BCS35-)		If the entry in field FEATNAME is SCF and the entry in field ACCESS is UNIVER, provide datafill for this subfield. Enter NSCR for no screening class.
	NUMCALLS	1 to 1024	Number of calls
(BCS3	(BCS35-)		If the entry in field FEATNAME is SCF and the entry in field ACCESS is UNIVER, provide datafill for this subfield. Enter a number to indicate the number of calls.
	RINGMEM	NORING,	Ring member
	(BCS35-)	RING, NA	If the entry in field FEATNAME is SCF and the entry in field ACCESS is UNIVER, provide datafill for this subfield. Enter NORING, RING, or NA (not applicable).
	TCAP_QUERY _ENABLED	Y or N	TCAP query enabled
			If the entry in field FEATNAME is ACB, AR, DRCW, SCA, SCF, or SCRJ, provide datafill for this subfield. Enter Y to enable TCAP query. Enter N to disable TCAP query.
			The default is Y.
			If the value of the TCAP_QUERY_ENABLED field is changed from Y to N, and the SOC option RES00073 is not on, then the following message will be displayed: "Change will not be active until SOC option RES00073 is turned ON."

## FEATNAME = SCWID

If the entry in field FEATNAME is SCWID, provide datafill for subfields DATETIME, DELETE\_CWT, and ACKTONE as described below. After adding the datafill, then go to field FNALANN.

<b>Field descriptions</b>	for condition	al datafill
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Field	Subfield	Entry	Explanation and action
SCWID	DATETIME	Y or N	Date and time
	(NA002-)		If the entry in field FEATNAME is SCWID, provide datafill for this subfield. Enter Y or N. Setting the entry to Y will allow date and time information to be sent from the switch to the SCWID subscriber's CPE along with the calling party identification information. The default is Y.
			Field ENABLED must be datafilled Y to allow delivery of calling party identification during call waiting for SCWID subscribers.
	DELETE_C WT (NA006)	Y or N	Delete Call Waiting.
			This subfield provides the option to prevent Call Waiting from being deleted from a line when SCWID is removed.
			Enter Y to delete CWT from a line when SCWID is removed. Otherwise enter N.
	ACKTONE	Y or N	Acknowledgment tone
	(-NA002)		Enter Y if an acknowledgment tone is desired. Otherwise enter N.

## **FEATNAME = all entries**

Datafill the following subfields for all features.

#### **Field descriptions**

Field	Subfield	Entry	Explanation and action
FEATNAME	FNALANN	see subfields	Feature not allowed announcement
			This field consists of subfields POTS_ACCESS and FNAL_CLLI.
	POTS_	00 to 99	POTS access
	ACCESS		Enter the two-digit plain ordinary telephone service (POTS) access code for activation of the CLASS feature that is used in POTS translation. The entry in this subfield must be identical to the table access code that is datafilled in table IBNXLA and used by the Meridian Digital Centrex (MDC) (Integrated Business Network (IBN) lines.
	FNAL_CLLI	alphanumeric (1 to 16	Announcement common language location identifier
		characters)	Enter the announcement CLLI for the announcement given when the subscriber tries to activate the feature to which the line has not subscribed. If the feature is disabled, (field ENABLE is set to N) then POTS lines get PDIL (Partial Dial) treatment and CLASS lines get FNAL (Feature Not Allowed) treatment. The CLLI must first be datafilled in tables CLLI, ANNS, ANNMEM and DRAMTRK.

# **Datafill example**

The following example shows sample datafill for table RESOFC.

#### MAP display example for table RESOFC

```
KEY ENABLED
                                                              FEATDATA
               FNALANN
  ACB
            Y
                         3 30 180 60 5 5 2 Y
                                                  DENY
        SUBSCR
                 ACB
                      5
                                                         DENY
                                                                DENY N
                    $
            Υ
   AR
   SUBSCR
           AR ONELEVEL
                        5
                           3 30 180
                                     60 5 5
                                              2 Y DENY
                                                         DENY
                                                                DENY Y
   COT
            Υ
                                               UNIVER COT ONELEVEL $ N
                    $
DSCWID
            Υ
SUBSCR DSCWID
               COMPLETE FWD NONE DSCWDBUSY N
                                                 DSCWDDFLT
                                                             Ν
DSCWDHOLD SUPV_BEFORE DSCWDREMD 15 15 6 UPGRADE
                                                                     $
                                                      Ν
```

# Table history

#### MMP13

Added value T4 as an intraswitch guard time value to subfields ACB and AR.

#### NA011

This release affects table RESOFC in the following ways:

- The COT feature can be made universally accessible for IBN lines by changing the ACCESS field from SUBSCR to UNIVER.
- Added RND to the list of options for ISDN BRI lines.

#### NA009

This release affects table RESOFC in the following ways:

- The ACRJ option for ISDN BRI subscribers is activated or deactivated in table RESOFC.
- The Universal Access feature for ISDN BRI subscribers is activated if the ACCESS field is set to UNIVER.
- The BRI in RES feature is only available if the ENABLED field is set to Y.
- Introduced option CFDCHECK in field DSCWID of subfield FEATNAME of field FEATDATA.

#### NA008

The following changes were made to table RESOFC:

- Added note that CNAMD and CND are applicable to ISDN subscribers and are controlled for an office by the existing CNAMD and CND tuples in table RESOFC.
- Added note that the CIDSSUP and CIDSDLV features for ISDN BRI subscribers are controlled through the existing CNDB tuple.

#### NA007

Field TCAP\_QUERY\_ENABLED was added. If SOC option RES00073 is turned on, field TCAP\_QUERY\_ENABLED provides an optional method of disabling TCAP query for the following features:

- ACB
- AR
- DRCW
- SCA
- SCF
- SCRJ

#### NA006

Field DELETE\_CWT was added to provide the option to delete or not to delete CWT from a line when DSCWID or SCWID is removed.

#### NA004

The following changes were made to table RESOFC:

- Fields WAITANNC, REALERT, and DATETIME were deleted as conditional provide datafill for the feature DSCWID.
- Fields DTYPE, DEFTRMT, AMA, BUSYANNC, BUSYSUPV, DFLTANNC, DFLTSUPV, HOLDANNC, HOLDSUPV, REMINDER, TFLASH, TDEFAULT, THOLD, and SYNC\_CPE were added as conditional provide datafill for the feature DSCWID.

#### NA003

Features CID and DNID were added to table RESOFC.

#### NA002

The following changes were made to table RESOFC:

- The ADSI line option was added to field FEATNAME and subfield FEATNAME.
- Field ACKTONE was deleted and field DATETIME was added to the conditional provide datafill for the SCWID feature.
- Field DATETIME was added to the conditional provide datafill for the DSCWID feature.

#### BCS36

Default values for features ACB and AR were added. Description of field ACCESS and of subfield FLASHACT for features ACB and AR was clarified.

## Supplementary information

This section provides information on dump and restore procedures and announcement CLLIs for table RESOFC.

#### **Dump and restore**

If the entry in field FEATNAME is COT, copy all existing fields from the old tuple to the new tuple. Initialize the new fields added by this feature to their NIL values in the new tuple. Follow the existing restore table procedure with the new tuple. Otherwise, copy with existing restore table procedure with old tuple. For two-level activation, fields BADIGITS and TIMEOUT are datafilled to 0 (zero) if the old tuple is datafilled two-level.

If a feature AR tuple is previously datafilled as one-level activation, fields BADIGITS and TIMEOUT do not appear.

The TCAP\_QUERY\_ENABLED field was introduced in CCM07. It is initialized to the default value of Y on a restore to CCM07.

For CCM07 and up, the TCAP\_QUERY\_ENABLED field is restored to the value from the dump side.

# **RESOFC** (end)

## Announcement CLLIs

The following table shows examples of announcement CLLIs.

### Announcement CLLIs

CLLI	Announcement	
cllix	primary language trace success	
clliy	primary language trace failure	
cllil	primary language initial prompt	
cllin	primary language nth level prompt	
cllia	secondary language trace success	
cllib	secondary language trace failure	
cllis1	secondary language initial prompt	
cllisn	secondary language Nth level prompt	

# RESTAMA

## Table name

**TOPS** Restricted AMA Table

## **Functional description**

Table RESTAMA allows the operating company to select the entry on automatic message accounting (AMA) in the calling service class field for any billing class defined in table RESTBIL. If the billing class is not defined in table RESTBIL before being entered in table RESTAMA, the entry is rejected.

Since the default AMA class entry (field AMACLASS) is NONCOIN, it is not necessary to make an entry in table RESTAMA if an entry is made in table RESTBIL.

No entry can be made in table RESTAMA unless an entry is made in table RESTBIL for the same billing class.

If the Specifying DA Billing Options by Restricted Billing Class feature is present, then table RESTAMA is not indexed with the restricted billing class from tables SPLDNID and RESTBIL. Instead, table RESTAMA is indexed from field AMARBC in either table RESTBIL or DARSTBIL.

For related information, refer to table RESTBIL.

## **Datafill sequence and implications**

Table RESTBIL must be datafilled before table RESTAMA.

## Table size

0 to 100 tuples

Initially the table is empty and is extended only as the user defines a new restricted billing class.

## **RESTAMA** (end)

# Datafill

The following table lists datafill for table RESTAMA.

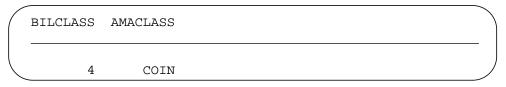
#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
BILCLASS		0 to 100	Billing class. Enter a valid billing class as previously defined in table RESTBIL.
AMACLASS		COINHOTEL or NONCOIN RBAMA_NIL	Automatic message accounting class. Enter the class of service to be output on AMA for the given billing class. Default value is NONCOIN.

## **Datafill example**

The following example shows sample datafill for table RESTAMA.

#### MAP display example for table RESTAMA



## Table name

**TOPS** Restricted Billing Table

# **Functional description**

There is a requirement in DMS Traffic Operator Position System (TOPS) to apply selective billing to certain types of calls, which implies that certain origination classes (that is, RSP) must be restricted with respect to the type of billing (that is, COL [collect]) that can apply to above calls.

Upon reception of an automatic number identification (ANI) identification (ID) digit 7 on a combined trunk, an entry in table SPLDNID is made in an attempt to match the calling number with one of the entries in the table. If a match is found, a customer definable display (field SCRNDISP in table RESTBIL) will be given at the TOPS position, on call arrival, to warn the operator of the special treatment of the call.

Upon reception of an ANI ID digit 0 or 7 on a restricted billing (value in field STATCLAS of table TRKGRP) trunk, an entry in table SPLDNID is made in an attempt to match the calling number with one of the entries in the table. If a match is found, a customer-definable display (field SCRNDISP in table RESTBIL) is given at the TOPS position, on call arrival, to warn the operator of the special treatment of the call. If the ANI ID digit is 0, then ANI spill is preserved, while if the ANI ID digit is 7, the call is treated as an ANI failure.

Once at the TOPS position, the call will not be allowed to be floated until a billing type (field BILTYPES in table RESTBIL) compatible with its restricted billing class (field BILCLASS in table RESTBIL) is entered by the operator.

Table RESTBIL allows the operating company to activate up to 100 restricted billing classes, while table RESTAMA is used to specify for each of the restricted billing classes activated, what calling class is printed on automatic message accounting (AMA) (that is, noncoin, coin, hotel).

Table RESTBIL is used to define billing classes (up to 100) and to associate each defined class to a screen display (operating company's choice for the name) and one or more (up to six) valid billing types.

If the operating company decides not to specify any screen display, the default is a blank field.

At least one type of billing for any defined call class is recommended, otherwise the system internally defaults to the restrictions currently applying to RSP. Default entries are not printed.

## **RESTBIL** (continued)

Table RESTBIL provides the same function for toll and assist (TA) calls as table DARSTBIL does for directory assistance (DA) calls. The restricted billing class number assigned to a particular directory number (DN) in table SPLDNID is used as the index into both table RESTBIL and DARSTBIL.

Having the same index for two tables imposes one of the following restrictions:

- Two DNs that have the same billing restrictions for TA, but different billing restrictions for DA service must be assigned different restricted billing class numbers in table SPLDNID.
- Two DNs that have the same billing restrictions for DA, but different billing restrictions for TA service must be assigned different restricted billing class numbers in table SPLDNID.

Field AMARBC, either in table RESTBIL or DARSTBIL, is used as the index into table RESTAMA, rather than the actual restricted billing class from table SPLDNID.

## **Datafill sequence and implications**

Table SPLDNID must be datafilled before table RESTBIL.

## Table size

0 to 505 tuples

Table RESTBIL is a static table, initially empty and extended only when the user defines restricted billing classes (up to a maximum of 100 entries). If the Specifying DA Billing Options by Restricted Billing Class feature is present in the switch, table size is increased from 505 words to 606 words.

#### Field Descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BILCLASS		0 to 100	Billing class. Enter a valid restricted billing class as previously defined in table SPLDNID.
AMARBC		0 to 100	Automatic message accounting restricted billing class. The entry in this field is used as index into table RESTAMA. Specify the value to be recorded as the restricted billing class on AMA for toll and assist (TA) calls.

# **RESTBIL** (continued)

<b>Field Descriptions</b>	(Sheet 2 of 2)
---------------------------	----------------

Field	Subfield or refinement	Entry	Explanation and action
SCRNDISP		alphanumeric (up to 8 characters)	Screen display. Enter an arbitrary name to be displayed on the TOPS screen in the class of service field for a particular billing class.
BILTYPES		3RD, CC, COL, PD, SPLCLD, or SPLCLG	Billing types. Enter a set of up to six allowable billing types for a defined billing class. If less than six types are required, end the list with a \$ (dollar sign). The following billing types may be used to define a billing class:
			• 3RD (calling third number billing)
			CC (calling credit card)
			<ul> <li>COL (collect) (AUTOCOL [automatic collect])</li> </ul>
			PD (sent paid)
			SPLCLD (called special billing)
			SPLCLG (calling special billing)
CCPDTYPS		ALL, LOCAL, NONE, TOLL	Call completion paid types. Enter one of the following values required for restrictions applying to sent DA paid call completions:
			• Enter ALL to allow all calls to be paid complete.
			<ul> <li>Enter LOCAL to allow local calls to be paid complete.</li> </ul>
			<ul> <li>Enter NONE to disallow all calls to be paid complete.</li> </ul>
			Enter TOLL to allow toll calls to be paid complete.
			<i>Note:</i> Field CCPDTYPES can only be set to NONE or ALL if the Directory Assistance (DA) Call Completion (CC) feature is not available in the central office switching software.

# Datafill

The following table lists datafill for table RESTBIL.

# **RESTBIL** (end)

# **Datafill example**

The following example shows sample datafill for table RESTBIL.

MAP display example for table RESTBIL

```
BILCLASS AMARBC SCRNDISP
BILTYPES CCPDTYPS

1 21 SENTPAID

( COL) ( CC) ( 3RD) (SPLCLG) (SPLCLD)$ LOCAL
```

### Table name

Routine Exercise Intensity Table

## **Functional description**

Table REXINTEN allows portions of message switch (MS) and link interface module (LIM) system routine exercise (REX) tests to be bypassed on selected days of the week. Table REXINTEN provides flexibility in the definition of REX executions for components of REX tests that cause the temporary removal of equipment from service.

A full REX test includes busying the node and returning it to service (RTS). A base REX test only performs in-service testing. It is recommended that a full REX test be run once a week.

Table REXINTEN only affects MS and LIM REX tests initiated by the system REX controller in DMS SuperNode and DMS SuperNode SE switches.

Since table REXSCHED also controls which days of the week a REX test is run, conflict can arise between tables REXINTEN and REXSCHED. Full conflict between the two tables must be avoided. For example, if the REX test is turned off for a LIM on Tuesdays in table REXSCHED (field DAYSDSBL set to TUE), but a full REX test is scheduled for Tuesdays only in table REXINTEN (field DAYSFURX set to TUE), then neither a base nor a full REX test runs on Tuesday. Full REX is turned off completely.

For related information, refer to table REXSCHED and office parameter NODEREXCONTROL in table OFCVAR.

## **Datafill sequence and implications**

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

Tuples corresponding to the MS and LIM node types are added automatically during system initialization. Additions and deletions to the table are not allowed.

Table REXINTEN is active by default. To deactivate it for a dump and restore, enter ALL in field DAYSFURX.

## Table size

2 tuples

# **REXINTEN** (end)

# Datafill

The following table lists datafill for table REXINTEN.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NODETYPE		LIM or MS	<i>Node type</i> Enter the type of node to be tested, LIM (link interface module) or MS (message switch).
DAYSFURX	WED, THU, FRI, SAT,	<i>Days of the week</i> Enter the day or days of the week when a full routine exercise (REX) test is to run.	
		SUN, ALL, or NONE	Separate each entry with a single space. If no further entries are required, end the list with a \$ (dollar sign).
			Enter ALL if a full REX test is to run every day of the week.
			Enter NONE if no full REX test is to run.
			Enter NONE for STP loads.
			The default value for LIM is TUE.
			The default values for MS are TUE, WED.

## Datafill example

The following example shows sample datafill for table REXINTEN.

In this example, a full REX test is run on the MS on Tuesdays and on the LIM on Tuesdays and Thursdays.

#### MAP display example for table REXINTEN

NODETYPE	DASFURX	
MS LIM	TUE WED \$ TUE \$	

## Table history BCS35

Table REXINTEN was introduced.

## Table name

Routine Exercise Schedule Table

# **Functional description**

Table REXSCHED contains the information that the system routine exercise (SREX) controller requires. This table schedules routine exercise (REx) tests according to the requirements of the operating company. The operating company requires these tests for spectrum peripheral modules (SPMs), series-3 peripheral modules (PM), XPM-based peripheral modules (XPS), and file processors (FP).

The operating company can use table REXSCHED to customize the REx test schedule to a switch. Table REXSCHED does not force operating companies to create REx test schedules. This table provides flexibility to operating companies to schedule REx tests.

For each type of node, operating company personnel can perform the following actions:

- enable or disable individual REx tests
- define REx test frequencies
- define the maximum number of REx tests that the system can run in parallel for SPM\_REX\_TEST. This should not be more than the maximum number decided by the system. As of feature number A89007516 the maximum number is one
- prevent tests on defined days

Computing module (CM), message switch (MS), and enhanced network (ENET) REx tests have a critical identification in software design. These tests are essential. The operating company can use the REXTEST command to suspend these critical tests for a limited time.

You can use the ENABLE field in table REXSCHED to disable the REx testing. The REx tests than you can disable include critical tests. This action can have serious consequences. Northern Telecom does not recommend that

you disable REx critical tests. If you disable critical REx tests, warnings appear. If you disable CM REx testing, the following conditions occur:

- Automated image testing does not occur. This testing includes image testing that follows patch applications.
- Automated activity switch occurs when system diagnostics cause this activity.
- Full CM REx testing does not occur every week.

You can use the DAYSDSBL field to exclude some REx tests from the test schedule on specified days of the week.

Table REXSCHED must have a minimum of two entries. The CM and MS REx tests are present in every DMS SuperNode office with series-3 PMs, applications, and file processors. The number of REx tests that table REXSCHED defines can increase with the addition of nodes and services.

The operating company **cannot** add or delete REx tests (from field REXTSTID). The system automatically defines the entries in this table. This condition causes entries to occur for the REx tests available in the office. The operating company can change the other fields.

Refer to the descriptions of table REXINTEN and office parameter NODEREXCONTROL in table OFCVAR for related information.

#### LCM and LCMCOV REx tests

In NA004 and later versions, the LCM REX Controller Enhancement feature has the following function. This feature eliminates the conflict that was present before between the extended peripheral module (XPM) and line concentrating module (LCM) REx tests. To eliminate the conflict, the feature migrates the LCM REx test from the LCM node audit process to the SREX controller. The feature removes the continuity and voltage (COV) test step that the system performs on the power converters and ringing generator. The feature removes the COV step from the LCM REx test and places the step in a separate test. This separate test is the LCMCOV REx test. This feature adds the tuples LCM\_REX\_TEST and LCMCOV\_REX\_TEST to table REXSCHED.

#### LCM, LGC REx test incompatibility with ATT BERT test

Do not schedule the ATT BERT test to run at the same time as the LCM and LGC REx tests. This ATT BERT test is in table ATTSCHED. These LCM and LGC REx tests are in table REXSCHED. You can schedule LCM and LGC REx tests to run at the same time as the ATT BERT test. The trunks that the system tests cannot operate, and the ATT BERT test fails. The system

generates log ATT122 when a schedule is present for these tests to run at the same time.

## **Datafill sequence and meaning**

The system automatically enters data in table REXSCHED.

Office parameter NODEREXCONTROL in table OFCVAR activates the REx test scheduling mechanism. Field REXON turns the REx test scheduling mechanism ON or OFF. For additional information on office parameter NODEREXCONTROL, refer to *Office Parameters Reference Manual* on office parameter NODEREXCONTROL.

You can disable the automatic REx test configuration. When this event occurs, table REXSCHED allows the operating company to configure automatic REx testing manually for the REx test identifier LGC\_REX\_TEST. You can enable the automatic REx test configuration. When this event occurs, the system does not allow attempts to change fields PARALLEL and PERIOD for LGC\_REX\_TEST. These attempts result in an error message.

To manually update fields PARALLEL and PERIOD, you must disable automatic configuration. To disable automatic configuration, enter the following command at the command interpreter (CI) level of the MAP display:

## >AUTOCONFIG OFF LGC\_REX\_TEST

## Table size

2 to 64 tuples

Normal size is 16 tuples.

# Datafill

Datafill for table REXSCHED appears in the following table.

### **Field descriptions**

Field	Subfield or refinement	Entry	Description
REXTSTID		see subfield	Routine exercise test identifier. This field contains subfield REX_TEST_ID.
	REX_TEST_ID	alphanumeric 1 to 16 characters	Routine exercise test identifier. The system defines routine exercise (REx) test identifiers (REXTSTID). The REx tests that are available in the office appear in this table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Description
ENABLE		Y or N	<i>Enable.</i> Enter Y (yes) to enable or N (no) to disable the REx test. The default value for this field is Y.
			<i>Note:</i> If you disable critical (CM, MS, or ENET) REx tests, the system generates alarms. These alarms are CM RExSch, MS RExByp, and Net RExSch, in that order. The system also generates, IOAU112, CM179, MS104, and ENET501 logs.
PERIOD		1 to 7	<i>Period.</i> Enter a value between 1 and 7 included. This value defines the minimum number of days between two REx tests that follow on the same node.
			Each REx test must run at least one time every week.
			If you disable automatic REx test configuration, the default value for this field is 1. This value indicates that an REx test occurs every day. If you enabled automatic REx test configuration, the default value for this field for REx test identifier LGC_REX_TEST is 7. This value indicates that an REx test occurs every week. The system does not allow you to change this period.
			This system sets this field to a default value of 7 for REx test identifiers LCM_REX_TEST, LCMCOV_REX_TEST, and SPM_REX_TEST. When this value is 7, an REx test occurs every week. To change the period of a test, set this field to a different value.

### **Field descriptions**

Field	Subfield or refinement	Entry	Description
PARALLEL		0 to 99 (Note)	<i>Parallel.</i> This field limits the number of REx tests that can occur in parallel for one node type. The SREX controller can maximize the number of REx tests run in parallel. The operating company can limit the number of parallel REx tests in a node type but cannot increase the number of parallel REx tests beyond the limit defined for the application. This value is different for all REx tests. The resources that each test requires determine this value.
			You can disable automatic REx test configuration. The default value for this field is the maximum value that the maintenance software for each REx test allows. These tests do not include the LCM REx test and LCMCOV REx test. For the LCM REx test and LCMCOV REx test, the default value for this field is the <i>minimum</i> value.
			You can enable automatic REx test configuration. When the event occurs, the default value for the REx test identifier LGC_REX_TEST is the default value that the system automatically configures. An NA (does not apply) appears in this field. The system does not allow you to change the value of this field for the LGC_REX_TEST tuple.
			<i>Note:</i> For the LCM_REX_TEST tuple, this field can be a value from 1 to 4. For the LCMCOV_REX_TEST tuple, this field <i>must</i> contain 1. The LCMCOV REx test does not execute on more than one LCM at a time. This field contains a default value of 1 for the LCM_REX_TEST, LCMCOV_REX_TEST, and SPM_REX_TEST tuples.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Description
DAYSDSBL	SBL MON, TUE, WED, THU, FRI, SAT, SUN, ALL, or NONE		Days disabled list. Enter the days on which to disable the REx test. The name day applies to the scheduled start of the REx test. For example, an REx test can be in a schedule. The test can run from Monday evening 23:00 to Tuesday morning 02:00. The test runs at 01:00 Tuesday. In this condition, the system records as sent that the test started on Monday.
			Each REx test must run at least one time every week.
			Enter ALL to disable an REx test on every day of the week. This entry can suspend critical REx tests for a limited time.
			The default value for this field is NONE. This value represents REx test never disabled.

## **Datafill example**

Sample datafill for table REXSCHED appears in the following example.

_					
	REXTSTID	ENABLE	PERIOD	PARALLEL	DAYSDSBL
	MS_REX_TEST	Y	1	1	NONE
	CM_REX_TEST	Y	1	1	NONE
	ENET_REX_TEST	Y	1	1	NONE
	SLM_REX_TEST	Y	1	1	NONE
	LIM_REX_TEST	Y	1	17	NONE
	LGC_REX_TEST	Y	7	NA	NONE
	MSB_REX_TEST	Y	1	10	NONE
	LCM_REX_TEST	Y	7	4	NONE
	SPM_REX_TEST	Y	7	1	NONE

#### MAP example for table REXSCHED

*Note:* Do not schedule the XLIU\_REX\_TEST to occur during a full REx of Table REXINTEN.

For offices with spare XLIU and NIU modes, sample datafill for table REXSCHED appears in the following example.

	REXTSTID	ENABLE	PERIOD	PARALLE	L				DAYSDSBL
		Y	1	1					NONE
	MS_REX_TEST CM REX TEST	r Y	1	1					NONE
	LM_REX_TEST	Ŷ	1	1					NONE
EN	ET_REX_TEST	Y	1	1					NONE
XL	IU_REX_TEST	Y	1	1	MON	TUES	WED	FRI	SAT SUN \$
L	IM_REX_TEST	Y	1	1					NONE
$\mathbf{L}$	GC_REX_TEST	Y	7	NA					NONE
R	CC_REX_TEST	Y	7	1					NONE
SM	SR_REX_TEST	Y	7	1					NONE
Ν	IU_REX_TEST	Y	1	3					THU \$
LCMC	OV_REX_TEST	Y	7	1					NONE
L	CM_REX_TEST	Y	7	1					NONE

#### MAP example for table REXSCHED for spare XLIU and NIU nodes

*Note:* Do not schedule the XLIU\_REX\_TEST to occur during a full REx of Table REXINTEN.

# **Table history**

### SN06 (DMS)

This table was updated for feature number 89007516.

#### BASE06

Restrictions on how to disable CM, MS, and ENET REx tests were removed in BASE06.

#### NA004

The following changes occurred according to feature AF5898, LCM REX Controller Enhancement:

- The "LCM and LCMCOV REx tests" subsection under "Functional description" section was added in NA004.
- Information on LCM\_REX\_TEST and LCMCOV\_REX\_TEST tuples was added to "Field descriptions" table in NA004.
- The LCM\_REX\_TEST and LCMCOV\_REX\_TEST tuples were added to MAP example in "Datafill example" section in NA004.
- "Supplementary information" section was added to document error messages related to LCM\_REX\_TEST and LCMCOV\_REX\_TEST tuples in NA004.

The following additional changes occurred:

- Reference in "Functional description" section to 16 REx tests defined in the system was removed in NA004. This removal occurred because this number can vary.
- Note in "Functional description" section was removed in NA004. This note states that if REx tests are not available, table REXSCHED is empty. This condition cannot be present.
- Paragraph in "Datafill sequence and limits" section was removed in NA004. This paragraph states that you must enter data in table REXSCHED after all the inventory tables because the table identifies the actual REx tests available in the office. Removal of this paragraph occurred because the system automatically enters data in table REXSCHED.
- The spelling of entry TUES for field DAYSDSBL was corrected to read TUE in NA004.

#### BCS36

Subfield REX\_TEST\_ID was added in BCS36.

#### CSP03

Changes related to the CI command AUTOCONFIG were added in CSP03.

### **Additional information**

The following error message appears if you attempt to set field PARALLEL to a value greater than 4 for the LCM\_REX\_TEST tuple:

```
The maximum for LCM_REX_TEST is 4 parallel REX test(s)
```

The LCMCOV REx test does not execute on more than one LCM at a time. The following error message appears if you attempt to set field PARALLEL to a value other than 1 for the LCMCOV\_REX\_TEST tuple:

The maximum for LCMCOV\_REX\_TEST is 1 parallel REX test(s)

The SPM REx test does not execute on more than one LCM at a time. The following error message appears if you attempt to set field PARALLEL to a value other than 1 for the SPM\_REX\_TEST tuple:

The maximum for SPM\_REX\_TEST is 1 parallel REX test(s)

SPM\_REX\_TEST has a dependency on ENET\_REX\_TEST and MS\_REX\_TEST. This means that REX test will not be run on SPM nodes while ENET REX and MS REX tests are being executed.

You can disable a critical REx test in table REXSCHED. If you attempt to suspend the REx test with the REXTEST SUSPEND command, the following error message appears:

REXTEST SUSPEND successful on <REx\_test\_type>. However, <REx\_test\_type> is already disabled in table REXSCHED.

*Note:* The REx\_test\_type can be CM\_REX\_TEST, MS\_REX\_TEST, or ENET\_REX\_TEST.

You can disable a critical REx test in table REXSCHED. If you attempt to enable the REx test with the REXTEST RESUME command, the following error message appears:

REXTEST RESUME successful on <REx\_test\_type> However, <REx\_test\_type> is disabled in table REXSCHED.

*Note:* The REx\_test\_type can be CM\_REX\_TEST, MS\_REX\_TEST, or ENET\_REX\_TEST.

An issue affecting offices with spare X.25/X.75/X.75' Link Interface Unit (XLIU) and Node Interface Unit (NIU) nodes has been discovered. The spare XLIU nodes begin REx before the NIU node has come back in service (INSV) from completing its REx test; it remains at in-service trouble (ISTB) status. The ISTB status of NIU causes the spare XLIU to go into system-busy status (SYSB). To prevent this conflict, datafill the XLIU and NIU REx in Table REXSCHED so that the tests occur on separate days. See example datafill in this section.

*Note:* Do not schedule the XLIU\_REX\_TEST to occur during a full REx of Table REXINTEN.

# REXSCHED (end)

# RGSIGSYS

#### Table name

Register Signaling System Table

## **Functional description**

Table RGSIGSYS contains all the relevant customer variable register signaling data. This allows the customer to change the register signaling variables on a trunk subgroup or on a line attribute basis.

There are three fields in table TRKSGRP that indicate the required register signaling systems: RGICSSI (register incoming signaling system), RGOGSSI (register outgoing signaling system), and RG2WSSI (register two-way signaling system). Each of these fields refers to an entry in table RGSIGSYS.

Field RSSINDX in table LINEATTR relates to an entry in table RGSIGSYS.

Each tuple in table RGSIGSYS describes an instance of a register signaling system. There can be many different instances of register signaling systems of the same type.

Each tuple in the table has the following layout:

RGSIGIDX RGSIGTYP variable\_area

The customer defines the name of a register signaling system index (RGSIGIDX) by adding a new tuple to table RGSIGSYS. The key to each entry in the table is field RGSIGIDX.

There are nine register signaling types as described below in the following table . Each register signaling type is designed to support a generic signaling system.

Types	Register signaling system
MF3	Three-phase multifrequency (MF) pulse signaling
MFCR2	(MF compelled [MFC] R2 signaling(Used by DMS-300 switching units.)
NTRS03	MF pulse packet (MFPP) type 2 (MFPP-2)(Used for Confederation of Independent States (CIS) network for incoming toll calls to a DMS that is replaced as CIS automatic intercity telephone exchange (AMTC-2, 3), toll exchanges.

#### Register signaling types (Sheet 1 of 2)

## **RGSIGSYS** (continued)

Types	Register signaling system
NTRS04	R1 modified signaling
NTRS05	E and M signaling
NTRS06	see NTRS14
NTRS10	MF pulsed signaling(Used only in China.)
NTRS11	MFC R2 signaling(Used by World Systems DMS-100 and DMS-200 switching units and switching units using the Chinese variant of the CCITT R2 signaling system.)
NTRS12	Socotel compelled trunk register signaling(Used by World Systems DMS-100 and DMS-200 switching units.)
NTRS14	MF pulse packet (MFPP) type 1 (MFPP-1)(Used for CIS network between local outgoing and toll incoming AMTC-KE (electronic) tandem DMS-100/200I (international) switches.
RGHYBRID	Hybrid register signaling

The name of each subfield is an acronym describing the application of the time value or variable. The acronyms, in general, begin with one of the following prefixes:

- O (outgoing variables begin with O)
- I (incoming variables begin with I)
- TM (time)

Register signaling types (Sheet 2 of 2)

- HD (hold)
- RG (register)
- MIN or MAX (minimum or maximum digits)

### Updating of signaling system data in peripheral modules

The contents of table RGSIGSYS reside in both international line group controllers (ILGC) and international digital trunk controllers (IDTC) peripheral modules (PM). These values are downloaded upon the return to service (RTS) of each PM. Any data that is changed when a PM is in service is updated when the PMs are RTSed from the PM level of the MAP (maintenance and administration position). Only the PM containing the line or trunk with changed signaling data must to be RTSed.

## RGSIGSYS (end)

#### Hybrid signaling

The hybrid signaling (RGHYBRID) supports more than one register signaling for a trunk in order to provide switching and automatic number identification (ANI). In field RGSIGTYP, selector RGHYBRID consists of the components of a hybrid structure. In other words, combinations of signaling types MF3, MFPP NTRS02, NTRS05, NTRS06, and NTRS03 or NTRS14.

For further information on signaling type RGHYBRID, refer to table RGHYBRID.

### **Datafill sequence and implications**

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

#### Table size

Memory is allocated for 255 register signaling indexes.

## **Table history**

#### BCS36

Subfield RSS\_CHAR\_VECTOR was added. Signaling types NTRS063 and NTRS14 were added.

#### Supplementary information

This section provides information on error messages that can occur when datafilling table.

#### **Error messages**

If an attempt is made to delete an RGSIGIDX tuple from table RGSIGSYS and there is a tuple in TRKSGRP, the following error message is output:

CANNOT DELETE THIS TUPLE; IT IS USED BY <the CLLI of the trunk using the tuple is indicated here>

# **RGSIGSYS** type MF3

## Three-phase multifrequency (MF) pulse signaling

A description of the customer variable data for register signaling type MF3 appears in this section.

The method by which you add or change RGSIGSYS data appears in the following section.

#### Making changes to RGSIGSYS

A user can change signaling system data for many reasons. These reasons include the following examples:

- 1. Addition of new trunks with a new register signaling system to the switch occurs.
- 2. Separation of one trunk from the trunk group occurs to experiment with the register signaling variables of the trunk.
- 3. One or more of the timing variables must change for trunks with a signaling system.
- 4. The trunks of a specified signaling system change to a new signaling system type.

In the first two examples, data entry for new trunks must occur. The rule for entry for new trunks requires that table RGSIGSYS contain entries before table TRKSGRP. The creation of a new entry in table TRKSGRP can support a new trunk that requires a new RGSIGIDX. If this condition occurs, an entry for that RGSIGIDX must first be in table RGSIGSYS.

The condition in the third example does not require changes to table TRKSGRP. The appropriate variables can change in table RGSIGSYS. To implement changes in a tuple in table RGSIGSYS, a download must occur. The system must download the tuples that change to the peripheral module (PM).

The fourth example represents an important change to the signaling in use on a set of trunks. This change requires close control with the switching center at the far end of these trunks. The RGICSSI, RGOGSSI, or RG2WSSI field of the trunk subgroup points to the different RGSIGIDX. Busy (BSY) and return to service (RTS) each trunk in the subgroup from the trunk test position (TTP) level of the MAP display.

### Adding a new RGSIGSYS tuple

In the previous examples and item 2 the , addition of the new signaling system to RGSIGSYS occurs first.

In table RGSIGSYS, use the ADD command to add a new RGSIGIDX. When the system prompts you for an entry, enter the specified RGSIGTYP. A prompt occurs for changes from the displayed default value. To keep the default value, enter a blank line.

To activate the new tuple in table RGSIGSYS, a download of the data to the PMs must occur. The PM must be RTSed from the PM level of the MAP display.

Next, enter the new trunks in the normal way. Field RGICSSI, RGOGSSI, or RG2WSSI of the new subgroup must refer to the new RGSIGIDX in table RGSIGSYS. The system does not download data at this point.

To activate this change, manual busy (MBSY) and RTS each trunk in the subgroup from the TTP level of the MAP display.

#### Example 1

In the following example, the addition of a new RGSIGIDX entry occurs. This entry is MYRGSIGIDX of type MF3. The variable values are the same as the default values for MF3, except for fields OPULSIG and IKPTM. Field OPULSIG changes from 68 ms to 75 ms and field IKPTM changes from 15 s to 8 s.

#### Adding a new tuple to table RGSIGSYS.

#### At the MAP terminal

1 To access table RGSIGSYS, type

#### >TABLERGSIGSYS

and press the Enter key.

MAP response:

TABLE RGSIGSYS

2 To add the new signaling index, type

#### >ADD

and press the Enter key.

MAP response:

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT.

**3** To confirm the addition, type

>Y

and press the Enter key.

MAP response:

RGSIGIDX:

4	To enter the new signaling index, type >myrgsigidx
	and press the Enter key.
	MAP response:
	RGSIGTYP
5	To enter the new signaling type, type
	>mf3
	and press the Enter key.
	MAP response: OKPSIG : 100
•	
6	To leave the outgoing KP signal in the present state, press the Enter key.
	MAP response: OPULSIG : 68
-	
7	To enter the new outgoing pulse signal length, type >75
	and press the Enter key.
	MAP response:
	ORGHLDTM: 240
8	To leave the outgoing overall register holding time in the present state, press the Enter key.
	MAP response:
	OIGDTM: 70
9	To leave the outgoing interdigital time in the present state, press the Enter key.
	MAP response:
	IKPTM: 15
10	To enter the new incoming time for KP signal, type
	>8
	and press the Enter key.
	MAP response:
	IMINDIG1: 3
11	To leave the incoming minimum number of digits (first phase) in the current state, press the Enter key.
	MAP response:
	IMAXDIG1: 3

12	To leave the incoming maximum number of digits (first phase) in the current state, press the Enter key.
	MAP response:
	IPSHDTM1: 15
13	To leave the incoming phase overall holding time in the current state, press the Enter key.
	MAP response
	IMINDID2: 3
14	To leave the incoming minimum number of digits (second phase) in the current state, press the Enter key.
	MAP response:
	IMAXDIG2: 3
15	To leave the incoming maximum number of digits (second phase) in the current state, press the Enter key.
	MAP response:
	IPSHDTM2: 15
16	To leave the incoming maximum number of digits (second phase) in the current state, press the Enter key.
	MAP response:
	IPSHDTM2: 15
17	To leave the incoming minimum number of digits (final phase) in the current
	state, press the Enter key.
	MAP response:
	IMAXDIG3: 14
18	To leave the incoming maximum number of digits (final phase) in the current state, press the Enter key.
	MAP response:
	IPSHDTM3: 15
19	To leave the incoming phase overall holding time in the current state, press the Enter key.
	MAP response:
	TUPLE TO BE ADDED: MYRGSIGIDX MF3 100 75 240 70 8 3 3 15 3 3 15 3 14 15 ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
20	To confirm the additional, type
	>Y
	and press the Enter key.

	MAP response: TUPLE ADDED
	IOPLE ADDED
21	To exit table RGSIGSYS, type
	>QUIT
	and press the Enter key.
22	To access the MP level of the MAP display, type
	>MAPCI;MTC;MP
	and press the Enter key.
23	To post the IDTC, type
	>POSTIDTCn
	and press the Enter key.
	where
	n is the number of the IDTC
24	
24	To return the IDTC to service, type <b>&gt;RTSPM</b>
	and press the Enter key.
25	To exit the MP level of the MAP display, type
25	>QUIT ALL
	and press the Enter key.
26	To access table TRKSGRP, type
20	>TABLE TRKSGRP
	and press the Enter key.
27	To position on the trunk, type
	>POSITION my trunk0
	and press the Enter key.
	where
	mytrunk
	is the name of the trunk
	0 is the number of the trunk
	MAP response:
	MYTRUNK 0 3X04AA
	STD
	IC DP IM N 30 4 NO SX N N N M UNEQ
28	To change the registered incoming signaling index, type
	>CHANGE SGRPVARAREA RGICSSI myrgsigidx
	and press the Enter key.

	MAP response:
	ENTER Y TO CONTINUE PROCESSING OR N TO QUIT.
29	To confirm the addition, type >Y
	and press the Enter key.
30	To exit table TRKSGRP, type
	>QUIT
	and press the Enter key.
31	To access the TTP level of the MAP display, type
	>MAPCI;MTC;TRKS;TTP
	and press the Enter key.
32	To post a group of circuits by the common language location identifier (CLLI) of the trunk, type
	>POST my trunk
	where
	my trunk is the CLLI name of the trunk
33	To busy every circuit on the trunk, type
	>BUSY ALL
	and press the Enter key.
34	To return the circuits on the trunk to service, type
	>RTS ALL
	and press the Enter key.
35	To exit the TTP level of the MAP display, type
	>QUIT ALL
	and press the Enter key.
Deleting a R	GSIGIDX

# To delete an RGSIGIDX tuple from table, some fields must not be present in the table TRKSGRP tuple. These fields are RGSIGSYS, RGICSSI, RGOGSSI, and RG2WSSI. This tuple points to the tuple to delete. A utility program uses the register signaling type and the signaling system index to check each entry in the trunk subgroup data table. If the program finds a matching index, the system returns the common language location identifier (CLLI). If the program does not find a matching index, the system returns NIL\_CLLI.

You can activate a change to fields RGICSSI, RGOGSSI, or RG2WSSI of a tuple in TRKSGRP. To perform this action, MBSY and RTS each trunk in the subgroup from the TTP level of the MAP display.

### Making changes to existing RGSIGSYS tuples

The register signaling type (RGSIGTYP) of any tuple cannot change. The value of fields other than the key, RGSIGIDX, or the selector, RGSIGTYP, can change in the normal way. See the previous example. If the change involves large numbers of trunks, testing of the new variables must occur on a small subgroup first. This event must follow the method for how to define a new RGSIGIDX.

If the parameters contain the correct values for the test subgroup, the original RGSIGIDX tuple can change. Busy the members of the test subgroup before you enter the members again to become members of the original subgroup.

# Datafill

Datafill for table RGSIGSYS type MF3 appears in the following table.

Field	Subfield or refinement	Entry	Description
RGSIGIDX		see subfield	<i>Register signaling index</i> . This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR _ VECTOR	alphanumeric 1 to 16 characters	<i>Register signaling system index</i> . Enter the register signaling index that the customer defines. This field is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.
	RGSIGTYP	MF3	<i>Register signaling type.</i> Enter the register signaling type (MF3). Enter data in refinements OKPSIG, OPULSIG, ORGHLDTM, OIDGTM, IKPTM, IMINDIG1, IMAXDIG1, IPSHDTM1, IMINDIG2, IMAXDIG2, IPSHDTM2, IMINDIG3, IMAXDIG3, and IPSHDTM3.
	OKPSIG	90 to 110	<i>Outgoing KP signal duration</i> . Enter the duration in milliseconds of the outgoing KP signal.
			The default value is 100.
	OPULSIG	61 to 75	<i>Outgoing pulse signal length</i> . Enter the duration in milliseconds of every signal other than KP.
			The default value is 10.
			<i>Note:</i> For MMP loads, the range is 10 to 75.

### Field descriptions (Sheet 1 of 4)

# Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Description
	ORGHLDTM	180 to 300	<i>Outgoing overall register holding time</i> . Enter the time in seconds that the system holds the register for transmission of the digits.
			The default value is 240.
	OIDGTM	70 to 1000	Outgoing interdigital time. Enter the outgoing interdigital time in milliseconds.
			The default value is 70.
			<i>Note:</i> For MMP loads, the range is 0 to 1000.
	ІКРТМ	2 to 30	<i>Incoming time for KP signal</i> . Enter the time in seconds that the trunk waits for reception of the first digit.
			The default value is 15.
	IMINDIG1	1 to 14	<i>Incoming minimum number of digits, first phase.</i> Enter the minimum number of digits that the trunk can receive in the first phase.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IMAXDIG1	1 to 14	Incoming maximum number of digits, first phase. Enter the maximum number of digits that the trunk can receive in the first phase. The value in this field must be greater than or equal to the value in field IMINDIG1.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IPSHDTM1	10 to 20	Incoming phase overall holding time. Enter the amount of time in seconds that the incoming register waits. The incoming register waits for reception of the maximum number of digits in the first phase.
			The default value is 15.

Field	Subfield or refinement	Entry	Description
	IMINDIG2	1 to 14	<i>Incoming minimum number of digits, second phase.</i> Enter the minimum number of digits that the trunk can receive in the second phase.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IMAXDIG2	1 to 14	Incoming maximum number of digits, second phase. Enter the maximum number of digits that the trunk can receive in the second phase. The value in this field must be greater than or equal to the value in field IMINDIG1.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IPSHDTM2	10 to 20	Incoming phase overall holding time. Enter the amount of time in seconds that the incoming register waits. The incoming register waits for reception of the maximum number of digits in the second phase.
			The default value is 15.
	IMINDIG3	1 to 14	<i>Incoming minimum number of digits, final phase.</i> Enter the minimum number of digits that the trunk can receive in the final phase.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.

# Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Description
	IMAXDIG3	1 to 14	Incoming maximum number of digits, final phase. Enter the maximum number of digits that the trunk can receive in the final phase. The value in this field must be greater than or equal to the value in field IMINDIG1.
			The default value is 14.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IPSHDTM3	10 to 20	Incoming phase overall holding time. Enter the time in seconds that the incoming register waits. The incoming register waits for reception of the maximum number of digits in the final phase.
			The default value is 15.

### Field descriptions (Sheet 4 of 4)

# **Datafill example**

Sample datafill for table RGSIGSYS type MF3 appears in the following example.

The example uses the following data:

- the register signaling indexes are LOCRGSIGDX and TOLRGSIGDX
- the register signaling type is MF3
- the outgoing KP signal duration is 100 ms
- the outgoing pulse signal length is 75 ms
- the outgoing overall register holding time is 240 s
- the outgoing interdigital time is 70 ms
- the incoming time for KP signal is 15 s
- the incoming minimum number of digits for the first phase is 4
- the incoming maximum number of digits for the first phase is 13
- the incoming overall holding time for the first phase is 15 s
- the incoming minimum number of digits for the second phase is one
- the incoming maximum number of digits for the second phase is three
- the incoming overall holding time for the second phase is 15 s
- the incoming minimum number of digits for the final phase is one

# RGSIGSYS type MF3 (end)

- the incoming maximum number of digits for the final phase is three
- the incoming overall holding time for the final phase is 15 s

### MAP example for table RGSIGSYS type MF3

RSVAR 		RGS	SIGID	Х										
MF3 100 85 240 80 15 4 13 15 1 3 15 1 3 1	RSVA	AR												
MF3 100 85 240 80 15 4 13 15 1 3 15 1 3 1		CPCQT	CDX											
TOLRGSIGDX			-	240	80 15	5 4	13	15	1	3	15	1	3	15
MF3 100 85 240 80 15 4 13 15 1 3 15 1 3 1		TOL	RGSI	-										

# **RGSIGSYS type MFCR2**

# MF compelled (MFC) R2 signaling

This section describes the customer variable data for register signaling type MFCR2. The DMS-300 switching units use MFCR2.

### **MFCR2** interregister signals

The MFCR2 interregister protocol uses the PCM-30 digital trunk as a medium. The MFCR2 operates at 2048 kbit/s. The MFCR2 protocol uses the PCM-30 speech channels to transmit multifrequency (MF) tones over an R2 link that connects two international switching units.

These two switching units assign an MFCR2 tone transmitter and an MFCR2 tone receiver to each call. The transmitter sends double-frequency tone groups that the receiver can recognize and interpret.

See the table description for table RGSIGSYS type NTRS11 for additional information on compelled signaling.

### **Timeouts on MFCR2 registers**

The MFCR2 registers can limit the holding time of the MFCR2 transmitter and receiver if interregister signaling experiences an interruption. To limit the holding time, the incoming and outgoing registers have timeout periods. These periods are for continuous supervision of the time that the different phases of interregister signaling take.

### **Timeout of outgoing MFCR2 registers**

The outgoing MFCR2 register has a timeout mechanism that monitors the following periods:

- the holding time of a forward signal without an acknowledgment received
- the time the opposite register takes to stop the backward signal transmission. This transmission follows the termination of the forward signal.

A timeout mechanism is not a requirement in the time that a sender does not send an MF group. Allocation of the outgoing MFCR2 register only occurs after reception of all the address digits of the called party. These digits come from the previous trunk.

### Timeout on arrival of a backward acknowledgment

Timeout supervision starts at the beginning of the transmission of a forward MF group. The deactivation of the transmitter involved causes the system to recognize a backward signal. This event resets the timeout supervision.

Timeout supervision starts again at the beginning of the transmission of each forward signal.

If a timeout occurs, the switching unit returns a correct signal or audible tone, or a signal and tone. This signal or tone informs the calling party of the fault occurrence. The system releases the outgoing trunk and the MFCR2 transmitter or receiver for the trunk. The switching unit outputs a detailed report over the log utility report program. The report contains information about the digits the system sent before the timeout occurred.

### Timeout on the end of backward signal transmission

The outgoing MFCR2 register has a timeout mechanism that monitors an interval. This interval is between the end of transmission of a forward signal and the recognition that the backward signal stopped.

If a timeout occurs, the switching unit returns an correct signal or audible tone, or a signal and a tone. The signal or tone informs the calling party of the fault occurrence. The system releases the outgoing trunk and the MFCR2 transmitter and receiver allocated to the trunk. The switching unit outputs a detailed report over the log utility report program. The report contains information about the digits sent before the timeout occurred.

### **Timeout of incoming MFCR2 registers**

The incoming MFCR2 register has a timeout mechanism to supervise the following periods:

- the time the register waits to receive the first MFCR2 signal or the following forward MFCR2 signal
- the time that the opposite register takes to end the forward signal transmission. This transmission follows the start of the backward signal transmission.

### Timeout on arrival of the next forward signal

The incoming MFCR2 register has a timeout mechanism that monitors an interval. This interval is between the allocation of the incoming MFCR2 register and recognition of the first MFCR2 forward signal. The timeout mechanism also monitors the interval between the recognition of two forward signals in succession.

If a timeout occurs, the switching unit sends a congestion signal in a pulse format and releases the incoming MFCR2 register. The switching unit outputs a log utility report with detailed information about the digits received before the timeout occurred.

### Timeout on the end of forward signal transmission

The incoming MFCR2 register has a timeout mechanism that monitors an interval. This interval is between the start of transmission of the backward signal and the recognition that the forward signal stopped.

If a timeout occurs, the switching unit releases the incoming MFCR2 register and waits for the Clear Forward signal from the other end. The switching unit outputs a log utility report with detailed information about the digits the system received before the timeout occurred.

### **MFCR2 register release**

The system must release an outgoing MFCR2 register if the following conditions occur:

- reception of a Clear Forward line signal from the preceding trunk occurs
- a timeout occurs
- reception of a backward signal terminating the interregister signaling protocol occurs

The system must release an incoming MFCR2 register if the following conditions occur:

- reception of a Clear Forward line signal occurred from the trunk that has allocation of the MFCR2 register
- a timeout occurred
- transmission of a backward signal terminating the interregister signaling protocol occurred

The outgoing and incoming switching unit passes the link-to-speech conditions. This event follows an Address Complete signal or a Subscriber Line Free signal. The MFCR2 registers at the two ends must disconnect before the switching units pass to speech condition. For a passage to speech condition to occur, the following conditions must be present:

- The incoming MFCR2 register must disconnect from the link. This event must occur in 30 ms of the recognition of the end of the last backward signal.
- The outgoing MFCR2 register must disconnect from the link. This event must occur in 30 ms of the recognition of the end of the last backward signal.

- The outgoing switching unit speech conditions must be set up. This event must occur 30 to 60 ms after recognition of the end of the last backward signal.
- The incoming switching unit speech conditions must be set up. This event must occur a minimum of 75 ms after the end of transmission of the last backward signal.

### **R2 timing for Australia**

The register signaling type MFCR2 in table RGSIGSYS for T3MFC Australian national system has some recommended values. These values appear in the following table.

### R2 timing for Australia (Sheet 1 of 2)

RGSISYS field	Description of field	Value
RGSIGIDX	register signaling index	AUST3MFC
RGSIGTYP	register signaling type	MFCR2
ОХМТТМ	outgoing transmit time	20 s
OIDLTM	outgoing idle time	20 s
OPLSTM	outgoing pulse-end time	200 ms
OPSPLSTM	outgoing post-pulse time	150 ms
ОСМРТМ	outgoing compel time	360 ms
IMXWTTM	incoming maximum wait time	16 s
IMXWTTM1	incoming short maximum wait time	4 s
IPLSHDTM	incoming pulse hold time	150 ms
IPRPLSTM	incoming pre-pulse time	100 ms
IPSPLSTM	incoming post-pulse time	100 ms
IPSRLSTM	incoming post-release time	75 ms
ІСМРТМ	incoming compel time	360 ms
UTRON	universal tone Rx on	36 ms
UTROFF	universal tone Rx off	36 ms
ICRMTTM	incoming reply time	50 s

R2 timing for Australia (Sheet 2 of 2)							
RGSISYS field	Description of field	Value					
IFDGWTTM	incoming first digit wait time	1 s					
PROTINDX	multifrequency compelled (MFC) protocol index	3 s					

Datafill

Datafill for table RGSIGSYS type MFCR2 appears in the following table.

### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
RGSIGIDX		see subfield	<i>Register signaling index.</i> This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR _ VECTOR	alphanumeric 1 to 16 characters	<i>Register signaling system index.</i> Enter the register signaling index that the customer defines. This key is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.
	RGSIGTYP	MFCR2	<i>Register signaling type</i> . Enter the signaling type (MFCR2). Enter data in refinements OXMTTM, OIDLTM, OPLSTM, OPSPLSTM, OCMPTM, IMXWTTM, IMXWTTM1, IPLSHDTM, IPRPLSTM, IPSPLSTM, IPSRLSTM, ICMPTM, UTRON, UTROFF, ICRMTTM, and PROTINDX.
	OXMTTM	10 to 50	<i>Outgoing transmit time</i> . Enter the maximum time in seconds that a register waits for a backward signal. The register waits for a backward signal after the register sends a forward signal. If the wait time exceeds this time, the system releases the register.
			The default value is 30.
	OIDLTM	15 to 60	<i>Outgoing idle time</i> . Enter the maximum time between the end of a backward signal, and the start of the next forward signal. This entry must be in seconds. If the outgoing register cannot signal before this time expires, the system releases the register.
			The default value is 35.

Field	Subfield or refinement	Entry	Explanation and action
	OPLSTM	150 to 1500	<i>Outgoing pulse end time</i> . Enter the time in milliseconds that represents the correct width of a received pulse signal.
			The default value is 150.
	OPSPLSTM	50 to 1000	<i>Outgoing post pulse time</i> . Enter the post-pulse pause time in milliseconds. This time allows the incoming register to be ready for the next forward signal.
			The default value is 150.
	OCMPTM	10 to 2500	<i>Outgoing compel time</i> . Enter the outgoing compel time in milliseconds. This time passes between the removal of the forward signal and the detection of the removal of the backward signal.
			The default value is 50.
	IMXWTTM	4 to 60	Incoming maximum wait time Enter the maximum time in seconds that the incoming register waits for reception of the next signal that is not optional. For digit collection, use of this time occurs before collection of the minimum number of digits is complete. Digit analysis determines when the collection of the minimum number of digits is complete.
			The default value is 24.
	IMXWTTM1	4 to 50	Incoming short maximum wait time. Enter the maximum time in seconds that the incoming register waits for reception of the next optional signal. For digit collection, use of this time occurs after collection of the minimum number of digits. Digit analysis determines when collection of the minimum number of digits is complete. This time can be less than the time in use in field IMXWTTM.
			The default value is 4.
	IPLSHDTM	100 to 1000	Incoming pulse hold time. Enter the duration in milliseconds of all backward pulsed signals.
			The default value is 150.

Field	Subfield or refinement	Entry	Explanation and action
	IPRPLSTM	100 to 1000	Incoming pre-pulse time. Enter the time in milliseconds between two events. The first event is the transmission of the last backward signal of a compelled sequence. The second event is the start of transmission of a pulsed signal by the incoming register.
			The default value is 100.
	IPSPLSTM	100 to 1000	<i>Incoming post-pulse time</i> . Enter the time in milliseconds that follows the transmission of a pulsed signal. This signal indicates that the system does not recognize any forward signals.
			The default value is 100.
	IPSRLSTM	75 to 500	Incoming post release time. Enter the time in milliseconds that represents the post-release pause time before the start of the next compelled signal.
			The default value is 75.
	ICMPTM	10 to 2500	Incoming compel time. Enter the time in milliseconds that represents the period between two events. The first event is the transmission of the backward signal by the incoming register. The second event is the release of the forward signal by the outgoing register.
			The default value is 50.
	UTRON	24 to 180	Universal tone receiver tone on persistence. Enter the time in milliseconds that the tone must persist before the universal tone receiver (UTR) reports the presence of the tone.
			The default value is 48.
	UTROFF	24 to 180	Universal tone receiver tone off persistence. Enter the time in milliseconds that the tone must remain off before the UTR reports the absence of the tone.
			The default value is 36.

# Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ICRMTTM	10 to 50	<i>Incoming reply time.</i> Enter the time after which the incoming end sends a signal to prevent the timeout of the outgoing end. This entry must be in seconds.
			The default value is 25.
	IFDGWTTM	0 to 40	Incoming first digit wait time. Enter the maximum time in seconds that the incoming register waits for the reception of the first digit.
			The default value is 0, which means the timer does not apply.
	PROTINDX	1 to 10	<i>Multifrequency compelled protocol index</i> . Enter the index into the MFCPROT table tuple used for this protocol.
			The default value is 1.

# **Datafill example**

Field descriptions (Sheet 4 of 4)

Sample datafill for table RGSIGSYS type MFCR2 appears in the following example.

The example uses the following data:

- the register signaling index is GWMFC
- the register signaling type is MFCR2
- the outgoing transmit time is 30 s
- the outgoing idle time is 35 s
- the outgoing pulse end time is 150 ms
- the outgoing post-pulse time is 150 ms
- the outgoing compel time is 50 ms
- the incoming maximum wait time before collection of the minimum number of digits is 24 s
- the incoming short maximum wait time after collection of the minimum number of digits is 4 s
- the incoming pulse hold time is 150 ms
- the incoming pre-pulse time is 100 ms

# RGSIGSYS type MFCR2 (end)

- the incoming post-pulse time is 100 ms
- the incoming post-release time is 75 ms
- the incoming compel time is 50 ms
- the UTR tone on persistence time is 36 ms
- the UTR tone off persistence time is 36 ms
- the incoming reply time is 50 s
- the wait time for the first incoming digit is 1 s
- the multifrequency compel protocol index is 1

### MAP example for table RGSIGSYS type MFCR2

# **RGSIGSYS type NTRS03**

# MF pulse packet (MFPP) type 2 (MFPP-2) signaling

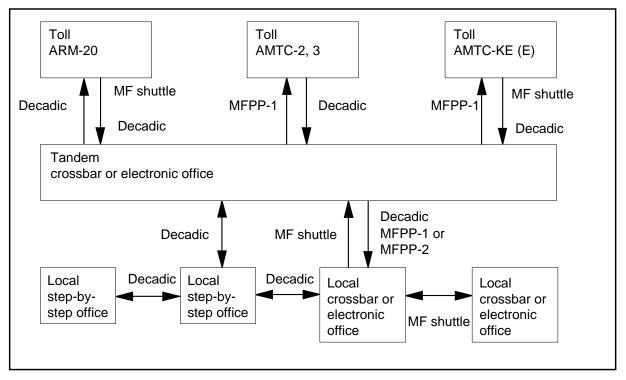
Installation of register signaling MFPP-2 occurs in signaling type NTRS03.

The following four types of register signaling occur in the local CIS network:

- decadic
- MF shuttle
- MFPP-1 (MF11, MF6)
- MFPP type 2 (MFPP-2) (700 Hz, 1100 Hz)

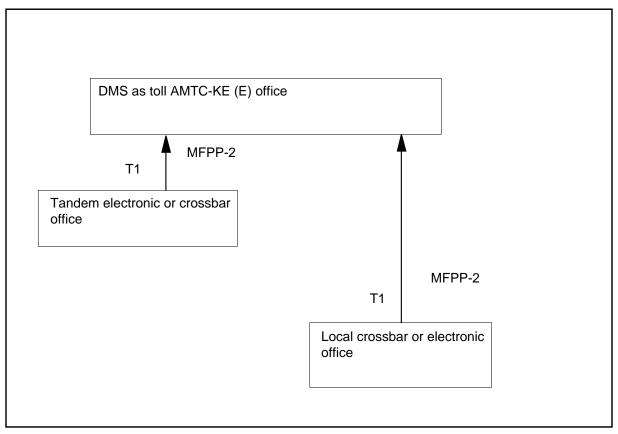
The four types of register signaling appear in the following figure.

### Register signaling types in local CIS network



The MFPP-2 configuration between local, tandem, and toll switches appears in the following figure.

### **MFPP-2** configuration



The frequency groups available with NTRS03 signaling appear in the following table..

### Frequency combinations (Sheet 1 of 2)

Signal	Frequencies (Hz)				
MF1	700 + 900				
MF2	700 + 1100				
MF3	900 + 1100				
MF4	700 + 1300				
<i>Note 1:</i> The duration of each frequency group is $50 \pm 5$ ms.					
Note 2: The duration of each pause bet	<b>Note 2:</b> The duration of each pause between MF signals is $60 \pm 5$ ms.				

Frequency combinations (Sheet 2 of 2)

Signal	Frequencies (Hz)			
MF5	900 + 1300			
MF6	1100 + 1300			
MF7	700 + 1500			
MF8	900 + 1500			
MF9	1100 + 1500			
MF10	1300 + 1500			
MF11	700 + 1500			
<b>Note 1:</b> The duration of each frequency group is $50 \pm 5$ ms.				
<b>Note 2:</b> The duration of each pause between MF signals is $60 \pm 5$ ms.				

The meanings of the frequency groups for use in forward and backward directions are:

• Forward

### MF1 to MF10 digits

uigns

• Backward

### MF2

request, automatic number identification (ANI)

### 700 Hz

congestion

### 1100 Hz

release register or wait for operator answer

*Note:* For BCS36, the system does not support detection of the congestion case after the first packet. The system does not send the 700 Hz tone.

Enter the delay in field DLYMFPP2 before you send the first request (MF2) signal.

Enter the duration of 700 and 1100 Hz in field SGNLTIME.

# Datafill

Datafill for table RGSIGSYS type NTRS03 appear in the following table.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description
RGSIGIDX		see subfield	<i>Register signaling index.</i> This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR_ VECTOR	alphanumeric (1 to 16 characters)	<i>Register signaling system index</i> . Enter the customer defined register signaling index. This field is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.

<b>Field description</b>	s (Sheet 2 of 2)
--------------------------	------------------

	Subfield or		
Field	refinement	Entry	Description
	RGSIGTYP	NTRS03	<i>Register signaling type.</i> Enter the signaling type (NTRS03) and enter data in refinement DIR.
	DIR	C or OG	<i>Direction.</i> Enter IC for incoming trunks and enter data in the following refinements:
			• MF2TIME
			• MINPAUSE
			• MAXPAUSE
			• MINMF
			• MAXMF
			SGNLTIME
			REPLTIME
			DLYMFPP2
			These refinements are in the following section "DIR = $IC$ "
			Enter OG for outgoing trunks. Enter data in the following refinements:
			• MFTIME
			• PAUSTIMEF
			• MINMF2
			• MAXMF2
			• MINSGNL
			• MAXSGNL
			REPLTIME
			• MFWAIT
			• INTLDGT
			These refinements appear in the following section "DIR = OG"

### DIR = IC

If the entry in field DIR is IC, enter data in the following refinements:

- MF2TIME
- MINPAUSE
- MAXPAUSE
- MINMF
- MAXMF
- SGNLTIME
- REPLTIME
- DLYMFPP2

### Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description
	MF2TIME	0 to 31	<i>Signal MF2 time</i> . Enter the duration of signal MF2 for incoming DMS signals. Enter the time in units of 10 ms.
			The default is 5 (50 ms).
	MINIPAUSE	0 to 15	<i>Minimum pause time</i> . Enter the minimum filtering time for detection of each pause between MF signals. Enter the time in units of 10 ms.
			The default is 6 (60 ms).
	MAXPAUSE	0 to 15	Maximum pause time. Enter the maximum filtering time for detection of each pause between MF signals. Enter the time in units of 10 ms. The entry in this field must be greater than the entry in field MINPAUSE. The pause after an MF signal can exceed the value in field MAXPAUSE. When condition occurs this pause indicates the end of the digits packet.
			The default is 11 (110 ms).
	MINMF	0 to 15	<i>Minimum duration</i> . Enter the minimum filtering time for detection of MF signals. Enter the line in units of 10 ms.
			The default is 0 (zero).

Field	Subfield or refinement	Entry	Description
	MAXMF	0 to 15	<i>Maximum duration</i> . Enter the maximum filtering time for detection of MF signals in units of 10 ms. The entry in this field must be greater than the entry in field MINMF.
			The nominal value is 10.
			The default is 5 (50 ms).
	SGNLTIME	0 to 6000	<i>Signal time</i> . Enter the duration to send 700 Hz or 1100 Hz signals in units of 10 ms. The default is 10 (100 ms).
	REPLTIME	0 to 6000	<i>Reply time</i> . Enter the timer value for the extended multiprocessor system (XMS)-based peripheral module (XPM). Enter this value to wait for a signal after you send an MF2 signal in units of 10 ms.
			The default is 1000 (10 000 ms).
	DLYMFPP2	0 to 100	<i>Delay multifrequency pulse packet type 2</i> . Enter the timer value for the incoming exchange. Enter this value to wait before the system sends the first MF2 signal after transmission of a seize (SZA) line signal. Enter the time in units of 10 ms.
			The default is 20 (200 ms).

### Field descriptions for conditional datafill (Sheet 2 of 2)

# DIR = OG

If the entry in field DIR is OG, enter data in the following refinements:

- MFTIME
- PAUSETIME
- MINMF2
- MAXMF2
- MINSGNL
- MAXSGNL
- REPLTIME
- MFWAIT
- INTLDGT

Field	Subfield or refinement	Entry	Description
	MFTIME	0 to 10	<i>Minimum signal time</i> . Enter the minimum filtering time for detection of 700 Hz or 1100 Hz signals. Enter the time in units of 10 ms.
			The default is 7 (70 ms).
	PAUSETIME	0 to 15	<i>Pause</i> . Enter the duration to send MF2 (request) signal. Enter the time in units of 10 ms.
			The default value is 6 (60 ms).
	MINMF2	0 to 31	<i>Minimum time for MF2</i> . Enter the minimum filtering time for detection of MF2 signals. Enter the time in units of 10 ms.
			The default is 0 (zero).
	MAXMF2	0 to 31	<i>Maximum time for MF2</i> . Enter the maximum filtering time for detection of MF2 signals. Enter the time in units of 10 ms. The entry in this field must be greater than the entry in field MINMF2.
			The default is 5 (50 ms).
	MINSGNL	0 to 15	<i>Minimum signal time</i> . Enter the minimum filtering time for detection of 700 Hz or 1100 Hz signals. Enter the time in units of 10 ms.
			The default is 7 (70 ms).
	MAXSGNL	0 to 15	<i>Maximum signal time</i> . Enter the maximum filtering time for detection of 700 Hz or 1100 Hz signals. Enter the time in units of 10 ms. The entry in this field must be greater than the entry in field MINSGNL.
			The default is12 (120 ms).
	REPLTIME	0 to 6000	<i>Reply time</i> . Enter the timer value for the XPM from an XMS to wait for an MF2 signal. Enter the time in units of 10 ms.
			The default is 1000 (10 000 ms).

# Field descriptions for conditional datafill (Sheet 1 of 2)

# RGSIGSYS type NTRS03 (end)

Field	Subfield or refinement	Entry	Description
	MFWAIT	0 to 100	<i>Multifrequency wait.</i> Enter the duration delay before the system sends the packet after the system receives every MF2 signal. Enter the time in units of 10 ms.
			The default is 25 (250 ms).
	INTLDGT	1 to 2	<i>International digit</i> . Enter the code value that specifies the number of digits for automatic international call code.
			The default is 2, which indicates the current network.

### Field descriptions for conditional datafill (Sheet 2 of 2)

# **Datafill example**

Sample datafill for table RGSIGSYS type NTRS03 appears in the following example.

### MAP example for table RGSIGSYS type NTRS03

$\bigcap$	RGSIGIDX									RS	VAR	
	OGMYMFPP NTRS03	OG	5	6	0	5	7	12	1000	25	2	

# **RGSIGSYS type NTRS04**

### R1 modified signaling

This section describes the customer variable data for register signaling type NTRS04.

The NTRS04 signaling is a modified R1 register signaling for use in the Caribbean expansion project. The R1 register signaling is signaling type MF3.

Application of R1 modified signaling can occur for automatic and semi-automatic operation of one-way and two-way circuits. This condition occurs for international areas.

Descriptions and functions for R1 modified signals appear in the following sections:

• KP (start of pulsing) signal (sent in forward direction)

The system sends this register signal after the recognition of the Start Dialing signal. The system uses the KP to prepare the incoming multi-frequency register for the reception of interregister signals. The KP indicates that the call is a terminating call.

• KP2 (start of pulsing) signal (sent in the forward direction)

The system sends this register signal after the system recognizes the Start Dialing signal. The system uses the KP2 to prepare the incoming multi-frequency register for the reception of interregister signals that follow. The KP2 differs from the KP signal. The KP2 indicates a transit call that is an intercontinental call.

• Address signal (sent in the following direction)

The system sends this register signal to indicate one decimal element of information for the number of the called party. The range for this information is 0-9. The system sends a sequence of address signals for each call.

• ST (end of pulsing) signal (sent in the forward direction)

The system sends this register signal to indicate that additional address signals do not follow.

• Code11 signal (sent in the forward direction)

The system sends this register signal to indicate that the system routes the incoming call to an operator at the terminating exchange.

• Code12 signal (sent in the forward direction)

The system sends this register signal to indicate that the system routes the incoming call to a special international operator. These operators handle special calls, like pre-booked calls.

Digit collection by the incoming register occurs in three phases for R1 modified signaling. Digit collection occurs after the start of pulsing (KP) signal.

The first phase collects the first set of digits. The second phase collects the next set of digits. The final phase collects the digits that remain, and the end-of-pulsing (ST) signal.

The outpulsing signaling format is:

KP (or KP2) + country code + language digit (or discrimination digit) + Codel1 (or Codel2) + XXXX (or national number) + ST

where:

XXXX can be 1, 2, 3, or 4 digits.

# Datafill

Datafill for table RGSIGSYS type NTRS04 appears in the following table.

Field	Subfield or refinement	Entry	Description
RGSIGIDX		see subfield	<i>Register signaling index</i> . This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR _ VECTOR	alphanumeric (1 to 16 characters)	<i>Register signaling system index.</i> Enter the register signaling index that the customer defines. This field is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.

### Field descriptions (Sheet 1 of 5)

# Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Description		
	RGSIGTYP	NTRS04	<i>Register signaling type</i> . Enter the signaling type (NTRS04). Enter data in the following refinements:		
			• OKPSIG		
			OKP2SIG		
			• OPULSIG		
			ORGHLDTM		
			• OIDGTM		
			• IKPTM		
			IMINDIG1		
			IMAXDIG1		
			IPSHDTM1		
			IMINDIG2		
			IMAXDIG2		
			IPSHDTM2		
			• IMINDIG3		
			• IMAXDIG3		
			• IPSHDTM3		
	OKPSIG	90 to 110	<i>Outgoing KP signal duration</i> . Enter the duration of the outgoing KP signal. Enter the duration in milliseconds.		
			The default value is 100.		
	OKP2SIG	90 to 110	<i>Outgoing KP2 signal duration</i> . Enter the duration of the outgoing KP2 signal. Enter the duration in milliseconds		
			The default value is 100.		
	OPULSIG	61 to 75	<i>Outgoing pulse signal length</i> . Enter the duration of signals other than KP and KP2. Enter the duration in milliseconds.		
			The default value is 68.		
			<i>Note:</i> For MMP loads, the range is 10 to 75.		

# Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Description
	ORGHLDTM	180 to 240	<i>Outgoing overall register holding time.</i> Enter the time that the system holds the register for transmission of the digits. Enter the time in seconds.
			The default value is 240.
			<i>Note:</i> For MMP loads, the range is 180 to 300.
	OIDGTM	61 to 75	<i>Outgoing interdigital time</i> . Enter the outgoing interdigital time, the time between digits. Enter the time in milliseconds.
			The default value is 68.
			<i>Note:</i> For MMP loads, the range is 0 to 1000.
	IKPTM	10 to 20	<i>Incoming time for KP signal.</i> Enter the time that the trunk waits for the reception of the KP, or KP2, signal. Enter the time in seconds.
			The default value is 20.
			<i>Note:</i> For MMP loads, the range is 2 to 30.
	IMINDIG1	0 to 13	<i>Incoming minimum number of digits, phase one.</i> Enter the minimum number of digits that the register can receive in phase one.
			The default value is 1.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IMAXDIG1	0 to 13	Incoming maximum number of digits phase one. Enter the maximum number of digits that the register can receive in phase one. The value in this field must be greater than or equal to the value in field IMINDIG1.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.

# Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Description
	IPSHDTM1	10 to 20	Incoming phase overall holding time, phase one. Enter the time that the incoming register waits to receive the maximum number of digits in phase one. Enter the time in seconds.
			The default value is 20.
	IMINDIG2	0 to 13	<i>Incoming minimum number of digits, phase two.</i> Enter the minimum number of digits that the register can receive in phase two.
			The default value is 1.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IMAXDIG2	0 to 13	Incoming maximum number of digits, phase two. Enter the maximum number of digits that the register can receive in phase two. The value in this field must be greater than or equal to the value in field IMINDIG2.
			The default value is 3.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IPSHDTM2	10 to 20	Incoming Phase Overall Holding Time, Phase Two. Enter the time that the incoming register waits to receive the maximum number of digits in phase two. Enter the time in seconds.
			The default value is 20.
	IMINDIG3	0 to 13	<i>Incoming minimum number of digits, phase three.</i> Enter the minimum number of digits that the register can receive in phase three.
			The default value is 1.
			<i>Note:</i> For MMP loads, the range is 1 to 13.

Field	Subfield or refinement	Entry	Description
	IMAXDIG3	0 to 13	Incoming maximum number of digits, phase three. Enter the maximum number of digits that the register can receive in phase three. The value in this field must be greater than or equal to the value in field IMINDIG3.
			The default value is 13.
			<i>Note:</i> For MMP loads, the range is 1 to 13.
	IPSHDTM3	10 to 20	Incoming phase overall holding time, phase three. Enter the time that the incoming register waits to receive the maximum number of digits in phase three. Enter the time in seconds.
			The default value is 20.

# **Datafill example**

Field descriptions (Sheet 5 of 5)

Sample datafill for table RGSIGSYS type NTRS04 appears in the following example.

The following data appears in the example:

- the register signaling index is CEP1
- the register signaling type is NTRS04
- the outgoing KP signal duration is 100 ms
- the outgoing KP2 signal duration is 100 ms
- the outgoing pulse signal length is 68 ms
- the outgoing overall register holding time is 240 s
- the outgoing interdigital time is 68 ms
- the incoming time for KP signal is 20 s
- the incoming minimum number of digits for phase one is 4
- the incoming maximum number of digits for phase one is 13
- the incoming overall holding time for phase one is 20 s
- the incoming minimum number of digits for phase two is 1
- the incoming maximum number of digits for phase two is 3
- the incoming overall holding time for phase two is 20 s

# RGSIGSYS type NTRS04 (end)

- the incoming minimum number of digits for phase three is 1
- the incoming maximum number of digits for phase three is 3
- the incoming overall holding time for phase three is 20 s

### MAP example for table RGSIGSYS type NTRS04

$\frown$	RGSIC	JIDX													
													RSV	AR	
_	(	CEP1													
	NTRS04 100	100	68	240 6	3 20	4	13	20	1	3	20	1	3	20	

# **RGSIGSYS type NTRS05**

# E and M signaling

This section describes the customer variable data for register signaling type NTRS05.

The system uses NTRS05 for incoming, outgoing, and two-way trunks that use dial pulse signaling. An example of dial pulse signaling is E and M or loop disconnect signaling.

### E and M trunks

For trunks that use E and M signaling, the signals come from on-hook and off-hook conditions. These conditions are of the telephone set of the subscriber. The following table provides the conditions for the E and M leads on the analog side of the multiplexer (channel bank).

### E and M leads

Condition	M lead	E lead
On hook	Open	Open
Off hook	Earth	Earth

For trunks that use E and M signaling, the system converts the digital codes in time slot 16 of the PCM-30 system. The system converts these signals to E and M signals in the channel bank. The system also converts E and M signals to loop disconnect for step-by-step exchange by an appropriate converter.

The system digitizes the line signals E and M type. The system encodes these signals in time slot 16 of the PCM-30 system. The register signals are decadic dial pulses that the system transmits and receives in time slot 16. The system transmits the decadic dial pulses on the M lead for outpulsing from DMS. The system also conveys these pulses on the E lead for reception from the step-by-step.

The system transmits and receives digital codes through the A-bit of the ABCD-bit facility. This action occurs in time slot 16 of the PCM-30 system. The primary multiplexer converts the outgoing digital codes to M-lead analog signals. The primary multiplexer is the channel bank. The primary multiplexer also converts the incoming E-lead signals to digital codes for the DMS switch. The B-, C-, and D-bits do not change. The signaling system does not use these bits.

### Loop disconnect trunks

Loop disconnect transmits supervisory and address information on a trunk circuit. Use of loop disconnect can occur in the interworking between SXS equipment and the DMS-100 central office.

Signals come from the on hook and off hook conditions of the telephone set of the subscriber. This process causes a series of loops and disconnections. When the subscriber lifts the receiver that is off-hook a loop forms. This loop allows the current to flow. Each dialed digit causes a sequence of on-hook, (break) pulses that represent the digit.

The system transmits and receives the digital codes through the A-bit of the ABCD-bit facility. This action occurs in time slot 16 of a PCM-30 system. A primary multiplexer converts the outgoing digital codes to analog signals. The primary multiplexer also converts analog signals to digital codes for incoming signals. A primary multiplexer is the channel bank. This signaling system does not change or use B-,C-, and D-bits.

### Trunks with other types of dial pulse signaling

Trunks with dial pulse signaling other than E and M or loop disconnect signaling use the A-bit of the digital codes. These codes are in time slot 16 of the PCM-30 system. The trunks use the A-bit to convey the line and digit signals like the signals from the previous description.

# Datafill

Datafill for table RGSIGSYS type NTRS05 appears in the following table.

Field	Subfield or refinement	Entry	Description
RGSIGIDX		see subfield	<i>Register signaling index.</i> This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR_ VECTOR	alphanumeric (1 to 16 characters)	<i>Register signaling system index</i> . Enter the register signaling index the customer defines. This field is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Description
	RGSIGTYP	NTRS05	<i>Register signaling type</i> . Enter the signaling type (NTRS05). Enter data in the following refinements:
			• IDLEPOL
			Direction
			• SIGDIR
			IRMXIDT
			IRMXINT
			IRMNDGT
			• OSPCTBRK
			OSMNIDP
	IDLEPOL	0 to 1	<i>Idle A-bit polarity</i> . Enter the polarity of the A-bit when idle.
			The default value is 1.
	SIGDIR	C, OG, 2W	<i>Signal direction</i> . If the signal direction is incoming. Enter IC. Enter data in refinements IRMXIDT, IRMXINT, IRMNDGT, and FLTRTIME.
			If the signal direction is outgoing, enter OG. Enter data in refinements OSPCTBRK, OSMNIDP, PPS, and OPLSDLAY.
			If the signal direction is two-way, enter 2W. Enter data in the following refinements:
			IRMXIDT
			IRMNXINT
			IRMNDGT
			• FLRTIME
			• OSPCTBRK
			OSMNIDP
			• PPS
			OPLSDLAY

Field	Subfield or refinement	Entry	Description
	IRMXIDT	500 to 30000	Incoming receive maximum initial digit time. If the entry in field SIGDIR is IC or 2W, enter data in this refinement. Enter the maximum time that the register waits for the first digit. Enter the time in 2 ms increments.
			The default value is 2000 (4 s).
	IRMXINT	500 to 30000	Incoming receive maximum interdigit time. If the entry in field SIGDIR is IC or 2W, enter data in this refinement. Enter the maximum time, in 2-ms increments, that the register waits between digits.
			The default value is 2000 (4 s).
	IRMNDGT	1 to 14	<i>Incoming receive number of digits.</i> If the entry in field SIGDIR is IC or 2W, enter data in this refinement. Enter the expected number of digits to receive.
			The default value is 4.
	FLTRTIME	1 to 20	<i>Filter time</i> . If the entry in field SIGDIR is IC or 2W enter data in this refinement. Enter the minimum signal duration time for the detection of make and break signals. Enter the Time in 2 ms increments.
			The default value is 8 (16 ms).
	OSPCTBRK	20 to 75	<i>Outgoing send percent break</i> . If the entry in field SIGDIR is OG or 2W, enter data in this refinement. Enter the percentage of break that the system uses to derive the make break times. This percentage is the make break ratio.
			The default value is 65.
	OSMNIDP	100 to 750	Outgoing send minimum interdigital pause. If the entry in field SIGDIR is OG or 2W, enter data in this refinement. Enter the minimum time for the interdigital pause to separate digits. Enter the time in 2 ms increments.
			The default value is 350 (700 ms).

### Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Description
	PPS	7 to 22	<i>Pulse rate in pulses per second.</i> If the entry in field SIGDIR is OG or 2W, enter data in this refinement. Enter the pulse rate in pulses for each second.
			The default value is 10.
	OPLSDLAY	0 to 6000	<i>Outpulse delay.</i> If the entry in field SIGDIR is OG or 2W, enter data in this refinement. Enter the time delay between the seizure of an outgoing DP trunk and the start of outpulsing. Enter the time in units of 10 ms.
			The default value is 0 (zero).

# **Datafill example**

Sample datafill for table the RGSIGSYS type NTRS05 feature appear in the following example.

The following data appear in this example:

- the register signaling index is EMSIGNAL
- the register signaling type is NTRS05
- the signaling direction is incoming
- the maximum time to wait for an initial digit is 4 s
- the maximum time to wait between digits is 2 s
- the expected number of digits is 13
- the filter time is 8 ms

# RGSIGSYS type NTRS05 (end)

### MAP example for table RGSIGSYS type NTRS05

RGSIGIDX					RSVAR	
 EMSIGNAL NTRS05	IC	2000	1000	13	8	

## **RGSIGSYS type NTRS10**

### MF pulsed signaling

This section describes the customer variable data for register signaling type NTRS10.

Use of NTRS10 occurs for multi-frequency pulsed (MFP) operator trunks for the Chinese network. The MFP register protocol uses the incoming PCM-30 speech channels. The MFP uses these channels to receive R2 tones over an MFP link. This link connects an operator board and a DMS-100/200. Use of NTRS10 occurs over dedicated incoming operator trunks. The NTRS10 is a non-compelled signaling system that uses R2 frequencies.

The following two types of incoming MFP operator trunks are in use for signaling type NTRS10:

- SF (single frequency)/MFP incoming trunk from a remote semi-automatic toll operator (CH04)
- DC (direct current)/MFP incoming trunk from a local manual toll operator (CH09)

### Datafill

Datafill for table RGSIGSYS type NTRS10 appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Description
RGSIGIDX		see subfield	<i>Register signaling index</i> This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR_ VECTOR	alphanumeric (1 to 16 characters)	<i>Register signaling system index</i> Enter the register signaling index that the customer defines. This field is the key to table RGSIGSYS.
RSVAR		see subfields	<i>Register signaling variable area</i> This field contains subfield RGSIGTYP.
	RGSIGTYP	NTRS10	<i>Register signaling type</i> Enter the signaling type (NTRS10).

### **Datafill example**

Sample datafill for table the RGSIGSYS type NTRS10 feature appear in the following example.

This example uses register signaling index CHINA2.

# RGSIGSYS type NTRS10 (end)

#### MAP example for table RGSIGSYS type NTRS10

RGSIGIDX		
	RSVAR	
CHINA2	NTRS10	
		,

## **RGSIGSYS type NTRS11**

### MFC R2 signaling

This section describes the customer variable data for register signaling type NTRS11.

The NTRS11 provides the timing values for trunks that use R2 signaling in World Systems DMS-100 and DMS-200 switching units.

China uses this signaling type for the Chinese national variant of the Consultative Committee on International Telephony and Telegraphy (CCITT) R2 signaling system.

The R2 is a compelled trunk register signaling system with specifications that CCITT defines. The primary use of R2 is as an international signaling protocol between gateway exchanges. Countries can define variants for use in national networks.

### **Compelled signaling**

Compelled register signaling occurs between a forward register and a backward register at opposite ends of a link between exchanges. The registers communicate through a two-out-of-N inband multi-frequency code, where the value of N is normally six. The frequencies that the register uses in the forward and backward directions are different. A maximum of 15 separate signals are available in each direction, where N equals 6. The register uses these signals to convey information like the number of the called subscriber. These signals also convey route information, call charges, or the availability of switching equipment in the network. The correct meaning associated with a signal can vary according to the position of the signal in the signaling sequence.

Register signaling is complete when the terminating office receives the information that the office requires to route the call. Register signaling is complete when a backward signal to connect pulse code modulation (PCM) informs the originating office. If the terminating office cannot complete the call, the register sends a backward signal. This signal indicates the reason the call cannot complete and register signaling terminates.

The compelled cycle takes place in the following order (See the following figure "Compelled signaling sequence").

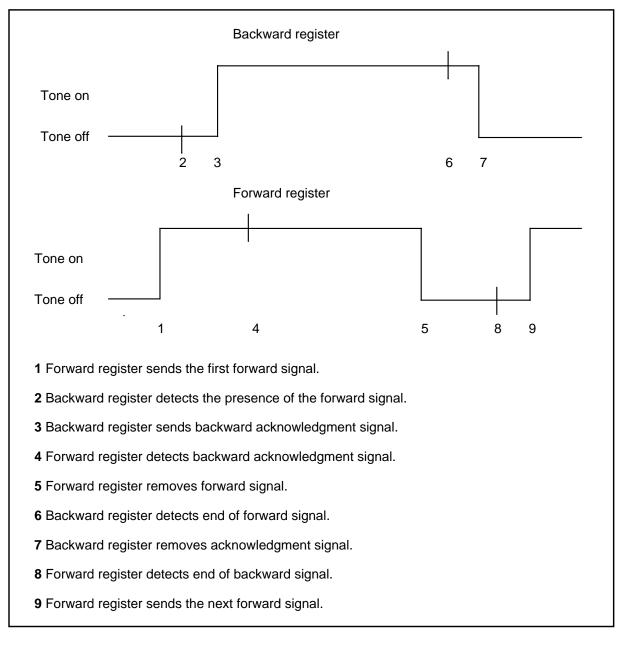
- 1. After the seizure of the outgoing link, the forward register sends the first forward signal (1). The forward register connects a forward multi-frequency tone.
- 2. The backward register in the next exchange detects the forward signal (2). The register determines the meaning. In response, the register connects a backward multi-frequency tone to send a backward signal (3). The

backward signal acts as an acknowledgment to the forward signal. This backward signal can provide additional information.

3. The forward register detects the backward signal (4). The register determines the meaning of the signal. In response, the register disconnects the forward MF tone to remove the forward signal (5).

- 4. The backward register detects the end of the forward signal (6). In response, the register disconnects the backward MF tone to remove the backward signal (7).
- 5. The forward register detects the end of the backward signal (8). The register can send the next forward signal (9).

**Compelled signaling sequence** 

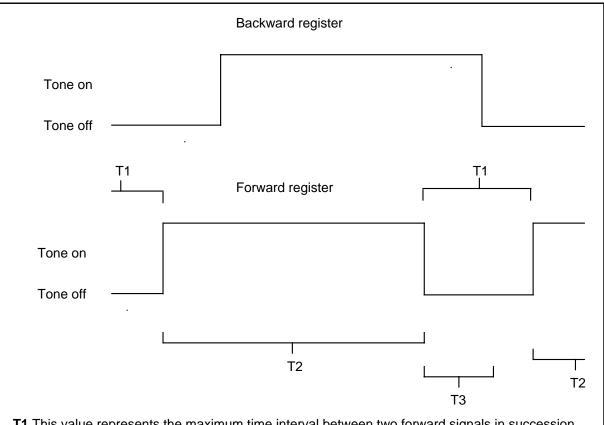


For some conditions, the backward register must send a fixed duration, or pulsed, signal. The backward register must send the signal without earlier reception of forward signal. This action occurs if the backward register acknowledges the last forward signal and cannot complete the call. This action occurs if the register does not receive additional forward signals. The pulsed signal lasts for a specified length of time. The next forward signal acknowledges this signal.

#### **Compelled signal timing**

The timing for compelled signaling appears for the forward and backward registers in the following figure "Timing for compelled signaling".

#### Timing for compelled signaling



**T1** This value represents the maximum time interval between two forward signals in succession. The range that CCITT recommends is 4 to 24 s with a default value of 15 s. Use a minimum timing value for this interval if digit analysis is not in use. Use a minimum timing value with protocols that do not have an End of Digits signal.

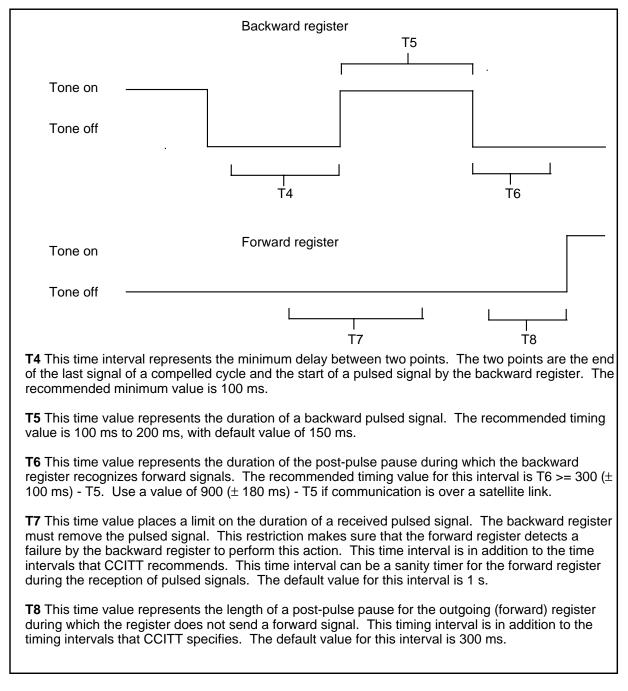
**T2** This value represents the maximum time interval over which a forward signal can connect during compelled signaling. The system removes a forward signal on the detection of a backward signal. This timer makes sure that the forward register detects a failure by the backward register to connect an acknowledgment tone. The recommended range for this interval is 12 to 18 s, with a default value of 15 s.

**T3** This value represents the maximum time interval between the end of a forward signal and the end of the backward acknowledgement signal. This timing makes sure that the forward register detects a failure by the backward register to remove the acknowledgment tone. The recommended value for this interval is greater than or equal to 24 s.

#### Pulsed signal timing

The timing for the transmission and reception of pulsed signals appears in the following figure "Timing for pulsed signaling".

#### Timing for pulsed signaling



## Datafill

Datafill for table RGSIGSYS type NTRS11 appear in the following table.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Description
RGSIGIDX		see subfield	<i>Register signaling index</i> . This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR_ VECTOR	alphanumeric (1 to16 characters)	Register signaling system index. Enter the register signaling index that the customer defines. This field is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.
	RGSIGTYP	NTRS11	<i>Register signaling type.</i> Enter the signaling type (NTRS11). Enter data in the following refinements:
			OGMXTON
			OGMXTOFF
			• OGRMXPLS
			OGPSTPLS
			• ICMXISIG
			ICMXISIG
			ICPREPLS
			ICPLSTM
			ICPSTPLS
			ICMXFTON
			ICPSTCMP
			OGPREPLS

<b>Field descriptions</b>	(Sheet 2 of 4)
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Field	Subfield or refinement	Entry	Description
	OGMXTON	0 to 12000	Outgoing maximum forward tone on. Enter the maximum time interval in units of 10 ms between two events. The first event is the connection of a forward tone by the outgoing forward register. The second event is the detection of a backward acknowledgment tone. This interval applies to a forward register. The T2 in figure "Timing for compelled signaling", found in this document, represents this interval.
			The default value is 1500.
	OGMXTOFF	0 to 12000	Outgoing maximum forward tone off. Enter the maximum time interval in units of 10 ms between two points. The first point is the end of the tone that the forward register sends. The second point is the end of the backward acknowledgment tone. The T3 in the figure "Timing for compelled signaling", found in this document, represents this interval.
			The default value is 2400.
	OGRMXPLS	0 to 12000	Outgoing received maximum pulse length. Enter the maximum pulse duration in units of 10 ms of a received pulsed signal. This interval applies to a forward register. The T7 in the figure "Timing for pulsed signaling", found in this document, represents this interval.
			The default value is 30.
	OGPSTPLS	0 to 12000	<i>Outgoing forward post-pulse pause</i> . Enter the time interval in units of 10 ms. The forward register cannot send a forward signal after the register receives a pulsed signal during the 10 ms intervals. The T8 in the figure "Timing for pulsed signaling", found in this document, represents this interval.
			The default value is 30.

Field	Subfield or refinement	Entry	Description
	ICMXISIG	0 to 12000	Incoming maximum intersignal time. Enter the maximum interval in units of 10 ms between two points. The first point is the end of a backward signal. The second point is the detection of the next forward signal. This interval applies to a backward register. The T1 in the figure "Timing for compelled signaling", found in this document, represents this interval.
			The default value is 1500.
	ICPREPLS	0 to 12000	Incoming pre-pulse pause. Enter the interval in units of 10 ms between two points. The first point is the end of the last signal of a compelled cycle. The second point is the start of a pulsed signal. The register does not recognize a forward signal during this time. The T4 in the figure "Timing for pulsed signaling", found in this document, represents this interval.
			The default value is 10.
	ICPLSTM	0 to 12000	Incoming pulse duration. Enter the duration in units of 10 ms of a pulsed backward signal. This interval applies to a backward register. The T5 in the figure "Timing for pulsed signaling, found in this document, represents this interval.
			The default value is 15.
	ICPSTPLS	0 to 12000	<i>Incoming post pulse pause</i> . Enter the time interval in units of 10 ms. The register does not recognize forward signals during these intervals. This interval applies to the backward register. The T6 in the figure "Timing for pulsed signaling", found in this document, represents this interval.
			The default value is 20.

Field	Subfield or refinement	Entry	Description
	ICMXFTON	0 to 12000	Incoming maximum forward tone on. Enter the maximum time in units of 10 ms for the register to receive a forward signal. This process makes sure that the backward register detects a failure of the forward register to remove the tone. This timing is like the timing in field OGMXTON. This timing applies to a forward register.
			The default value is 6000.
	ICPSTCMP	0 to 12000	<i>Incoming pause after compelling.</i> Enter the minimum time in units of 10 ms for the register to delay after compelling stops before line signaling can resume.
			The default value is 80.
	OGPREPLS	0 to 12000	<i>Outgoing pre-pulse duration</i> . Enter the maximum time in units of 10 ms that the forward register waits for a pulse from the backward register after the end of the last signal of a compelled cycle. This value controls the time the outgoing register waits to receive a backward signal. This timing is like the timing in field ICPREPLS. This timing applies to a forward register.
			The default value is 6000.

#### Field descriptions (Sheet 4 of 4)

### **Datafill example**

Sample datafill for table RGSIGSYS type NTRS11 appears in the following example.

The example uses the following data:

- the register signaling index is R2TRK
- the register signaling type is NTRS11
- the maximum tone-on signal for a forward signal is 15 s
- the maximum tone-off signal for a forward signal is 24 s
- the maximum duration of a received pulsed signal is 300 ms
- the post pulse pause time is 300 ms
- the maximum inter-signal time for a received forward signal is 15 s

## RGSIGSYS type NTRS11 (end)

- the delay between the end of transmission of the last signal of a compelled cycle and the start of transmission of a pulsed signal is 100 ms
- the duration of the pulsed backward signal is 150 ms
- the duration of the post pulse pause is 200 ms
- the maximum time at which a register can receive a forward signal is 60 s
- the minimum time after compelling stops before line signaling can resume is 800 ms
- the forward register waits for a pulse from the backward register after compelling stops for a maximum time of 60 s

#### MAP example for table RGSIGSYS type NTRS11

	RGSIG	IDX									RSVAR	
 NTRS11	R2 1500	TRK 2400	30	30	1500	10	15	20	6000	80	6000	

## **RGSIGSYS type NTRS12**

### Socotel compelled trunk register signaling

The customer variable data for register signaling type NTRS12 appears in this section.

The NTRS12 provides the timing values for trunks through the Socotel register signaling system. This signaling system is for World Systems DMS-100 and DMS-200 switching units.

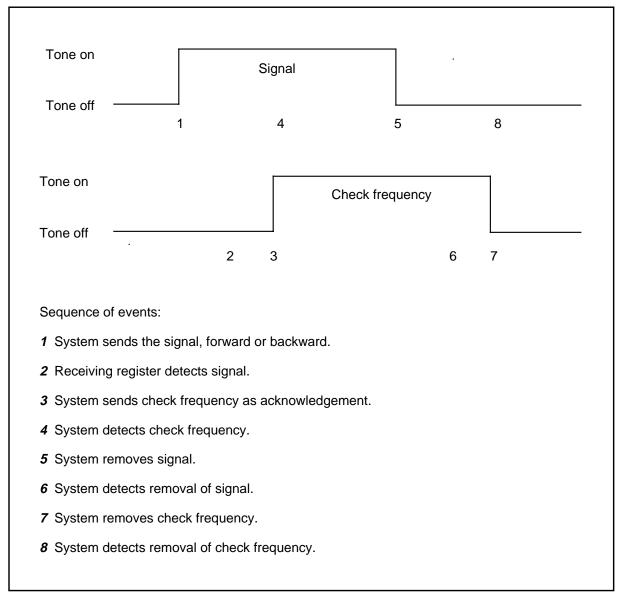
Socotel is a compelled trunk register signaling system. Socotel is a national signaling system. Each operating company can define variants for the operating company. The operating company defines these variants so that the Socotel in one country is not compatible with the Socotel of another country.

#### **Compelled signaling**

A compelled register signaling system describes the method to convey information between registers at each end of a trunk. The signaling is in band tones that the system selects on a two-out-of-six arrangement. Each information tone contains two component frequencies of a possible set of six. The two component frequencies are not the same. Socotel uses the following frequencies: 700, 900, 1100, 1300, 1500, 1700, and 1900 Hz.

Each defined signal has a assigned meaning based on the use of the signal. To make sure that information has secure transfer, the system uses compelling. A single frequency tone is the control or checking frequency (FC). The single frequency tone cannot be part of the signals. This condition acknowledges each signal sent in either direction. The basic Socotel compelling cycle appears in the figure on the following page.

#### Basic Socotel compelling cycle



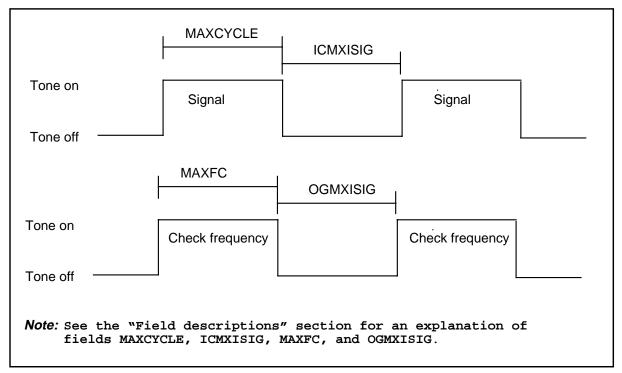
The system must exchange many signals to convey all the address, control, and status information for call setup. The compelling cycle repeats for each signal. This cycle repeats forward or backward.

Register signaling ends when the terminating office receives the information needed to route the call. Register signaling ends when the terminating office identifies and transmits the status of the calling line to the originating office.

## **Compelling cycle timing**

The timing for compelled cycles in Socotel appears in the following figure.

#### Socotel compelling timing parameters



### Datafill

Datafill for table RGSIGSYS type NTRS12 appears in the following table.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
RGSIGIDX		see subfield	<i>Register signaling index</i> . This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR _ VECTOR	alphanumeric 1 to 16 characters	<i>Register signaling system index</i> . Enter the customer defined register signaling index. This key is the key to table RGSIGSYS.
			, ICMXISIG and OGMXISIG, do not include the (UTR) requires. The system can ignore this value.

Field descriptions (Sheet 2 of 3)	criptions (Sheet 2 of 3)
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Field	Subfield or refinement	Entry	Explanation and action					
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.					
	RGSIGTYP	NTRS12	<i>Register signaling type</i> . Enter the signaling type (NTRS12) and enter data for refinements MAXCYCLE, MAXFC, ICMXISIG, OGMXISIG, and FC.					
	MAXCYCLE	0 to 6000	Maximum compelled cycle time. Enter the maximum time interval in units of 10 ms for a complete compelled cycle, forward or backward. The switching unit that initiates the cycle uses this time. The timing starts when the system sends an information signal. The timing stops when the system detects the removal of the check frequency (FC).					
			The default value is 500.					
	MAXFC	0 to 6000	Maximum checking frequency transmission time. Enter the maximum time interval in units of 10 ms over which the FC can transmit. The time starts on reception of an information element, also the start of transmission of the FC. The time stops on removal of the signal, and also the removal of the transmission of the FC.					
			The default value is 500.					
	ICMXISIG	0 to 6000	Incoming maximum time interval for a forward information signal. Enter the maximum time that an incoming trunk waits for a forward information signal from the originating switching unit. Enter this time in units of 10 ms. This time starts when the previous compelling cycle ends and represents the maximum time between signals allowed.					
			The default value is 1000.					

Field	Subfield or refinement	Entry	Explanation and action
	OGMXISIG	0 to 6000	Outgoing maximum time interval for a backward information signal. Enter the maximum time that an outgoing trunk waits for a backward information signal from the terminating switching unit. Enter this time in units of 10 ms. This time starts when the previous compelling cycle ends and represents the maximum time between signals allowed.
			The default value is 2000.
	FC	1700 or 1900	Check frequency. Enter the frequency in hertz of the FC used during Socotel register signaling. Assign this field according to the Socotel signaling in use. Enter 1900 Hz for Morocco or 1700 Hz for Spain.

recognition time that the universal tone receiver (UTR) requires. The system can ignore this value.

#### Field descriptions (Sheet 3 of 3)

## Datafill example

Sample datafill for table RGSIGSYS type NTRS12 appears in the following example.

This example uses register signaling type NTRS12, Socotel compelled signaling for World Systems DMS-100 and DMS-200 switching units.

- The register signaling index is SOCTRK1.
- The register signaling type is NTRS12.
- The maximum compelled cycle time is 5 s.
- The maximum transmission time for the check frequency is 5 s.
- The maximum time that an incoming trunk waits for a forward information signal from the originating switch is 10 s.
- The maximum time that an outgoing trunk waits for a backward information signal from the termination switch is 20 s.
- The check frequency is 1900 Hz.

## RGSIGSYS type NTRS12 (end)

### MAP example for table RGSIGSYS type NTRS12

RGSIGIDX					RSVAR	
 SOCTRK1 NTRS12	500	500	1000	2000	1900	

# **RGSIGSYS type NTRS14**

## MF pulse packet (MFPP) type 1 (MFPP-1)

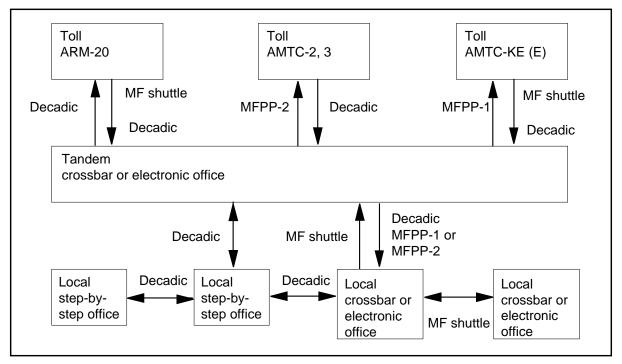
Implementation of register signaling MFPP-1 is in signaling type NTRS14.

Another name for signaling type NTRS14 is NTRS06.

Four types of register signaling are in the local CIS network. These four types appear in the following figure.

- Decadic
- MF shuttle
- MFPP-1 (MF11, MF6)
- MFPP type 2 (MFPP-2) (700 Hz, 1100 Hz)

#### signaling types in local CIS network

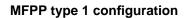


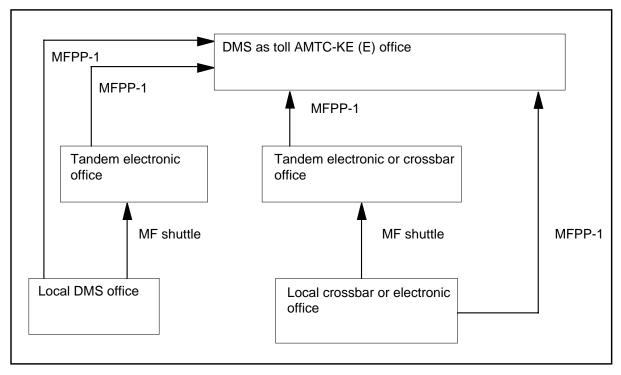
The DMS can be positioned instead of local or toll exchange.

A switch from MF shuttle to MFPP-1 signaling is necessary during the following call setup. This call setup is from outgoing exchange to the toll AMTC-KE (E) through the tandem office. The switch is not necessary for direct calls from local to toll switch.

The incoming switch starts the register signaling. The outgoing switch waits until the switch receives the signal from the incoming switch. The system sends the called and calling digits with category information. The signaling starts with MF shuttle register signaling (MFS) between local and tandem exchanges. Then the signaling switches to MFPP-1 register signaling for local to toll register signaling.

The MFPP-1 configuration between local, tandem, and toll switches appears in the following figure "MFPP type 1 configuration".





The frequency combinations available with NTRS14 signaling appear in the following table "Frequency combinations"..

Signal	Frequencies (Hz)
MF1	700 + 900
MF2	700 + 1100
MF3	900 + 1100
MF4	700 + 1300
MF5	900 + 1300
MF6	1100 + 1300
MF7	700 + 1500
MF8	900 + 1500
MF9	1100 + 1500
MF10	1300 + 1500
MF11	700 + 1500
Note 1:	The duration of each frequency combination is 50 $\pm$ 5 ms.
Note 2:	The duration of each pause between MF signals is 60 $\pm$ 5 ms.

### **Frequency combinations**

The following meanings are the meanings of the frequency combinations in forward and backward directions:

Forward

MF1 to MF10 digits

MF11

end of digits

Backward

MF2

request (digits, category, and automatic number identification [ANI])

MF6

repeat digits, negative acknowledgement

MF11

positive acknowledgement

The following sequence is the digit sequence in MFPP-1 register signaling:

NB + KA + NA + MF11

where

NA

is the calling directory number (DN)

KA

is the category of the calling subscriber (0 to 9)

#### NB

is the called DN

The system sends negative acknowledgement one time for a request that repeats. If the pulse packet that repeated is distorted, the system sends signal MF6 for negative acknowledgement. If the pulse packet that repeated is not distorted, the system sends signal MF11.

#### Switching from MF shuttle to MFPP-1

The local DMS supports switching for the CIS network. The switch can change from MFS register signaling to decadic, MFPP-2, or MFPP-1.

The MF shuttle switches to MFPP-1 after MF shuttle register signaling finishes. This action occurs in local electronic to toll AMTC-KE (E), through tandem E, call sequences for the present CIS network.

The backward signal MF4 informs the outgoing side that register signaling finishes correctly in MFS. The system sends the signal MF12 to the incoming side for acknowledgement of the received signal MF4. A special MF backward signal for switching from the MF shuttle to MFPP-1 in MFS is not present. The system records received backward signal MF4 like the switching from MFS to MFPP-1 register signaling. The MFPP-1 register signaling becomes active with called, calling, and category digits. The signaling becomes active without a new call attempt after the switch from MFS to MFPP-1.

The register signaling MFPP-1 becomes active after a delay set in field MFPPWAIT in field RGSIGSYS. Switching from MFS to MFPP-1 or MFS to MFPP-2 is not available for the same trunk.

The fourth parameter of the RGHYBRID structure determines the switching signaling.

The MFPP-1 signaling type uses the present hybrid structure with four elements. These elements are MF shuttle, decadic, ANI, and MFPP. The parameters of selector RGHYBRID for NTRS06 can be one of the following combinations:

- NTRS02 NTRS05 MF3 NTRS03 or NTRS14
- NTRS02 NTRS05 MF3 nil
- nil NTRS05 MF3 nil
- nil NTRS05 MF3 NTRS03 or NTRS14
- nil nil nil NTRS03 or NTRS14

The user can enter the fourth parameter with MFPP-2 (NTRS03) or NTRS14.

#### Datafill in other tables

The user must enter the following tuples in table DEFDATA to support signaling type NTRS14:

#### Required datafill for table DEFDATA

DATATYPE	DEFAULT
NTRS14IC_VAR_AREA	NTRS14IC_VAR_AREA 1000 20 5 0 0 0 0 25

### Datafill

The datafill for table RGSIGSYS type NTRS14 appears in the following table.

#### Field descriptions

Field	Subfield or	Entry	Explanation and action
RGSIGIDX		see subfield	<i>Register signaling index</i> . This field contains subfield RSS_CHAR_VECTOR.
	RSS_CHAR_ VECTOR	alphanumeric 1 to 16 characters	<i>Register signaling system index</i> . Enter the customer defined register signaling index. This key is the key to table RGSIGSYS.
RSVAR		see subfield	<i>Register signaling variable area</i> . This field contains subfield RGSIGTYP.
	RGSIGTYP	NTRS14	<i>Register signaling type</i> . Enter the signaling type (NTRS14) and enter data for refinement DIR.
	DIR	C or OG	<i>Direction.</i> Enter IC for incoming trunks and enter data for refinements. These refinements are MF2TIME, MFTIME, MINMF, MAXMF, MINPAUSE, MAXPAUSE, REPLTIME, and DLYMFPP in the following section
			Enter OG for outgoing trunks and enter data for refinements. These refinements are MFTIME, PAUSEMF, MINMF2, MAXMF2, MINMF, MAXMF, REPLTIME, and MFWAIT in the section "DIR = OG".

### DIR = IC

If the entry in field DIR is IC, enter refinements MF2TIME, MFTIME, MINMF, MAXMF, MINPAUSE, MAXPAUSE, REPLTIME, and DLYMFPP. This process appears in the following table.

	Subfield or		
Field	refinement	Entry	Explanation and action
	MF2TIME	0 to 31	<i>Signal MF2 time</i> . Enter the duration of signal MF2 for incoming DMS in units of 10 ms.
			The nominal value is 50 $\pm$ 5 ms.
			The default is 20 (200 ms).
	MFTIME	0 to 10	<i>Multifrequency time</i> . Enter the duration of each frequency combination for incoming DMS. Perform this entry if the system sends signal MF6 or MF11 in units of 10 ms.
			The nominal value is 50 $\pm$ 5 ms.
			The default value is 5, which is 50 ms.
	PAUSEMF	0 to 15	<i>Pause multifrequency</i> . Enter the duration of silence between two signals in units of 10 ms.
			The nominal value is 60 $\pm$ 5 ms.
			The default value is 6, which is 60 ms.
	MINMF	0 to 15	<i>Minimum duration</i> . Enter the minimum duration of filtering for receiving each signal in incoming DMS in units of 10 ms.
			The nominal value is 0.
			The default is 0.
	MAXMF	0 to 15	<i>Maximum duration</i> . Enter the maximum duration of filtering for receiving each signal for incoming DMS in units of 10 ms. The entry in field MAXMF must be greater than the entry in field MINMF.
			The nominal value is 10.
			The default is 0.

#### Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action				
	REPLTIME	0 to 6000	<i>Reply time</i> . Enter the timer value for the extended multiprocessor system (XMS)-based peripheral module (XPM) to wait for a reply signal in units of 10 ms.				
			The nominal value is 10000.				
			The default is 100, which is 1000 ms.				
	DLYMFPP	0 to 100	<i>Delay mulitfrequency pulse packet</i> . Enter the duration in units of one ms before you send the first MF2 signal.				
			The nominal value is 250.				
			The default value is 25, which is 250 ms.				

#### Field descriptions for conditional datafill (Sheet 2 of 2)

#### DIR = OG

If the entry in field DIR is OG, enter refinements MFTIME, PAUSEMF, MINMF2, MAXMF2, MINMF, MAXMF, REPLTIME, and MFWAIT. This process appears in the following table.

Field	Subfield or refinement	Entry	Explanation and action
	MFTIME	0 to 10	<i>Multifrequency time</i> . Enter the duration of each frequency combination for outgoing DMS if the system sends MF6 or MF11 in units of 10 ms.
			The nominal value is 50 $\pm$ 5 ms.
			The default value is 5, which is 50 ms.
	PAUSEMF	0 to 15	<i>Multifrequency pause</i> . Enter the duration of silence between two signals in units of 10 ms.
			The nominal value is 60 $\pm$ 5 ms.
			The default value is 6, which is 60 ms.
	MINMF2	0 to 31	<i>Minimum time for MF2</i> . Enter the minimum duration of filtering for received MF2 signal in outgoing DMS in units of 10 ms.
			The nominal value is 0.
			The default is 0.

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Field	Subfield or refinement	Entry	Explanation and action
	MAXMF2	0 to 31	<i>Maximum time for MF2</i> . Enter the maximum duration of filtering for received MF2 signal in outgoing DMS in units of 10 ms. The entry in field MAXMF2 must be greater than the entry in field MINMF2.
			The nominal value is 10.
			The default is 0.
	MINMF	0 to 15	<i>Minimum duration</i> . Enter the minimum duration of filtering for each signal in outgoing MDS. Enter this value during reception of only signal MF6 or MF11 with the same reason in units of 10 ms.
			The nominal value is 0.
			The default is 0.
	MAXMF	0 to 15	<i>Maximum duration</i> . Enter the maximum duration of filtering for each signal for outgoing DMS. Enter this value during reception of only signal MF6 or MF11 with the same reason in units of 10 ms. The entry in field MAXMF must be greater than the entry in field MINMF.
			The nominal value is 10.
			The default is 0.
	REPLTIME	0 to 6000	<i>Reply time</i> . Enter the timer value for the extended multiprocessor system (XMS)-based peripheral module (XPM) to wait for a reply signal in units of 10 ms.
			The nominal value is 10000.
			The default is 100 (1000 ms).
	MFWAIT	0 to 100	<i>Multifrequency wait.</i> Enter the duration of delay before the system sends the packet after receiving every MF2 signal in units of 10 ms.
			The nominal value is 250.
			The default is 25, which is 250 ms.

### Field descriptions for conditional datafill (Sheet 2 of 2)

## RGSIGSYS type NTRS14 (end)

# Datafill example

Sample datafill for table RGSIGSYS type NTRS14 appears in the following example.

#### MAP example for table RGSIGSYS type NTRS14

RGSIGIDX								RS	SVAR	
EMSIGNAL NTRS14	OC	1000	20	5	0	0	0	0	25	

## RLOGCLAS

### Table name

Remote Log Class Table

### **Functional description**

Table RLOGCLAS contains class, threshold, suppression, and system information for the log reports that apply to remote nodes.

See table LOGCLASS for more information.

### **Datafill sequence and meaning**

Enter data in table RLOGTAB before you enter data in table RLOGCLAS.

### Table size

16 to 512 tuples

The system allocates memory according to the number of additional tuples.

### Datafill

The datafill for table RLOGCLAS appears in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
REPNAME		see subfields	<i>Report name.</i> This field contains subfields LOGNAME and REPNUM.
	LOGNAME	alphabetical, a maximum of four characters	<i>Log name.</i> Enter the log name. Refer to the <i>Log Report Reference Manual</i> for a list of log names that reside in the log system.
	REPNUM	-32768 to 32767	<i>Report number.</i> Enter the report number. If all report numbers are a requirement, enter 1.
			<i>Note:</i> If a minus (-) report number is in use for a given report name, perform the following action. Enter this report number before the other logs with the same report name.
CLASS		0 to 31	<i>Class.</i> Enter the class number that associates with the report name.

## RLOGCLAS (continued)

Field	Subfield or refinement	Entry		Explanation and action
THRSHOLD		0 to 255		<i>Threshold</i> . Enter the number that specifies the messages the system prints. Enter 0 to print all messages.
				If the entry is a value from 1 to 255, office parameter THRESHOLD_IS_SAMPLING in table OFCVAR controls the action for log thresholding.
SUPPRESS		Y or N		<i>Suppress.</i> Enter Y (yes) to indicate that the system does not generate a report or log. If the system does generate a report or log, enter N (no).
				If the entry in field THRSHOLD is a value from 1 to 255, and the report is output, the following condition occurs. Office parameter BUFFER_THRESHOLDED_REPORTS in table OFCVAR controls the removal of reports that do not generate because of log thresholding.
TUNITS		-32768 32767	to	<i>Time units.</i> Enter the time, in minutes, when the register counts associated with a threshold report is reset to 0. A maximum of 100 different time units can occur. An entry of 0, or a negative value in this field means that the system generates all reports.
SYSLOG		Y or N		<i>System log.</i> Enter Y for a system log. All system logs are put in table LOGCLASS from the extension (EXT) files at loadbuild. If you do not want a system log, enter N.

### Field descriptions (Sheet 2 of 2)

## **Datafill example**

Sample datafill for table RLOGCLAS appears in the following example.

## RLOGCLAS (end)

MAP example for table RLOGCLAS

REPNAME	CLASS	THRSHOLD	SUPPRESS	TUNITS	SYSLOG	
MSL -1 OMPR 20		0 0	N N	-1 0	Y N	

# **Table history**

BCS36

Range of report numbers in field REPNUM was changed in BCS36.

## RLOGDEV

### Table name

Remote Log Device Table

## **Functional description**

The log output message classes for remote nodes appear in table RLOGDEV.

See tables LOGDEV, RLOGCLAS, and RLOGTAB for additional information.

## Datafill sequence and meaning

You must enter data in the following tables before you enter data in table RLOGDEV.

- OFCENG
- OFCOPT

Table RLOGTAB uses table RLOGDEV.

## Table size

The system allocates memory for 32 terminal devices.

## Datafill

Datafill for table RLOGDEV appears in the following table.

### 1Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DEV		alphanumeric (a maximum of 12 characters)	<i>Device</i> . Enter the name of the terminal device as assigned in table TERMDEV.
ALT		alphanumeric (a maximum of 12 characters) or NONE	Alternate. Enter the name assigned in table TERMDEV to the terminal device to which the system sends the logs. The system sends the logs to this terminal device if the main terminal device does not operate. If an alternate device is not a requirement, enter NONE.

## **RLOGDEV** (continued)

### 1Field descriptions (Sheet 2 of 2)

	Subfield or		
Field	refinement	Entry	Explanation and action
CLASSES		0 to 31	<i>Classes.</i> Enter the class numbers assigned to the terminal device. If the entry is a block of consecutive classes, enter the first and last class in the block. Separate each entry by a space. If classes are 1, 2, 3, 4, and 5, enter 1 5.
FORMAT		SCC2 or STD	<i>Format.</i> Enter SCC2 for the AT&T #2 switching control center format or STD for the standard format.
			<i>Note:</i> You can set this field to SCC2 if office parameter SCC2_LOGS in table OFCOPT is set to Y.
PRIORITY		Y or N	<i>Critical message prioritization.</i> Enter Y if the alarm level places the reports in priority. The system outputs the report with the highest alarm level at any specified time. Enter N if prioritization is not a requirement and the system outputs the reports in a chronological order.
			<i>Note:</i> You can set this field to Y if office parameter LOG_PRIORITIZATION in table OFCENG is set to Y.
GUAR		Y or N	<i>Guaranteed device</i> . Enter Y if the device is guaranteed. The device continues to run with the call processing or maintenance load. If the device is not guaranteed, enter N.
			The default value for this field is N.

## **Datafill example**

Sample datafill for table RLOGDEV appears in the following example.

## RLOGDEV (end)

#### MAP example for table RLOGDEV

LP121 NONE 0-31 STD N N TO NONE 10 SCC2 Y N		DEV A	ALT (	CLASSES	FORMAT	PRIORITY	GUAR
TO NONE 10 SCC2 Y N	TO NONE 10 SCC2 Y N						
		т0	NONE	10	SCC2	Y	Ν

# Table history

### BCS36

Continuation marks (CONTMARK) were removed as an option.

## **RLOGTAB**

#### Table name

Remote Log Table Table

## **Functional description**

Table RLOGTAB assigns a maximum of three output devices to receive logs from remote Support Operating System (SOS)-based nodes. Table NODNMTAB must contain all nodes in table RLOGTAB. To enter data in table NODNMTAB, add the correct information to the associated inventory table. The addition of link interface unit (LIU) Common Channel Signaling 7 (CCS7) in table LIUINV is an example of this entry. You must enter any output device that table RLOGDEV specifies.

The system automatically adds tuples for SOS nodes other than the computer module (CM), to table RLOGTAB. This condition occurs when the log subsystem recognizes these nodes. In the BCS32 and later versions, the operating company cannot add tuples to, or delete tuples from table RLOGTAB. If operating company personnel attempt this action, the following error message appears at the MAP terminal:

ONLY DEVICE ASSIGNMENTS CAN BE CHANGED IN TABLE RLOGTAB

The operating company can update any tuple to change a minimum of one of the three log device assignments in this tuple. New device names must appear in tables RLOGDEV and LOGDEV. To delete a device for any node, substitute the value NIL. Substitute this value in the position of the tuple that contained the device name.

The first tuple in table RLOGTAB is always tuple DEFAULT. This tuple speeds the entry of data in table RLOGTAB. The operating company uses this tuple to assign the same log devices to many remote SOS nodes in the switch. The first setting of tuple DEFAULT occurs before the operating company enters data. This setting does not assign log devices.

If the log system identifies a new remote SOS node, the log system creates a tuple for the node in table RLOGTAB. The system obtains device assignments in this tuple from the assignments in tuple DEFAULT at this time. The system passes the default tuple settings to the other tuples in the table.

If the operating company changes the datafill for the default tuple, the system checks all other tuples in the table. The system updates each tuple that had three device assignments that match in tuple DEFAULT before the change. The system updates the tuples to contain the default device assignments.

**RLOGTAB** (continued)

At the end of the update operation, the following message appears at the MAP terminal:

NEW DEFAULT DEVICES PROPOGATED TO nn NODES

The value nn identifies the number of nodes with previous log device assignments that match the assignments of the old tuple DEFAULT. The operating company updates these nodes to match the new tuple DEFAULT.

## **Datafill sequence and meaning**

You must enter data in table RLOGDEV before you enter data in table RLOGTAB.

Table RLOGCLAS uses table RLOGTAB.

## Table size

The table size is 0 to 2048 tuples

The number of tuples the system adds dynamically determines the table size.

## Datafill

Datafill for table RLOGTAB appears in the following table.

#### 1Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NODENAME		alphanumeric (a maximum of 8 characters)	Node name. Enter the node name.
NODENUM		-32768 to 32767	<i>Node number.</i> This file is a read-only field. The logs system enters data in this field. The operating company cannot enter data in this field. Refer to the <i>Log Report Reference</i> <i>Manual</i> for additional information on the logs system.
DEV1		alphanumeric (a maximum of 12 characters)	<i>First output device</i> . Enter the name of the first output device entered before in table RLOGDEV.

# RLOGTAB (end)

#### 1Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DEV2		alphanumeric (a maximum of12 characters)	Second output device. Enter the name of the second output device entered before in table RLOGDEV.
DEV3		alphanumeric (a maximum of 12 characters)	<i>Third output device.</i> Enter the name of the third output device entered before in table RLOGDEV.

# Datafill example

Sample datafill for table RLOGTAB appears in the following example.

#### MAP example for table RLOGTAB

NOI	DENAME NODEI	NUM DEV1	DEV2	DEV3	
DEI M2	FAULT -1 1 513	NIL	NIL NIL	NIL	-
_					

#### Table name

Remote Access Configuration Table

# **Functional description**

*Note:* The telnet server software currently does not use this table.

Table RMCONFIG configures the number of available telnet connections on a DMS. Each telnet connection requires a remote MAP (maintenance and administration position) (RMAP). The RMAP operates on the computing module (CM) of the DMS core. Each telnet connection requires a telnet process that operates on an Ethernet interface unit (EIU). This table specifies the maximum number of RMAP processes on the CM and the maximum number of telnet processes on each EIU that connects to the system.

The tuples that you must add to internal table CUSTFLDS for table formatting appear in Table, "CUSTFLDS".

#### CUSTFLDS

TABFLD		FLDNAME	FSPEC	PRTPOS	AREAREF
RMCONFIG	1	INDEX	L_KEY	1	Ν
RMCONFIG	2	NODE	L_DATA\$NODE	10	S
RMCONFIG	3	SESSIONS	L_DATA	16	R

The tuples that you must add to internal table CUSTAREA for table formatting appear in Table "CUSTAREA".

#### CUSTAREA

REFAREA		FLDNAME	FSPEC	PRTPOS	DISPLAY
RMTC_CM_DATA	1	RMAPCONN	NUM_RMAPSERVERS	20	TRUE N
RMTC_EIU_DATA	2	EIUINDEX	EIU_NUM	15	TRUE N
RMTC_EIU_DATA	3	TELNCONN	NUM_RMAPCLIENTS	20	TRUE N

## **Datafill sequence and meaning**

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

## **RMCONFIG** (continued)

# Table size

The table size is 0 to 32 tuples

## Datafill

Datafill for table RMCONFIG appears in the following table.

## Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfield	Index. This field contains subfield TABLE_KEY.
	TABLE_KEY	0 to 31	<i>Table key</i> . This field is the key field of the table. Enter the index to the table.
NODE		CM or EIU	<i>Node.</i> Enter the name of the node, CM (computing module) or EIU (Ethernet interface unit).
			<i>Note:</i> If the entry in field NODE is CM, the entry in field TABLE_KEY must be 0 (zero).
SESSIONS		see subfield	Sessions. This field contains subfield NODE_NAME.
	NODE_NAME	see refinements	<i>Node name.</i> This subfield contains refinements for field NODE.
			If the entry in field NODE is CM, enter data in refinement RMAPCONN.
			If the entry in field NODE is EIU, enter data in refinements EIUINDEX and TELNCONN.
	RMAPCONN	0 to 32	<i>Remote MAP connections.</i> If the entry in field NODE is CM, enter data in this refinement. Enter a value to specify the maximum number of remote MAP (maintenance and administration position) (RMAP) processes.

## **RMCONFIG** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	EIUINDEX	0 to 4095	<i>Ethernet interface unit index.</i> If the entry in field NODE is EIU, enter data in this refinement. Enter a value to specify the EIU number.
	TELNCONN	0 to 32	<i>Telnet connections.</i> If the entry in field NODE is EIU, enter data in this refinement. Enter a value to specify the maximum number of telnet processes.

## **Datafill example**

Sample datafill for table RMCONFIG appears in the following example.

#### MAP example for table RMCONFIG

INDEX	NODE	SESSIONS	
0 1	CM EIU	32 107 20	

# Table history

#### BCS36

The following changes occurred:

- Subfields TABLE\_KEY and NODE\_NAME were added.
- Field names NUM\_RMAPSERVERS, EIU\_NUM, and NUM\_RMAPCLIENTS were corrected to RMAPCONN, EIUINDEX, and TELNCONN in order.
- A node was added to field NODE.

#### BCS35

Table RMCONFIG was introduced.

## RMCONFIG (end)

## Additional information

This section provides information on how to enter data in table RMCONFIG.

#### **Miscellaneous information**

The RMAP server and the telnet server have a one-to-one relationship. Each active telnet session requires one telnet server that operates on the EIU. Each active telnet session requires one RMAP server that operates on the CM. A single EIU cannot support as many telnet servers as the CM can support RMAP servers. If this condition occurs, you need multiple EIUs to match the number of telnet and RMAP servers. Another method to match the number of servers is to limit the maximum number of RMAP servers on the CM.

#### Table name

Remote Maintenance Module Table

# **Functional description**

Table RMMINV performs functions similar to a maintenance trunk module (MTM) such as scanning of the service circuits, for example, dial pulse collection, test trunks, and alarm circuit packs. The remote maintenance module (RMM) is driven by the host line group controller/line trunk controller (LGC/LTC). The RMM can be located in the remote line concentrating module (RLCM), remote switching center (RSC), convertible RLCM, outside plant module (OPM), international LCM (IRLCM) switching configurations, Meridian cabinet remote module (MCRM), or remote digital line module (RDLM).

The RMM can be used remotely in one of the switching configurations described above. All switching configurations except RSC can have one RMM only, but RSC can be equipped with up to two RMMs.

The RMM is a single-shelf peripheral (NT6X13AA, NT6X13BA, NT6X13DA, NT6X1301, NT7X53AA) that contains two power converters (NT2X06AB and NT2X09AA), an RMM control card (NT6X74AB), a CODEC and TONE card (NT2X59AA), and space for 15 trunk circuits/service circuit packs. Product engineering code (PEC) NT6X13BA is the Caribbean RMM and NT6X13DA is the Turkish RMM.

The RMM terminates by means of two DS30A links (duplicated) on either the line cluster controller (LCC) or the remote cluster controller (RCC), depending on the configuration involved. Each DS30A link consists of 32 channels, 30 of which carry pulse code modulation (PCM) information and the other 2 are for messaging purposes. The RMM sends messages through DS30As to the LCCs/RCCs/DLMs and then by means of DS-1s to the host LGC/LTC if the RMM is part of a RLCM/RDLM or D30 to host ILGC/ILTC if the RMM is part of an IRLCM.

Table RMMINV identifies the RLCM/RSC/OPM/IRLCM/MCRM/RDLM site with the frame type, frame number, floor, row, frame position, equipment PEC, peripheral module (PM) load and executive program loaded, and C-side PM attached to each RMM.

## **Datafill sequence and implications**

The following tables must be datafilled before table RMMINV:

- DLMINV
- LCMINV
- LTCPSINV
- RCCINV
- RCCPSINV
- SITE

Tables SITE, RCCINV, and RCCPSINV must be datafilled before table RMMINV if an RMM is a subordinate of an RCC or RCC variant.

Tables SITE and LCMINV must be datafilled before table RMMINV if an RMM is a subordinate of an LCM or LCM variant.

Tables SITE, RCCINV, RCCPSINV, and LTCPSINV must be datafilled before table RMMINV if an RMM is a subordinate of an LTC.

Tables SITE, LCMINV, and DLMINV must be datafilled before table RMMINV if an RMM is a subordinate of a DLM.

### Table size

0 to 255 tuples

Memory is dynamically allocated for this table.

# Datafill

The following table lists datafill for table RMMINV.

#### Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
RMMNAME		see subfields	Remote maintenance module name
			This field consists of subfields SITENM, PMTYPE, and RMMNO.
	SITENM	alphanumeric (up to 4 characters)	Site name
			Enter the site name assigned to the remote location. This name must also be datafilled in tables LCMINV, RCCINV, OPMINV, and SITE.
	PMTYPE	RCC2, RMM, or SRCC	Peripheral module type
			Enter the PM type.
	RMMNO	0 to 254	Remote maintenance module number
			Enter the RMM number. This number is unique by office, not unique by site.

## Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
FRTYPE		DLE, MCRM, OPE, RCE, RCME, or	Frame type
		RLCM	Enter the frame type on which the RMM is equipped as follows:
			<ul> <li>Enter DLE (digital line equipment) if the RMM is used in the RDLM.</li> </ul>
			<ul> <li>Enter MCRM if the RMM is used in the cabinetized Meridian SL-100.</li> </ul>
			<ul> <li>Enter OPE if the RMM is used in the OPM.</li> </ul>
			• Enter RCE if the RMM is used in the RSC.
			<ul> <li>Enter RCME if the RMM is used in the convertible RLCM configurations.</li> </ul>
			<ul> <li>Enter RLCM if the RMM is used in the RLCM.</li> </ul>
			Entries outside this range are invalid.
FRNO		0 to 511	Frame number
			Enter the number of the frame on which this RMM is equipped.
SHPOS		5, 21, 38, 55, 56	Shelf position
			Enter the number of the shelf on which the RMM is located as follows:
			• Enter 5 if the RMM is located in the OPE.
			<ul> <li>Enter 21 if the RMM is located in the RCME.</li> </ul>
			• Enter 38 or 55 if the RMM is located in the RCE.
			• Enter 56 if the RMM is located in RLCM.
			Entries outside this range are invalid.

	Subfield or	- /	
Field	refinement	Entry	Explanation and action
FLOOR		0 to 99	Floor
			Enter the number of the floor on which the PM is located.
ROW		A to H J to N P to	Row
		Z AA to HH JJ to NN or PP to ZZ	Enter the number of the row in which the RMM is located.
FRPOS		0 to 99	Frame position
			Enter the position of the PM equipment frame.
EQPEC		6X1301 6X13AA	Equipment product engineering code
		6X13BA 6X13DA	Enter the equipment PEC as follows:
		7X53AA 8X98AA FX14AA or	<ul> <li>Enter 6X1301 for cabinetized Meridian SL-100.</li> </ul>
		MX85AA	• Enter 6X13AA for a regular RMM.
			• Enter 6X13BA for RMM - Caribbean.
			• Enter 6X13DA for RMM - Turkey.
			• Enter 7X53AA for RMM in the RDLM.
			• Enter 8X98AA for RMM on SRU.
			Enter FX14AA for AIM based RMM controller.
			• Enter MX85AA for RCC2.
			Entries outside this range are invalid.

### Field descriptions (Sheet 3 of 6)

Field descriptions	(Sheet 4 of 6)
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Field	Subfield or refinement	Entry	Explanation and action
LOAD		alphanumeric (vector of up to 8	Load
		characters)	Enter the name given to the issue of the PM software (for a list of available names, see the batch change supplement for the appropriate BCS release).
EXECS		alphanumeric (up to 6 characters)	Execs
			Enter the exec lineup to be used for the RMM (for a list of available names, see the batch change supplement for the appropriate BCS release).
CSPMINFO		see subfields	C-side peripheral module information
			This field consists of subfields RMMSELECTOR, CSIDEPM, and CSIDPORT.
	RMMSELECTO R	RMMDLM RMMILCM RMMLCM	Remote maintenance module selector
		RMMLTC RMMRCC2 RMMRCCI RMMRCO2 RMMSRCC RMMSRU	Enter the type of module in which the RMM is located.
	CSIDEPM	see subfields	C-side peripheral module
			This field consists of subfields PMT and EXTPMNO.

Field	Subfield or refinement	Entry	Explanation and action
	PMT	ALCM, ARCC, DLM, ELCM, ILCM,	Peripheral module type
		LCM, LTC,	Enter the PM type as follows:
		PRCC, RCC2, RCC, RCCI, RCO2,	<ul> <li>Enter DLM if the entry in field RMMSELECTOR is RMMDLM.</li> </ul>
		RMMLTC, SRCC, SRU,	<ul> <li>Enter ILCM if the entry in field RMMSELECTOR is RMMILCM.</li> </ul>
		or TRCC	<ul> <li>Enter ALCM, ELCM, or LCM if the entry in field RMMSELECTOR is RMMLCM.</li> </ul>
			<ul> <li>Enter RCC, TRCC, ARCC, or PRCC if the entry in field RMMSELECTOR is RMMRCC.</li> </ul>
			<ul> <li>Enter LTC or RCC if the entry in field RMMSELECTOR is RMMLTC or RMMRCC.</li> </ul>
			<ul> <li>Enter PRCC for international PCM30 remote cluster controller (the PCM30 peripheral can be used if the entry in field RMMSELECTOR is RMMRCC or RMMRCCI).</li> </ul>
			<ul> <li>Enter RMMLTC if the entry in field RMMSELECTOR is RMMLTC.</li> </ul>
			<ul> <li>Enter RCC2 if the entry in field RMMSELECTOR is RMMRCC2.</li> </ul>
			<ul> <li>Enter RCCI if the entry in field RMMSELECTOR is RMMRCCI.</li> </ul>
			<ul> <li>Enter RCO2 if the entry in field RMMSELECTOR is RMMRCO2.</li> </ul>
			<ul> <li>Enter SRCC if the entry in field RMMSELECTOR is RMMSRCC.</li> </ul>
			Enter SRU if the entry in field     RMMSELECTOR is RMMSRU.

### Field descriptions (Sheet 5 of 6)

#### Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
EXTPMNO		0 to 63	External peripheral module number
			Enter the external PM number to which the RMM is attached. Entries outside this range are invalid. This number must also be datafilled in either tables LCMINV, OPMINV, RCCINV, or DLMINV.

# RMMSELECTOR = RMMLTC, RMMRCC2, RMMRCC, RMMRCCI, RMMRSRCC, or RMMRCO2

If the entry in field RMMSELECTOR is either RMMLTC, RMMRCC2, RMMRCC, RMMRCCI, RMMSRCC, or RMMRCO2, datafill subfield CSIDPORT.

#### Conditional datafill for table RMMINV

Field	Subfield or refinement	Entry	Explanation and action
	CSIDPORT	0 to 63	C-side port
			Enter the number of the C-side port connected to the RMM as follows:
			<ul> <li>If the entry in field RMMSELECTOR is RMMRCC2, RMMRCO2, or RMMSRCC, enter a value from 0 (zero) to 63.</li> </ul>
			• If the entry in field RMMSELECTOR is RMMRCC, RMMRCCI, or RMMLTC, enter a value from 0 (zero) to 19.

## **Datafill example**

An example of datafill for table RMMINV is shown below.

*Note 1:* Site REM2 has its RMM as part of an RLCM, while sites REM7 and REM8 have their RMMs as part of an RSC.

Note 2: Values 41, 182, and 199 are unique by office.

# RMMINV (end)

#### Datafill example for table RMMINV

	RMMNA	AME FRI	TYPE FRN	O SH	POS FLO	OR RC	W FRPO	S	EQPEC	LOAD
EXECS		CS	SPMINFO	CSI	DPORT					
REM2	RMM	41	RLCM	1	56	2	A	4	6X13AA	RMMDA01
RSMEX RMMLCM		LCM	3	_					61 0	
REM7 RSMEX	RMM		RCE	1	38	2	A	4	6X13AA	RMMDA01
RMMRCC REM8 RSMEX	RMM	RCC 199	5 RCEI	0 2	51	2	А	4	6X13AA	RMMDA02
RMMRCC		PRCO	2 2	0						

# **Table history**

#### **TL06**

Added entry FX14AA to field EQPEC for AIM.

#### UK002

The following changes were made:

- CONTMARK field was removed.
- Explanation and action for entry 8X98AA was added for field EQPEC.

#### BCS36

Datafill sequence was revised and field PMT was corrected.

# RMPCKT

#### Table name

Remote Maintenance Pack Circuit

## **Functional description**

Remote maintenance pack circuit (RMPCKT) table contains the details of the

- universal maintenance pack (UMP) card in the Star Hub. The UMP provides line card diagnostic and maintenance capabilities to the peripheral module (PM) in which it is in. A UMP is defined as a trunk and has its own common language location identifier (CLLI) name.
- line maintenance unit (LMU) card in the Star Module. The LMU provides line card diagnostic and maintenance capabilities for lines connecting to the Star Module.

Table RMPCKT contains parameters for each UMP and LMU. Each tuple represents a logical definition of UMP or LMU cards. The tuple also contains all the necessary details about the Star Hub to which the UMP or LMU belongs.

## **Datafill sequence and implications**

The following tables must be datafilled before table RMPCKT.

- CLLI (make sure the first UMP or LMU card is entered in table CLLI)
- PMLOADS
- LNINV (make sure at least one line on the Star Hub is entered)

The following tables must be datafilled after table RMPCKT.

- ALMSCGRP
- ALMSDGRP
- ALMSC
- ALMSD

#### Table size

0 to 1000 tuples

# Datafill

The following table lists datafill for table RMPCKT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
МРКЕҮ		See subfields	Maintenance pack key. Enter the maintenance pack CLLI and maintenance pack cll and maintenance pack index.
	MPCLLI	RMP, UMP, LMU	Maintenance pack CLLI. Enter the type of maintenance card in the Star Hub or Star Module.
	MPIND	0 to 999	Maintenance pack index. Enter the index number. 0 to 511 for UMP. 0-999 for LMU.
PMNAME		See subfields	Peripheral module name. Enter the remote type, site, frame number, and unit number.
	REMOTYP	PM, UREM	Remote type. Enter the remote type.
	SITE	alphanumeric	Site. Enter the site name assigned to the remote location.
	FRAME	0 to 511	Frame number. Enter frame number for the Star Hub.
	UNIT	0 to 2	Unit number. Enter the unit number where the maintenance pack resides.
SLOTDRWR		See subfields	Slot or drawer. This field consists of subfields slot and drawer. Enter SLOT if a UMP is to be added. Enter DRAWER if an LMU.
	SLOT	0-37	RMP/UMP slot number. Enter the slot number of the RMP/UMP card.
	DRAWER	0-17	Drawer number. Enter the drawer number where the LMU resides.
CARDCOD		NTTR71AA NTTR73AA MY73AA	Card code. Enter the maintenance card code version.
LOAD		TERM_LDINF O	Load file name. Enter the name of the UMP load as defined in table PMLOADS. For RMP the value of this field is NILFNAME.

# **RMPCKT** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TRAFSNO		0 to 127	Traffic separation. Enter the type of traffic separation or traffic analysis to be performed.
TLINEATT		alphanumeric (1 to 16 characters)	Table LINEATTR index. Enter the line attribute index number in table LINEATTR for each UMP. Also enter the values for subfield XLAPLAN and RATEAREA.
			<i>Note:</i> In the North American market, the default entry for T_LINEATTR is 0 NIL NIL.
	XLAPLAN	XLAPLAN_ KEY	Translations plan. Default value is NIL.
	RATEAREA	NLCA_NILLA _0, NIL	Rate area. Default value is NIL.

## **Datafill example**

The following example shows sample datafill for table RMPCKT.

#### MAP display example for table RMPCKT

(		I	RMPCKT										
	MPKE	ΞY	I	PMNAMI	£	SI	LOTDRW	IR	CARDO	COD LOAI	O TRAFSNO		
	TLIN	JEA:	ΓT										
													_
	UMP	0	STAR	REM1	9	0	SLOT	13		NTTR73	UMPAK01	3	
		1	NIL N	ΙL									
	UMP	1	STAR	REM1	0	1	SLOT	15		NTTR73	UMPAK01	4	
		2	NIL N	IL									
	LMU	7	STAR	REM1	4	0	DRAWE	R 1	L2	TR71AA	NILFNAME	0	
		0	NIL N	IL									

# Table history

# MMP15

Development activity AF6857 introduced changes to fields PMNAME, CARDCOD and LOAD.

Field T\_LINEATTR changed to TLINEATT to reflect latest field name.

## RMPCKT (end)

#### NA012

Development activity 59007050 introduces changes to field T\_LINEATTR. This field now accepts an alphanumeric string instead of an integer string.

#### NA011

Changed field SLOT to SLOT\_OR\_DRAWER with added subfields SLOT and DRAWER to support UMP in Star Hub and LMU in Star Module.

#### NA010

New table RMPCKT to support universal maintenance pack in Star Remote Hub.

## RNDING

#### Table name

ITOPS Rating Charge Calculator Charge Rounding Table

## **Functional description**

Table RNDING specifies how rounding is applied to charges for a particular schedule set.

Rounding can be applied in any of the following ways:

- Rounding for coin lines is applied to charges before any tax is applied. Rounding to the smallest coin available for use in the coin phone will occur depending on the rounding factor. The smallest coin available for use in the coin phone is defined in table OFCVAR, parameter RATING\_SMALLEST\_COIN.
- Rounding is applied to each tax before adding to charges.
- Rounding is applied to total charges after tax.

For related information, refer to Table ATRIMOD.

#### **Rounding factor**

The rounding factor is the amount that is added to the calculated charge before truncation to accomplish the desired rounding. The rounding factor is proportional to the MULT value used in determining charges. The amount of round off precision available is equal to 1/10th the MULT value.

## **Datafill sequence and implications**

Table SSETNAME must be datafilled before table RNDING.

#### Table size

0 to 64 tuples

# **RNDING** (continued)

# Datafill

The following table lists datafill for table RNDING.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SSETNAME		alphanumeric (1 to 16 characters)	Schedule set name. Contains a schedule set name that has been datafilled in table SSETNAME.
CDR		Y or N	Coin call before tax rounding used. Y indicates that rounding is applied to pretax charges for coin calls. N indicates it is not.
СРТ		0 to 10	Coin call before tax rounding factor. When CDR is Y, the rounding factor that is used for rounding off pretax charges for coin lines is entered in this field. When CDR is N, 0 is entered in this field to satisfy the table editor.
NDR1		Y or N	Noncoin call tax rate 1 rounding used. Y indicates that rounding is applied to tax rate 1 charges for noncoin calls. N indicates that it is not.
NTR1		0 to 10	Noncoin call tax rate 1 rounding factor. When NDR1 is Y, the rounding factor used for rounding off tax rate 1 charges for noncoin lines is entered in this field. When NDR1 = N, 0 is entered to satisfy the table editor.
CDR1		Y or N	Coin call tax rate 1 rounding used. Y indicates that rounding is applied to tax rate 1 charges for coin calls. N indicates it is not.
CTR1		0 to 10	Coin call tax rate 1 rounding factor. When CDR1 is Y, the rounding factor used for rounding off tax rate 1 charges for coin lines is entered in this field. When CDR1 is N, 0 is entered to satisfy the table editor.
NDR2		Y or N	Noncoin call tax rate 2 rounding used. Y indicates that rounding is applied to tax rate 2 charges for noncoin calls. N indicates that it is not.

# **RNDING** (continued)

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
NTR2		0 to 10	Noncoin call tax rate 2 rounding factor. When NDR2 is Y, the rounding factor used for rounding off tax rate 1 charges for noncoin lines is entered in this field. When NDR2 = N, 0 is entered to satisfy the table editor.
CDR2		Y or N	Coin call tax rate 2 rounding used. Y indicates that rounding is applied to tax rate 2 charges for coin calls. N indicates it is not.
CTR2		0 to 10	Coin call tax rate 2 rounding factor. When CDR2 is Y, the rounding factor used for rounding off tax rate 2 charges for coin lines is entered in this field. When $CDR2 = N$ , 0 is entered to satisfy the table editor.
NDR3		Y or N	Noncoin call tax rate 3 rounding used. Y indicates that rounding is applied to tax rate 3 charges for noncoin calls. N indicates that it is not.
NTR3		0 to 10	Noncoin call tax rate 3 rounding factor. When NDR3 is Y, the rounding factor used for rounding off tax rate 3 charges for noncoin lines is entered in this field. When NDR3 = N, 0 is entered to satisfy the table editor.
CDR3		Y or N	Coin call tax rate 3 rounding used Y indicates that rounding is applied to tax rate 3 charges for coin calls. N indicates that it is not.
CTR3		0 to 10	Coin call tax rate 3 rounding factor. When CDR3 is Y, the rounding factor used for rounding off tax rate 3 charges for coin lines is entered in this field. When CDR3 = N, 0 is entered to satisfy the table editor.
NTT		Y or N	Noncoin call total after-tax rounding used. Y indicates that rounding is applied to the total charges, including taxes, for noncoin calls. N indicates that it is not.

# RNDING (end)

Field	Subfield or refinement	Entry	Explanation and action
NTTR		0 to 10	Noncoin call total after-tax rounding factor . When NTT is Y, the rounding factor used for rounding off the total charges, including taxes, for noncoin lines is entered in this field. When NTT = N, 0 is entered to satisfy the table editor.
СТТ		Y or N	Coin call total after-tax rounding used Y indicates that rounding is applied to the total charges, including taxes, for coin calls. N indicates it is not.
CTTR		0 to 10	Coin call total after-tax rounding factor. When CTT is Y, the rounding factor used for rounding off total charges, including taxes, for coin lines is entered in this field. When CTT = N, 0 is entered to satisfy the table editor.

#### Field descriptions (Sheet 3 of 3)

# **Datafill example**

The following example shows sample datafill for table RNDING.

#### MAP display example for table RNDING

SSETNAME	CDR	CPT	NDR1	NTR1	CDR1	CTR1	NDR2	NTR2	2 CDR	2 CTH	R2 NDF	R3 NTF	٤3	
								CDR3	CTR3	NTT	NTTR	CTT (	CTTR	
SCHSETB	N	0	Y	б	N	0	Y	3	N	0	N	0		
								Ν	0	Ν	0	Ν	0	
<														

# ROTLCB

#### Table name

Remote Office Test Line Call Back Table

## **Functional description**

Table ROTLCB and table ROTLSCSD drive the remote office test line (ROTL) facilities.

Tables ROTLCB and ROTLSCSD enable the incorporation of ROTL facilities into the DMS-100 family of switching systems. The remote office test line function allows a centralized automatic trunk test system, such as centralized automatic reporting on trunks (CAROT) or remote automatic measurement of performance and reporting on trunks (RAMPART), to automatically test outgoing and two-way trunks in a DMS-100.

The ROTL unit is connected to the DMS-100 by access lines and test ports. The two access lines are accessible from the direct distance dialing (DDD) network as subscriber lines. The CAROT or RAMPART system (referred to as CONTROL throughout this section) can access the ROTL unit through one of the two access ports, which must be connected as ground start lines. The two access lines behave as a two-line hunt group. In a DMS-100 office they are connected through card NT2X18AD (line-circuit card-type B) or equivalent line cards installed in the line module. Access lines for a DMS-200 switch are connected to a local class-5 switch.

Two ROTL unit test ports are used to originate tests. The ROTL test ports interface with the DMS switch through a trunk group with a pseudo common language location identifier (CLLI) of ROTLTP assigned in table CLLI. The two members of the trunk group consist of trunk circuits NT3X91AA (remote office test line circuit card).

These trunks must be assigned to tables TRKGRP, TRKSGRP, and TRKMEM with a trunk group type ROTL.

Each test port has four sense (scan) and four control (signal distributor) points associated with it. Table ROTLSCSD must be datafilled to identify the location of the scan cards and signal distributor cards that contain the scan and signal distributor points.

Circuits must not have been previously assigned to tables ALMSC, NWMSC and SCGRP before scan groups are assigned to table ROTLSCSD.

A maximum of six 105 test lines are used to terminate 105 test line calls in the near end office. The 105 test lines interface with the DMS through

## **ROTLCB** (continued)

NT3X91AA trunk circuits. These trunks are contained in a trunk group with a pseudo CLLI of TERM105 assigned in table CLLI and must be assigned to tables TRKGRP, TRKSGRP, and TRKMEM with a trunk class code of TERM105. Code 105 in the code table and its associated route must be datafilled to allow a call to the 105 test line to route to the trunks.

One alarm scan (sense) point is used for reporting major alarms such as power failure to the DMS office. This requires that tables ALMSC and ALMSCGRP be datafilled with function equal to ROTLALM.

## **Datafill sequence and implications**

The following tables must be datafilled before table ROTLCB.

- TRKMEM
- ALMSCGRP

## Table size

0 to 11 tuples

## Datafill

The following table lists datafill for table ROTLCB.

#### Field descriptions (Sheet 1 of 2)

	Subfield or		
Field	refinement	Entry	Explanation and action
INDEX		see subfield	Index
			This field consists of subfield K.
	К	1 to 10	Call back index
			Enter the call back index that is specified in the priming digits of a call back request. A security call back is made to the directory number for this index and the specified authorization level is granted if the 1004-Hz unlocking signal is received.

# ROTLCB (end)

Field	Subfield or refinement	Entry	Explanation and action
AUTHORIZ		AUTO or	Authorization
		MANUAL	Enter AUTO if a make busy request is allowed if the number of trunks out of service does not exceed the out-of-service limit. Enter MANUAL, if a make busy request is allowed even if the number of trunks out of service exceeds the out-of-service limit. The out of service limit is defined by office parameter ROTL_OUT_OF_SERVICE_LEVEL in table OFCENG.
DR		alphanumeric	Digit register
		(up to 18 digits)	Enter the directory number (security call back number) for the call back index entered in subfield K.

## **Datafill example**

An example of datafill for table ROTLCB is shown below.

For index 1, the authorization is AUTO and the directory number is 6211234.

For index 2, the authorization is manual and the directory number is 6221235.

#### MAP display example for table ROTLCB

INDEX	AUTHORIZ	DR	
1	AUTO	6211234	
2	MANUAL	6211235	

### Table history BCS36

Subfield K was added. Long field name for field DR was corrected.

# ROTLSCSD

## Table name

Remote Office Test Line Scan And Signal Distributor Table

# **Functional description**

This table is used to relate each test port with its sense (scan) and control (signal distributor) points.

For related information refer to table ROTLCB.

## **Datafill sequence and implications**

The following tables must be datafilled before table ROTLSCSD.

- ROTLCD
- CLLI
- TRKGRP
- TRKSGRP
- TRKMEM

## Table size

2 tuples

# Datafill

The following table lists datafill for table ROTLSCSD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TESTPORT		see subfields	Test port
			This field consists of subfields CLLI and MEMNAME.
	CLLI	ROTLTP	Common language location identifier
			Enter the pseudo fixed common language location identifier (CLLI) for the remote office test line (ROTL) test port. The pseudo CLLI must be previously entered in table CLLI.
	MEMNAME	0 to 9999	External trunk number
			Enter the external trunk number assigned to the trunk.

# ROTLSCSD (continued)

#### Field descriptions (Sheet 2 of 2)

	Subfield or	- /	<b>-</b> 1 <i>a</i> 1 <i>a</i>
Field	refinement	Entry	Explanation and action
SCTMTYPE		MTM	Scan trunk module type
			Enter MTM (maintenance trunk module) for the trunk module type on which the scan card is mounted.
			Any entry outside the range indicated for this field is invalid.
SCTMNO		0 to 2047	Scan trunk module number
			Enter the number of the trunk module on which the scan card is mounted.
SCTMCCT		0 to 29	Scan trunk circuit number
			Enter the trunk module circuit number to which the scan card is assigned.
SDTMTYPE		MTM	Signal distributor trunk module type
			Enter MTM for the type of trunk module on which the signal distributor card is mounted.
			Any entry ouside the range indicated for ths field is invalid.
SDTMNO		0 to 2047	Signal distributor trunk module number
			Enter the number assigned to the trunk module on which the signal distributor card is mounted.
SDTMCCT		0 to 29	Signal distributor trunk circuit number
			Enter the trunk module circuit number to which the signal distributor card is assigned.

## **Datafill example**

An example of datafill for table ROTLSCSD is shown below.

This example shows the scan and signal distributor card locations for two test ports. The two test ports have a pseudo CLLI of ROTLTP.

# ROTLSCSD (end)

#### MAP display example for table ROTLSCSD

TES	TPORT SCTMTYPE SDTMTYPE	SCTMNO SDTMNO	SCTMCCT SDTMCCT			
ROTLTP	9 0 MTM MTM		2 0		-	

# ROUND

## Table name

TOPS Charge Rounding Table

## **Functional description**

The operating company uses table ROUND to specify how rounding is applied to charges for a particular tariff.

Rounding is applied to two different stages of the total charge calculation:

- rounding (to cent) is applied to charges before any tax is applied
- rounding (to cent) is applied to each tax before adding to charges

Optionally, rounding is applied to coin calls as follows:

- rounding (to nickel) is applied to charge before tax
- rounding (to nickel) is applied to taxes
- rounding (to nickel) is applied to total charges after tax

#### **TOPS Mass Table Control**

Feature V0178 (TOPS Mass Table Control) permits data changes in table ROUND 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 ROUNDI, and then, when all the required changes are entered, swap the contents of table ROUND with table ROUNDI.

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

#### **Overseas Operator Center (OOC):**

Table ROUND specifies how the rounding is applied to charges for a particular tariff. The rounding is applied to pre-tax charges and each time a tax is added to charges (cent rounding). For coin calls, nickle rounding is applied to pre-tax charges, to the tax and the total charges after taxes have been added.

#### **Rounding factor**

The rounding factor is the amount that is added to the calculated charge before truncation to accomplish the desired rounding.

## **ROUND** (continued)

The following table provides an example of the rounding factor.

Type of rounding	Required rounding	Rounding factor	Data form entry
Cent	If rounding down is required for any fraction	0	0
	If rounding up is required for 0.3 cent and over	0.7	7
	If round up is required for 0.1 cent and over	0.9	0
Nickel	If rounding down is required for any fraction	0	0
	If rounding up is required for 2.1 cents and over	2.9	29
	If rounding up is required for 0.1 and over	4.9	49

Rounding factor

# **Datafill sequence and implications**

Table TARIFF must be datafilled before table ROUND.

## Datafill

The following table lists datafill for table ROUND.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
TARIFF		alphanumeric (up to 32 characters)	Calling tariff key. Enter the calling tariff name as previously datafill in table TARIFF.
DR		0 to 9	Before tax cent rounding factor. Enter the rounding factor to round charges before tax to cent.
CDR		Y or N	Coin call before tax nickel rounding required. Enter Y (yes) if rounding (to nickel) is to be applied to pretax charges for coin calls. Otherwise, enter N (no).

# **ROUND** (continued)

### Field descriptions (Sheet 2 of 3)

	Subfield or		
Field	refinement	Entry	Explanation and action
CDR5		0 to 49	Coin call nickel rounding factor before tax. If the entry in field CDR is Y, enter the rounding factor. Otherwise, enter 0 (zero).
TR1		0 to 9	Tax rate 1 cent rounding factor. Enter the rounding factor (to cent) for tax rate 1 (TAX1).
CTR1		Y or N	Coin call tax rate 1 nickel rounding required. Enter Y if rounding (to nickel) is to be applied to TAX1 for coin calls. Otherwise, enter N.
CT5R1		0 to 49	Coin call tax rate 1 nickel rounding factor. If the entry in field CTR1 is Y, enter the rounding factor. Otherwise, enter 0 (zero).
TR2		0 to 9	Tax rate 2 cent rounding factor. Enter the rounding factor (to cent) for TAX2. (see Fig. A)
CTR2		Y or N	Coin call tax rate 2 nickel rounding required. Enter Y if rounding (to nickel) is to be applied to TAX2 for coin calls. Otherwise, enter N.
CT5R2		0 to 49	Coin call tax rate 2 nickel rounding factor. If the entry in field CTR2 is Y, enter the rounding factor. Otherwise, enter 0 (zero).
TR3		0 to 9	Tax rate 3 cent rounding factor. Enter the rounding factor (to cent) for TAX3.
CTR3		Y or N	Coin call tax rate 3 nickel rounding required. Enter Y if rounding (to nickel) is to be applied to TAX3 for coin calls. Otherwise, enter N.
CT5R3		0 to 49	Coin call tax rate 3 nickel rounding factor. If the entry in field CTR3 is Y, enter the rounding factor. Otherwise, enter 0 (zero).

# ROUND (end)

#### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CCR		Y or N	Coin call total charges nickel rounding required. Enter Y if rounding (to nickel) is to be applied to total charges for coin calls. Otherwise, enter N.
CCR5		0 to 49	Coin call total charges nickel rounding factor. If the entry in field CCR is Y, enter the rounding factor. Otherwise, enter N.

#### **Datafill example**

The following examples show sample datafill for table ROUND.

The first example shows datafill for the North American Traffic Operator Position System (TOPS).

#### MAP display example for table ROUND

T	ARIFF	DR	CDR	CDR5	TR1	CTR1	CT5R1	TR2	CTR2	CT5R2	TR3	CTR3	CT5R3	CCR	CCR5
B	ELLON	5	N	0	5	Y	25	0	N	0	0	N	0	Y	25

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

#### MAP display example for table ROUND

(	TARIFF	DR	CDR	CDR5	TR1	CTR1	CT5R1	TR2	CTR2	CT5R2	TR3	CTR3	CT5R3	CCR	CCR5
	STKITT S1	5	N	0	5	Y	25	0	N	0	0	N	0	Y	25

# ROUNDI

## Table name

**TOPS** Charge Rounding Inactive Table

# **Functional description**

Feature V0178 (TOPS Mass Table Control) permits data changes in table ROUND 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 ROUNDI, and then, when all the required changes are entered, swap the contents of table ROUND with table ROUNDI.

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

Refer to table ROUND.

## **Datafill sequence and implications**

Refer to table ROUND.

## Table size

Refer to table ROUND.

## Datafill

Refer to table ROUND.

## **Datafill example**

Refer to table ROUND.

# ROUTEMAP

## Table name

Route Map Table

# **Functional description**

Table ROUTEMAP functions as a look-up table to allow the DMS to redirect calls to new routes. Table ROUTEMAP uses information from tables OVR0-9 and RTECHAR in field KEY to provide the alternate route selection. Table ROUTEMAP provides the translations software with a new route index to tables OVR0-9.

## **Datafill sequence and meaning**

Enter data in the following tables after you enter data in table ROUTEMAP.

- OVR0-9
- RTECHAR

## Table size

The minimum table size is 0 tuples. The amount of memory store available determines the maximum size.

## Datafill

Datafill for table ROUTEMAP appear in the following table.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description
RMAPKEY		see subfields	<i>ROUTEMAP key</i> This field is the key to the table. This field contains subfields TABID and RCNAME.
	TABID	OVRO to OVR9	<i>Table identifier</i> Enter the OVR table that results from the call translation. Enter data in refinement KEY.
			Entries outside this range are not correct.
	KEY	0 to 1023	<i>OVR table key</i> Enter the index to the tuple in the OVR table entered in subfield TABID.

## ROUTEMAP (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Description
	RCNAME	alphanumeric (a maximum of 8 characters)	<i>Routing characteristic name</i> Enter the routing characteristic name previously entered in field RCKEY in table RTECHAR.
NEWROUTE		see subfield	<i>New ROUTEMAP key</i> This field contains the information for the new route. This field contains subfield TABID.
	TABID	OVRO to OVR9	<i>Table identifier</i> Enter the new OVR table to which the call routes. Enter data in refinement KEY.
			Entries outside this range are not correct.
KEY		0 to 1023	<i>OVR table key</i> Enter the index to the tuple in the new OVR table entered in subfield TABID.

# **Datafill example**

Sample datafill for table ROUTEMAP appear in the following example.

#### MAP example for table ROUTEMAP

RMPAKEY		NEWROUTE					
 OVR4	2	OVR4	3			_	

## Table history BCS34

Table ROUTEMAP was introduced in BCS34.

# RSDTLINE

## **Table name**

Restricted Dial Tone LIne

## **Functional description**

Table RSDTLINE is used to identify the state of RSDT lines.

## **Datafill sequence and implications**

The LEN of an RSDTLINE tuple must be datafilled in table LNINV with a STATUS of Hardware Assigned/Software Unassigned (HASU), CUTOFF, or WORKING. The associated STATE field in table RSDTLINE is shown in the following table.

#### **RSDTLINE field STATE values**

Enry for office parameter RSDT_ENABLED	LEN status in table LNINV	LEN status in table RSDTLINE			
Ν	HASU	UNDEFINED			
N	WORKING	UNDEFINED			
N	CUTOFF	UNDEFINED			
Y	HASU (see note 1)	IN_EFFECT			
Y	WORKING	ELIGIIBLE			
Y	CUTOFF	ELIGIBLE			
Y	CUTOFF (see note 2)	IN_EFFECT			
Note 1: The LEN becomes WORKING in table LNINV.					
<i>Note 2:</i> It is possible to put an RSDT IN_EFFECT line into a CUTOFF state in table LNINV.					

## Table size

Table RSDTLINE has the same number of tuples as table LNINV.

## Datafill

The following table lists datafill for table RSDTLINE.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
LEN		<len></len>	LEN. For each line, this entry is equivalent to the key field in table LNINV.
STATE		ELIGIBLE, IN_EFFECT, or UNDEFINED	RSDT line state. The default value when datafilling a nw LEN is UNDEFINED. All lines will have their state set to UNDEFINED when the RSDT_ENABLED office parameter is set to N. Whent the RSDT_ENABLED office parameter is set to Y, an RSDT eligible line (a line that is WORKING or CUTOFF in table LNINV) will have the value IN_EFFECT. The SERVORD NEW command on an RSDT IN_EFFECT line will update the state to ELIGIBLE, while the SERVORD command OUT will update the state of an RSDT eligible line to IN_EFFECT.
			<i>Note:</i> This field is read-only.
RSDTIDX		0	RSDT index. The RSDT index is the value of the RSDTIDX field in tablle DNROUTE. The default value for this field is 0. This field can be used for future enhancements.

## **Datafill example**

The following example shows sample datafill for table RSDTLINE.

#### MAP display example for table RSDTLINE

$\left( \right)$			
	LEN	STATE	RSDTIDX
	HOST 00 1 00 06	IN_EFFECT	0
$\overline{\ }$			

## Creating lists and counts of LENs for each RSDT status type

To determine which LENs have a current RSDT state of IN\_EFFECT or ELIGIBLE, a list can be obtained from table RSDTLINE using a conditional list query command. The current total number of LENs with RSDT state of IN\_EFFECT or ELIGIBLE can also be obtained using a conditional count query command.>table rsdtline

The following figures display examples of both types of condional queries:

Example of a table query for a list of all LENs with a state of ELIGIBLE

>tabl TABLE >list	RS	SDI	LIN	νE	<b>eq eligible)</b> STATE	RSDTIDX
HOST		_			ELIGIBLE	0
HOST	00	1	00	07	ELIGIBLE	0

Example of a table query for a list of all LENs with a state of IN\_EFFECT

T7 >]	t <b>able</b> ABLE List	RSDI	DODUDY		
۲٦ —	EN			STATE	RSDTIDX
HC	OST (	0 1	00 06	IN_EFFECT	0

Example of a table query for a count of all LENs with a state of IN\_EFFECT

```
>table rsdtline
TABLE RSDTLINE
>count (state eq in_effect
SIZE = 94
```

## **Error messages for table RSDTLINE**

Error message	Description	Result
LEN: HOST 01 1 00 01ERROR: LEN MUST BE PRESENT IN TABLE LNINV	Atte mpting to add a tuple to RSDTLINE for a LEN that is not found in LNINV.	The addition fails and an error message is generated at the MAP.
LEN: HOST 01 1 00 01ERROR: INCOMPATIBLE LINE STATUS FOR RSDT	Atte mpting to add a tuple to RSDTLINE for a LEN that has a status of RESERVED or UNEQUIPPED in LNINV.	The addition fails and an error message is generated at the MAP.
LEN: HOST 01 1 00 01ERROR: INCOMPATIBLE LCC FOR RSDT LINE	Atte mpting to add a tuple to RSDTLINE for a LEN that does not have an LCC of 1FR or RES/1FR.	The addition fails and an error message is generated at the MAP.

Error messages for table RSDTLINE (Sheet 1 of 2)

Error message	Description	Result
LEN: HOST 01 1 00 01ERROR: INCOMPATIBLE OPTIONS FOR RSDT LINE	Atte mpting to add a tuple to RSDTLINE for a LEN that has an RSDT incompatible options assigned.	The addition fails and an error message is generated at the MAP.
LEN: HOST 01 1 00 01ERROR: CARDCODE NOT SUPPORTED	Atte mpting to add a tuple to RSDTLINE for a LEN that has an unsupported card code.	The addition fails and an error message is generated at the MAP.
LEN: HOST 01 1 00 01 IMPROPER LINE STATELEN: HSOT 01 1 00 01 RSDT LINE CANNOT BE PUT OUT OF SERVICE	Atte mpting to delete a line from RSDTLINE that is not in IDL, LMB, HAZ, CUT, LO or PLO state.	The deketuib fails and an error message is generated at the MAP.
LEN: HOST 01 1 00 01 FAILED TO UPDATE TABLE RSDTLINE	A SERVORD command is attempting to modify a tuple in RSDTLINE.	The change fails and an error message is generated at the MAP.
LEN: HOST 01 1 00 01ERROR: LINE DATA IS NOT SUPPORTED BY RSDT	Atte mpting to add a tuple to RSDTLINE for a line with data that is incompatible with RSDT.	The addition fails and an error message is generated at the MAP.

## Error messages for table RSDTLINE (Sheet 2 of 2)

## **RSDTLINE** (end)

# Warning messages for table RSDTLINE

#### Warning messages for table RSDTLINE

Warning message	Description	Result
THIS FIELD CANNOT BE CHANGED	Atte mpting to change the STATE or RSDTIDX field in RSDTLINE	The change is not allowed and a warning message is generated at the MAP.
RSDTIDX VALUE WILL DEFAULT TO 0	Atte mpting to datafill a non-zero value as the RSDTIDX.	The command is successful and a warning message is generated at the MAP.

## Table history NA010

This table was created.

## Table name

ITOPS Rating Rate Step Calculator Foreign Rating Table

# **Functional description**

International Traffic Operator Position System table RSFOR associates combinations of schedule set name and foreign called number digits with a schedule name and rate step. This table is used after the digit translation tables determine that a called number is foreign.

The schedule set name is obtained from table CLGSSET by indexing into it with the calling number digits. The system then uses the name and rate step to calculate charges, starting with table CHGHEAD.

For related information, refer to table ATRIMOD.

## **Datafill sequence and implications**

The following tables must be datafilled before table RSFOR:

- SCHEDEF
- SCHNAME
- SSETNAME

## Table size

Table RSFOR is a digilator table. The table compresses and uncompresses the digits to reduce the amount of memory used. The maximum number of tuples is determined by the memory allocation of the compressed digit datafill.

# Datafill

The following table lists datafill for table RSFOR.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCHSCC		see subfields	Schedule set-country code key. This field consists of subfields SSETNAME and DIGITS.
	SSETNAME	alphanumeric (1 to 16 characters)	Schedule set name. Enter a schedule set name that was datafilled in table SSETNAME.

# **RSFOR** (end)

Field	Subfield or refinement	Entry	Explanation and action
	DIGITS	vector of up to 18 characters (0-9, N, B, C, D, E, F)	Foreign called number digits. Enter the foreign called number digits.
SCHNAME		alphanumeric (1 to 16 characters)	Schedule name. Enter the schedule name that was datafilled in table SCHNAME. The combination of schedule name and rate step must be found in table SCHEDEF with a foreign termination type (field TERMTYPE = FOREIGN).
RATESTEP		0 to 999	Rate step. Enter the rate step that was datafilled in table SCHEDEF when field TERMTYPE is FOREIGN.

# **Datafill example**

The following example shows sample datafill for table RSFOR.

#### MAP display example for table RSFOR

(	SCHSCC		SCHNAME	RATESTEP	
	SSETNAMEA	33	FORSCHED1	321	
	SSETNAMEB	33	FORSCHED1	322	
	SSETNAMEC	33	FORSCHED1	323	
	SSETNAMED	33	FORSCHED1	324	
	SSETNAMEA	33078	FORSCHED2	510	
	SSETNAMEB	33078	FORSCHED2	511	
	SSETNAMEC	33078	FORSCHED2	512	
	SSETNAMED	33078	FORSCHED2	513	

# RSLOC

## Table name

ITOPS Rating Rate Step Calculator Local Rating Table

# **Functional description**

International Traffic Operator Position System table RSLOC associates schedule set names with a schedule name and rate step. This table is used after the digit translation tables determine that a called number is a local national number.

The schedule set name is obtained from table CLGSSET by indexing into it with the calling number digits. The system then uses the schedule name and rate step to calculate charges, starting with table CHGHEAD.

For related information, refer to table ATRIMOD.

## **Datafill sequence and implications**

The following tables must be datafilled before table RSLOC.

- SCHEDEF
- SCHNAME
- SSETNAME

## Table size

0 to 640 000 tuples

## Datafill

The following table lists datafill for table RSLOC.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
SSETNAME		alphanumeric (1 to 16 characters)	Schedule set name. Enter a schedule set name that was datafilled in table SSETNAME.
SCHNAME		alphanumeric (1 to 16 characters)	Schedule name. Enter the schedule name that was datafilled in table SCHNAME.
RATESTEP		0 to 999	Rate step. Enter the rate step that was datafilled in table SCHEDEF when field TERMTYPE is LOCAL.

# **RSLOC** (end)

# **Datafill example**

The following example shows sample datafill for table RSLOC.

#### MAP display example for table RSLOC

$\left( \right)$	SSETNAME	SCHNAME	RATESTEP
	SSETNAMEA	LOCSCHED1	921
	SSETNAMEB	LOCSCHED1	922
	SSETNAMEC	LOCSCHED1	923
	SSETNAMED	LOCSCHED1	924

#### RSM

## Table name

Remote Service Module Table

## **Functional description**

Table RSM is used by local or combined local/toll switches that are configured for remote operation.

#### Datafill sequence

Table MTAMDRVE must be datafilled after table RSM.

#### Table size

0 to 100 tuples

# **Field descriptions**

Field names, subfield names, and valid data ranges for table RSM are described below.

#### Field descriptions for table RSM (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RSM		0to127 or	Remote service module number
		0 to 511	Enter the number assigned to the remote service module (RSM).
			If the switch is an NT40, enter a number between 0 and 127.
			If the switch is a SuperNode, enter a number between 0 and 511.
FRAME		see subfields	Line module frame
			This field consists of subfields SITE and FRAME.

#### 1-790 Data schema tables

## RSM (end)

#### Field descriptions for table RSM (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SITE	alphanumeric (4 characters)	Site
			Enter the remote site name where the RSM is located. The first character of the entry for the site name must be alphabetic.
	FRAME	0to127 or 0 to 511	Remote line frame module number
			Enter the number of the primary remote line frame module assigned to the RSM.
			If the switch is an NT40, enter a number between 0 and 127.
			If the switch is a SuperNode, enter a number between 0 and 511.

## Datafill example

An example of datafill for table RSM is shown below.

The example shows datafill for a local SuperNode switch with one remote site (MERV) equipped with one RSM on the primary remote line frame module 0.

#### Datafill example for table RSM

RSM FRAME
0 REM1 00

#### Table name

ITOPS Rating Rate Step Calculator National Rating Table

# **Functional description**

International Traffic Operator Position System table RSNAT associates combinations of schedule set name and national toll called number digits with a schedule name and rate step. This table is used after the digit translation tables determine that a called number is national toll.

The schedule set name is obtained from table CLGSSET by indexing into it with the calling number digits. The system then uses the schedule name and rate step to calculate charges, starting with table CHGHEAD.

For related information, refer to table ATRIMOD.

## **Datafill sequence and implications**

The following tables must be datafilled before table RSNAT.

- SCHEDEF
- SCHNAME
- SSETNAME

## Table size

0 to 65 000 tuples

# Datafill

The following table lists datafill for table RSNAT.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCHSDN		see subfields	Schedule set-directory number key. This field consists of subfields SSETNAME and DIGITS.
	SSETNAME	alphanumeric (1 to 16 characters)	Schedule set name. Enter a schedule set name that was datafilled in table SSETNAME.
	DIGITS	numeric (1 to 18 digits)	National toll called number digits. Enter the national toll called number digits.

# **RSNAT** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OVERLAY		see subfield	Rate type and refinements. This field consists of selector field RATETYPE.
	RATETYPE	SRA or VH	Rate type. Enter SRA for a single rate area method and datafill refinements SCHNAME and RATESTEP.
			Enter VH when a vertical-horizontal coordinate rate step system is associated with refinement SCHNAME.
	SCHNAME	alphanumeric (1 to 16 characters)	Schedule name. Enter the schedule name that was datafilled in table SCHNAME. The combination of schedule name and rate step is found in table SCHEDEF with a national termination type (field TERMTYPE = NATIONAL).
	RATESTEP	0 to 999	Rate step. Enter the rate step that was datafilled in table SCHEDEF if field TERMTYPE is NATIONAL.

# **Datafill example**

The following example shows sample datafill for table RSNAT.

#### MAP display example for table RSNAT

SCHSDN		OVERLAY		
SSETNAME	DIGITS	RATETYPE	SCHNAME	RATESTEF
SSETNAMEA	1022	SRA	SCHED1	300
SSETNAMEA	20	SRA	SCHED1	320
SSETNAMEA	3041	SRA	SCHED2	500
SSETNAMEB	1021	SRA	SCHED3	100
SSETNAMEB	20	SRA	SCHED3	110
SSETNAMEB	3041	SRA	SCHED3	120
SSETNAMEC	1021	SRA	SCHED4	400
SSETNAMEC	1022	SRA	SCHED4	440
SSETNAMEC	3041	SRA	SCHED4	460
SSETNAMED	1021	SRA	SCHED5	600
SSETNAMED	1022	SRA	SCHED5	610
SSETNAMED	20	SRA	SCHED6	200
_				

# RSNAT (end)

## Table history BCS36

Vertical-horizontal (V-H) option added to field RATETYPE.

## RSSERV

#### Table name

**TOPS** Active Service Rating Table

## **Functional description**

Table RSSERV supports TOPS Queue Management System (QMS) global service rating. It lists all the service rating systems in the switching unit. Table RSSERV is the active table in the pairing of tables RSSERV and RSSERVI. The active table is used by the software for call processing, therefore, changes cannot be made to the active data while it is in use. The inactive table is used to allow changes to the service rating table by the operating company during normal working hours. The active table is compared with the data in the inactive table and is automatically updated during low traffic periods.

During active call processing, table RSSERV retrieves a schedule name and ratestep given a schedule set and service combination. Table RSSERV has a two-part key consisting of a schedule set name and a service name. The schedule set name is determined by datafill in table SSETNAME and CLGSSET. The second part of the key, the service name, is determined by datafill in table TQMSSERV or table SERVSCRN.

Each key in table RSSERV maps to a schedule name and a ratestep used for that particular key. Schedule names are datafilled in table SCHNAME. If call processing encounters a schedule set or service combination such that no tuple is datafilled in table RSSERV, global rating is not able to calculate the ratestep or the charges for the call. In this case, a nil charge and ratestep is returned. Operator displays are updated during the process to indicate processing milestones.

## **Datafill sequence and implications**

The following tables must be datafilled before table RSSERV:

- SCHEDEF
- SCHNAME
- SERVNAME
- SSETNAME

#### **Table size**

0 to 4096 tuples

## **RSSERV** (continued)

The following error message is displayed if field SCHNAME is not datafilled in table SCHEDEF.

SCHNAME NOT KNOWN TO TABLE SCHEDEF

The following error message is displayed if field SCHNAME in table SCHEDEF is not datafilled with field TERMTYPE = SERVICE.

SCHEDULE TERMTYPE MUST BE SERVICE

The following error message is displayed if the value in field RATESTEP was either less than the lower rate step or greater than the highest rate step fields specified for the schedule name in table SCHEDEF.

RATESTEP OUT OF RANGE

The following error message is displayed if field SERVNAM has a value of NILSERV or TOLLFREE.

INVALID SERVICE

#### Datafill

The following table lists datafill for table RSSERV.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY			This field consists of subfields SSETNAME and SERVNAM.
	SSETNAME	alphanumeric (1 to 16 characters)	Schedule set name. Enter a schedule set name that is determined by datafill in table SSETNAME. This is the first part of the key.
	SERVNAM	alphanumeric (1 to 8 characters)	Service name. Enter a service name that is determined by datafill in table SERVNAME. This is the second part of the key. Values NILSERV and TOLLFREE cannot be datafilled in field SERVNAME in table RSSERV.

# RSSERV (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCHNAME		alphanumeric (1 to 16 characters)	Schedule name. Enter a schedule name that is datafilled in table SCHNAME.
RATESTEP		0 to 999	Rate step. Enter a ratestep from 0 to 999. This ratestep must match the range defined for field SCHNAME in table SCHEDEF.

# **Datafill example**

The following example shows sample datafill for table RSSERV.

#### MAP display example for table RSSERV

$\left( \right)$	KEY		SCHNAME	RATESTEP	
	HONDURAS	TOLLDA	CTRDA	67	

# Table history

#### BCS35

Table RSSERV introduced.

## Table name

**TOPS Inactive Service Rating Table** 

## **Functional description**

Table RSSERVI supports TOPS Queue Management System (QMS) global service rating. It lists all the inactive service rating systems in the switching unit. Table RSSERVI is the inactive table in the pairing of tables RSSERV and RSSERVI. The active table is used by the software for call processing, therefore, changes cannot be made to the active data while it is in use. The inactive table is used to allow changes to the service rating table by the operating company during normal working hours. The active table is compared with the data in the inactive table and is automatically updated during low traffic periods.

Table RSSERVI has a two-part key consisting of a schedule set name and a service name. The schedule set name is determined by datafill in table SSETNAME and CLGSSET. The second part of the key, the service name, is determined by datafill in table TQMSSERV or table SERVSCRN.

Each key in table RSSERVI maps to a schedule name and a ratestep used for that particular key. Schedule names are datafilled in table SCHNAME. If call processing encounters a schedule set or service combination such that no tuple is datafilled in table RSSERVI, global rating is not able to calculate the ratestep or the charges for the call. In this case, a nil charge and ratestep is returned. Operator displays are updated during the process to indicate processing milestones.

For related information, refer to table RSSERV.

## **Datafill sequence and implications**

The following tables must be datafilled before table RSSERVI:

- SCHEDEF
- SCHNAME
- SERVNAME
- SSETNAME

## Table size

0 to 4096 tuples

#### **RSSERVI** (continued)

The following error message is displayed if field SCHNAME is not datafilled in table SCHEDEF.

SCHNAME NOT KNOWN TO TABLE SCHEDEF

The following error message is displayed if field SCHNAME in table SCHEDEF is not datafilled with field TERMTYPE = SERVICE.

SCHEDULE TERMTYPE MUST BE SERVICE

The following error message is displayed if the value in field RATESTEP was either less than the lower rate step or greater than the highest rate step fields specified for the schedule name in table SCHEDEF.

RATESTEP OUT OF RANGE

The following error message is displayed if field SERVNAM has a value of NILSERV or TOLLFREE.

INVALID SERVICE

### Datafill

The following table lists datafill for table RSSERVI.

#### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY			This field consists of subfields SSETNAME and SERVNAM.
	SSETNAME	alphanumeric (1 to 16 characters)	Schedule set name. Enter a schedule set name that is determined by datafill in table SSETNAME. This is the first part of the key.
	SERVNAM	alphanumeric (1 to 8 characters)	Service name. Enter a service name that is determined by datafill in table SERVNAME. This is the second part of the key. Values NILSERV and TOLLFREE cannot be datafilled in field SERVNAME in table RSSERVI.

# RSSERVI (end)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCHNAME		alphanumeric (1 to 16 characters)	Schedule name. Enter a schedule name that is datafilled in table SCHNAME.
RATESTEP		0 to 999	Rate step. Enter a ratestep from 0 to 999. This ratestep must match the range defined for field SCHNAME in table SCHEDEF.

# **Datafill example**

The following example shows sample datafill for table RSSERVI.

#### MAP display example for table RSSERVI

$\left( \right)$	KE	Y	SCHNAME	RATESTEP	
	HONDURAS	TOLLDA	CTRDA	67	

# Table history

## BCS35

Table RSSERVI was introduced.

## RTECHAR

#### Table name

ISDN Routing Characteristic Table

## **Functional description**

Table RTECHAR associates a routing characteristic name (RCNAME) to several routing characteristics. The system uses RCNAME through translations and routing to select a route. The system selects a route according to the routing characteristics of the call.

Routing characteristics bearer capability (BC) and peripheral interface (PI) apply to Japan Public Network 7 (JPN7) ISDN user part (ISUP).

When a caller places an ISDN call, the system transmits an information element (IE) to the DMS central office switching center.

*Note:* The system accesses table RTECHAR when a caller places non-ISDN calls. Entries in table RTECHAR can define bearer capabilities. Non-ISDN calls with a specified bearer capability use table RTECHAR. Non-ISDN calls use table RTECHAR to obtain an RCNAME for re-routing and re-translation purposes.

The message SETUP is part of the information element. When the system receives message SETUP, the system accesses table RTECHAR. The system searches table RTECHAR for the RCNAME in the transmitted message SETUP. Table RTECHAR contains a list of RCNAMEs where each RCNAME has an assigned set of routing characteristics. If the system cannot find an RCNAME for a specified set of routing characteristics, the default value applies. The system associates the default value of NILNAME with the call. The default value of NILNAME appears in table RTECHAR.

Each routing characteristic has an internally defined default value. When a customer adds a tuple that contains the default value, and lists the tuple, the default value does not appear.

## Datafill sequence and meaning

Enter data in the following tables after you enter data in table RTECHAR.

- RCNAME
- BCDEF

Enter data in the ISDN translations tables to initiate full ISDN translations.

#### **DMS 100E**

Set office parameter NUM\_RC\_EXT\_BLKS in table OFCENG to one or more. If office parameter NUM\_RC\_EXT\_BLKS does not have a value of one or more the system routes calls that use this parameter to treatment.

#### **DMS 300**

DMS 300 does not use RC\_EXT\_BLKS.

#### Table size

0 to 256 tuples

The system dynamically allocates data store for each tuple in table RTECHAR.

## Datafill

Datafill for table RTECHAR appears in the following table.

#### Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Description
RCKEY		see subfield	<i>Routing characteristic key</i> This field contains subfield RCNAME.
	RCNAME	alphanumeric (1 to 8 characters)	<i>Routing characteristic name</i> Enter the RCNAME that is a correct entry in table RCNAME.
GROUPRC		see subfields	<i>Group routing characteristic</i> This field contains subfields FIRSTRC and OTHERRC. Each RCKEY can have one to seven GROUPRCs assigned.
	FIRSTRC	see subfields	<i>First routing characteristic</i> Enter values for the first routing characteristic. This subfield contains refinement RCSEL. A group routing characteristic can have one first routing characteristic assigned.

## Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Description
	RCSEL	BC, CDN, OSA, PI, SR, or TNS	Routing characteristic selector Enter one of the entries with the associated refinements. Descriptions of the refinements appear in alphabetical order in the following list.
			Enter BC (bearer capability). Enter data in refinement BC.
			Enter CDN (called party number). Enter data in refinement CDNTON.
			Enter OSA (operator system access). Enter data in refinement OSA.
			Enter PI (protocol preference indicator). Enter data in refinement PI.
			Enter SR (service request). Enter data in refinement SR.
			Enter TNS (transit network selection). Enter data in refinement TNSTON.
	BC	alphanumeric (1 to 16 characters)	<i>Bearer capability name</i> If the entry in subfield RCSEL is BC, enter data in this refinement. Enter the bearer capability name as entered in table BCDEF.
			The default entry is 3_1KHZ.
			Go to subfield OTHERRC.

Field	Subfield or refinement	Entry	Description
	CDNTON	ABBR, IN, L, NA, NET, or NIL	<i>Called party number type of number</i> If the entry in subfield RCSEL is CDN, enter data in this refinement. Enter the required CDN type of number. The entry values appear in the following list:
			• Entry ABBR indicates the presence of a called number that contains an abbreviated number.
			<ul> <li>Entry IN indicates the presence of an international number.</li> </ul>
			<ul> <li>Entry L indicates the presence of a called number that contains a 7-digit public number.</li> </ul>
			• Entry NA indicates the presence of a called number that contains a 10-digit public number.
			<ul> <li>Entry NET indicates the presence of a called number that contains a variable private number.</li> </ul>
			<ul> <li>Entry NIL indicates the CDN. Information element (IE) is not present. Digits can be in the keypad IE or the TNS IE.</li> </ul>
			Go to subfield OTHERRC.
	OSA	NIL, PRIP, PUBA, or PUBP	<i>Operator system access</i> If the entry in subfield RCSEL is OSA, enter data in this refinement. Enter the required operator system access (OSA) selector. The entry values appear in the following list:
			<ul> <li>The NIL represents the OSA. The IE is not present.</li> </ul>
			<ul> <li>The PRIP represents the attendant of a business group.</li> </ul>
			<ul> <li>The PUBA represents the inter-LATA carrier operator.</li> </ul>
			<ul> <li>The PUBP represents the operating company operator.</li> </ul>
			Go to subfield OTHERRC.

## Field descriptions (Sheet 3 of 6)

## Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Description
	PI	SUPREF SUPREQ or NOISUPRQ	Protocol preference indicator If the entry in subfield RCSEL is PI, enter data in this refinement. Enter the required number of protocol preferences ISUPREQ, ISUPREF, or NOISUPRQ.
			Go to subfield OTHERRC.
	SR	CFW, CLI, CUG, NIL, or NND	Service request If the entry in subfield RCSEL is SR, enter data in this refinement. Enter the required type of service request (SR). The entry values appear in the following list:
			The CFW (call forwarding with reason)
			The CLI (calling line identity)
			The CUG (closed user group)
			<ul> <li>The NIL represents the SR. The IE is not present.</li> </ul>
			The NND (network name display)
			Go to subfield OTHERRC.
	TNS	NA, NIL, or US	<i>Transit network selection</i> If the entry in subfield RCSEL is TNS, enter data in this refinement. Enter the required type of transit network selection (TNS) selector. The entry values appear in the following list:
			<ul> <li>The NA represents the presence of public carrier digits.</li> </ul>
			<ul> <li>The NIL represents the TNS. The IE is not present.</li> </ul>
			<ul> <li>The US represents the presence of private carrier digits.</li> </ul>
			Go to subfield OTHERRC.

Field	Subfield or refinement	Entry	Description
	OTHERRC	see subfield	Other routing characteristic This field specifies the other routing characteristic of a grouping. This field does not specify the first routing characteristic (field FIRSTRC). This field contains subfield SEL. Each entry in field FIRSTRC can have a maximum of three entries assigned. These entries make a group routing characteristic (GROUPRC).
	SEL	BC, CDN, OSA, PI, SR, or TNS	Routing characteristic selector Enter one of the entries with the respective refinements. Descriptions of the refinements appear in alphabetical order in the following section.
			Enter BC. Enter data in refinement BC.
			Enter CDN. Enter data in refinement CDNTON.
			Enter OSA. Enter data in refinement OSA.
			Enter PI. Enter data in refinement PI.
			Enter SR. Enter data in refinement SR.
			Enter TNS. Enter data in refinement TNSTON.
	BC	alphanumeric (1 to 16 characters)	Bearer capability name If the entry in subfield SEL is BC, enter data in this refinement. Enter the bearer capability name entered in table BCDEF.
			The default entry is 3_1KHZ.
	CDNTON	ABBR, IN, L, NA, NIL, or NET	<i>Called party number type of number</i> If the entry in subfield SEL is CDN, enter data in this refinement. Enter the required CDN type of number. For an explanation of entries, see earlier refinement CDNTON.
	OSA	NIL, PRIP, PUBA, or PUBP	<i>Operator system access</i> If the entry in subfield SEL is OSA, enter data in this refinement. Enter the required operator system access (OSA) selector. For an explanation of entries, see earlier OSA refinement.

## Field descriptions (Sheet 5 of 6)

## Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Description
	PI	ISUPREF ISUPREQ or NOISUPREQ	<i>Protocol preference indicator</i> If the entry in subfield SEL is PI, enter data in this refinement. Enter the required number of protocol preferences ISUPREQ, ISUPREF, and NOISUPRQ.
	SR	CFW, CLI, CUG, NIL, or NND	Service request If the entry in subfield SEL is SR, enter data in this refinement. Enter the required type of service request (SR). For an explanation of entries, see earlier refinement SR.
	TNS	NA, NIL, or US	<i>Transit network selection</i> If the entry in subfield SEL is TNS, enter data in this refinement. Enter the required type of transit network selection (TNS) selector. For an explanation of entries, see earlier refinement TNS.

# **Datafill example**

Sample datafill for table RTECHAR appears in the following example.

RCKEY	GROU	PRC		CONTMARK	
NILNAME	\$		\$		
64KNAME	BC	64KDATA	\$		
	BC	64KDATA	SR CLI	\$	
64KPUBP	BC	64KDATA	OSA PUBP	\$	
	\$				
64KPUB	BC	64KDATA	CDN L	\$	
	BC	64KDATA	CDN NA	\$	
	BC	64KDATA	TNS NA	+	
			CDN NA	+	
			OSA NIL	\$	
RCNAME1	BC	SPEECH	SR CLLI	\$	
ISUPONLY	PI	ISUPREQ		\$	
ISUPPREF	PI	ISUPREF		\$	

#### MAP example for table RTECHAR

# RTECHAR (end)

## Table history BCS36

Subfield RCNAME was added in BCS36.

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# RTSALGO

#### Table name

Return-to-Service Algorithm Table

## **Functional description**

Table RTSALGO improves the auditing algorithm by which the system-busied nodes and links return to service. This improvement occurs when observing the known hierarchical relationships between the different node types. Use the NET\_BRANCH algorithm if the network branch is critical. Use the IOC\_BRANCH algorithm if the input/output controller (IOC) branch is critical. If any of the above algorithms are not present, use the default algorithm, DEFAULT\_BRANCH.

An algorithm is an array of node types. Nortel defines a set of algorithms when the load is first built. Samples of algorithms appear in the following list.

- Algorithm for the network branch
  - CMC\_NODE NET\_NODE TM\_NODE CMC\_NODE NET\_NODE LM\_NODE
  - CMC\_NODE NET\_NODE DCM\_NODE RCT\_NODE RCS\_NODE RCU\_NODE
- Algorithm for the IOC branch
  - CMC\_NODE IOC\_NODE TDC\_NODE CMC\_NODE IOC\_NODE TC\_NODE
  - RCT\_NODE RCS\_NODE RCU\_NODE
- Algorithm for the default branch
  - CMC\_NODE IOC\_NODE NET\_NODE CMC\_NODE IOC\_NODE TDC\_NODE
  - CMC\_NODE NET\_NODE TM\_NODE CMC\_NODE IOC\_NODE TC\_NODE
  - CMC\_NODE NET\_NODE DCM\_NODE CMC\_NODE IOC\_NODE DDU\_NODE
  - CMC\_NODE NET\_NODE LM\_NODE CMC\_NODE IOC\_NODE DLC\_NODE
  - CMC\_NODE NET\_NODE DCM\_NODE RLM\_NODE CMC\_NODE IOC\_NODE
  - DPC\_NODE RCT\_NODE RCS\_NODE RCU\_NODE

See table RTSNT for associated information.

## **Datafill sequence and meanings**

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

## Table size

The system automatically allocates memory for a maximum of four return-to-service branches.

## Datafill

Datafill for table RTSALGO appears in the the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
RTSBRNCH		see subfield	<i>Return-to-service algorithm key</i> . This field contains subfield RTS_BRNCH.
	RTS_BRANCH	COMBINED_ BRANCH DEFAULT_ BRANCH NET_ BRANCH or IOC_	<i>Return-to-service branch.</i> Enter COMBINED_BRANCH for the algorithm in use. This process occurs if the network branch and input/output controller (IOC) branch are critical or not critical. The load does not specify COMBINED_BRANCH. Use the DEFAULT_BRANCH.
		BRANCH	Enter DEFAULT_BRANCH for the default algorithm in use to return nodes to service if the user does not specify any nodes.
			Enter NET_BRANCH for the algorithm in use if the network branch is critical.
			Enter IOC_BRANCH for the algorithm in use if the IOC branch is critical.
RTSVECT		alphanumeric (1 to 16 characters)	<i>Return-to-service algorithm vector</i> . The entry in this field is a string of node types. Add a maximum of 119 node types. If less than 119 node types are necessary, end the list with a \$.

## **Datafill example**

Sample datafill for table RTSALGO appears in the following example.

## RTSALGO (end)

#### MAP example for table RTSALGO

RTSBRNCH			RTSVECT
NET_BRANCH	(	CPU_NODE) (	MS_NODE)\$

## **Table history**

#### BCS36

Subfield RTS\_BRANCH was added in BCS36. The entry column for field RTSVECT was corrected.

## **Additional information**

This section provides information on dump and restore procedures when you add data entry to table RTSALGO.

#### **Dump and restore**

The removal of table RTSALGO from the system occurs. When this process occurs, the algorithm that corresponds to the DEFAULT\_BRANCH must change to an empty vector. This change occurs because the software determines the algorithm.

Before the restoration of table RTSALGO occurs, set the office parameter RTSALGOWRITE in table OFCSTD to Y (yes). After the restoration of the data occurs, set the parameter back to N (no) for write protection.

## Table name

Return-to-service Node Types Table

## **Functional description**

The purpose of table RTSNT is to improve the method by which the system-busied nodes and links return to service. This process occurs by observing the known hierachical relationships between the different node types.

The system keeps a set of queues, with each queue that corresponds to one node type. The system awakens the audit process every minute. The audit process steps through all nodes in the system. The audit process selects nodes and links that are in the system busy state. A node is in the system busy state or has system busied C-side link or links. When this condition occurs, the system places the node in the queue that corresponds to its own node type. The evaluation of the system occurs to determine if the system is critical. Every node has a queue maximum (field QMAX) associated with the node. Field QMAX specifies the maximum number of nodes of the node type that can be on the return-to-service queue. This numbe000000r is the maximum number before the system becomes critical. Table RTSNT contains the specifications for QMAXs. A network pair is down or a line module (LM) and its mate are down. These conditions constitute a critical condition.

While the audit system is active, the audit system first checks if the system is critical. If the system is critical, the system will run at priority 5, not 1. This process allows the system to operate more easily. The system begins to make return to service attempts on nodes in the return-to-service queues. When either of the branches is critical the system tries to repair that branch first.

Refer to table RTSALGO for related information.

## Datafill sequence and meaning

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

## Table size

The number of tuples is a system parameter. The number of tuples depends on the number of node types in the office.

# **RTSNT** (continued)

## Datafill

Datafill for table RTSNT appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
NODETYPE		see subfield	<i>Node type key.</i> This field contains subfield NODE_TYPE.
	NODE_TYPE	alphanumeric (1 to 12 characters)	<i>Node type</i> . Enter the node type of the different nodes and links.
QMAX		0 to 4095	Queue maximum. Enter the maximum number of the node type that are on a return-to-service queue. This entry occurs before the system becomes critical.
DEFAULT		Y or N	<i>Default.</i> Enter Y if the system calculates a default value for field QMAX. To use this option, you must enter 0 in field QMAX.
			Or, enter N. If the entry is N, set field QMAX to any desired value except 0.

# Datafill example

An example of datafill for table RTSNT appears in the following chart.

#### MAP example for table RTSNT

NODETYPE QMAX	DEFAULT	
GMS_NODE 4095	Y	

## Table history BCS36

Field NODETYPE was added in BCS36.

# RTSNT (end)

## **Additional information**

This section provides information on dump and restore procedures when you enter data in table RTSNT. This section provides a sample list of the node to queue relationship that table RTSNT provides.

#### **Dump and restore**

The removal of table RTSNT from the system occurs for each node type. When the system sets field DEFAULT to Y, change field QMAX to 0. The software accepts this value when the default option is in use.

#### Node to queue relationship

Table RTSNT provides a sample list of the node to queue relationship that appears in the following Table "RTSNT".

NODETYPE	QMAX	DEFAULT	
CPU_NODE	2	Y	
MS_NODE	1	Υ	
NET_NODE	2	Υ	
TM_NODE	3	Υ	
LM_NODE	1	Υ	
DCM_NODE	1	Υ	
IOC_NODE	2	Υ	
TC_NODE	2	Υ	

#### Node/queue relationship in table RTSNT

# SAAUTO

### Table name

Automatic Service Analysis Table

# **Functional description**

- Table SAAUTO defines when a session is in use for manual service analysis (MSA) or automatic service analysis (ASA). When the session is automatic, the table defines:
- the analysis time intervals
- the frequency of the analysis
- the target number of calls to be sampled
- the sampling criteria
- Table SAAUTO allows the operating company to define how the system presents output from the ASA session:
- in a call-by-call report
- a summary of the last 100 calls
- both call-by-call and summary data.

Service analysis allows the operating company to monitor and analyze traffic on the DMS switch. The MSA requires a dedication MSA position, which a service analyst operates. The service analyst monitors the call and inputs subjective data on the quality of service. The ASA allows the supervision of traffic quality without a dedicated position or analyst. The collection of data on internal and external problem occurs.. The ASA can not monitor the speech path and enter analyst observed events.

At any time, a maximum of five service analysis sessions can be on the switch. Define each session as either MSA or ASA. Identify each session by a fixed number. Each session can monitor and analyze traffic separate from the other session.

Each ASA session can have up to five slots defined. No two slots of the same session can overlap. The slots can be next to the other slot.

The system supports ASA on the DMS-300 for the following gateway trunks:

- IT (T101 testline)
- PL (private line)
- CCITT signaling system R1

- CCITT signaling system R2 (digital only)
- CCITT signaling system No. 5
- CCITT signaling system No. 6
- CCITT signaling system No. 7, telephone user part (TUP) blue book
- CCITT signaling system No. 7, TUP red book
- T/SPS signaling system No. 7, TUP plus (TUP+)
- CCITT signaling system No. 7, ISDN user part (ISUP) blue book
- United Kingdom national user part (BTUP) (BTNR167)

Table SAAUTO is a change-only table.

See table SASPEC for associated information.

### **Target calls parameters**

The DMS switch attempts to distribute the target number of calls evenly for a session slot over the datafilled time period. The following conditions can distort the distribution:

- Low number of calls that require the sample process. The ASA monitors up to ten calls at the same time. When a session set samples ten calls over an hour, the switch can analyze all ten calls. The switch can analyze these calls in the first few minutes. A session set to sample 600 calls over an hour returns a distribution of approximately ten calls a minute.
- Calls with a long average holding time. The longer the holding time of the sampled calls, the lower the rate at which ASA samples.
- Low levels of traffic of the required standards.

A long session of several hours with a high number of target calls (over 1000) obtains optimum distribution.

The range of calls an ASA session samples is 0 to 4010.

### **Command SACONTROL**

The command interpreter (CI) command SACONTROL queries the status and change the settings of the service analysis system.

### **Datafill sequence and meaning**

You must enter data in table SASPEC before you enter data in table SAAUTO.

# SAAUTO (continued)

# Table size

5 tuples

### Datafill

Datafill for table SAAUTO appears in the following table.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SESSION		see subfield	<i>Session.</i> This field is the key to the table and contains the subfield KEY.
	KEY	1 to 5	Key. Enter the key to the table.
CONTROL		see subfield	Control. This field contains subfield MODE.
	MODE	AUTOMATIC or MANUAL	<i>Service analysis mode</i> . Enter AUTOMATIC if the system reserves the session for automatic analysis and datafill refinement ASA.
			Enter MANUAL if the system reserves the session for manual analysis. The refinements do not require datafill.
ASA		see subfield	Automatic service analysis. This field contains up to five multiples of subfields START, STOP, FREQ, TARGET, OUTFORM, and SASPIND. Separate each subfield with a single space. If less than five multiples are required, end the list with a \$.
	START	see subfields	<i>Start.</i> This field contains subfields DATE and TIME. Separate each subfield with a single space.
	DATE	1 to 366	<i>Start date</i> . Enter the day of the year at which the session starts analysis.
	TIME	0000 to 2359	<i>Start time</i> . Enter the time of the day at which the session starts analysis. The format is HHMM.

# SAAUTO (continued)

	Subfield or		
Field	refinement	Entry	Explanation and action
	STOP	0000 to 2359	<i>Stop.</i> Enter the time when the session stops the analysis. The format is HHMM. The stop time (field STOP) precedes the start time (field START). When this process occurs, the automatic service analysis (ASA) considers the stop time to be in the next day.
	FREQ	DAILY ONEOFF or WEEKLY	<i>Frequency</i> . Enter the frequency of the analysis.
	TARGET	1 to 4000	<i>Target</i> . Enter the number of calls that require the sample process for the analysis.
	OUTFORM	FULL PERCALL or	<i>Output form</i> . Enter the form of output required.
		SUMMARY	Enter FULL for call-by-call and summary data.
			Enter PERCALL for data output on a call-by-call base. Information includes treatment or backward signals the system applies or receives during the call.
			Enter SUMMARY if a summary is output after every 100 calls during the sample process, or at the end of the analysis. The system presents information in a packed hex format for machine reading.
	SASPIND	1 to 50	<i>Table SASPEC index.</i> Enter the index in table SASPEC. The entry in this field provides the selection standards for the ASA session.

#### Field descriptions (Sheet 2 of 2)

# **Datafill example**

Sample datafill for table SAAUTO appears in the following example.

# SAAUTO (end)

#### MAP example for table SAAUTO

SESSION

CONTROL

```
5
AUTOMATIC (12 0400 0800 DAILY 3 FULL 16)
(3 0011 2359 WEEKLY 2000 SUMMARY 49) $
```

# Table history

### BCS36

Table SAAUTO was introduced in BCS36.

# **Additional information**

This section provides information on dump and restore procedures for table SAAUTO.

### **Dump and restore**

Normal dump and restore procedures apply.

### Table name

Subscriber Activated Call Blocking (SACB)

# **Functional description**

Table SACB associates a North American call class to a string of destination digits. Table SACB sets the call class based on the non-prefix digits.

Call classes IDDD, OPRA, TOLL, and ZROM are based on the prefix digits of the dialed number and cannot be assigned in table SACB.

A new subscriber activated call blocking call class (SACBCC) FPBALLOW is added for table SACB in NA011. The call class is described below:

The operating company can block all calls originated from a line by persons who do not have the personal identification number (PIN) of the subscriber. The call classes to be restricted are specified when adding SACB to the subscriber line. FPB functionality can be added to a line through the subfield SACBCC in a SERVORD session. When FPB is added to a line with other call classes, FPB overrides the other call classes. Fraud Prevention Allow (FPBALLOW) permits calls without a PIN. The operating company can enter a small set of callable numbers without a PIN such as 911 or a repair number. The callable numbers chosen by operating company personnel such as 911 or 611 are entered in subfield FPBALLOW in table SACB.

The restricted call classes are specified when adding the SACB option to the subscriber line. The addition of the SACB option is done using the service order system (SERVORD). The SACB feature is controlled by an access code. The PIN assigned to the SACB feature activates or deactivates the feature.

The operating company is provided with a boolean function, SACB suspend (SACBSUS). SACBSUS can be set to Y or N. SACBSUS set to Y compares the dialed number with numbers entered in the FPBALLOW subfield. If the numbers match, the call is allowed to proceed. 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 the FPBALLOW subfield. If the digits match, the call is allowed to proceed. If the digits do not match, the call is restricted and the PIN is required. If FPB is not on the line, a check is made for other call classes.

*Note 1:* Emergency calls must complete, without regard to the SACB restrictions assigned to the subscriber line. Therefore, 911 calls and calls dialed as 0- complete provided they are datafilled against FPBALLOW in table SACB.

# **SACB** (continued)

*Note 2:* Subscriber activated call blocking is only valid for residential (RES) or Meridian Digital Centrex (MDC) lines.

# **Datafill sequence and implications**

FPBALLOW affects the SACB data schema table.

There is no requirement to enter data in other tables before entering data in table SACB.

# Table size

0 to 32000

Memory is allocated dynamically.

# Datafill

The following table lists datafill for table SACB.

### **Field descriptions**

Field	Subfield	Entry	Explanation and action
DIGITS		numeric (up	Digits
		to 18 digits)	. Restricted to 8 digits .
			Enter the digits that compare to the non-prefix dialed digits. If the digits are an exact match, the indicated call class is assigned. For example, to assign a toll directory assistance (TDAS) call class to a call dialed as 1+NPA-555-1212, enter NPA555 in field DIGITS.
			<i>Note:</i> To minimize the impact on real-time translation, digit are checked one time. The first digits reported from peripheral processing to central control for translation must match all the digits in field DIGITS as digits.
	SACBCC	LDAS, TDAS, 1800, 1900, 1976	Subscriber activated call blocking call class
		1976, FPBALLOW, FPB, TOLL, ZROM, OPRA, IDDD, or SPEC	Enter the subscriber-activated call blocking (SACB) call class from the following list:
			<ul> <li>LDAS (local directory assistance [411 or equivalent])</li> </ul>
			<ul> <li>TDAS (toll directory assistance [all 1 555])</li> </ul>
			I800 (800 Information services)
			I900 (900 Information services)
			I976 (976 Information services)
			<ul> <li>FPBALLOW (fraud prevention blocking allowed numbers)</li> </ul>
			<ul> <li>SPEC (special [repair office or maintenance])</li> </ul>
			<i>Note:</i> FPBALLOW holds the numbers for calls that are allowed with FPB, for example, 911.

# SACB (end)

# **Datafill example**

The following example shows sample datafill for table SACB.

#### MAP display example for table SACB

DIGITS	SACBCC	
411	LDAS	
555	TDAS	
611	SPEC	
800	1800	
900	1900	
976	1976	
911	FPBALLOW	

# SACODES

### Table name

Service Analysis Codes (SACODES) Table

# **Functional description**

Table SACODES contains data that command CAT (category) in the MAP (maintenance and administration position) in which directories GWSA and SAEDIT uses or refers. The data in the table maps a two-digit code to a different service analysis (SA) observational category. The service analysis operators use codes to classify the effectiveness or ineffectiveness of a call. When the operator enters the code through command CAT, the system identifies the code in table SACODES. The observational category that the code represents, appears on the SA MAP display.

A maximum of 90 numeric codes map to 90 observational categories. The codes and categories are in table SACODES. The administrator can add, delete or edit codes and categories.

Refer to the *DMS-100 Family Commands Reference Manual* for additional information on command CAT.

### Datafill sequence and meaning

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

# Table size

90 tuples

# Datafill

Datafill for table SACODES appears in the following table.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
SACODES		10 to 99	<i>Service analysis codes.</i> This field is the key field for table SACODES. Enter a number from 10 to 99.
CATEGORY		alphanumeric (a maximum of 10 characters)	<i>Category</i> . Enter the category. Each entry in field SACODES must have a different entry in field CATEGORY. The default is a blank string, ten spaces long.

# SACODES (end)

# Datafill example

Sample datafill for table SACODES appears in the following table.

#### MAP example for table SACODES

SACODES CATEGORY 10

OKNAS

# **Table history**

#### BCS35

Table SACODES was introduced in BCS35.

# SAIDOFC

### Table name

Speech Activated Intelligent Dialing Optionality Table

# **Functional description**

This table controls software optionality for two new features, Speech Activated Intelligent Dialing (SAID) Enhanced Signaling Protocol (AN0831) and Network Facility Access (NFA) Stringing of Digits (SOD) (AN0434). Adding tuples to table SAIDOFC activates these functionalities upon datafill.

# **Datafill sequence and implications**

There is no requirement to datafill other tables prior to table SAIDOFC. This table is active upon initial program load.

## Table size

Table SAIDOFC is statically allocated at 4 entries.

# Datafill

The following table lists datafill for table SAIDOFC.

### Field descriptions for table SAIDOFC

Field	Subfield or refinement	Entry	Explanation and action
SAIDOPTN		SAID_SOD ASSV_CONTEXT ASSV_QUERY	SAID option
		ASSV_PROGRAM	Enter the name of the service to activate.

# **Datafill example**

The following example shows sample datafill for table SAIDOFC.

### MAP display example for table SAIDOFC

SAIDOPTN		
SAID_SOD ASSV_CONTEXT		

In this example, SOD is allowed. Also, Assisted Service call context messages will be sent, depending on the datafill of tables ASSVFEAT and ASSVLINK.

# SAIDOFC (end)

However, Assisted Service query and program request messages will be ignored.

# Table history

# NA002

Table SAIDOFC was created.

### Table name

Service Assistant/In-charge Queueing Size Table

# **Functional description**

Table SAQSIZE associates a maximum queue depth with each team in a switch. This table allows the operating company to datafill the depth of the Service Assistance/In-charge (SA/IC) queue on a team basis. Initially, the table is empty.

The operating company can datafill the queue size of each team independently. The maximum queue size for each team is 16. If a team has a queue size of 16, a maximum of 16 SA/IC requests can be in queue for assistance for that team at one. If the maximum number of requests are in queue, further operator assistance requests result in a busy tone, indicating no assistance is available.

If the operating company datafills 0 (zero) as the entry in field SAQSIZE, against a team number, no assistance requests can be queued in that team. If this occurs, SA/IC queueing is in effect turned off.

If a team is not datafilled in table SAQSIZE, its queue size is assumed to be 1.

The key field is TEAMNO, which contains the valid key number in the office.

The first field is SAQSIZE. This is the maximum number of SA/IC requests that can be queued at one time. If the queue is full, no further SA/IC requests can be made until a slot opens up on the queue.

The second field is called SONALERT. This indicates when the sonalert is turned on at the IC position. This occurs when an assistance request is queued, an assistance request is deflected from the queue, or when the sonalert should not be activated in response to SA queuing.

# **Datafill sequence and implications**

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

This table must be datafilled after the office parameter, TOPS\_NUM\_TRAFFIC\_OFFICES in table OFCENG. This parameter specifies the number of teams that can be datafilled in field TEAMNO.

# Table size

0 to 30 tuples

# SAQSIZE (continued)

# Datafill

The following table lists datafill for table SAQSIZE.

#### **Field descriptions**

	Subfield or		
Field	refinement	Entry	Explanation and action
TEAMNO		see subfield	Team number. This field consists of subfield SAQ_KEY.
	SAQ_KEY	0 to 30	Service assistant/in-charge request queue key. Enter a number to represent the team number. Team number 0 (zero) is invalid.
SAQSIZE		0 to 16	Service assistant/in-charge request queue size. Enter a number that represents the maximum number of SA/IC (Service assistant/in-charge) requests that can be queued at one time. If the queue is full, no further SA/IC requests can be made until a slot opens in the queue.
SONALERT		0 to 16	Sonalert. Enter the threshold value that indicates when the sonalert should be activated. The sonalert is activated at the in-charge (IC) operator position if the number of requests in the IC team's queue is equal to or exceeds the threshold value. The sonalert threshold value cannot exceed the queue size for the team.

# **Datafill example**

The following example shows sample datafill for table SAQSIZE.

The example consists of three teams.

- Team 1 has an SA/IC request queue size of 8. This means only eight operator positions may be queued for assistance. After eight positions are in queue, the queue is full, and further general assistance requests can not be queued. Operators making these requests hear busy tone. The last field of the first tuple shows that, for team 1, the sonalert is activated on team 1's IC position when at least four assistance requests are in queue.
- Team 2 has the maximum SA/IC request queue size of 16. This means 16 operator positions may be queued for assistance. After 16 positions are in queue, the queue is full, and further general assistance requests can not be queued. Operators making these requests hear busy tone. The sonalert

### SAQSIZE (end)

threshold field is datafilled as 0 (zero). This means that, for team 2, the sonalert is not activated due to queued assistance requests. The sonalert can still be activated for other conditions that can arise during call traffic such as centralized automatic message accounting (CAMA) suspension, 25% controlled traffic, and others.

• Team 3 has a queue size of 0 (zero). This effectively turns off SA/IC queueing for a team. If an SA/IC is not immediately available, the requesting operator hears busy tone.

#### MAP display example for table SAQSIZE

	TEAMNO	SAQSIZE	SONALERT	
	1	8	4	
	2	16	0	
$\langle$	3	0	0	

# SASPEC

### Table name

Service Analysis Specification Table

# **Functional description**

Table SASPEC defines the selection standards of calls that require analysis for the Automatic Service Analysis (ASA) system.

# **Datafill sequence and meaning**

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

### Table size

0 to 50 tuples

### Datafill

Datafill for table SASPEC appears in the following table.

#### Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
SASPIND		numeric (1 to 50)	Service analysis specification indicator This field is the key to table SASPEC. Enter a numeric value to specify the service analysis specification indicator.
SG		GW	<i>Signaling group</i> Enter GW to specify the signaling group that applies for Automatic Service Analysis (ASA).
ICSELTYP		ANY, CCT, or TT	Incoming call selection type Enter data in this field to specify the incoming call selection type. The description appears in the following list:
			• If any call can proceed through, enter ANY.
			<ul> <li>If selection by circuit is a requirement, enter CCT and datafill refinements GROUP and EXTERN.</li> </ul>
			<ul> <li>If selection by signaling type is a requirement, enter TT.</li> </ul>

# **SASPEC** (continued)

Field	Subfield or refinement	Entry	Explanation and action
GROUP		alphanumeric (1 to 16 characters)	<i>Trunk group</i> Enter data in this field if the value in field ICSELTYP is CCT.
			Enter a character string to specify a trunk group.
EXTERN		numeric (0 to 9999)	<i>External circuit number</i> Enter data in this field if the value in field ICSELTYP is CCT.
			Enter a numeric value to specify the external circuit number. If an external circuit number is not a requirement, leave this field blank.
OGSELTYP		ANY, CCT, or TT	<i>Outgoing call selection type</i> Datafill this field to specify the outgoing call selection type. The description of this process appears in the following list:
			• If any call can proceed through, enter ANY.
			<ul> <li>If selection by circuit is a requirement, enter CCT and enter data in refinements GROUP and EXTERN.</li> </ul>
			<ul> <li>If selection by signaling type is a requirement, enter TT.</li> </ul>
GROUP		alphanumeric (1 to 16 characters)	<i>Trunk group</i> Enter this field if the value in field ICSELTYP is CCT.
			Enter a character string to specify a trunk group.
EXTERN		numeric (0 to 9999)	External circuit number Enter data in this field if the value in field ICSELTYP is CCT.
			Enter a numeric value to specify the external circuit number. If an external circuit number is not a requirement, leave this field blank.

### Field descriptions (Sheet 2 of 4)

# **SASPEC** (continued)

## Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
DIGSEL		ANY or SEL	<i>Digit selection type</i> Enter data in this field to specify the digit selection type. The description of this process appears in the following list:
			• If digit selection does not occur, enter ANY.
			<ul> <li>If selection is a requirement, enter SEL. Enter refinements ICOFFTYP, OCOFFTYP, and DIGITS. This option is available to offices with the optional digit selection feature package, NTXU16.</li> </ul>
ICOFFTYP		NATL, INTL, or TIEROUTE	Incoming call connected office type selection Enter data in this field if the value in field ICSELTYP is CCT. The description of this process appears in the following list:
			<ul> <li>Enter NATL if the incoming call that connects the office type is national.</li> </ul>
			• Enter INTL if the incoming call that connects the office type is international.
			• Enter TIEROUTE if the incoming call that connects the office type is tie route.
OCOFFTYP		NATL, INTL, or TIEROUTE	Outgoing call connected office type selection Enter data in this field if the value in field ICSELTYP is CCT. Entry values for this field appear in the following list:
			• Enter NATL if the outgoing call that connects to office type is national.
			<ul> <li>Enter INTL if the outgoing call that connects to office type is international.</li> </ul>
			• Enter TIEROUTE if the outgoing call that to connects office type is tie route.

# SASPEC (end)

Field	Subfield or refinement	Entry	Explanation and action
DIGITS		numeric 1 to 18 digits (0 to 9, B, or C)	<i>Digits</i> Enter data in this field if the value in field ICSELTYP is CCT.
			Enter one or more digits.
USRCLSS		ANY, SUBSCRIBER, or OPERATOR	<i>User class</i> Datafill this field to specify call selection based on the common calling party category of the call. The description appears in the following list:
			Enter ANY if a user class selection is not a requirement.
			Enter SUBSCRIBER if subscriber based call selection applies. This option is available to offices with the optional user class feature package, NTXU16.
			Enter OPERATOR if operator based call selection applies. This option is available to offices with feature package NTXU16.

#### Field descriptions (Sheet 4 of 4)

# Datafill example

Sample datafill for table SASPEC appears in the following example.

#### MAP example for table SASPEC

SASPIND SG 1 GW ANY ANY ANY SUBSCRIBER 2 GW CCT ISUP2W TT C7 ANY OPERATOR 3 GW TT R1 CCT N5OG 8 INTL NATL A123 ANY 4 GW CCT TUP2W 1 ANY INTL NATL 12 ANY 5 GW ANY TT TUP ANY SUBSCRIBER 6 GW TT C7 TT C7 INTL INTL 444 ANY 7 GW CCT R1IC 2 CCT R1OG 4 NATL NATL 555 ANY

### Table history BCS36

Table SASPEC was introduced according to feature AE1125.

# SATOVER

### Table name

Double Satellite Override Table

## **Functional description**

Table SATOVER lists common language location identifiers (CLLI). The CLLI belong to trunk groups connected to a distant office through a satellite link. These trunk groups connect to each other.

An incoming trunk group receives signals through a satellite link. The system does not normally permit trunk group to connect to an outgoing trunk group that transmits signals through satellite. Table SATOVER uses an override field to define when the connection can occur. An attempt to create a connection of this type provides access to table SATOVER. If the trunk groups do not connect to a distant end through a satellite link, access to this table does not occur.

# **Datafill sequence and meaning**

You must enter data in table CLLI before you enter data in table SATOVER.

### Table size

0 to 8192 tuples

The maximum size of this table is 8192 tuples. The highest ADNUM value of a CLLI determines storage for table SATOVER. The highest ADNUM value rounds to the nearest multiple of 32.

# SATOVER (continued)

# Datafill

Datafill for table SATOVER appears in the following table.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROM\$TO		see subfields	From CLLI to CLLI. This field contains subfields CLLIA and CLLIB.
	CLLIA	alphanumeric (1 to 16 characters) or ALL	First from or to CLLI. Enter the CLLI of a trunk group that connects to the distant office through a satellite link. This CLLI must appear as an entry in table CLLI.
			Allow trunk groups that connect to the distant office through a satellite link the following condition. Allow these trunk groups to connect to a specified trunk group that also connects to the distant office through a satellite link. If this condition occurs, enter ALL in this field and enter data in table CLLI to add the CLLI value ALL.

# SATOVER (end)

Field	Subfield or refinement	Entry	Explanation and action
	CLLIB	alphanumeric (1 to 16 characters) or ALL	Second from or to CLLI. Enter the CLLI of a trunk group that connects to the distant office through a satellite link. This CLLI must appear as an entry in table CLLI. The entry ALL is not correct for this field.
OVERRIDE		Y or N	<i>Override.</i> Enter Y if a double satellite connection can occur. Enter N if a double satellite connection cannot occur. If the two CLLIs do not appear in the table, the default value is N.
			In general, a Y entry overrides an N entry. Entries with an override of N do not occur because N is the default. These entries do not occur because the table does not contain two CLLIs. The connection can occur if the same two CLLIs appear two times in the table. If one of the CLLIs contains an override of Y and the other contains an override of N, the connection occurs. This connection agrees with the last record entry.
			Other entries that contain the value ABCD do not determine if connections to or from ABCD occur. This condition occurs if field CLLIA contains the value ALL, field CLLIB contains the value ABCD, and field OVERRIDE contains Y.

# Datafill example

Datafill for table SATOVER appears in the following example.

### MAP example for table SATOVER

$\left( \right)$	FROM\$TO	OVERRIDE	
	ALL VCR01CAN	Y	

### Table name

Service Analysis Users Table

# **Functional description**

Switching units that have feature package NTX065 (Service Analysis) require table SAUSERS. Table SAUSERS records switching unit-dependent data for each service analysis user. Table SAUSERS identifies the MAP (maintenance and administration position) location. Table SAUSERS provides monitor information associated with each service analysis.

Service analysis assignment of the external trunk number and the code of the trunk group can occur. Service analysis assignment occurs when the monitored connection is a dedicated local trunk on a DMS-300 Gateway switching unit.

A monitored connection can be a correct local or remote directory number (DN), that is not on a DMS-300 Gateway switching unit. In this occurrence, the system requires the following information:

- a correct local or national DN, with prefix digits
- a correct local direct DN dialback
- a pretranslator name for the local or national DN
- the serving numbering plan area (NPA) code entered in the pretranslator
- memory that the system allocates for the maximum number of ten local or remote monitor connections required for service analysis

The local billing DN entries in field BILLDN allow entry and validation of variable length DNs (VARDN). The VARDN supports the Universal DN format, which uses a maximum of 15 digits.

The remote monitor data in table SAUSERS includes field PIC. Field PIC contains the abbreviated name of a carrier. The operator uses field PIC when the dialback connection occurs over an outgoing access to carrier (ATC) trunk. The default value is NOCAR. Entry of value NOCAR occurs in field PIC when the dialback connection does not occur over an ATC trunk. The operator enters the abbreviated name of the carrier. Correct PIC names are the names entered in table OCCNAME.

Table SAUSERS defines the value DFLT as the default value for field MONMODE.

### **SAUSERS** (continued)

#### **Table initialization**

Table control initializes the ten entries in table SAUSERS with the default values. Table control uses the default values that appear in the following table, "SAUSERS".

#### Default values in table SAUSERS

Field name	Value
USER	\$
MONMODE	DFLT

# **Datafill sequence and meaning**

Enter data in tables PICNAME and OCCNAME before you enter data in table SAUSERS.

# Table size

10 tuples

The system allocates memory for the maximum number of local or remote monitor connections assigned for service analysis. The maximum number of local or remote monitor connections is 10.

### Datafill

Datafill for table SAUSERS appears in the following tables.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Description
KEY		0 to 9	<i>Key</i> . Enter the index in table SAUSERS. Entries out of this range are correct.
USER		alphanumeric (1 to 8 characters)	<i>User.</i> Enter the login identifier of the service analysis user.
SAMODATA		see subfields	Service analysis monitor data. This field contains subfields MONMODE, CLLI, EXTERN, PIC, DBKDN, BILLDN, SNPA, and PRTRN. The subfields that apply depend on the monitor connection type.

### **SAUSERS** (continued)

#### **Default monitor connection**

If the monitor connection is a default for a tuple that is not in use, the datafill for field MONMODE appears in the following table.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Description
	MONMODE	DFLT	Monitor mode. Enter DFLT for the MONMODE field. If field MONMODE contains DFLT, you do not need to enter data in other subfields. See tables Table, "Field descriptions for conditional datafill" on page -839 and Table, "Field descriptions for conditional datafill" on page -840 for the entry of data in other entries.

#### Local dedicated trunk monitor connection

If the monitor connection is a local dedicated trunk on a DMS-300 Gateway switching unit, enter data in fields MONMODE, CLLI and EXTERN. The datafill for these tables appears in the table.

#### Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Description
	MONMODE	LOCL	Monitor mode. Enter LOCL for the monitor mode.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code of the trunk assigned to service analysis in table CLLI.
	EXTERN	0 to 9999	External trunk number. Enter the external trunk number of the trunk assigned to service analysis.

#### Directory number trunk monitor connection

The monitor connection can occur as a correct local or remote DN that is not on a DMS-300 Gateway switching unit. If this condition occurs, enter data in

# **SAUSERS** (continued)

fields MONMODE, PIC, DBKDN, BILLDN, SNPA, and PRTRN. The datafill for these field appears in the following table.

Field	Subfield or refinement	Entry	Description
	MONMODE	REM	Monitor mode. Enter REM for the monitor mode.
	PIC	vector to a maximum of 16 characters	Primary inter-LATA carrier. Enter the PIC for a remote dialback connection over an outgoing ATC trunk. The carrier defines the PIC. Enter NOCAR for other outgoing trunk type. Entries must match the entries in table OCCNAME.
	DBKDN	vector (to a maximum of 18 digits)	Dialback directory number. Enter the 7-digit DN if the dialback DN is local. Enter the 10-digit DN if the dialback DN is direct distance dialing (DDD). If required, add the prefix digits.
	BILLDN	vector to a maximum of 15 entries (N, 0 to 9, B, C, D, E, F)	Billing directory number. Enter the local DN where a DDD dialback charge occurs. This field allows entry of variable-length local billing DNs when the Universal DN system is active in office parameter ACTIVE_DN_SYSTEM.
	SNPA	vector to a maximum of 7 entries (0 to 9 and A to F)	Serving numbering plan area. Enter the NPA the system uses to translate the dialback DN.
	PRTRN	alphanumeric (1 to 4 characters) or NPRT	Pretranslator name. If pretranslation of the dialback DN is a requirement, enter the pretranslator name. Enter NPRT if pretranslation of the dialback DN is not a requirement.

#### Field descriptions for conditional datafill

# **Datafill example**

Datafill for table SAUSERS appears in the following example.

# SAUSERS (end)

#### MAP example for table SAUSERS

```
KEY USERSAMODATA0 OPERATORLOCL HSET 11 REMOTE1REM MCI 14169671111 5258321 613 P621
```

# Table history

#### NA005

The following changes were made to table SAUSERS:

- The value for field BILLDN was changed to allow for variable-length billing DNs in NA005.
- The value for field SNPA was changed, to allow for variable-length billing DNs in NA005.

# SBSRMINV

#### ATTENTION

This table applies to new or modified content for SN09 (DMS) that is valid through the current release.

### Selector Bank Subsystem Resource Manager Inventory

SBSRMINV supports the CSVS architecture on the MTX. The SBSRMINV table provides information about voice span connections between Selector Bank Shelves (SBS) under the Enhanced Base Station Controller's (EBSC) Control Node and ICP/DTC/SPM trunks at the MTX. A tuple from this table associates SBS voice trunks with MTX voice trunk groups and ICP/DTC/SPM spans. The information in this table is used by the CMBSMOA&M and call processing entities.

## **Datafill sequence and meaning**

The following tables must be datafilled before Table SBSRMINV:

- Table TRKMEM (see note)
- Table NOISBSC

**Note:** Do NOT change the PM span in a TRKMEM tuple when the PM span is being used in table SBSINV/SBSRMINV. There is no table control check being enforced to block this change. Proceeding with this change causes inconsistent datafill between tables SBSINV/SBSRMINV and TRKMEM. This may result in calls failing due to trunk mismatch between SBSINV/SBSRMINV and TRKMEM trunk assignments.

### Table size

560 tuples (280 per BSC)

# Datafill

The following table lists Field descriptions and datafill for table SBSRMINV.

*Note:* In the Field descriptions table, subfields and refinements are shown in italic typeface.

### **Field descriptions**

Field	Entry	Explanation and action
SBSMRKEY		Selector Bank Subsystem Resource Manager Key
		This is a two part key. It is comprised of subfields BSCNUM and SBSNUM.
BSCNUM	0 to 15	Base Station Controller NUMber
(subfield of SBSMRKEY)		Value range 0 to 15 indicates that up to 16 BS can be datafilled in this table. However, the maximum number of supported BSCs per MTX is two.
		This subfield indicates a BSC number used as EBSC in Nortel CDMA systems. This is the first part of the key of table SBSRMINV.
SBSNUM	0 to 279	Selector Bank Subsystem NUMber
(subfield of SBSMRKEY)		Indicates an SBS shelf ID. This is the second part of the key of table SBSRMINV.
TRUNKGRP	A string of	Trunk Group
	characters containing the CLLI (Common Language Location Identifier) value from table TRKMEM.	This is a string field that indicates the CLLI name of the trunk member as datafilled in table TRKMEM.

# **Field descriptions**

Field	Entry	Explanation and action
SLTNO	Vector of up	SLoT Number
	to 8 elements. Each element of the vector contains up	This vector field indicates the voice trunk span connections between a SBS and ICPs/DTCs/SPMs. The explanation for the vector elements is as follows:
	to 4 values: (w x y z)	<i>SLOTNO</i> : Slot number: This field indicates one of the 8 ports available on an SBS.
	where w is the SBS slot number, x is the PM type, y is the PM number, and z is the PM circuit number.	<i>PMSPAN</i> : PM span: This vector element is comprised of PM type, PM number and PM span where PM stands for Peripheral Module.
		<i>PMTYPE</i> : Peripheral Module Type: This is the type of the MTX peripheral that is being connected to an SBS. These peripherals must be a DTC(Digital Trunk Controller), SPM(Spectrum Peripheral Module), or ICP (Intelligent Cellular Peripheral).
		<i>DTCNO</i> : Digital Trunk Controller Number: DTC number, the one in the LTCINV table to which the SBS is connected.
		<i>DTCCKTNO</i> : DTC Circuit Number: DTC span number, which is one of the pside T1s available in the LTCPSINV table for the DTC number specified.
		<i>SPMNO</i> : Spectrum Peripheral Module Number: SPM number, the one in the MNNODE table to which the SBS is connected.
		SUBFIELDS: SLOTNO, PMSPAN
SLOTNO (subfield of SLTNO)	0 to 7	Slot Number This field indicates one of the 8 ports available on a SBS.
PMSPAN	Vector	PM Span
(subfield of SLTNO)	containing PM type, PM number and PM circuit number.	This vector element is comprised of PM type, PM number and PM span where PM stands for Peripheral Module.
		SUBFIELDS: PMTYPE, DTCNO, SPMNO, ICPNO, SPANNO

# **Field descriptions**

Field	Entry	Explanation and action
PMTYPE (Subfield of PMSPAN)	DTC, SPM, ICP	Peripheral Module Type
		This is the type of the MTX peripheral that is being connected to an SBS. These peripherals must be a DTC (Digital Trunk Controller), SPM (Spectrum Peripheral Module), or ICP (Intelligent Cellular Peripheral).
DTCNO	eld of	Spectrum Peripheral Module Number
(Subfield of PMSPAN)		SPM number, the one in the MNNODE table to which the SBS is connected.
(If PMTYPE is DTC)		which the SDS is connected.
ICPN0 0 to 255	0 to 255	Intelligent Cellular Peripheral Number
(Subfield of PMSPAN) (If PMTYPE is ICP)		ICP number, the one in the LTCINV table to which the SBS is connected.
SPANNO	0–19 (for	Span number
(Subfield of PMSPAN)	DTC and ICP), 0-185 (for SPM)	For DTC: DTC span number, which is one of the p-side T1s available in the LTCPSINV table for the DTC number specified.
		For SPM: SPM carrier circuit number, which corresponds to CCTNO field in table MNHSCARR. CCTNO is the carrier circuit number assigned to the carrier.
		For ICP: ICP span number, which is one of the p-side links in the LTCPSINV table.

# **Error messages**

The following table lists the error messages for specific datafill conditions.

### Error messages for datafill conditions

Datafill condition	Error message
If a user attempts to add a tuple with BSC number that is not supported in our systems (more than 1)	Currently table SBSRMINV only supports 2 BSC(s)
If a user attempts to add a tuple using a valid supported BSC that is not datafilled yet in table <i>NOISBSC</i> .	BSC must be datafilled in table NOISBSC
If a user attempts to add a tuple whose key (BSC and SBS number) is already datafilled in table SBSRMINV.	Tuple is currently datafilled in table SBSRMINV
If a user attempts to add a SBSRMINV tuple whose key is currently datafilled in table SBSINV.	The same key cannot be datafilled in both tables SBSRMINV and SBSINV at the same time. Tuple is currently datafilled in table SBSINV
If a user attempts to add or change a tuple containing a CLLI (in TRUNKGRP field) which is not datafilled in table TRKGRP	TRUNKGRP specified does NOT exist in table TRKGRP.
If a user attempts to add or change a tuple containing a trunk group that is not a MTX trunk.	Only MTX trunks are allowed.
If a user attempts to add or change a tuple containing a trunk group that is not a voice trunk.	Only voice trunks are allowed.
If a user attempts to add or change a tuplecontaining a trunk group that is not datafilled intable TRKSGRP.	TRUNKGRP specified does NOT exist in tableTRKSGRP.
If a user attempts to add or change a tuple containing a trunk group which its datafill in table TRKSGRP does not have a specified STD signalling.	TRKSGRP for TRUNKGRP specified must have STD signalling.

## Error messages for datafill conditions

-	_
Datafill condition	Error message
If a user attempts to add or change a tuple containing a trunk group already datafilled in other tables (SBSINV, SBSRMINV, PARTDATA, BSCDEST, or NTRKMEM).	TRUNKGRP x is used already in table SBSINV, SBSRMINV, PARTDATA, BSCDEST, or NTRKMEM. (where x is trunk group CLLI name).
If a user attempts to add or change a tuple when the SVTC (Simultaneous Voice Traffic Capacity) SOC usage is over its limit. This condition is only applicable to DTCs. The SOC name is SVTC000x	where x is could be a number from 1 to 7. ERROR: This operation on SBS x cannot proceed due to these SOC option(s): SVTC000x: <usage information="">. (where x represents the SBS device number)</usage>
If a user attempts to add or change a tuple to have SPMs when the MSPM0001 (SBS to SPM Interface) SOC is turned off.	SOC MSPM0001 must be ON to datafill SPM in table SBSRMINV.
If a user attempts to add or change a tuple to have no SLTNO information(i.e. empty vector).	There must be at least 1 Selector Card Interface (SCI) slot datafilled.
If a user attempts to add or change a tuple to have repeated slot numbers.	Repeated Selector Card Interface(SCI) slot number x. (where x represents the repeated slot number)
If a user attempts to add or change a tuple to have different PM types in the slot vector.	PMs in slot information must be of the same type.
If a user attempts to add or change a tuple to have repeated spans within the tuple itself.	Repeated spans within the tuple. W number = x, Span number = y. (where W can be any of the following values: DTC, SPM, or ICP; x is the PM number, and y is the carrier/span number)
If a user attempts to add or change a tuple to have repeated spans between tuples within the same table.	Repeated spans within table SBSRMINV. BSC number = $u$ ,SBS number = $v$ ,W number = $x$ ,Span number = $y$ . (where u is the value of the BSC, v is the value of the SBS, W can be any of the following values: DTC, SPM, or ICP; x is the PM number, and y is the carrier/span number.)

#### Error messages for datafill conditions

Datafill condition	Error message
If a user attempts to add or change a tuple to have repeated spans between tables SBSRMINV and SBSINV.	W x, Span y is already datafilled in table SBSINV. (where W is the PM type (DTC, SPM, ICP); x is the PM number, and y is the carrier/span number.)
If a user attempts to add or change a tuple to have span for which the channels datafilled in table TRKMEM do not belong to the same trunk group in table TRKGRP.	W x, Span y has a channel belonging to trunk group A in table TRKMEM. Channels in PM span specified must be in trunk group B. (where W is the PM type (DTC/ICP/SPM), x is the PM number, y is the carrier/span number, and A and B are trunk CLLIs.)
If a user attempts to add or change a tuple to have span which is not datafilled in table TRKMEM.	At least 1 channel must be datafilled in TRKMEM for PM W, Span x. (where W is the PM type (DTC/SPM/ICP) and x is the span number associated with the selected PM.)
If a user attempts to add or change or delete a tuple with spans that are not offline.	Span is NOT offline. W number = x, Span number = y. (where W is the PM type (DTC/SPM/ICP), x is the PM number, and y is the carrier/span number.)
If a user attempts to add or change a tuple to have an out of order list of slot numbers.	SCI Slot Numbers (SLOTNO) must be datafilled sequentially, starting from 0.

## **Datafill example**

The figure that follows provides an example of datafill for table SBSRMINV.

### **SBSRMINV** datafill example

# Table history

SN09 (DMS)

Table SBSRMINV added to DMS-100 documentation for Q01063949.

## **SCAICOMS**

#### ATTENTION

This table applies to new or modified content for SN09 (DMS) that is valid through the current release.

### **Table name**

Switch/Computer Application Interface Communications

### **Functional description**

Table SCAICOMS defines a linkset for use by a switch/computer application interface (SCAI) group. This table allows the configuration of SCAI links on a multiprotocol controller (MPC) card. The MPC, link, calling address, and a closed user group protocol for each link must be datafilled. This table allows the configuration of SCAI links on an MPC as well as on an Ethernet interface unit (EIU).

The linksets can either be X.25 linksets or transmission control protocol (TCP) linksets. A TCP linkset uses the Internet protocol (IP) address of the customer. The TCP/IP uses a TL1 interface to provide connectivity between the DMS-100 switch and a business computer. The TCP/IP uses a local area network (LAN) and internet router. The EIU provides LAN connectivity to the DMS-100 switch. Each TCP connection matches to a linkset.

### **Datafill sequence and implications**

The following tables must be datafilled before Table SCAICOMS:

- MPC
- MPCLINK

### Table size

0 to 352 tuples

*Note:* Up to 256 of the total 352 tuples can have X.25 linksets; up to 96 tuples can have TCP linksets.

# Datafill

The following table lists datafill for Table SCAICOMS.

## **Field descriptions**

Field	Subfield	Entry	Explanation and action
LINKSET		alphanumeric (up to 16 characters)	Link set name. Enter the name of the linkset.
SCAILNKS		see subfield	SCAI links. This field contains subfield LNKSEL.
	LNKSEL	X25, TCP	Link set selector. Enter the transport protocol used for the linkset. Field LNKSEL includes subfields CHNLS, MINALARM, and MAXALARM.
			Enter X25 to specify an X.25 CompuCALL link and see fields DEVICE, MPCNO, LINK, REMDA, PROTOCOL, and LINKTYPE.
			Enter TCP for the CompuCALL Transport Enhancements feature, and see subfields IPADDR and MULTIMSG.
	CHNLS	1 to 8	Channels. If LINKSEL = X25, enter the number of link selectors within a linkset. This field includes subfield DEVICE.
	MINALARM	MN, MJ, CR	Minimum alarm. If LINKSEL = X25, enter the alarm status for the minimum alarm.
	MAXALARM	MN, MJ, CR	Maximum alarm. If LINKSEL = X25, enter the alarm status for the maximum alarm.
	DEVICE	MPC	Device. If LINKSEL = X25, enter MPC for the device that supports the controller. (Only the MPC is supported.) This subfield includes refinements MPCNO, LINK, REMDNA, PROTOCOL, and LINKTYPE.

## Field descriptions

Field	Subfield	Entry	Explanation and action
	MPCNO	0 to 255	MPC number. If DEVICE = MPC, enter the MPC number used. This MPC number must be defined in table MPC.
	LINK	2 or 3	Link number. If DEVICE = MPC, enter the MPC link that is used. The link number must be datafilled in Table MPCLINK.
	REMDNA	0 to 9 (up to 15 digits)	Calling data network address. If DEVICE = MPC, enter the calling data network address.
	PROTOCOL	0 to 255	Protocol. If DEVICE = MPC, enter any relevant protocol data.
	LINKTYPE	SVC, PVC	Type of virtual circuit. If DEVICE = MPC, enter SVC (switched virtual circuit).
	IP_ADDR	0 to 255	IP address. If LINKSEL = TCP, enter the IPADDR of the customer; for example, ### ### ### ###, where # is a digit ranging from 0 to 9 and a space is entered after every 3 digits.
			If only one IP address is required, cancel the second prompt for an IP address by typing a \$ character.
	MULTIMSG	Y or N	Multiple message. If LINKSEL = TCP, enter Y for MULTIMSG. Otherwise, enter N.
OPTIONS		NONMS, NMSPVT	Options. This field identifies the option name. The addition of options is for each linkset. Enter NONMS or NMSPVT. The value for options not selected is \$ (not present).
		Present or Not Present	No network message service. Block network messages for this linkset. The value NONMS indicates the option is present. The value \$ indicates the option is not present.

# **Field descriptions**

Field	Subfield	Entry	Explanation and action
		Present or Not Present	NMS private. This option identifies VMS application interfaces that send private DNs across the link. The value NMSPVT indicates the option is present and the DMS switch tries to send a private DN across the link. The value \$ indicates the option is not present.
	DNASSOC	DNASSOC	DN ASSOC. This option indicates that the DN needs to be reassociated as a result of a RESTART/SWACT occurring on the switch.
	CONTAUD	see subfield	Continuity audit interval option. See subfields.
	AUDINTVL	1 to 720	Audit interval. This parameter allows the minutes for audit interval of the continuity test. If the value is zero, the switch does not prompt the next parameters.
	AUTOSVCA BORT	Y or N	AUTOSVCABORT. This parameter forces the physical X.25 linksets to be taken down when the buffer for the outgoing queue is exceeded when changing the BOOL to Y. The outgoing queue contains the SCAI data that is sent down the link. If this is not set to Y, then a SCAI301 log is generated and a message loss on other X.25 linksets may occur when the outgoing queue is exceeded causing a degradation of SCAI service.
	RESPTIME	1 to 30	Response time. This parameter allows provisioning of seconds the switch waits for a response from the host computer.
	NUMATMPT	1 to 10	Number of attempts. This parameter allows provisioning for maximum times the switch sends a continuity test message for a particular linkset.

#### **Field descriptions**

Field	Subfield	Entry	Explanation and action
	TERMINET	Y or N	Termination. This parameter allows provisioning for termination of a session.
	ENHASSOC	see subfield	Enhanced association. This option allows subscription to the ICM ACD DN Association Limit feature.
	NUMACDDN	1–100	Number of automatic call distribution directory numbers. The operating company chooses a value for the NUMACDDN parameter. If the end user provisions option ENHASSOC and the NUMACDDN parameter, the end user can associate up to the maximum value of the NUMACDDN parameter.

## **Datafill example**

The following example shows sample datafill for Table SCAICOMS.

### MAP display example for Table SCAICOMS

LINKSET	SCAILINKS
LINKSET1 X25 (MPC (3 2 12345678 3 1 128 0 SVC)\$)\$ MN	CRY (DNASSOC)\$
LINKSET2 X25 (MPC ( 2 2 66778834 3 1 128 0 SVC) \$)\$	MN MJ Y \$
TCP_LINKSET1 TCP 47 192 40 120 \$ N (DNASSOC '	?) \$

### Datafill related to ICM Message Waiting Activation/Deactivation

The following example shows sample datafill for Table SCAICOMS.

MAP display example for Table SCAICOMS

#### Datafill related to ICM ACD DN Association Limit

The following example shows sample datafill for Table SCAICOMS.

#### MAP example for Table SCAICOMS

FCP1	TCP	192	136	141	205	\$	Ν	(ENHA	SSC	DC	50	))	\$				
(251	X25	(MPC	C (0	3 00	0000	000	იიი	00000	9	9	9	9	SVC)	\$)	Ś	MN	CR

#### Datafill related to ICM Workqueue Re-Engineering

The following example shows sample datafill for Table SCAICOMS.

#### MAP example for Table SCAICOMS

```
TCPI TCP 192 136 141 201 $ N (CONTAUD 15 12 4 Y) $
X251 X25 (MPC (0 3 000000000000 9 9 9 9 SVC) $) $ MN CR
n (CONTAUD 15 12 4 Y) $
TCPI TCP 192 136 141 201 $ N (CONTAUD 15 12 4 Y) $
X251 X25 (MPC (0 3 000000000000 9 9 9 9 SVC) $) $ MN CR
N (CONTAUD 0) $
```

#### Datafill related to multiple IPADDR fields

The following example shows sample datafill for Table SCAICOMS.

#### MAP display example for Table SCAICOMS

LINKSET LNKSEL IPADDR IPADDR TCP\_AA TCP 47 150 19 1 47 102 3 4 MULTIMSG:N OPTION:CONTAUD AUDIT:N OPTION:\$ TUPLE TO BE ADDED TCP\_AA TCP(47 150 19 1) (47 102 3 4) \$ N (CONTAUD N)\$ ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT

The following example shows sample datafill for Table SCAICOMS, where the second IPADDR is not required.

#### MAP display example for Table SCAICOMS

LINKSET LNKSEL IPADDR IPADDR TCP\_BB TCP 47 10 3 2 \$ MULTIMSG:N OPTION:CONTAUD AUDIT:N OPTION:\$ TUPLE TO BE ADDED TCP\_BB TCP(47 10 3 2) \$ N (CONTAUD N)\$ ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT

Table history SN09 (DMS)

Added multiple IPADDR with feature A00009078.

#### SN04 (DMS)

Added parameter AUTOSVCABORT under Change Request Q00468788.

#### NA015

The ICM Logon Enhancements and Reengineering (59022453) feature adds option DNASSOC to table SCAICOMS.

#### NA014

The Increasing the Maximum Number of ICM Sessions (59016386) feature changes the maximum number of ICM sessions on TCP/IP links from 16 to 96. The feature also changes the number of tuples in the SCAICOMS table from 144 to 224.

### NA013

The ICM ACD DN Association Limit (59011953) feature adds option ENHASSOC to Table SCAICOMS. Option ENHASSOC has the NUMACDDN subfield.

### NA012

The ICM Workqueue Reengineering (59006731) feature added option CONTAUD to Table SCAICOMS. Option CONTAUD has the following subfields:

- AUDINTVL
- RESPTIME
- NUMATMPT
- TERMINET

#### NA011

ICM Message Waiting Activation/Deactivation (AU3192) added the following subfields to the OPTION field in Table SCAICOMS:

- NONMS
- NMSPVT

This release required the following changes:

- Added a datafill example related to ICM Message Waiting Activation/Deactivation.
- Updated the field description table.

#### NA008

This release made the following changes:

- Added TCP as a valid value for field LNKSEL.
- Added subfield IPADDR to field LNKSEL.

# SCAIGRP

### Table name

Switch Computer Application Interface Group Table

# **Functional description**

Table SCAIGRP stores all the switch computer application interface (SCAI) groups within a switch. SCAI groups are logical entities that are associated with a set of SCAI links and services. In BCS32, each SCAI group corresponds to a Meridian Digital Centrex (MDC) customer group.

SCAI groups are defined by operating companies. Each SCAI group has a password, network node identifier (ID) and business group ID (BGID). The password must be identified by users at the establishment of a session. The network node ID identifies the network node ID assigned to each SCAI group. It uniquely identifies a specific switch within a set of public or private switches. The BGID is used to map each business group to a SCAI group.

## **Datafill sequence and implications**

The following tables must be datafilled before table SCAIGRP.

- BGDATA
- SCAICOMS

The following tables must be datafilled after table SCAIGRP.

- SCAISVID
- LTDEF

## Table size

0 to 256 tuples

# SCAIGRP (continued)

## Datafill

The following table lists datafill for table SCAIGRP.

### Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCAIGNAM		alphanumeric (up to 16	Switch computer application interface group name
		characters)	Enter the name of the switch computer application interface (SCAI) group.
PASSWORD	alphanumeric		Password
		(up to 8 characters)	Enter the password assigned to the SCAI group. This password must be specified at any SCAI session association.
NETNODID		0 to 32 767	Network node identification
			Enter the network node identification for each SCAI group.
BGID		0 to 4 194 303	Business group identification
			Enter the location of the business group GRPNUM as identified in table BGDATA.
			<i>Note:</i> Only local GRPNUMs in table BGDATA can be used here.
OPTIONS		see subfields	Options
			This field consists of subfields OPTIONS and LINKSET.

## **SCAIGRP** (continued)

#### Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
		•	•
	OPTIONS	LINKSET	Options
		FRANCE	The options list for this table is a vector of one multiple. Enter LINKSET to assign linksets to a SCAI group. Enter FRANCE to assign the NDI and NDS Mapping to ICM/CompuCALL feature to a SCAI group.
	LINKSETS	alphanumeric	Link sets
		(up to 16 characters)	Enter up to eight link sets owned by a SCAI group that is defined in table SCAICOMS. Datafill this optional parameter only for groups using X.25 links. If less than eight link sets are required, end the list with a \$ (dollar sign).

## **Datafill example**

The following examples shows sample datafill for table SCAIGRP.

### MAP display example for table SCAIGRP

	SCAIGNAM PASS	SWORD NETNODID	BGID	OPTIONS
(LINKS)	COMK ET ( SIDE0_L1)	ABCD 1 (SIDE1_L1) \$)	 1	

#### MAP display example for table SCAIGRP

MYSCAIGRP	PASS	1	NATIONAL	1	OPTIONS
(LINKSET ( TCP2 ) \$)	(FRANCE)	\$			

## SCAIGRP (end)

## Table history MMP14

Added value FRANCE to subfield OPTIONS to support activity 59019157.

# SCAILNKS

### Table name

Switch Computer Application Interface Link Table

## **Functional description**

Table SCAILNKS defines sets of primary rate access (PRA) D-channels that can be associated with Automatic Call Distribution (ACD) operator positions using table ACDTKMEM.

## **Datafill sequence and implications**

Table LTMAP must be datafilled before table SCAILNKS.

The D-channel must be defined in table LTMAP before datafilling table SCAILNKS.

ACD operator positions must be defined in table ACDTKMEM before being entered in table SCAILNKS.

If option SCAIRTE is datafilled in table SCAILNKS, table OFRT or table IBNRTE must be datafilled for the option before datafilling table SCAILNKS.

### Table size

1 to 32 tuples

## Datafill

The following table lists datafill for table SCAILNKS.

#### Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
LINKSET		alphanumeric (up to 8 characters) or SCAIDEF	Link set
			Enter up to 32 link set names, or enter SCAIDEF (switch computer application interface default). If less than 32 link sets are required, end the list with a \$ (dollar sign).
			The default value for this field is SCAIDEF.
DCHNLS		see subfield	D-channels
			This field consists of subfield PMTYPE. Up to four D-channels can be entered. If less than four channels are required, end the list with a \$ (dollar sign).

# SCAILNKS (continued)

### Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PMTYPE	DTCI	Peripheral module type
			Enter DTCI (ISDN digital trunk controller).
DTCINO		0 to 511	ISDN digital trunk controller number
			Enter the DTCI number of the D-channel.
DTCICTNO		0 to 19	ISDN digital trunk controller circuit number
			Enter the DS-1 circuit number used for the D-channel.
DTCICTTS		1 to 24	ISDN digital trunk controller circuit time slot
			Enter the time slot of the DS-1 circuit number used for the D-channel.
OPTIONS		see subfield	Options
			This field consists of subfield OPTION. Up to two options can be datafilled. If less than two options are required, end the list with a \$ (dollar sign).
	OPTION	SCAIRTE	Option
		BOCTIMEor \$	If the entry in field LINKSET is SCAIDEF, enter SCAIRTE and datafill refinements TABNAME and INDEX.
			BOCTIME is optional. Datafill refinement TIME.Otherwise, enter \$.
			The default value for this subfield is SCAIRTE.
TABNAME		IBNRT2	Table name
		IBNRT3 IBNRT4 IBNRTE OFRT2	If the entry in subfield OPTION is SCAIRTE, ter the table name that the translations routes to for the SCAIDEF tuple.
		OFRT3 OFRT4 OFRT or TOPS	Any entry outside the range indicated for this field is invalid.

## SCAILNKS (end)

#### Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		1 to 1023	Index
			If the entry in subfield OPTION is SCAIRTE, datafill this refinement. Enter the table route reference index number in the route to which translation routes.
TIME		1 to 16	Time
			If the entry in subfield OPTION is BOCTIME, datafill this refinement. Enter the validation time, in seconds, for a validation query initiated for a calling card number.

### **Datafill example**

The following example shows sample datafill for table SCAILNKS.

The example shows that SCAIDEF has one D-channel datafilled. The D-channel has an ISDN digital trunk controller (DTCI), the frame number is 2, the DS-1 circuit number is 7, and the time slot on the DS-1 circuit is 1. Option BOCTIME is specified with a value of 4 s of validation time for a calling card number validation query.

LNKSET1 has two D-channels datafilled. The first D-channel has a PMTYPE of DTCI, the frame number is 0, the DS-1 circuit number is 5, and the time slot on the DS-1 circuit is 10. The second D-channel has a PMTYPE of DTCI, the frame number is 0, the DS-1 circuit number is 6, and the time slot on the DS-1 circuit is 3.

#### MAP display example for table SCAILNKS

LINKSET DCHNLS OPTIONS SCAIDEF (DTCI 2 7 1) \$ (SCAIRTE OFRT 10) (BOCTIME 4) \$ LNKSET1 (DTCI 0 5 10) (DTCI 0 6 3) \$ \$

# SCAIPROF

### Table name

Switch Computer Application Interface Profile

## **Functional description**

Table SCAIPROF serves as a lookup table for switch computer application interface (SCAI) CompuCALL service profiles. A service profile is a set of CompuCALL messages and associated options that are available during a CompuCALL session.

Table SCAIPROF uses the linksets entered in table SCAICOMS and the subservice names in table SCAISSRV to make up a CompuCALL service profile. The key field is PROFKEY.

Both Residential Enhanced Services (RES) and Meridian Digital Centrex (MDC) event message sets cannot be subscribed to in the same SCAI profile in table SCAIPROF. If one has been datafilled, the other will be denied.

## **Datafill sequence and implications**

The following tables must be datafilled before table SCAIPROF:

- OFCOPT
- SCAISSRV
- SCAICOMS

### **Table size**

0 to 1792 tuples

The total number of linksets is 224 (128 X.25 linksets plus 96 TCP linksets) The maximum table size derives from the maximum number of service identities (8) for each linkset, multiplied by the number of linksets (224) that can be datafilled in table SCAICOMS.

*Note:* With NA014 release and up, the SCAIPROF table allows the user to add service profiles for all 96 transmission control protocol (TCP) tuples.

# SCAIPROF (continued)

## Datafill

The following table lists datafill for table SCAIPROF.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
PROFKEY		see subfields	Profile key. This field is a two-part key that identifies linkset and service profile combinations. Field PROFKEY consists of subfields LINKSET and SRVCID.
	LINKSET	alphanumeric (1 to 16 characters)	Linkset name. Enter one of the linkset names from table SCAICOMS. For example, enter LINKSET1.
	SRVCID	0 to 255	Service identity. Enter a service identity (ID) number. Up to eight service IDs can be entered for each linkset, but only one service profile can be used at any time. The service ID must be unique for each linkset and profile combination.
PROFILE		alphanumeric (1 to 16 characters)	Profile Enter subservice names from table SCAISSRV. This field represents the CompuCALL service profile. Up to eight service profiles can be configured for each linkset. A service profile cannot be datafilled with two subservice names from the same CompuCALL service category (for example, AEVENT1 and AEVENT2 that both derive from category ACDEVENT in table SCAISSRV). If less than six profiles are required, end the list with a \$ (dollar sign).

## **Datafill example**

The following example shows sample datafill for table SCAIPROF.

### **SCAIPROF** (continued)

MAP display example for table SCAIPROF

# **Table history**

#### NA014

This release changes the SCAIPROF table to allow the user to add service profiles for all of the 96 TCP tuples.

#### NA008

This release adds the default subservice names TPQC10\$, ICCM10\$, CTXEVENT10\$, and RESEVENT10\$ for subfield PROFILE.

#### NA006

This release increases the number of service profiles for each linkset from six to eight.

#### BCS35

Table SCAIPROF was introduced.

### **Supplementary information**

This section provides information on dump and restore procedures and the datafill procedure for existing SCAI groups for table SCAIPROF.

#### Dump and restore procedures

Tables SCAISSRV and SCAIPROF replace the function provided by tables SCAISRVC and SCAISVID. Manual entry of tables SCAISSRV and SCAIPROF is required for BCS35. All CompuCALL messages from BCS34 are grouped into categories for BCS35.

## SCAIPROF (end)

### **Datafill of existing SCAI groups**

The following steps are required to datafill existing SCAI groups:

- 1. Make a list of the linkset(s) owned by a SCAI group and the required CompuCALL messages assigned for the linkset(s).
- 2. If possible, find the subservice name(s) in table SCAISSRV that contain all the messages from step 1. The fixed subservices facilitate this procedure.
- 3. If messages from step 1 cannot be found in the existing subservice names in table SCAISSRV, new subservice or existing subservice names can be entered (or edited) into table SCAISSRV to include the additional messages.
- 4. Make a list of the subservice names, from steps 2 and 3, to be subscribed to by the SCAI group.
- 5. Enter the names of the linksets (step 1) and the list of subservice names (step 4) in table SCAIPROF.

# SCAISSRV

### Table name

Switch Computer Application Interface Subservices Table

# **Functional description**

Table SCAISSRV acts as a reference table for CompuCALL service categories. CompuCALL uses a switch-computer application interface (SCAI) link to provide DMS-100 switch services to applications on a subscriber host computer. One service is Intelligent Call Management (ICM). Table SCAISSRV includes a series of boolean values that indicate the CompuCALL messages provided for each subservice category. The key to Table SCAISSRV is Field SUBSERV.

Table SCAIPROF uses the subservice names defined in Table SCAISSRV. The subservice names build a service profile of the CompuCALL messages available to a subscriber linkset. A service profile is a set of CompuCALL messages available to a subscriber during a CompuCALL session.

## **Datafill sequence and implications**

There is no requirement to put data into other tables before table SCAISSRV.

### Table size

40 to 255 tuples. The minimum size includes fixed subservices.

# Datafill

The following table lists the fields, subfields, and data entry for table SCAISSRV.

Field descriptions for table SCAISSRV

Field	Subfield	Entry	Explanation and action
SUBSERV			
			Subservice names do not use the \$ (dollar sign). Current and future fixed subservice names use the \$. CompuCALL provides the following fixed subservice names: ACDEVENT11\$, ACDEVENT12\$, ACDEVENT1\$, ACDEVENT12\$, ACDEVENT15\$, ACDEVENT34\$, ACDEVENT35\$, ACDEVENT36\$, CALLINIT07\$, CTXEVENT07\$, CTXEVENT10\$, CTXEVENT07\$, CTXEVENT10\$, CTXEVENT35\$, DNQUERY07\$, ICCM10\$, ICCM13\$ RESEVENT07\$, RESEVENT10\$, RESEVENT07\$, RESEVENT10\$, RESEVENT13\$, RESOURCE11\$, RESOURCE35\$, ROUTING15\$, ROUTING34\$, ROUTING35\$, SCAI3WC07\$, SCAI3WC09\$, SCAI3WC14\$, SCAIMWTI13\$, SCAICC08\$, SCAICC09\$, SCAIMWTI07\$, TPAC12\$, TPAC13\$, TPAC36\$, TPCC08\$, TPCC34\$, TPCC35\$, TPQC10\$, CPGEVENT14\$
			For example, the fixed subservice names in 34\$ contain the equivalent BCS34 CompuCALL functions. The names in 35\$ contain all possible messages and functions available in BCS35.
			Table SCAIPROF can contain the subservice names if an SCAI group requires messages and subfields in a given CompuCALL service category.
SPROFILE		see subfield	Subservice profile contents. This field includes subfield CATEGORY.

### Field descriptions for table SCAISSRV

Field	Subfield	Entry	Explanation and action			
	CATEGORY	ACDEVENT, CALLINIT, CTXEVENT, DNQUERY, ICCM, RESEVENT, RESOURCE, ROUTING, SCAICC, SCAIMWTI, SCAI3WC, TPAC,	CompuCALL service category. Enter ACDEVENT.			
			DNQUERY, ICCM, RESEVENT,	DNQUERY, ICCM, RESEVENT,	DNQUERY, ICCM, RESEVENT,	Enter ACDEVENT (Automatic Call Distribution [ACD] line call event) and select subfields as shown in the "CATEGORY = ACDEVENT" section.
			Enter CALLINIT (call initiation) and select subfields as shown in the "CATEGORY = CALLINIT" section. CALLINIT is a default tuple for Meridian Digital Centrex (MDC) CompuCALL.			
		TPCC, TPQC, CPGEVENT	Enter CTXEVENT (MDC line call event) and select subfields as shown in the "CATEGORY = CTXEVENT" section.			
			Enter DNQUERY (directory number [DN] query) and select subfields as shown in the "CATEGORY = DNQUERY" section. DNQUERY is a default tuple for MDC CompuCALL.			
					Enter CompuCALL integration with Integrated Call Center Manager (ICCM) and select subfields as shown in the "CATEGORY = ICCM" section.	
			Enter RESEVENT (Residential Enhanced Services [RES] line call event) and select subfields as shown in the "CATEGORY = RESEVENT" section. RESEVENT is a default tuple for MDC CompuCALL.			
			Enter RESOURCE (resource) and select subfields as shown in the "CATEGORY = RESOURCE" section.			
			Enter ROUTING (custom call routing) and select subfields as shown in the "CATEGORY = ROUTING" section.			
			Enter SCAICC (SCAI call control) and select subfields as shown in the "CATEGORY = SCAICC" section.			

Field	Subfield	Entry	Explanation and action
			Enter SCAIMWTI (SCAI message-waiting indication) and select subfields as shown in the "CATEGORY = SCAIMWTI" section. SCAIMWTI is a default tuple for MDC CompuCALL.
			Enter SCAI3WC (SCAI three-way calling) and select subfields as shown in the "CATEGORY = SCAI3WC" section. SCAI3WC is a default tuple for MDC CompuCALL.
			For BCS36 and up, enter TPAC (third party agent control) and select subfields as shown in the "CATEGORY = TPAC" section.
			Enter TPCC (third party call control) and select subfields as shown in the "CATEGORY = TPCC" section.
			Enter TPQC (third-party queue control) and select subfields as shown in the "CATEGORY = TPQC" section. All parameters in category TPQC are required.
			Enter CPGEVENT and select subfields as shown in the "CATEGORY=CPGEVENT" section.

### Field descriptions for table SCAISSRV

## **CATEGORY = ACDEVENT**

If the entry in subfield CATEGORY is ACDEVENT, select the subfields as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

Field	Subfield	Entry	Explanation and action
		see subfield	Functions. This field includes subfield FUNCTION. You can select up to eleven functions. If you select less than eleven functions, end the list with a \$ (dollar sign).
	FUNCTION	AGTLGDIN,	Function. Enter CompuCALL messages.
		AGTLGDOUT, AGTNREADY, AGTREADY, CALLANSWR CALLOFFR, CALLQUED, CALLREL, AGTSETACT, EMKEVENT, LOBEVENT	Enter AGTLGDIN (agent logged in) and select subfields ACDGROUP, POSID, and select LOGINID as shown in the "FUNCTION = AGTLGDIN" section.
			Enter AGTLGDOUT (agent logged out) and select subfields ACDGROUP and POSID as shown in the "FUNCTION = AGTLGDOUT or AGTREADY" section.
			Enter AGTNREADY (agent not ready) and select subfields ACDGROUP, POSID, and WALKAWAY as shown in the "FUNCTION = AGTNREADY" section.
Γ			Enter AGTREADY (agent ready) and select subfields ACDGROUP and POSID as shown in the "FUNCTION = AGTREADY" section.
			Enter CALLANSWR (call answered) and select subfields CPADIGS, NCALLID, DEVICEID, ACDDN, CALLNGNO, CHARGENO, CALLTYPE, ORIGDN, PREVAPPL, HOSTCALD, ACDGROUP, and FWDPARTY as shown in the "FUNCTION = CALLANSWR" section.
			Enter CALLOFFR (call offered) and select subfields CPADIGS, NCALLID, ACDDN, CALLNGNO, CHARGENO, CALLTYPE, ORIGDN, PREVAPPL, HOSTCALD, ACDGROUP, DEVICEID, and FWDPARTY as shown in the "FUNCTION = CALLOFFR" section.

Field	Subfield	Entry	Explanation and action
			Enter CALLQUED (call queued) and select subfields CPADIGS, NCALLID, ACDDN, CALLNGNO, CHARGENO, CALLTYPE, ORIGDN, PREVAPPL, HOSTCALD, ACDGROUP, and FWDPARTY as shown in the "FUNCTION = CALLQUED" section.
			Enter CALLREL (call released) and select subfields NCALLID, RELTYPE, ACDDN, ACDGROUP, DEVICEID, and POSTCALL as shown in the "FUNCTION = CALLREL" section.
			Enter AGTSETACT (agent set action) and select subfields NTWSETACT, INTSTAT, and ENHWAC as shown in the "FUNCTION = AGTSETACT" section.
			Enter EMKEVENT (emergency key event) and select subfields NCALLID, AGTPOS, AGTDN, SUPRVPID, SUPRVDN, and AUXDN as shown in the "FUNCTION = EMKEVENT" section.
			Enter LOBEVENT (line of business call event) and select subfields NCALLID, AGTPOS, and LOBTIME as shown in the "FUNCTION = LOBEVENT" section.

### Field descriptions for category=ACDEVENT

## **FUNCTION = AGTLGDIN**

If the entry in subfield FUNCTION is AGTLGDIN, select the subfields as follows.

Field	Subfield	Entry	Explanation and action
	ACDGROUP	Y or N	ACD group. Enter Y (yes) to select the ACD group option. Otherwise, enter N (no).
	POSID	Y or N	Position ID. Enter Y to select the position ID option. Otherwise, enter N.
	LOGINID	Y or N	Login ID. Enter Y to select the login ID option. Otherwise, enter N.

### **FUNCTION = AGTLGDOUT or AGTREADY**

If the entry in subfield FUNCTION is AGTLGDOUT or AGTREADY, select the subfields as follows.

#### Field descriptions for function=AGTLGDOUT or AGTREADY

Field	Subfield	Entry	Explanation and action
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	POSID	Y or N	Position ID. Enter Y to select the position ID option. Otherwise, enter N.

### **FUNCTION = AGTNREADY**

If the entry in subfield FUNCTION is AGTNREADY, select the subfields as follows.

#### Field descriptions for function=AGTNREADY

Field	Subfield	Entry	Explanation and action
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	POSID	Y or N	Position ID. Enter Y to select the position ID option. Otherwise, enter N.
	WALKAWAY	Y or N	Walk away code. Enter Y to select walk away code option. Otherwise, enter N. This field is an ACD option, by default an entry is not made.

#### **FUNCTION = CALLANSWR**

If the entry in subfield FUNCTION is CALLANSWR, select the subfields as follows.

#### Field descriptions for function=CALLANSWR

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device ID. Enter Y to select the device ID option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	ACDDN	Y or N	ACD directory number. Enter Y to select the ACDDN option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N.
	CPADIGS	Y or N	Called party address digits. Enter Y to select the called party address digits option. Otherwise, enter N.

### Field descriptions for function=CALLANSWR

### FUNCTION = CALLOFFR

If the entry in subfield FUNCTION is CALLOFFR, select the subfields as follows.

### Field descriptions for function=CALLOFFR

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	ACDDN	Y or N	ACD directory number. Enter Y to select the ACDDN option. Otherwise, enter N.

### Field descriptions for function=CALLOFFR

Field	Subfield	Entry	Explanation and action
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device ID option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N.
	CPADIGS	Y or N	Called party address digits. Enter Y to select the called party address digits option. Otherwise, enter N.

### FUNCTION = CALLQUED

If the entry in subfield FUNCTION is CALLQUED, select the subfields as follows.

### Field descriptions for function=CALLQUED

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	ACDDN	Y or N	ACD directory number. Enter Y to select the ACDDN option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N.
	CPADIGS	Y or N	Called party address digits. Enter Y to select the called party address digits option. Otherwise, enter N.

#### Field descriptions for function=CALLQUED

#### **FUNCTION = CALLREL**

If the entry in subfield FUNCTION is CALLREL, select the subfields as follows.

#### Field descriptions for function=CALLREL

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	RELTYPE	Y or N	Release type. Enter Y to select the release type option. Otherwise, enter N.
	ACDDN	Y or N	ACD directory number. Enter Y to select the ACDDN option. Otherwise, enter N.

### Field descriptions for function=CALLREL

Field	Subfield	Entry	Explanation and action
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	POSTCALL	Y or N	Postcall status. Enter Y to select the postcall status option. Otherwise, enter N.

### **FUNCTION = AGTSETACT**

If the entry in subfield FUNCTION is AGTSETACT, select the subfields as follows.

#### Field descriptions for function=AGTSETACT

Field	Subfield	Entry	Explanation and action
	NTWSETACT	Y or N	Network set action. Enter Y to select the network set action option. Otherwise, enter N.
	INTSTAT	Y or N	Interval status. The dv-agent-setaction-u message reports interval completed for release guard or variable wrap. The message transmits if there are no calls in the queue and the agent is waiting for a call. Enter Y to select the interval status option. Otherwise, enter N.
	ENHWAC	Y or N	Report new walkaway reason. The ACD agent tells the host computer when the walkaway reason changes. Enter Y to send the dv-agent-setaction-u message from the switch to the host computer.

### FUNCTION = EMKEVENT

If the entry in subfield FUNCTION is EMKEVENT, select the subfields as follows.

Field descriptions for function=EMKEVENT

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select this option. Otherwise, enter N. This parameter identifies the call in a network. The default is Y. If you select N, the switch cannot track CompuCALL messages.
	AGTPOSID	Y or N	Agent position ID. Enter Y to select this option. Otherwise, enter N. The default is Y.
	AGTDN	Y or N	Agent DN. Enter Y to select this option. Otherwise, enter N.
	SUPRVPID	Y or N	Supervisor position DN. Enter Y to select this option. Otherwise, enter N.
	SUPRVDN	Y or N	Supervisor Answer Emergency key DN. Enter Y to select this option. Otherwise, enter N.
	AUXDN	Y or N	Auxiliary device DN. Enter Y to select this option. Otherwise, enter N.

### FUNCTION = LOBEVENT

If the entry in subfield FUNCTION is LOBEVENT, select the subfields as follows.

#### Field descriptions for function=LOBEVENT

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N. This parameter identifies the call in a network. Enter Y to include the parameter. If you select N, the host cannot track CompuCALL messages. The default is Y.

#### Field descriptions for function=LOBEVENT

Field	Subfield	Entry	Explanation and action
	AGTPOSID	Y or N	Agent position ID Enter Y to select this option. Otherwise, enter N. The default is Y.
	LOBTIME	Y or N	LOB time stamp. Enter Y to select this option. Otherwise, enter N. This option provides a time stamp to each LOB message sent from the DMS-100 switch. (The recorded time is the local time at the switch location, not the host site.)

### CATEGORY = CALLINIT

If the entry in subfield CATEGORY is CALLINIT, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=CALLINIT

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION.
	FUNCTION	MAKECALL	Function. Enter MAKECALL (make call) and select subfields AUTHCODE and ACCTCODE as follows.

#### **FUNCTION = MAKECALL**

If the entry in subfield FUNCTION is MAKECALL, select the subfields as follows.

#### Field descriptions for function=MAKECALL

Field	Subfield	Entry	Explanation and action
	AUTHCODE	Y or N	Authorization code. Enter Y to select this option. Otherwise, enter N.
	ACCTCODE	Y or N	Account code. Enter Y to select this option. Otherwise, enter N.

## **CATEGORY = CPGEVENT**

If the entry in subfield CATEGORY is CPGEVENT, select the subfields as follows.

### Field descriptions for category=CPGEVENT

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION.
	FUNCTION	DIGCOLL,BU SY,RINGBAC K,CONNECT ED,RAN,MUS IC,SILENCE, TRTMT	This selector field allows selection of one of the possible call progress events for subscription. There are limited refinements for each call progress event.
			Enter DIGCOLL (digit collection) and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, DIALDIGS, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = DIGCOLL" section.
			Enter BUSY (busy event) and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, DIALDIGS, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = BUSY" section.
			Enter RINGBACK and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, TERMDEV, TERMACD, TERMNAME, ACDDN, FWDINFO, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = RINGBACK" section.
			Enter CONNECTED and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, TERMDEV, TERMACD, TERMNAME, ACDDN, FWDINFO, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = CONNECTED" section.

Field	Subfield	Entry	Explanation and action
			Enter RAN and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, TERMACD, ACDDN, FWDINFO, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = RAN" section.
			Enter MUSIC and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, TERMACD, ACDDN, FWDINFO, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = MUSIC" section.
			Enter SILENCE and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, TERMACD, ACDDN, FWDINFO, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = SILENCE" section.
			Enter TRTMT (treatment) and select subfields NCALLID, ORIGDEV, ORIGACD, ORIGNAME, DIALDIGS, CALLTYPE, FLEGDEV, FLEGACD, and FLEGNAME as shown in the "FUNCTION = TRTMT" section.

### Field descriptions for category=CPGEVENT

### **FUNCTION = DIGCOLL**

If the entry in subfield FUNCTION is DIGCOLL, select the subfields as follows.

<b>Field descriptions</b>	s for function=DIGCOLI	
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Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.
	DIALDIGS	Y or N	Digits dialed. Enter Y to select the DIALDIGS option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

#### Field descriptions for function=DIGCOLL

### FUNCTION = BUSY

If the entry in subfield FUNCTION is BUSY, select the subfields as follows.

### Field descriptions for function=BUSY

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.
	DIALDIGS	Y or N	Digits dialed. Enter Y to select the DIALDIGS option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.

## Field descriptions for function=BUSY

Field	Subfield	Entry	Explanation and action
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg of call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

# **FUNCTION = RINGBACK**

If the entry in subfield FUNCTION is RINGBACK, select the subfields as follows.

## Field descriptions for function=RINGBACK

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.
	TERMDEV	Y or N	Terminating device ID (position ID if ACD agent). Enter Y to select the TERMDEV option. Otherwise, enter N.
	TERMACD	Y or N	Terminating ACD group. Enter Y to select the TERMACD option. Otherwise, enter N.
	TERMNAME	Y or N	Terminator's name. Enter Y to select the TERMNAME option. Otherwise, enter N.
	ACDDN	Y or N	ACD DN dialed by caller, primary or additional. Enter Y to select the ACDDN option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	FWDINFO	Y or N	Forwarding information. Enter Y to select the FWDINFO option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (Position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg of call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

#### Field descriptions for function=RINGBACK

## **FUNCTION = CONNECTED**

If the entry in subfield FUNCTION is CONNECTED, select the subfields as follows.

## Field descriptions for funcion=CONNECTED

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.
	TERMDEV	Y or N	Terminating device ID (position ID if ACD agent). Enter Y to select the TERMDEV option. Otherwise, enter N.
	TERMACD	Y or N	Terminating ACD group. Enter Y to select the TERMACD option. Otherwise, enter N.

Field descriptions for	funcion=CONNECTED
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Field	Subfield	Entry	Explanation and action
	TERMNAME	Y or N	Terminator's name. Enter Y to select the TERMNAME option. Otherwise, enter N.
	ACDDN	Y or N	ACD DN dialed by caller, primary or additional. Enter Y to select the ACDDN option. Otherwise, enter N.
	FWDINFO	Y or N	Forwarding information. Enter Y to select the FWDINFO option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg of call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

## FUNCTION = RAN

If the entry in subfield FUNCTION is RAN, select the subfields as follows.

## Field descriptions for function=RAN

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	TERMACD	Y or N	Terminating ACD group. Enter Y to select the TERMACD option. Otherwise, enter N.
	ACDDN	Y or N	ACD DN dialed by caller, primary or additional. Enter Y to select the ACDDN option. Otherwise, enter N.
	FWDINFO	Y or N	Forwarding information. Enter Y to select the FWDINFO option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg of call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

#### Field descriptions for function=RAN

## FUNCTION = MUSIC

If the entry in subfield FUNCTION is MUSIC, select the subfields as follows.

## Field descriptions for function=MUSIC

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.

## Field descriptions for function=MUSIC

Field	Subfield	Entry	Explanation and action
	TERMACD	Y or N	Terminating ACD group. Enter Y to select the TERMACD option. Otherwise, enter N.
	ACDDN	Y or N	ACD DN dialed by caller, primary or additional. Enter Y to select the ACDDN option. Otherwise, enter N.
	FWDINFO	Y or N	Forwarding information. Enter Y to select the FWDINFO option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg of call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

## **FUNCTION = SILENCE**

If the entry in subfield FUNCTION is SILENCE, select the subfields as follows.

Field descriptions for function=SILENCE

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	TERMACD	Y or N	Terminating ACD group. Enter Y to select the TERMACD option. Otherwise, enter N.
	ACDDN	Y or N	ACD DN dialed by caller, primary or additional. Enter Y to select the ACDDN option. Otherwise, enter N.
	FWDINFO	Y or N	Forwarding information. Enter Y to select the FWDINFO option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

#### Field descriptions for function=SILENCE

## FUNCTION = TRTMT

If the entry in subfield FUNCTION is TRMT, select the subfields as follows.

## Field descriptions for function=TRTMT

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the NCALLID option. Otherwise, enter N.
	ORIGDEV	Y or N	Originating device ID (position ID if ACD agent). Enter Y to select the ORIGDEV option. Otherwise, enter N.
	ORIGACD	Y or N	Originating ACD group. Enter Y to select the ORIGACD option. Otherwise, enter N.
	ORIGNAME	Y or N	Originator's name. Enter Y to select the ORIGNAME option. Otherwise, enter N.

#### Field descriptions for function=TRTMT

Field	Subfield	Entry	Explanation and action
	DIALDIGS	Y or N	Digits dialed. Enter Y to select the DIALDIGS option. Otherwise, enter N.
	CALLTYPE	Y or N	Type of call. Enter Y to select the CALLTYPE option. Otherwise, enter N.
	FLEGDEV	Y or N	Device ID of first leg of call, if multiparty call (position ID if ACD agent). Enter Y to select the FLEGDEV option. Otherwise, enter N.
	FLEGACD	Y or N	ACD group of first leg call, if multiparty call. Enter Y to select the FLEGACD option. Otherwise, enter N.
	FLEGNAME	Y or N	Name of first leg of call, if multiparty call. Enter Y to select the FLEGNAME option. Otherwise, enter N.

## **CATEGORY = CTXEVENT**

If the entry in subfield CATEGORY is CTXEVENT, select the subfields as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=CTXEVENT

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to five functions. If you select less than five functions, end the list with a \$ (dollar sign).

Field	Subfield	Entry	Explanation and action
	FUNCTION	CALLANSWR	Function. Enter CompuCALL messages.
		, CALLNAME, CALLOFFR, CALLREL, SETOFFHK	Enter CALLANSWR and select the subfields NCALLID, DEVICEID, CALLNGNO, CALLNGDIAL, CALLNGNAME, CHARGENO, CALLTYPE, ORIGDN, ORIGDIAL, ORIGNAME, PREVAPPL, HOSTCALD, CALLMODE, FWDPARTY, and MEMBERID as shown in the "FUNCTION = CALLANSWR" section.
			Enter CALLNAME and select the subfields NCALLID, DEVICEID, CALLNGNO, CALLNGDIAL, and CALLNGNAME as shown in the "FUNCTION = CALLNAME" section.
			Enter CALLOFFR and select the subfields NCALLID, CALLNGNO, CALLNGDIAL, CALLNGNAME, CHARGENO, CALLTYPE, ORIGDN, ORIGDIAL, ORIGNAME PREVAPPL, HOSTCALD, and CALLMODE, DEVICEID, and FWDPARTY as shown in the "FUNCTION = CALLOFFR" section.
			Enter CALLREL and select the subfields NCALLID, RELTYPE, DEVICEID, and MEMBERID as shown in the "FUNCTION = CALLREL" section.
			Enter SETOFFHK and select the subfields NCALLID, DEVICEID, and MEMBERID as shown in the "FUNCTION = SETOFFHK" section.

# Field descriptions for category=CTXEVENT

# **FUNCTION = CALLANSWR**

If the entry in subfield FUNCTION is CALLANSWR, select the subfields as follows.

Field descriptions for	function=CALLANSWR
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Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CALLNGDIAL	Y or N	Dialable calling number. Enter Y to select the dialable calling number option. Otherwise, enter N.
	CALLNGNAME	Y or N	Calling name. Enter Y to select the calling name option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	ORIGDIAL	Y or N	Originating dialable digits. Enter Y to select the originating dialable digits option. Otherwise, enter N.
	ORIGNAME	Y or N	Originating name. Enter Y to select the originating name option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	CALLMODE	Y or N	Call mode. Enter Y to select the call mode option. Otherwise, enter N.

#### Field descriptions for function=CALLANSWR

Field	Subfield	Entry	Explanation and action
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N.
	MEMBERID	Y or N	Member ID. Enter Y to select the member ID option. Otherwise, enter N.

# FUNCTION = CALLNAME

If the entry in subfield FUNCTION is CALLNAME, select the subfields as follows.

#### Field descriptions for function=CALLNAME

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CALLNGDIAL	Y or N	Dialable calling number. Enter Y to select the dialable calling number option. Otherwise, enter N.
	CALLNGNAME	Y or N	Calling name. Enter Y to select the calling name option. Otherwise, enter N.

## **FUNCTION = CALLOFFR**

If the entry in subfield FUNCTION is CALLOFFR, select the subfields as follows.

## Field descriptions for function=CALLOFFR

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.

# Field descriptions for function=CALLOFFR

Field	Subfield	Entry	Explanation and action
	CALLNGDIAL	Y or N	Dialable calling number. Enter Y to select the dialing number option. Otherwise, enter N.
	CALLNGNAME	Y or N	Calling name. Enter Y to select the calling number option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating dial numbers. Enter Y to select the originating dial option. Otherwise, enter N.
	ORIGDIAL	Y or N	Originating dialable digits. Enter Y to select the originating dialable digits option. Otherwise, enter N.
	ORIGNAME	Y or N	Originating name. Enter Y to select the originating DN option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	CALLMODE	Y or N	Call mode. Enter Y to select the call mode option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N. Enter Y if feature ICM MWT is active.

# **FUNCTION = CALLREL**

If the entry in subfield FUNCTION is CALLREL, select the subfields as follows.

Field descriptions for function=CALLREL

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	RELTYPE	Y or N	Release type. Enter Y to select the release type option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	MEMBERID	Y or N	Member ID. Enter Y to select the member ID option. Otherwise, enter N.

# **FUNCTION = SETOFFHK**

If the entry in subfield FUNCTION is SETOFFHK, select the subfields as follows.

#### Field descriptions for function=SETOFFHK

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. This field is an ACD option, which by default, is not entered. Otherwise, enter N.
	MEMBERID	Y or N	Member ID. Enter Y to select the member ID option. Otherwise, enter N.

# **CATEGORY = DNQUERY**

If the entry in subfield CATEGORY is DNQUERY, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=DNQUERY

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION.
	FUNCTION	DNQUERY	Function. Enter DNQUERY and select subfield FILTER as follows.

## **FUNCTION = DNQUERY**

If the entry in subfield FUNCTION is DNQUERY, select the subfield as follows.

## Field descriptions for function=DNQUERY

Field	Subfield	Entry	Explanation and action
	FILTER	Y or N	Query filter. Enter Y to select the query filter option. Otherwise, enter N.

# CATEGORY = ICCM

If the entry in subfield CATEGORY is ICCM, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=ICCM

Field	Subfield	Entry	Explanation and action
FUNCTIONS			Functions. This field includes subfield FUNCTION.
	FUNCTION	SETCDNST	Function. Enter functions.
	R	REASNAGT	Enter SETCDNST for the dv-Set-CDN-State message. This message allows ICCM to change the state of a CDN queue on the DMS-100 switch.
			Enter REASNAGT for the dv-Reassign-Agent message. The dv-Reassign-Agent message reassigns the agent to a new supervisor. Enter REASNAGT and select subfields AgentPosid and NewSuperPosid as follows.

# FUNCTION = REASNAGT

If the entry in subfield FUNCTION is REASNAGT, select the subfields as follows.

## Field descriptions for function=REASNAGT

Field	Subfield	Entry	Explanation and action
	AgentPosid	Y or N	Agent position identification. This subfield identifies the agent position identification assigned to a new supervisor.
	NewSuperPosid	Y or N	New supervisor position identification. This subfield identifies the position identification of the supervisor to assign the agent.

# **CATEGORY = RESEVENT**

If the entry in subfield CATEGORY is RESEVENT, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

Field	Subfield	Entry	Explanation and action
	FUNCTION	CALLANSWR, CALLOFFR, CALLOFFR, CALLREL, SETOFFHK	Function. Enter CompuCALL messages.
			Enter CALLANSWR (call answered) and select subfields NCALLID, DEVICEID, CALLNGNO, CALLNGDIAL, CALLNGNAME, CHARGENO, CALLTYPE, ORIGDN, ORIGDIAL, ORIGNAME, PREVAPPL, HOSTCALD, CALLMODE, and FWDPARTY as shown in the "FUNCTION = CALLANSWR" section.
			Enter CALLNAME and select subfields NCALLID, DEVICEID, CALLNGNO, CALLNGDIAL, and CALLNGNAME as shown in the "FUNCTION = CALLNAME" section.
			Enter CALLOFFR (call offered) and select subfields NCALLID, CALLNGNO, CALLNGDIAL, CALLNGNAME, CHARGENO, CALLTYPE, ORIGDN, ORIGDIAL, ORIGNAME, PREVAPPL, HOSTCALD, DEVICEID, FWDPARTY and CALLMODE as shown the "FUNCTION = CALLOFFR" section.
			Enter CALLREL (call released) and select subfields NCALLID, RELTYPE, and DEVICEID as shown in the "FUNCTION = CALLREL" section.
			Enter SETOFFHK (set off hook) and select subfields NCALLID and DEVICEID as shown in the "FUNCTION = SETOFFHK" section.

# **FUNCTION = CALLANSWR**

If the entry in subfield FUNCTION is CALLANSWR, select the subfields as follows.

## Field descriptions for function=CALLANSWR

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CALLNGDIAL	Y or N	Dialable calling number. Enter Y to select the dialable calling number option. Otherwise, enter N.
	CALLNGNAME	Y or N	Calling name. Enter Y to select the calling name option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	ORIGDIAL	Y or N	Originating dialable digits. Enter Y to select the originating dialable digits option. Otherwise, enter N.
	ORIGNAME	Y or N	Originating name. Enter Y to select the originating name option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.

#### Field descriptions for function=CALLANSWR

Field	Subfield	Entry	Explanation and action
	CALLMODE	Y or N	Call mode. Enter Y to select the call mode option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N.

# FUNCTION = CALLNAME

If the entry in subfield FUNCTION is CALLNAME, select the subfields as follows.

#### Field descriptions for function=CALLNAME

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CALLNGDIAL	Y or N	Dialable calling number. Enter Y to select the dialable calling number option. Otherwise, enter N.
	CALLNGNAME	Y or N	Calling name. Enter Y to select the calling name option. Otherwise, enter N.

## **FUNCTION = CALLOFFR**

If the entry in subfield FUNCTION is CALLOFFR, select the subfields as follows.

## Field descriptions for function=CALLOFFR

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	CALLNGDIAL	Y or N	Dialable calling number. Enter Y to select the dialing number option. Otherwise, enter N.
	CALLNGNAME	Y or N	Calling name. Enter Y to select the calling name option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the. Charge number type option. Otherwise, enter N.
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	ORIGDIAL	Y or N	Originating dialable digits. Enter Y to select the originating dialable digits option. Otherwise, enter N.
	ORIGNAME	Y or N	Originating name. Enter Y to select the originating name option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N. Enter Y if feature ICM MWT is active.
	CALLMODE	Y or N	Call mode. Enter Y to select the call mode option. Otherwise, enter N.

# Field descriptions for function=CALLOFFR

# **FUNCTION = CALLREL**

If the entry in subfield FUNCTION is CALLREL, select the subfields as follows.

#### Field descriptions for function=CALLREL

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	RELTYPE	Y or N	Release type. Enter Y to select the release type option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.

## **FUNCTION = SETOFFHK**

If the entry in subfield FUNCTION is SETOFFHK, select the subfields as follows.

#### Field descriptions for function=SETOFFHK

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.

## **CATEGORY = RESOURCE**

If the entry in subfield CATEGORY is RESOURCE, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=RESOURCE

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION.

#### Field descriptions for category=RESOURCE

Field	Subfield	Entry	Explanation and action
	FUNCTION	ACDQUERY APPSTQRY	Function. Enter functions.
			Enter ACDQUERY.
			Enter APPSTQRY to request ACD agent status and call status. Select parameters as shown in the "FUNCTION = APPSTQRY" section.

## **FUNCTION = APPSTQRY**

If the entry in subfield FUNCTION is APPSTQRY, select the subfields as follows.

## Field descriptions for function=APPSTQRY

Field	Subfield	Entry	Explanation and action
	DN	Y or N	Directory number. Enter Y to select the single ACD DN, CDN, or agent option. Otherwise, enter N.
	ALLCDNS	Y or N	All CDN status. Enter Y to select the all CDN status option. Otherwise, enter N.
	ALLAGENTS	Y or N	All agents status. Enter Y to select the all agents status option. Otherwise, enter N.
	AGTSTAT	Y or N	Agent status. Enter Y to select the agent status option. Otherwise, enter N.
	CALLSTAT	Y or N	Call status. Enter Y to select the call status option. Otherwise, enter N.

# **CATEGORY = ROUTING**

If the entry in subfield CATEGORY is ROUTING, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to two functions. If you select less than two functions, end the list with a \$ (dollar sign).
	FUNCTION	CALLRECDC	Function. Enter CompuCALL messages.
		CALLREDIR	Enter CALLRECDC and select subfields CPADIGS, NCALLID, ACD directory number, CALLNGNO, CHARGENO, CALLTYPE, ORIGDN, PREVAPPL, HOSTCALD, ACDGROUP, and FWDPARTY as shown in the "FUNCTION = CALLRECDC" section.
			Enter CALLREDIR (call redirect) and select subfields NCALLID, REDIRN, and HOSTCALD as shown in the "FUNCTION = CALLREDIR" section.

## **FUNCTION = CALLRECDC**

If the entry in subfield FUNCTION is CALLRECDC, select the subfields as follows.

#### Field descriptions for function=CALLRECDC

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	ACDDN	Y or N	ACD directory number. Enter Y to select the ACD directory number option. Otherwise, enter N.
	CALLNGNO	Y or N	Calling number. Enter Y to select the calling number option. Otherwise, enter N.
	CHARGENO	Y or N	Charge number. Enter Y to select the charge number option. Otherwise, enter N.

Field	Subfield	Entry	Explanation and action
	CALLTYPE	Y or N	Call type. Enter Y to select the call type option. Otherwise, enter N.
	ORIGDN	Y or N	Originating DN. Enter Y to select the originating DN option. Otherwise, enter N.
	PREVAPPL	Y or N	Previous application ID. Enter Y to select the previous application ID option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.
	ACDGROUP	Y or N	ACD group. Enter Y to select the ACD group option. Otherwise, enter N.
	FWDPARTY	Y or N	Forwarding party. Enter Y to select the forwarding party option. Otherwise, enter N.
	CPADIGS	Y or N	Called party address digits. Enter Y to select the called party address digits option. Otherwise, enter N.

#### Field descriptions for function=CALLRECDC

## **FUNCTION = CALLREDIR**

If the entry in subfield FUNCTION is CALLREDIR, select the subfields as follows.

## Field descriptions for function=CALLREDIR

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.
	REDIRN	Y or N	Redirect DN. Enter Y to select the redirect DN option. Otherwise, enter N.
	HOSTCALD	Y or N	Host call data. Enter Y to select the host call data option. Otherwise, enter N.

## **CATEGORY = SCAICC**

If the entry in subfield CATEGORY is SCAICC, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to five functions. If you select less than five functions, end the list with a \$ (dollar sign).
	FUNCTION	ANSWCALL CALLUNHELD CALLHELD HOLDCALL RELSCALL UNHOLDCALL	Function. Enter CompuCALL messages.
			Enter ANSWCALL (answer call).
			Enter CALLUNHELD (call unheld) and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD" section.
			Enter CALLHELD (call held) and select subfield NCALLID as show in the "FUNCTION =CALLHELD" section.
			Enter HOLDCALL (hold call).
			Enter RELSCALL (release call) and select subfield RELTYPE as shown in the "FUNCTION = RELSCALL" section.
			Enter UNHOLDCALL (unhold call).

## FUNCTION = CALLUNHELD or CALLHELD

If the entry in subfield FUNCTION is CALLUNHELD or CALLHELD, select the subfield as follows.

#### Field descriptions for function=CALLUNHELD or CALLHELD

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.

## **FUNCTION = RELSCALL**

If the entry in subfield FUNCTION is RELSCALL, select the subfield as follows.

#### Field descriptions for function=RELSCALL

Field	Subfield	Entry	Explanation and action
	RELTYPE	Y or N	Release type. Enter Y to select the release type option. Otherwise, enter N.

# **CATEGORY = SCAIMWTI**

If the entry in subfield CATEGORY is SCAIMWTI, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=SCAIMWTI

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to two functions. If you select less than two functions, end the list with a \$ (dollar sign).
	FUNCTION	MSGWAIT MWTACT	Function. For message waiting indication, enter MSGWAIT and select subfields DEVICEID, MWTYPE, and INDICATION as shown in the "FUNCTION = MSGWAIT" section.
			For message waiting activation or deactivation, enter MWTACT and select subfields DEVICEID, VMSDEVID, and INDICATION as shown in the "FUNCTION = MWTACT" section.

# **FUNCTION = MSGWAIT**

If the entry in subfield FUNCTION is MSGWAIT, select the subfields as follows.

<b>Field descriptions</b>	for function=MSGWAIT
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Field	Subfield	Entry	Explanation and action
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	MWTYPE	Y or N	Message waiting type. Enter Y to select the message waiting type option. Otherwise, enter N.
	INDICATION	Y or N	Indication. Enter Y to select the indication option. Otherwise, enter N.

## **Function = MWTACT**

If the entry in subfield FUNCTION is MWTACT, select the subfields as follows.

## Field descriptions for function=MWTACT

Field	Subfield	Entry	Explanation and action
	DEVICEID	Y or N	Device identification. Enter Y to select the device identification option. Otherwise, enter N.
	VMSDEVID	Y or N	VMS device identification. Enter Y to select the VMS device identification option. Otherwise, enter N.
	INDICATION	Y or N	MWT activation/deactivation indication. Enter Y to select the MWT activation or deactivation indication option. Otherwise, enter N.

# CATEGORY = SCAI3WC

If the entry in subfield CATEGORY is SCAI3WC, select the subfield as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=SCAI3WC

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to seven functions. If you select less than seven functions, end the list with a \$ (dollar sign).
	FUNCTION	ADDPTY	Function. Enter CompuCALL messages.
		CNTRLREL CONFPTY CONFEVNT CONSULTEV DROPPTY NCTRLREL TRANPTY TRANSFEREV	Enter ADDPTY and select subfields OPTYPE, ORIGADDR, and DESTDN as shown in the "FUNCTION = ADDPTY" section.
			Enter CNTRLREL and select subfield NCALLID as shown in the "FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV "section. Enter CONFPTY and select subfield ORIGADDR as shown in the "FUNCTION = CONFPTY" section.
			Enter CONSULTEV, and select subfield NCALLID as shown in the "FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter CONFEVNT and select subfield NCALLID as shown in the "FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter CONSULTEV and select subfield NCALLID as shown in the "FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.

#### Field descriptions for category=SCAI3WC

Field	Subfield	Entry	Explanation and action
			Enter DROPPTY and select subfields OPTYPE and ORIGADDR as shown in the "FUNCTION = DROPPTY section.
			Enter NCTRLREL and select subfield NCALLID as shown in the "FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter TRANPTY and select subfield ORIGADDR as shown in the "FUNCTION = TRANPTY" section.
			Enter TRANSFEREV and select subfield NCALLID as shown in the "FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.

## **FUNCTION = ADDPTY**

If the entry in subfield FUNCTION is ADDPTY, select the subfields as follows.

You must select subfields OPTYPE, ORIGADDR, and DESTDN for the Intelligent Call Management (ICM) application to validate subfield ADDPTY.

Field descriptions for function=ADDPTY

Field	Subfield	Entry	Explanation and action
	OPTYPE	Y or N	Operation type. Enter Y to select the operation type option. Otherwise, enter N.
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	DESTDN	Y or N	Destination DN. Enter Y to select the destination DN option. Otherwise enter N.

## **FUNCTION = CONFPTY**

If the entry in subfield FUNCTION is CONFPTY, select the subfield as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield CONFPTY.

#### Field descriptions for function=CONFPTY

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.

# FUNCTION = CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV

If the entry in subfield FUNCTION is CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV select the subfield as follows.

# Field descriptions for function=CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSEREV

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.

## **FUNCTION = DROPPTY**

If the entry in subfield FUNCTION is DROPPTY, select the subfields as follows.

You must select subfields OPTYPE and ORIGADDR for the ICM application to validate subfield DROPPTY.

#### Field descriptions for function=DROPPTY

Field	Subfield	Entry	Explanation and action
	OPTYPE	Y or N	Operation type. Enter Y to select the operation type option. Otherwise, enter N.
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.

## **FUNCTION = TRANPTY**

If the entry in subfield FUNCTION is TRANPTY, select the subfield as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield TRANPTY.

#### Field descriptions for function=TRANPTY

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.

# CATEGORY = TPAC

If the entry in subfield CATEGORY is TPAC, select the subfields as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

## Field descriptions for category=TPAC

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to four functions. If you select less than four functions, end the list with a \$ (dollar sign).
	FUNCTION	CHGFORCE	Function. Enter CompuCALL messages.
		CHGVWRAP LOGINAGT LOGOUTAGT NREADYAGT READYAGT RESERVEAGT UNRESERVEAGT	Enter CHGFORCE (change force) to change the Forcing feature for the ACD group or ACD agent. Select subfields ORIGADDR and FRCETYPE as shown in the "FUNCTION = CHGFORCE" section.
	ONREGERVERGT	Enter CHGVWRAP (change variable wrap) to change the variable wrap timer on an ACD group basis or agent basis. Select subfields ORIGADDR and WRAPTIMER as shown in the "FUNCTION = CHGVWRAP" section.	
			Enter LOGINAGT (login agent) and select subfields ORIGADDR, LOGINID, and PASSWORD as shown in the "FUNCTION = LOGINAGT" section.
			Enter LOGOUTAGT (logout agent) and select subfield ORIGADDR as shown in the "FUNCTION = LOGOUTAGT or READYAGT" section.

## Field descriptions for category=TPAC

Field	Subfield	Entry	Explanation and action
			Enter NREADYAGT (make agent not ready) and select subfields ORIGADDR and WALKAWAY as shown in the "FUNCTION = NREADYAGT".
			Enter READYAGT (agent ready) and select subfield ORIGADDR as shown in the "FUNCTION = LOGOUTAGT or READYAGT" section.
			Enter RESERVEAGT (reserve agent) and select subfield ORIGADDR and RESERV_TIMER as shown in the "FUNCTION = RESERVEAGT" section.
			Enter UNRESERVEAGT (unreserve agent) and select subfield ORIGADDR as shown in the "FUNCTION = UNRESERVEAGT" section.

## **FUNCTION = CHGFORCE**

If the entry in subfield FUNCTION is CHGFORCE, select the subfields as follows.

#### Field descriptions for function=CHGFORCE

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	FRCETYPE	Y or N	Force type. Enter Y to select the force type option. Otherwise, Enter N.

## **FUNCTION = CHGVWRAP**

If the entry in subfield FUNCTION is CHGVWRAP, select the subfields as follows.

#### Field descriptions for function=CHGVWRAP

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	WRAPTIMER	Y or N	Wrap timer. Enter Y to select the wrap timer option. Otherwise, Enter N.

## **FUNCTION = LOGINAGT**

If the entry in subfield FUNCTION is LOGINAGT, select the subfields as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield LOGINAGT.

#### Field descriptions for function=LOGINAGT

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	LOGINID	Y or N	Login ID. Enter Y to select the login identification option. Otherwise, enter N.
	PASSWORD	Y or N	Password. This field is an ACD option, which by default, is not entered.

## FUNCTION = LOGOUTAGT or READYAGT

If the entry in subfield FUNCTION is LOGOUTAGT or READYAGT, select the subfield as follows.

You must select the subfield ORIGADDR for the ICM application to validate subfields LOGOUTAGT or READYAGT.

#### Field descriptions for function=LOGOUTAGT or READYAGT

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N. Otherwise, enter N.

# FUNCTION = NREADYAGT

If the entry in subfield FUNCTION is NREADYAGT, select the subfields as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield NREADYAGT.

## Field descriptions for function=NREADYAGT

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	WALKAWAY	Y or N	Walk away code. Enter Y to select the WALKAWAY option. Otherwise, enter N. This subfield is an ACD option, which by default, is not made.

## FUNCTION = RESERVEAGT

If the entry in subfield FUNCTION is RESERVEAGT, select the subfields as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield RESERVEAGT.

#### Field descriptions for function=RESERVEAGT

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	RESERV_TIMER	Y or N	Reserve timer. Enter Y to select the RESERV_TIMER option. Otherwise, enter N.

## FUNCTION = UNRESERVEAGT

If the entry in subfield FUNCTION is UNRESERVEAGT, select the subfield as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield UNRESERVEAGT.

#### Field descriptions for function=UNRESERVEAGT

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.

# CATEGORY = TPCC

If the entry in subfield CATEGORY is TPCC, select the subfields as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION. You can select up to 13 functions. If you select less than 13 functions, end the list with a \$ (dollar sign).
	FUNCTION	ADDPTY ANSWCALL CALLHELD CALLUNHELD	Enter ADDPTY (add party) and select subfields OPTYPE, ORIGADDR, DESTDN, and CLDABTNO as shown in the "FUNCTION = ADDPTY" section.
		CNTRLREL CONFEVNT	Enter ANSWCALL (answer call).
		CONFPTY CONSULTEV DROPPTY HOLDCALL MAKECALL	Enter CALLHELD (call held) and select subfield NCALLID as shown in the "FUNCTION = CALLHELD, CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
		NCTRLREL RELSCALL TRANPTY TRANSFEREV UNHOLDCALL	Enter CALLUNHELD (call unheld) and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter CONFEVNT (call conferenced) and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter CONFPTY (conference party) and select subfield ORIGADDR as shown in the "FUNCTION = CONFPTY or TRANPTY" section.

Field	Subfield	Entry	Explanation and action
			Enter CONSULTEV (call-consult originated) and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter DROPPTY (drop party) and select subfields OPTYPE and ORIGADDR as shown in the "FUNCTION = DROPPTY" section.
			Enter HOLDCALL (hold call).
			Enter MAKECALL (make call) and select subfields AUTHCODE and ACCTCODE as shown in the "FUNCTION = MAKECALL" section.
			Enter RELSCALL (release call) and select subfield RELTYPE as shown in the "FUNCTION = RELSCALL" section.
			Enter TRANPTY (transfer party) and select subfield ORIGADDR as shown in the "FUNCTION = CONFPTY or TRANPTY" section.
			Enter TRANSFEREV (call transferred) and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter UNHOLDCALL (unhold call).
			Enter CNTRLREL and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.
			Enter NCTRLREL and select subfield NCALLID as shown in the "FUNCTION = CALLUNHELD, CNTRLREL, CONSULTEV, CONFEVNT, NCTRLREL, or TRANSFEREV" section.

# Field descriptions for category=TPCC

#### FUNCTION = ADDPTY

If the entry in subfield FUNCTION is ADDPTY, select the subfields as follows.

You must select subfields OPTYPE, ORIGADDR, and DESTDN for the ICM application to validate subfield ADDPTY.

Field descriptions for function=ADDPTY

Field	Subfield	Entry	Explanation and action
	OPTYPE	Y or N	Operation type. Enter Y to select the operation type option. Otherwise, enter N.
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.
	DESTDN	Y or N	Destination DN. Enter Y to select the destination DN option. Otherwise, enter N.
	CLDABTNO	Y or N	Called about number. Enter Y to select the destination DN option. Otherwise, enter N.

# FUNCTION = CALLHELD, CALLUNHELD, CNTRLREL, CONFEVNT, CONSULTEV, NCTRLREL, or TRANSFEREV

If the entry in subfield FUNCTION is CALLHELD, CALLUNHELD, CNTRLREL, CONFEVNT, CONSULTEV, NCTRLREL, or TRANSFEREV select the subfield as follows.

# Field descriptions for function=CALLHELD, CALLUNHELD, CNTRLREL, CONFEVNT, CONSULTEV, NCTRLREL, or TRANSFEREV

Field	Subfield	Entry	Explanation and action
	NCALLID	Y or N	Network call ID. Enter Y to select the network call ID option. Otherwise, enter N.

#### **FUNCTION = CONFPTY or TRANPTY**

If the entry in subfield FUNCTION is CONFPTY or TRANPTY, select the subfield as follows.

You must select subfield ORIGADDR for the ICM application to validate subfield CONFPTY or TRANPTY.

#### Field descriptions for function=CONFPTY or TRANPTY

Field	Subfield	Entry	Explanation and action
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.

## FUNCTION = DROPPTY

If the entry in subfield FUNCTION is DROPPTY, select the subfields as follows.

You must select subfields OPTYPE and ORIGADDR for the ICM application to validate subfield DROPPTY.

#### Field descriptions for function=DROPPTY

Field	Subfield	Entry	Explanation and action
	OPTYPE	Y or N	Operation type. Enter Y to select the operation type option. Otherwise, enter N.
	ORIGADDR	Y or N	Originating address. Enter Y to select the originating address option. Otherwise, enter N.

#### FUNCTION = MAKECALL

If the entry in subfield FUNCTION is MAKECALL, select the subfields as follows.

#### Field descriptions for function=MAKECALL

Field	Subfield	Entry	Explanation and action
	AUTHCODE	Y or N	Authorization code. Enter Y to select the authorization code feature. Otherwise, enter N.
	ACCTCODE	Y or N	Account code. Enter Y to select the account code feature. Otherwise, enter N.

#### FUNCTION = RELSCALL

If the entry in subfield FUNCTION is RELSCALL, select the subfield as follows.

#### Field descriptions for function=RELSCALL

Field	Subfield	Entry	Explanation and action
	RELTYPE	Y or N	Release type. Enter Y to select the release type option. Otherwise, enter N.

#### CATEGORY = TPQC

If the entry in subfield CATEGORY is TPQC, select the subfields as follows. See the "ACD CompuCALL" section of the *Translations Guide* for more information.

#### Field descriptions for category=TPQC

Field	Subfield	Entry	Explanation and action
FUNCTIONS		see subfield	Functions. This field includes subfield FUNCTION.

Field	Subfield	Entry	Explanation and action
	FUNCTION	GIVETRMT, ROUTECALL, TRMTCOMP	Function. You can select up to three functions. If you select less than three functions, end the list with a \$ (dollar sign).
			Enter GIVETRMT (give treatment) to subscribe to the dv-Give-Treatment queue control message. This message enables callers in an ACD DN incoming call queue to receive a recorded announcement (RAN), Music, Ringback, Silence, Busy, Fastbusy, or Disconnect. CompuCALL requires this message.
			Enter ROUTECALL (route call) to select the dv-Route-Call call control message. The host computer uses this message to route a call in an ACD queue. CompuCALL requires this message. ROUTECALL also allows the user to select whether the customer receives optional enhanced display text as shown in the "FUNCTION = ROUTECALL" section.
			The switch does not need to send an association message to the ACD group before it sends this message.
			Enter TRMTCOMP (treatment completed) to select the dv-Treatment-Completed-U call event message. This message occurs when the RAN call treatment is complete. CompuCALL requires this message.

### Field descriptions for category=TPQC

#### **FUNCTION = ROUTECALL**

If the entry in subfield FUNCTION is ROUTECALL, select the subfield as follows.

#### Field descriptions for function=ROUTECALL

Field	Subfield	Entry	Explanation and action
	DISPTEXT	Y or N	Display text. Enter Y to select the display text option. Otherwise, enter N.

# **Datafill example**

The following example shows sample datafill for table SCAISSRV.

#### MAP display example for table SCAISSRV

```
SUBSERV
                                                    SPROFILE
    SCAI3WC09$
SCAI3WC (CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (ADDPTY Y Y Y)
(CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y)
    MYEVENT
CALLINIT1
CALLINIT (MAKECALL Y Y) $
    3WC1
SCAI3WC(ADDPTY Y Y Y)(CONFPTY Y)(DROPPTY Y Y)(TRANPTY Y)(CONFEVNT N)$
    MWTI1
SCAIMWTI (MSGWAIT Y Y Y) $
    DNORY1
DNQUERY (DNQUERY N) $
    TPCC09$
TPCC (ADDPTY Y Y Y) (CONFPTY Y)(DROPPTY Y Y)(TRANPTY Y)(MAKECALL Y Y)
(ANSWCALL)(HOLDCALL)(UNHOLDCALL) (CALLUNHELD Y) (RELSCALL Y)
(CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y)$
   SCAICC08
SCAICC (ANSWCALL) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (RESLCALL Y)
$
   SCAICC09
SCAICC (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (RESLCALL Y) (ANSWCALL)
(CALLHELD Y)$
   DNQUERY2
DNQUERY (DNQUERY Y) $
   TPQC10$
TPQC (ROUTECALL N) (GIVETRMT) (TRMTCOMP)
                                         $
   TPQC11$
TPQC (ROUTECALL Y) (GIVETRMT) (TRMTCOMP)
                                        $
```

#### MAP example for table SCAISSRV (continued)

```
SUBSERV
                                                  SPROFILE
    RESOURCE35$
RESOURCE (ACDQUERY) $
    RESOURCE11$
RESOURCE (ACDQUERY) (APPSTQRY Y Y Y Y Y)
                                   Ś
    ACDEVENT11$
ACDEVENT(CALLQUED Y Y Y Y Y Y Y Y Y Y)
(CALLOFFR Y Y Y Y Y Y Y Y Y Y Y Y)
(AGTLGDOUT Y Y) (AGTREADY Y Y) (AGTNREADY Y Y Y) (LOBEVENT Y Y Y)
(EMKEVENT Y Y Y Y Y)
   CUSTOMEREVENT
ACDEVENT(CALLQUED Y Y Y Y N N Y Y Y)
(CALLOFFR Y Y Y Y Y N N N Y Y Y) (CALLANSWR Y Y Y Y Y Y Y Y N Y N)
(CALLREL Y Y N Y Y)(LOBEVENT N Y N) (EMKEVENT Y N Y N Y)
   ACDEVENT11$
(CALLANSWR Y Y Y Y Y Y Y Y Y Y Y Y) (CALLREL Y Y Y Y Y)(AGTLGDIN Y Y Y)
(AGTLGDOUT Y Y) (AGTREADY Y Y) (AGTNREADY Y Y Y) (LOBEVENT Y Y Y)
(EMKEVENT Y Y Y Y Y)$
   MYTUPLE
ACDEVENT (CALLQUED Y Y Y Y Y Y Y Y Y Y Y)
(CALLREL Y Y Y Y Y) (EMKEVENT Y Y N Y N N)$
   ACDEVENT12$
ACDEVENT (CALLQUED Y Y Y Y Y Y Y Y Y Y)
(CALLREL Y Y Y Y Y Y) (AGTLGDIN Y Y Y) (AGTLGDOUT Y Y) (AGTREADY Y Y)
(AGTNREADY Y Y N) (LOBEVENT Y Y Y) (EMKEVENT Y Y Y Y Y Y)
(AGTSETACT Y Y) $
CUSTOM ACDEVENT (AGTREADY Y Y) (CALLREL Y Y N N N Y)
(AGTSETACT Y Y) $
    TPAC12$
TPAC (LOGINAGT Y Y N) (LOGOUTAGT Y) (READYAGT Y) (NREADYAGT Y N)
(RESERVEAGT Y Y) (UNRESERVEAGT Y) $
    ICCM13$
ICCM (SETCDNST ) (REASNAGT Y Y) $
    TPAC13$
TPAC (LOGINAGT Y Y N) (LOGOUTAGT Y) (READYAGT Y) (NREADYAGT Y N)
(RESERVEAGT Y Y) (UNRESERVEAGT Y) (CHGVWRAP Y Y) (CHGFORCE Y Y) $
```

#### MAP example for table SCAISSRV (continued)

SUBSERV SPROFILE SCAIMWTI13\$ SCAIMWTI(MSGWAIT Y Y Y)(MWTACT Y Y Y) \$ CTXEVENT 13\$ (CALLNAME Y Y Y Y Y) \$ RESEVENT13\$ YYY)\$ (CALLNAME Y Y Y Y Y) \$ CPGEVENT14\$ CPGEVENT(DIGCOLL Y Y Y Y Y Y Y Y Y) (BUSY Y Y Y Y Y Y Y Y) (RINGBACK Y Y Y Y Y Y Y Y Y Y Y Y Y) (CONNECTED Y Y Y Y Y Y Y Y Y Y Y Y)(RAN Y Y Y Y Y Y Y Y Y Y Y Y) (MUSIC Y Y Y Y Y Y Y Y Y Y Y Y Y Y) (SILENCE Y Y Y Y Y Y Y Y Y Y Y) \$ TPCC14\$ TPCC (ANSWCALL) (RELSCALL Y) (CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (ADDPTY Y Y Y Y) (CONFPTY Y)(DROPPTY Y Y) (TRANPTY Y) (MAKECALL Y Y) (CNTRLREL Y) (NCTRLREL Y) TPCC15\$ (TPCC) (CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (CNTRLREL Y) (NCTRLREL Y) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (ANSWCALL) (RELSCALL) (ADDPTY Y Y Y Y) (CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y) (MAKECALL Y Y) (CALLHELD Y)\$ SCAI3WC14\$ SCAI3WC (CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (ADDPTY Y Y Y) (CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y) (CNTRLREL Y) (NCTRLREL Y)\$ ACDEVENT15\$ YYY) (CALLANSWR YYYYYYYYYYYY) (CALLREL YYYYY) (AGTLGDIN Y Y Y) (AGTLGDOUT Y Y) (AGTREADY Y Y) (AGTNREADY Y Y N) (LOBEVENT Y Y Y) (EMKEVENT Y Y Y Y Y Y) (AGTSETACT Y Y N) \$ ROUTING15\$ 

## Supplementary information

This section provides information on dump and restore procedures and the datafill procedure for current SCAI groups for table SCAISSRV.

#### Dump and restore procedures

A reformat is necessary to address the added postcall status parameter in the CALLREL function of the ACDEVENT category. The reformat applies for ONPs to NA010 from NA007, NA008, and NA009.

A reformat is necessary to address the added CPADIGS parameter in the CALLANSWR, CALLOFFR, and CALLQUED functions of the ACDEVENT category. A reformat is necessary for the CPADIGS parameter in the CALLRECDC function of the ROUTING category. The reformat applies for ONPs to NA013 from NA012, NA011, and NA010.

#### **Datafill of existing SCAI groups**

To select current SCAI groups:

- 1. Make a list of the linksets owned by an SCAI group and the required CompuCALL messages assigned for the linksets.
- 2. If possible, find the subservice names in table SCAISSRV that contain all the messages from step 1. The fixed subservices assist with this procedure.
- 3. If table SCAISSRV does not contain the existing subservice names from step 1, you can enter new subservice or existing subservice names.
- 4. Make a list of the subservice names, from steps 2and 3, to which the SCAI group can subscribe.
- 5. Enter the names of the linksets (from step 1) and the list of subservice names (from step 4) in table SCAIPROF.

## **Release history**

#### NA016

Release 59028955 adds the following default tuple to Table SCAISSRV. The default tuple receives the function DISPLAY\_TEXT for the ICM call event message DV\_ROUTE\_CALL:

• default tuple TPQC11\$ under the category TPQC with the new parameter DISPTEXT in the ROUTECALL function

*Note:* The DN from which the call is being routed must be associated with the SCAI session; the SCAI version should be at least SCAI17.

If a ROUTE\_CALL message is sent without the DISPLAY\_TEXT parameter, then call routing behavior is unchanged. If a DV\_ROUTE\_CALL is sent with

the parameter DISPLAY\_TEXT but the customer is not subscribed to the new default tuple TPQC11\$ in table SCAISSRV, then a Return\_error with reason NOT ALLOWED is returned.

#### NA015

This release adds the following default tuples to Table SCAISSRV. The default tuples receive the function CALLHELD for the ICM call event message DV\_CALL\_HELD\_U:

- default tuple TPCC15\$ under the category TPCC
- default tuple SCAIC09\$ under the category SCAICC

This release also extends the support of the following call event message and call control message:

- When a call has been unheld manually or through ICM, the call event message DV\_CALL\_UNHELD\_U reports to the host application. The DN must be associated to a SCAI session so that the host application receives the call event message DV\_CALL\_UNHELD\_U.
- When a call has been put on hold manually or through ICM, the host application sends the call control message DV\_UNHOLD\_CALL to the switch. This action places the call off hold. The switch reports the call event message DV\_CALL\_UNHELD\_U to the host application. The DN parameter is set to the directory number of the unholding party.

*Note 1:* The call event message DV\_CALL\_UNHELD\_U and the call control message DV\_UNHOLD\_CALL does not change the hold and unhold functionality of the CHD, HLD, or HOLD KEY features. For example, the switch reports the DV\_CALL\_HELD\_U message to the computer whether a call is placed on hold manually by call hold (CHD), permanent hold (HLD), hold key, auto hold or by the ICM DV\_HOLD\_CALL message.

 The exception is K-SETS which support the HOLD KEY but not the CHD or HLD features. The POTS 500/2500 support the CHD and HLD features but not the HOLD KEY.

*Note 2:* Automatic Call Distribution (ACD), Meridian Digital Centrex (MDC), and Residential Enhanced Services (RES) agents support the changes to the call event message and the call control message stated above.

#### MMP14

FUNCTION = TRTMT (treatment) and subfields added to CATEGORY = CPGEVENT.

#### NA013

This release makes the following change to table SCAISSRV.

The Called Party Address in ICM messages feature (59011948) adds the CPADIGS parameter to the CALLANSWR, CALLOFFR, and CALLQUED functions in the ACDEVENT category. The feature adds the CPADIGS parameter to the CALLRECDC function in the ROUTING category. The feature adds the ACDEVENT15\$ default tuple to the ACDEVENT category and the ROUTING15\$ default tuple to the ROUTING category.

#### NA012

This release makes the following changes to table SCAISSRV:

- ICM TAPI Extensions (A59006746) adds service category CPGEVENT to table SCAISSRV with messages DIGCOLL, BUSY, RINGBACK, CONNECTED, RAN, MUSIC, and SILENCE.
- ICM TAPI Extensions adds default tuple CPGEVENT14\$ to category CPGEVENT. The feature subscribes to all messages and all field subscriptions are Y.
  - The addition of the default tuple reduces the total number of non-default tuples by one.
  - Sites that have full SCAISSRV tables will have a problem with adding the last tuple of the table on the load. This problem occurs during a software upgrade.
- ICM Three Way Call Enhanced Status Reporting (59006736) adds default tuples TPCC14\$ and SCAI3WC14\$ to table SCAISSRV. The tuples add functions CNTRLREL and NCTRLREL to table SCAISSRV.

## NA011

This release makes the following changes to table SCAISSRV:

- ICM Message Waiting Activation/Deactivation (AU3192) adds the following entries to table SCAISSRV:
  - MWTACT for category SCAIMWTI with parameters DEVICEID, VMSDEVID, and INDICATION
  - CTXEVENT13\$ and RESEVENT13\$ subservice profiles to include parameter Forwarding Party (FWDPARTY) for functions CALLOFFR category CXTEVENT and RESEVENT
  - SCAIMWTI13\$ subservice profile to include new message dv-MWT-ACT and the previous dv-Message-Waiting-U
- ICM MADN Support (AU3191) adds the MEMBERID parameter to the functions SETOFFHK, CALLANSWR, and CALLREL for category CTXEVENT. The subservice profile is CTXEVENT13\$.
- ICM Configuration Management (AU3190) adds default tuple ICCM13\$ with all parameters selected to Y. ICM Configuration Management (AU3190) adds function REASNAGT to category ICCM. Function REASNAGT includes parameters AgentPosid and NewSupervisorPosid.
- ICM Configuration Management (AU3190) adds default tuple TPAC13\$ with all parameters selected to Y. ICM Configuration Management (AU3190) adds functions CHGVWRAP and CHGFORCE to category TPAC. Function CHGVWRAP includes parameters ORIGADDR and WRAPTIMER. Function CHGFORCE includes parameters ORIGADDR and FRCETYPE.
- ACD Enhanced Walkaway (AF7737) adds new subfield ENHWAC to subfield AGTSETACT.

## NA010

This release makes the following changes to table SCAISSRV:

- Network ICM (AU2799) adds default tuple TPAC12\$ with all parameters selected to Y. Network ICM (AU2799) adds functions RESERVEAGT and UNRESERVEAGT to category TPAC. Function RESERVEAGT includes parameters ORIGADDR and RESERVE\_TIMER. Function UNRESERVEAGT includes parameter ORIGADDR.
- Network ICM (AU2799) adds default tuple ACDEVENT12\$ with all parameters selected to Y. Network ICM (AU2799) adds function AGTSETACT to category ACDEVENT. Function AGTSETACT includes

parameters NTWSETACT and INTSTAT; ICM Variable Wrap Reporting (AU2801) adds parameter INTSTAT.

• ICM Variable Wrap Reporting (AU2801) also adds parameter POSTCALL to function CALLREL. Set all parameters in tuple ACDEVENT12\$, to Y. In ACDEVENT11\$ and previous tuples with category ACDEVENT, the POSTCALL parameter is present and set to N.

#### NA009

This release makes the following changes to table SCAISSRV:

- CompuCALL Line of Business (LOB) Event Reporting (AU2618) adds function LOBEVENT to category ACDEVENT. Function LOBEVENT includes parameters NCALLID, AGTPOSID, and LOBTIME. This feature also adds default tuple ACDEVENT11\$ with all parameters selected Y.
- CompuCALL Emergency Key Event Reporting (AU2619) adds function EMKEVENT to category ACDEVENT. Function EMKEVENT includes parameters NCALLID, AGTPOSID, AGTDN, SUPRVPID, SUPRVDN, and AUXDN. The default tuple ACDEVENT11\$ includes function EMKEVENT with all parameters set to Y.
- CompuCALL Status Query (AU2620) adds function APPSTQRY to category RESOURCE. Function APPSTQRY includes parameters DN, ALLCDNS, ALLAGENTS, AGTSTAT, and CALLSTAT. This feature also adds default tuple RESOURCE11\$ with all parameters selected Y.
- Called About Number Display (AF7227) adds parameter CLDABTNO to function ADDPTY in category TPCC and adds fixed tuple TPCC11\$ with all parameters set to Y.

#### NA008

This release makes the following changes to table SCAISSRV:

- The CompuCALL Integration with ICCM feature (AU2339) adds category ICCM with function SETCDNST and default tuple ICCM10\$.
- CompuCALL Basic ICCM Functionality-Selective Queueing feature (AU2341) adds category TPQC with function ROUTECALL and default tuple TPQC10\$.
- CompuCALL Basic ICCM Functionality-Call Treatments feature (AU2441) adds functions GIVETRMT and TRMTCOMP to category TPQC.

### NA007

This release makes the following changes to table SCAISSRV:

- Subservice TPCC adds Functions TRANSFEREV, CONFEVNT, and CONSULTEV.
- Subservice SCAI3WC adds functions TRANSFEREV, CONFEVNT, and CONSULTEV.
- Subservice TPCC adds a new default tuple called TPCC09\$, with all parameters selected Y.
- Subservice SCAI3WC adds a new default tuple called SCAI3WC09\$, with all parameters selected Y.

## NA006

This release makes the following changes to table SCAISSRV:

- Subfield CATEGORY adds subservice SCAI with options ANSWCALL, CALLUNHELD, HOLDCALL, RELSCALL, and UNHOLDCALL.
- Subservice TPCC adds functions ANSWCALL, CALLUNHELD, HOLDCALL, RELSCALL, and UNHOLDCALL.

## NA005

This release makes the following changes to table SCAISSRV:

- Subfield CATEGORY adds subservices RESEVENT, CALLINIT, SCAI3WC, SCAIMWTI, and DNQUERY.
- Subfield CTXEVENT adds subservices SETOFFHK, CALLOFFR, CALLANSWR, and CALLREL.

## BCS36

This release makes the following changes to table SCAISSRV:

- CompuCALL changes the table size.
- Subfield CATEGORY adds subservice TPAC.
- Subservice ACDEVENT adds AGTLGDIN, AGTLGDOUT, AGTNREADY, and AGTREADY.

## BCS35

CompuCALL introduces table SCAISSRV

## Table name

Speed Calling Table

# **Functional description**

Table SCALLTAB is a read-only table. The following information is listed in the table for each speed calling number:

- the site name assigned to the remote location of the line with speed calling (if the line is remote)
- the line equipment number (LEN) of the line with speed calling
- the party number of the line with speed calling
- whether the speed calling list is a short list (eight numbers), a long list (30 numbers), or an international abbreviated dialing list (ADL)
- the speed calling code (2 to 9, 20 to 49, or 0 to 99 for ADL)
- the digits of the destination number

Table SCALLTAB is never datafilled. The speed calling codes are set by the subscriber using a telephone and are stored in this table by the system. Table SCALLTAB is required for journal file records and for dump and restores.

# **Datafill sequence and implications**

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

## Table size

0 to 30 tuples

# SCALLTAB (continued)

# Datafill

The following table lists datafill for table SCALLTAB.

#### **Field descriptions**

Field	Subfield or refinement	Entry	Explanation and action
LINECODE		see subfields	Line code
			This field consists of subfields LEN, PTY, 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.
			Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
	PTY	S, T1 to T5, or R1 to R5	Party
			This field contains the party of the line that is equipped with speed calling.
	DF	SC1, SC2, or	Feature
	ADL	This field contains SC1 if the speed calling list is short (eight numbers), SC2 if the speed calling list is long (30 numbers), or ADL for the international abbreviated dialing list.	
	CODE	0 to 99	Speed calling code
			This field contains the speed calling code, which is 2 to 9 for a short list, 20 to 49 for a long list, or 0 to 99 for an ADL list.
DEST		numeric (1 to	Destination digits
		30 digits)	This field contains the digits of the destination number that is associated with the speed calling code.

# SCALLTAB (end)

# **Datafill example**

The following example shows sample datafill for table SCALLTAB.

MAP display example for table SCALLTAB

			LINECODE	DEST	
HOST	00 0 00 00	S	SC1 3	2258493	

# Table history

#### NA004

Field DEST entry was changed from "numeric (up to 24 digits)" to "numeric (1 to 30 digits)" to accommodate 15-digit international dialing.

#### DMS-100 Family North American DMS-100

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

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