Carrier Voice Over IP Operational Configuration: Data Schema Reference Volume 2

What's new for (I)SN09?

The following data schema tables have been revised:

- TONES
- SERVINFO

Introduction

The purpose of data schema is to assist the operating company in preparing office-dependent data for the relevant DMS switching unit.

The office-dependent data is stored in a series of data store lookup tables that are used in conjunction with software programs and circuits to advance each call through the various stages of call processing.

The data schema portion of the document provides functional descriptions of tables and their fields, including valid entries for each field. It does not provide translation information, call progression sequence, or complete feature implementation datafill.

Understanding data schema table reference information

This document is divided into modules; each module describes one table. As new software features are added, or capabilities are enhanced, existing table documents are revised, or new tables are written.

Data schema tables are arranged in alphabetical order by short table name. Each table has a unique name, which is the abbreviation of the long table title. For example, table CLLI is the short table name for the Common Language Location Identifier Table.

Each data schema module in this document contains the following information:

- **Full table name**
- **Functional description** - a detailed description of the purpose and structure of the table
- **Datafill sequence and meaning** - a list of table dependencies that includes
  - tables that provide prerequisite datafill (provisioning) entries for the described table
  - tables that use the datafill entries in the described table for their provisioning requirements
- **Table size** - information about the number of tuples (rows of datafill) the table can support, and about memory allocation where applicable
- **Datafill** - a reference table describing the field names and parameter values that the tuples use
- **Table history** - a change history for the data schema table
- **Additional information** - any details about the table not covered in the previous sections

In this document

The Carrier Voice Over IP Data Schema Reference uses two volumes to describe the data schema tables associated with Carrier VoIP components. Tables are listed alphabetically. Volume 1 contains tables whose names begin with the letters A through M. Volume 2 contains tables whose names begin with the letters N through Z.

The following table lists the data schema tables described in Volume 2 by component (device, manager or application). This table also lists

data schema tables common to the DMS that apply to Carrier VoIP as well. For a description of a table, click on the name.

Data schema tables in this volume (Sheet 1 of 7)

Name	Description	Device, Manager or Application
NLUPCLLI	Nailed-up Connection Common Language Location Identifier	MG4K
NTPOLL	Table NTPOLL specifies the steps taken during a polling operation	Common
OAFUNDEF	Operator Services System Advanced Intelligent Network Function Definition	Common
OFCCODE	Office Code	Common
OFCHEAD	Office Code Head	Common
OFR2	Office Route-2	Common
OFR3	Office Route-3	Common
OFR4	Office Route-4	Common
OFRT	Office Route Table	Common
PADDATA	Pad Data	Common
PADNDEV	Patch Administration Device	DPT SPM ATM, IW SPM ATM, MG4K
PATHSET	Universal Signaling Point m3ua Pathsets	Common
PECINV	Product Engineering Code Inventory	MG4K, SPM
PMLOADS	Peripheral Module Loads	DPT SPM ATM, IW SPM ATM, MG4K, SPM
PXCODE	Prefix Code	Common
PXHEAD	Prefix Code Head	Common

Data schema tables in this volume (Sheet 2 of 7)

Name	Description	Device, Manager or Application
PXRTE	Prefix Code Route	Common
QMSMIS	QMS MIS Link Definition	Common
RESFEAT	Residential Line	Common
REXSCHED	Routine Exercise Schedule	IW SPM ATM
RMMINV	Remote Maintenance Module Inventory	Common
SBSMAP	SBSMAP defines service data types	Common
SDMBILL	SuperNode Data Manager Billing	CS 2000 Core Manager
SERVINFO	Intelligent Network Service Information	Common
SERVRINV	Stores provisioned data for a GWC or an AUD	GWC
SERVSINV	Server Subtending Node Inventory	GWC
SITE	Site	MG4K
SOSMMPC	System of Operative Searching Measures MPC	Common
SOSMPARM	System of Operative Searching Measures Parameters	Common
SOSMTRK	System of Operative Searching Measures Trunk	Common
SPMCHAST	SPM Messaging Channel Assignment	DPT SPM ATM, IW SPM ATM
SPMECAN	SPM Echo Canceller	MG4K, SPM
SPMLDVAL	Spectrum Load Name Validation	SPM

Data schema tables in this volume (Sheet 3 of 7)

Name	Description	Device, Manager or Application
SYNCLK	Synchronous Clock	IW SPM ATM, SPM
TDBDAOPT	TOPS Database Directory Assistance Options	Common
TFANINT	Traffic Separation Intersection	Common
TMTCNTL	Treatment Control	Common
TMTCNTL.TREAT	Treatment Control Treatments	Common
TMTMAP	Treatment to Cause Map	Common
TOLLTRKS	TOLLTRKS	Common
TONES	Tones	Common
TOPSFTR	TOPS features	Common
TOPSMCDB	TOPS Message Center Database	Common
TOPSPARM	TOPS Office Parameter	Common
TOPSTOPT	Traffic Operator Position System Trunk Options	Common
TRKLATA	Originating trunk local access and transport area	Common
TRKMEM	Trunk Member	GWC, MG4K, SPM
TRKSGRP	Information for each subgroup assigned to the trunk groups listed in table TRKGRP	MG4K
TRKSGRP type CCITT6	Pulsing type is CCITT6 (CCITT no. 6 signaling)	MG4K
TRKSGRP type C7UP	Trunk Subgroup Type CCS7 User Part	MG4K
TRKSGRP type DPNSS	DPNSS trunk subgroups	MG4K
TRKSGRP type DS0TL	JACK trunk group	MG4K

Data schema tables in this volume (Sheet 4 of 7)

Name	Description	Device, Manager or Application
TRKSGRP type FDCP	Flexible Digital CAS Platform (FDCP) trunk subgroups	MG4K
TRKSGRP type FST	Flexible signaling trunk (FST) trunk subgroups	MG4K
TRKSGRP type G1TR7	1TR7 trunk subgroups. G1TR7	MG4K
TRKSGRP type ISDN	Trunk Subgroup Type ISDN	MG4K
TRKSGRP type JSTD	Japan standard (JSTD) signaling	MG4K
TRKSGRP type N5	N5 pulsing	MG4K
TRKGRP type OC	OG/2W from Local to CAMA Trunk Group Type	Common
TRKGRP type OI	Incoming Operator Trunk Group Type	Common
TRKGRP type OP	OG/2W from Local or Toll to TOPS or TSPS Trunk Group Type	Common
TRKGRP type OPR	International Operator (No Metering) Trunk Group Type	Common
TRKGRP type OS	Outgoing from Toll Trunk Group Type	Common
TRKGRP type P2	Two-way DID/DOD PBX Trunk Group Type	Common
TRKGRP type PRA	ISDN Primary Rate Access Trunk Group Type	Common
TRKGRP type PRIVLN	Private Line Trunk Group Type	Common
TRKGRP type PX	Two-way Digital PBX Trunk Group Type	Common
TRKSGRP type R1/R1N5	R1 or R1N5 pulsing	MG4K

Data schema tables in this volume (Sheet 5 of 7)

Name	Description	Device, Manager or Application
TRKSGRP type R2	R2 pulsing and GW trunk	MG4K
TRKGRP type RC	Recording Completing Trunk Group Type	Common
TRKGRP type RONI	TOPS Remote ONI Trunk Group Type	Common
TRKGRP type ROTL	TRKGRP type ROTL	Common
TRKGRP type SC	2W/IC from North AMR5 or CAMA Trunk Group Type	Common
TRKSGRP type SIGSYS	OPR, MTR, or ITOPS trunk groups	MG4K
TRKGRP type SOCKT	Short or Open Circuit Test Line (OCKT) or SCKT	Common
TRKGRP type SPC	Semi-permanent Connections Trunk Group Type	Common
TRKSGRP type STD	Trunk group with standard (STD) signaling	MG4K
TRKSGRP type STDTL/CCIS6	CCIS6 pulsing with TL (transmission link) trunk group	MG4K
TRKGRP type T101	101 Communication Test Line Trunk Group Type	Common
TRKGRP type T105	Terminating 105 Test Line Trunk Group Type	Common
TRKGRP type T2	Two-Way End Office Trunk Group Type	Common
TRKGRP type TD	TRKGRP type TD	Common
TRKGRP type TDDO	Tandem Two-stage Direct-dial Overseas Trunk Group Type	Common
TRKGRP type TL	CCIS Transmission Link Trunk Group Type	Common

Data schema tables in this volume (Sheet 6 of 7)

Name	Description	Device, Manager or Application
TRKGRP type TO	Outgoing End Office Trunk Group Type	Common
TRKGRP type TOPSARU	TOPS External Audio Response Unit Trunk Group Type	Common
TRKGRP type TOPSVL	TRKGRP type TOPSVL	Common
TRKGRP type TPS101	International 101 Test Line Trunk Group Type	Common
TRKGRP type TI	Incoming End Office Trunk Group Type	Common
TRKGRP type TTL2	Terminating 102 Test Line Trunk Group Type	Common
TRKSGRP type TUP	Signaling is telephone user part (TUP) on trunk group types IBNTI, IBNTO, and IBNT2	MG4K
TRKSGRP type UKSTD	Outgoing IBN trunks supporting United Kingdom '3J type III/IV loop disconnect signaling	MG4K
TRKGRP type UT	Utility Telemetry Trunk Group Type	Common
TRKGRP type VR	Operator Verification Trunk Group Type	Common
TRKSGRP type X25	X.25 signaling type	MG4K
TRKSGRP type X75	X.75 signaling type	MG4K
TRKGRP type ZI	0+ and 0- Tandem to TSPS or TOPS Trunk Group Type	Common
USPPATHS	Automatic Call Distribution Routing	Common
VIRTGRPS	Virtual Facility Group	Common

Data schema tables in this volume (Sheet 7 of 7)

Name	Description	Device, Manager or Application
VOWINV	Virtual Office Worker Inventory	Common
VRDNINV	VRDN inventory table	Common
XAFWLOAD	XA-Core Firmware Load	Common
XLABILL	XLAGRP Translation Refinement for Billing Types	Common
XLACLASS	XLAGRP Translation Refinement for Calling Service Class	Common
XLAPLAN	Translation Plan	SPM

Supplementary data schema

The following list references data schema that do not appear in this document:

- *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual*, 297-8021-351.09.03
- *DMS-100 Family North American DMS-100 Translations Guide*, 297-8021-350.17.03
- *Succession SN07 OSS (ATM and IP) Advance Feature Guide*, PLN-07AT-OSS
- *Succession Fault Management Logs Reference*, NN10275-909
- *Succession Performance Management Operational Measurements Reference*, NN10264-709

The following documents list the translation service documents available in this Succession release:

- *Configuration Management: Government Emergency Telephone Service*, NN10341-501
- *Configuration Management: Enhanced 911 Service*, NN10343-501
- *Configuration Management: Lawful Intercept Service*, NN10345-501

NLUPCLLI

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Nailed-up Connection Common Language Location Identifier

A switching unit can provide table NLUPCLLI. This switching unit must have feature package NTX802AA (Toll Features II), or feature package NTX902AA (Local Features II).

The incoming side of the nailed-up connection pair does not require a hard-wire supervision off-hook to be available. The system supports in-band and standard supervision signals in both directions.

Trunks for the nailed-up connection trunk group have trunk group type NU in table TRKGRP.

The maximum number of nailed-up connections is 801 or 0 to 800. For each of the connections, the following requirements apply:

- Data entry of the CLLI and external trunk number of the incoming and outgoing trunks must occur. You must connect this CLLI and the external trunk number of the incoming and outgoing trunks.
- The value of field CONNECT must be specified.

If field CONNECT is set to Y (yes), the two trunk circuits connect. The state of these trunk circuits change from idle, inhibit, lockout, or remote make busy. The state of these trunk circuits change to seized on the trunk test position (TTP).

If field CONNECT is set to N (no), a release of the connection occurs. The trunks return to the idle state.

For the first datafill, field CONNECT must be N.

Datafill sequence and meaning

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

- CLLI
- TRKMEM

Table size

0 to 801 tuples.

Junctored Network offices

For JNET offices, parameter MAXNUCS in table OFCENG allocates memory for table NLUPCLLI.

Enhanced Network offices

For ENET offices, parameter MAXNUCS in table OFCENG does not use allocate memory for table NLUPCLLI. For ENET offices, parameter MAXNUCS in table OFCENG must be 0.

Datafill

The following table lists the datafill for table NLUPCLLI.

Field, subfield, and refinement descriptions for table NLUPCLLI (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
INDX		numeric (0 to 800)	Index. Enter the index for the entry. the assignment of the index must be in order and start from 0.
NUPI		see subfields	Nailed-up incoming connection. This field contains subfields CLLI and EXTRKNM.
	CLLI	alphanumeric (maximum of 16 characters)	Incoming common language location identifier. Enter the CLLI code assigned to the incoming trunk in table CLLI.
	EXTRKNM	numeric 0 to 9999	Incoming external trunk number. Enter the external trunk number for the incoming trunk.
NUPO		see subfields	Nailed-up outgoing connection. This field contains subfields CLLI and EXTRKNM.

Field, subfield, and refinement descriptions for table NLUPCLLI (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (maximum of 16 characters)	Outgoing common language location identifier. Enter the CLLI code for the outgoing trunk in table CLLI.
	EXTRKNM	numeric 0 to 9999	Outgoing external trunk number. Enter the external trunk number for the outgoing trunk.
	CONNECT	Y or N	Connect. Enter Y if the two trunks are to connect. For other conditions enter N.

Table history

SN07

Table NLUPCLLI migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

NTPOLL

ATTENTION
This table applies to new or modified content for SN08 that is valid through the current release.

NTPOLL

Table NTPOLL specifies the steps taken during a polling operation. The poll executes tuple zero through tuple n-1 where n is the number of polling steps. To see the schedule for the next poll use the command “pollschd qschd”.

Table NTPOLL is initialized the first time a user enters table NTPOLL or types a POLL command at the CI prompt. Before either of these events, the table does not exist.

Before table NTPOLL is activated in this manner, polling is based on internal data structures with no need for Table NTPOLL. Table NTPOLL only exists to allow user updates to the polling steps. When table NTPOLL is activated, it is automatically datafilled with a default polling template. The default polling template reflects the internal data structures which previously tracked all of the poll steps.

When steps are added to or deleted from table NTPOLL the table automatically renumbers so that all the steps are consecutive from 0 to n-1 where n = the total number of steps.

The polling steps stored in table NTPOLL are preserved during system restarts and upgrades (ONP).

Datafill sequence and meaning

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

Table size

Before activation, table NTPOLL is empty.

After activation, the default polling template contains less than 500 tuples.

Datafill

The following table lists the datafill for table NTPOLL.

Field, subfield, and refinement descriptions for table NTPOLL

Field	Subfield or refinement	Entry	Explanation and action
NTPOLLKY		see subfields	The two-part key for table NTPOLL.
	STEPNUM	numeric 0 to n-1	The step number. The system keeps steps numbered from 0 to n-1 (where n equals the total number of steps) when tuples are added and deleted.
	INSERT	boolean Y or N	Used only for inserting a new tuple between two existing tuples. To insert a step, use the REPLACE command with STEPNUM=a and INSERT=Y where ‘a’ is a step number. The new step is added as STEPNUM a, the original tuple is preserved with STEPNUM=a+1 and all subsequent steps increment by one.
LONG		boolean Y or N	Long format. Set to Y to include this step in long format polling reports.
SHORT		boolean Y or N	Short format. Set to Y to include this step in short format polling reports.
USAGE		boolean Y or N	Usage format. Set to Y to include this step in usage format polling reports.
MEMCALC		boolean Y or N	Memory calculation format. Set to Y to include this step in memcalc format polling reports.
STPTYP		TABLE, CMPLX	The step type, either table or complex. Refinements for the STPTYP are shown on the following pages.

STPTYP = TABLE

If the entry in subfield STPTYP is TABLE, datafill the tuple as shown below.

Subfield or refinement	Entry	Explanation and action
TABNAME	alphanumeric	Table name. The name string of the table.
TSOPER	COUNT or LIST	Table Step Operation. The table step operation, either COUNT or LIST.
LISTOP	ALL, FIRST or LAST	List operation. List all, the first or the last tuples in the table.
HOWMANY	numeric	How many tuples to list. If the list operation (LISTOP) is set to FIRST or LAST, this field is required. Enter the number of tuples to be listed.

STPTYP = CMPLX

If the entry in subfield STPTYP is CMPLX, datafill the tuple as shown below.

Field	Subfield or refinement	Entry	Explanation and action
CMPLXTYP		INT or EXT	Complex poll type. Select internal for code-defined poll or external for user-defined poll.
CMPLXNAME		alphanumeric (40 characters, use underscore for space, double-underscore for underscore)	Complex poll name. Enter the name of the complex poll. For an internal complex step, this is the name of the internal procedure stored in internal data structures. For an external complex step, this string is run as a CI command.

Table history

(I)SN08

Table NTPOLL was created for activity A00006226.

OAFUNDEF

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Operator Services System Advanced Intelligent Network Function Definition

Table Operator Services System Advanced Intelligent Network Function Definition (OAFUNDEF) defines the functions (services) used in processing OSSAIN calls. A function is a service or portion of a service provided by a service node, live operator, or an existing TOPS automated system.

Datafill sequence and meaning

Tables OANODINV, OASESNPL, and CT4QNAMS must be datafilled before table OAFUNDEF.

Table OAFUNDEF must be datafilled before tables OAFNDISP, OAFUNBLK, OACNNPRF, OATLKPRF, OADTFPRF, OACAUPRF, OADSCPRF, OACTLDEF, and SNVLGRP.

Table size

0 to 1023 tuples.

Datafill

The following table lists the datafill for table OAFUNDEF.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
FUNCID		0 to 1022	Function identification. This is the key into the table. This number must match between the host, remote (if OSAC), and service node.
FUNCNAME		1 to 16 characters	Function name. This value is used by other OSSAIN tables.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
FUNCAREA		see subfield FUNCTYPE	Function area. This field consists of subfield FUNCTYPE and refinements.
	FUNCTYPE	SN, TOPSOPER, TOPSAUTO	Function type. The function provider. Following are the values: SN - service node. Datafill refinements ORIGSERV, TRIGGER_AREA, SBTIMER_AREA, ISAUTOSN_AREA, ANSONVLC, and CAMHERE. TOPSAUTO - existing TOPS automated system. Datafill refinements AUTOSYS and OPRONFL. TOPSOPER - a live operator. Datafill refinements OPRCT4Q and QMS_AREA. ***Note:*** Note, if a function has FUNCTYPE = TOPSOPER and that FUNCNAME is datafilled in field NEWFUNC, then FUNCTYPE cannot be changed to SN or TOPSAUTO.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	ORIGSERV	TASERV, DASERV, INTCSERV	Originating service. If FUNCTYPE = SN, datafill this refinement. This field is used to apply a base service to an OSSAIN call originating on the DMS switch and routed to an OSSAIN service node. Calls receiving DA or Intercept service are in a restricted mode while at the service node. DA and Intercept calls should only be routed to a service node to determine billing for the call prior to transferring the call to an operator. The service from the ORIGSERV field is not applied to calls originated by the service node and the service not applied to calls transferred by the service node or operator. Enter TASERV (for toll and assistance), DASERV (for directory assistance), or INTCSERV (for intercept).
	TRIGGER_ AREA	see subfield	Trigger area. If FUNCTYPE = SN, datafill this refinement. This field consists of refinement TRIGEVNT.
	TRIGEVNT	N or Y	Trigger event. Enter Y if a specific trigger event session pool is to be used for trigger event informs and datafill refinement TRIGPOOL. Otherwise, enter N.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	TRIGPOOL	name from table OASESNPL	Trigger event session pool name. Datafill this field if field TRIGEVNT = Y. Enter a session pool name defined in table OASESNPL with TRIGEVNT=Y.
	SBTIMER_ AREA	see subfield SBTIMOUT	Session begin timer area. If FUNCTYPE = SN, datafill this refinement. This field consists of subfield SBTIMOUT and refinement.
	SBTIMOUT	Y or N	Session begin time out. This new field only appears if FUNCTYPE = SN. This field enables a timer when an OSSAIN call is routed to the function. If the SN does not respond in the timer period, the call is routed to an alternate function in table OAFNDISP field ORFLACTN. The values are: Y - Enable timer. Datafill refinement SBTIMER. N - Do not start timer. The DMS switch assumes the SN has received the Session Begin message and has control of the call. If the SN has not received the message, the call remains connected to the SN session. This connection continues until OSSAIN onhook and call sanity timers take effect. Or, the connection continues until the SN goes out of service. The default is N.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 5 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	SBTIMER	1 to 7	Session begin timer period. Datafill this field if SBTIMOUT = Y. Enter the time in seconds the switch waits for a reply from a SN before the call is routed to an alternate function.
	ISAUTOFN_ AREA	see subfields	Is auto function area. If FUNCTYPE = SN, datafill this refinement. This field consists of subfield ISAUTOFN.
	ISAUTOFN	Y or N	Is auto function. Indicate if this function should be reassigned for a no automation service call. Enter Y for reassignment and datafill subfield NEWFUNC. Otherwise, enter N for no reassignment. The default is N. Originating line number service (OLNS) indicates if the subscriber has requested service from an operator instead of an automated system.
	NEWFUNC	name from table OAFUNDEF	New function. Datafill this field if field ISAUTOFN = Y. Enter a TOPS operator function defined in table OAFUNDEF.
	ANSONVLC	N or Y	Answer on voice link connection. This field indicates whether to return answer on connection of a voice link. Enter Y to return answer or N to not return answer. The default is Y.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	CAMHERE	N or Y	QMS CAM here. If FUNCTYPE = SN, datafill this refinement. This field indicates the location of the QMS CAM. The values are: N (no) - QMS CAM is centralized at an OSAC host switch, not in this switch. Datafill refinement HRSESNPL. Y (yes) - QMS CAM is located in this switch. Datafill refinement CALLQ and VOICE_AREA.
	HRSESNPL	node name from table OANODINV	Host-remote session pool name. If CAMHERE=N, datafill this field with a session pool for OSAC messaging between the OSAC remote and OSAC host. This session pool is used by the remote to request the host for a service node session to a centralized service node that has the function for the call. The session pool name must be datafilled in table OASESNPL with ORIGTYPE = OSACORIG.
	CALLQ	call queue from table QMSCQDEF	Call queue. If CAMHERE=Y, datafill this field with a call queue defined in table QMSCQDEF.
	VOICE_ AREA	see subfield	Voice connection area. This area only appears if CAMHERE = Y. This area consists of subfield CONVOICE.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	CONVOICE	Y or N	Connect voice link. This field indicates if the switch should select and connect a voice link for an SN before routing the call to the SN. Enter Y to enable this capability. The default is N.
	DISPROUT	Y or N	Disposition routing. Datafill this field if field CONVOICE = Y. This field indicates if the switch should perform disposition routing when the voice link connection attempt fails. Enter Y to enable this capability.
	AUTOSYS	AABS, DAS	TOPS automated system. If FUNCTYPE = TOPSAUTO, datafill this refinement. This field indicates the existing TOPS automated system providing this function. The MAP display also shows values MCCS, ACTS, and BRANDING; however, only AABS is currently supported.
	OPRONFL	from field CT4QNAME in table CT4QNAMS	Operator on failure. If FUNCTYPE = TOPSAUTO, datafill this refinement. This field indicates the CT4Q for QMS POSTAUTO refinement ordering if live operator backup is required for the existing TOPS automated system specified in field AUTOSYS. This value is defined in field CT4QNAME of table CT4QNAMS.

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 8 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	OPRCT4Q	from field CT4QNAME in table CT4QNAMS	Operator call type for queue. If FUNCTYPE = TOPSOPER, datafill this refinement. This field indicates the CT4Q for the final call queue assignment when obtaining a live operator for this function. This value is defined in field CT4QNAME of table CT4QNAMS.
	QMS_AREA	see subfield	Voice connect area. If FUNCTYPE = TOPSOPER, datafill this refinement. This field consists of subfield QREFINMT.
	QREFINMT	Y or N	QMS refinement. This field indicates if the switch should apply QMS refinements to the TOPSOPER CT4Q before routing the call to the operator. Enter Y to enable this capability. The default is N. If Y, datafill CQORDER.
	CQORDER	PREOPR, POSTAUTO, RECALL, or ASST	Call queue refinement order. Datafill this field if field QREFINMT = Y. Indicate the order of call queue refinement. The values refer to the fields in tables TQORDERA and TQORDERB, which are the following: PREOPR - pre-operator POSTAUTO - post automated service RECALL - recall or transfer to an operator ASST - a QMS Customer Assistance Service Expert (CASE) operator

Field, subfield, and refinement descriptions for table OAFUNDEF (Sheet 9 of 9)

Field	Subfield or refinement	Entry	Explanation and action
DAS	DASCT4Q	CT4Q name	Enter the Call Type For Queuing (CT4Q) to use to determine the call queue, service, DA database instance.
	QMSAREA	Y, N	Defines whether or not QMS refinements are to be done on the DASCT4Q.
		PREOPR, POSTAUTO, RECALL, ASST	If QMS_AREA = Y this refinement defines the order to be used for QMS refinements.

Additional information

Error messages

The following error messages apply to table OAFUNDEF.

Error messages for table OAFUNDEF (Sheet 1 of 4)

Error message	Explanation and action
`OSSAIN function names must be unique.`	This message is displayed if an attempt is made to add two tuples with the same function name.
`AABS is the only TOPS automated system that is currently supported for OSSAIN.`	This message is displayed if an attempt is made to datafill field AUTOSYS with a TOPS automated system other than AABS. AABS is the only TOPS automated system supported in the initial release (TOPS06) of OSSAIN.
`Only session pools with ORIGTYPE OSACORIG may be datafilled in field HRSESNPL.`	If the session pool for field HRSESNPL is not datafilled as an OSACORIG session pool in table OASESNP, this error message is displayed.

Error messages for table OAFUNDEF (Sheet 2 of 4)

Error message	Explanation and action
Only nodes of PM type OSAC may be datafilled in field NODENAME.	This message is displayed if an attempt is made to datafill a node name in table OAFUNDEF that is not of type OSAC. Table OANODINV allows nodes to be one of three types: OSN, OSNM, and OSAC. Only OSAC type nodes can be datafilled in table OAFUNDEF when CAMHERE = N.
This CT4Q is in use in table OAFUNDEF. You must remove all references to this CT4Q before you can delete it.	This message is displayed if an attempt is made to delete a CT4Q from table CT4QNAMS that is in use in table OAFUNDEF. Tuples may not be deleted from table CT4QNAMS until all references to that CT4Q are removed from table OAFUNDEF.
Field <field name> must be datafilled with a CT4Q from table CT4QNAMS that has a SYSTEM value of TOPSOPR.	This message is displayed if an attempt is made to datafill field OPRCT4Q or OPRONFL with a CT4Q that is not defined in table CT4QNAMS with field SYSTEM, MCCS, ACTS, BRANDING = TOPSOPR.
This function is datafilled in table XXXXXXXX. Since field FUNCTYPE is being changed from SN, you must remove any references to this function from the OSSAIN trigger tables.	This message is displayed if an attempt is made to change the FUNCTYPE field from SN to TOPSOPER or TOPSAUTO and the function is referenced in any OSSAIN trigger table. The trigger tables may only redirect to a node.

Error messages for table OAFUNDEF (Sheet 3 of 4)

Error message	Explanation and action
This function name is in use in table XXXXXXXX. `You must remove all references to this function name before you can delete it.`	This message is displayed if an attempt is made to delete a tuple from table OAFUNDEF that has a function name used in one of the following tables: OAFNDISP, OAFUNBLK, OACNNPRF, OATLKPRF, OADTFPRF, OACAUPRF, OADSCPRF, or OACTLDEF. Tuples may not be deleted from table OAFUNDEF until all datafill references to that function name are deleted from all of the above tables. Table OAFUNDEF must be datafilled before the above tables. Standard table control error messages are displayed if an attempt is made to datafill those tables with a function name that has not been defined in table OAFUNDEF.
`Only session pools with TRIGEVNT=Y may be datafilled in field TRIGPOOL.`	If the trigger event inform pool is not datafilled as a trigger event session pool, this error message is displayed.
`TYPE OF HRSESNPL IS SR_SESSION_POOL_RANGE`	Tables OANODINV and OASESNPL must be datafilled before host-remote session pools can be used in table OAFUNDEF. A standard table control message is displayed if an attempt is made to datafill a session pool in field H_R_SNPL that is not datafilled in table OASESNPL.

Error messages for table OAFUNDEF (Sheet 4 of 4)

Error message	Explanation and action
This function name is in use in table XXXXXXXX. You must remove all references to this function name before you can delete it.	This message is displayed if an attempt is made to delete a tuple from table OAFUNDEF that has a function name used in one of the following tables: OAFNDISP, OAFUNBLK, OACNNPRF, OATLKPRF, OADTFPRF, OACAUPRF, OADSCPRF, OACTLDEF, or SNVLGRP. Tuples may not be deleted from table OAFUNDEF until all datafill references to that function name are deleted from all of the above tables. Table OAFUNDEF must be datafilled before the above tables. Standard table control error messages are displayed if an attempt is made to datafill those tables with a function name that has not been defined in table OAFUNDEF.
`Field NEWFUNC must be datafilled with a function from table OAFUNDEF that has a functype value of TOPSOPER.`	This error message is displayed if an attempt is made to enter a value in field NEWFUNC that does not meet the following requirements: • A function must already be present in table OAFUNDEF before it can be assigned to NEWFUNC. • Only functions of type TOPSOPER can be assigned to NEWFUNC.
`This function name is in use in NEWFUNC field of table OAFUNDEF.` `You must remove all references to this function name before you can delete it.`	A tuple cannot be deleted if its function name is assigned to a NEWFUNC field. If an attempt is made to delete the tuple this message is displayed.
`This function is datafilled in table OAFUNDEF.` `Since field FUNCTYPE is being changed from TOPSOPER, you must remove any references to this function from the NEWFUNC field in table OAFUNDEF.`	TOPS operator functions that are assigned as NEWFUNC cannot be changed to an OSSAIN SN or TOPS Automated System type function. If an attempt is made to change the function, this message is displayed.

Table history

SN07

Table OAFUNDEF migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

Added field DAS and associated subfields as per feature A00003704.

OFCCODE

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Office Code

Applies to new or modified content for NA015 that is valid through the current release.

Table Office Code (OFCCODE) is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table OFCCODE translates the office code digit segment, together with tables OFCHEAD and OFCRTE.

For related information, refer to tables ACCODE.

For a description of the universal translation tables, refer to table ACHEAD.

Datafill sequence and meaning

Table OFCHEAD must be datafilled before tables OFCCODE and OFCRTE.

Datafill

Refer to table ACCODE for more information.

Table size

Refer to table ACCODE for more information.

Table history

SN07

Table OFCCODE migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

OFCHEAD

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Office Code Head

Table Office Code Head (OFCHEAD) is a member of the universal translation tables. The universal translation tables are organized to translate the incoming digit string in segments. Table OFCHEAD translates the office code digit segment, together with tables OFCCODE and OFCRTE.

For related information, refer to tables ACCODE and ACRTE.

For a description of the universal translation tables, refer to table ACHEAD.

Datafill sequence and meaning

Refer to table ACHEAD for more information.

Datafill

Refer to table ACHEAD for more information.

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.

Table history

SN07

Table OFCHEAD migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

OFR2

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

Office Route-2

Table Office Route-2 (OFR2) is an exact duplicate of table OFRT. Refer to table OFRT for full details of the use and the datafill for table OFR2.

Datafill sequence and meaning

Refer to table OFRT for more information.

Table size

0 to 1024 tuples.

Datafill

Refer to table OFRT for more information.

Table history

SN07

Table OFR2 migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

NA017 (SN04)

Feature 59035336 introduces the Supergroup (SG) option.

OFR3

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

Office Route-3

Table Office Route-3 (OFR3) is an exact duplicate of table OFRT. Refer to table OFRT for full details of the use and the datafill for table OFR3.

Datafill sequence and meaning

Refer to table OFRT for more information.

Table size

0 to 1024 tuples.

Datafill

Refer to table OFRT for more information.

Table history

SN07

Table OFR3 migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

NA017 (SN04)

Feature 59035336 introduces the Supergroup (SG) option.

OFR4

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

Office Route-4

Table Office Route-4 (OFR4) is an exact duplicate of table OFRT. Refer to table OFRT for full details of the use and the datafill for table OFR4.

Datafill sequence and meaning

Refer to table OFRT for more information.

Table size

0 to 1024 tuples.

Datafill

Refer to table OFRT for more information.

Table history

SN07

Table OFR4 migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 8 of 12*, 297-8021-351.09.03.

NA017

Feature 59035336 introduces the Supergroup (SG) option.

OFRT

Office Route Table

ATTENTION

Retranslation using the RT or RX selectors begins in the Home Numbering Plan Control (HNPACONT) table. In order to retranslate correctly, appropriate translations must be in place. Retranslated numbers, which would normally require a prefix digit (1 or 0) in order to complete, will not complete if the retranslated number is an ambiguous code requiring a prefix digit. This situation occurs when the retranslated number encounters the AMBI PFX selector in the HNPACODE subtable in table HNPACONT.

Verify translations that use the RT or RX selectors for correct routing prior to implementation. If the RT or RX selector fails to retranslate the call correctly, you must use alternate translations. The alternate translations may include, but are not limited to the following:

1 - use of a virtual facility group

2 - use of a dedicated translation scheme for retranslated calls (a dedicated SNPA/STS code in table HNPACONT with retranslated numbers broken out in translations and routed correctly).

3 - Use of the OPF selector instead of the PRX selector for ambiguous code calls. The OPF selector does not require the presence of a prefix digit to complete a 10-digit call.

The following table lists the route reference table and subtables.

OFRT route reference table and subtables

Table name	Title
OFRT	Office Route Table
HNPACONT.RTEREF	Home NPA Route Reference Subtable
FNPACONT.RTEREF	Foreign NPA Route Reference Subtable
FNPACONT.FNPASTS.RTEREF	Foreign NPA STS Route Reference Subtable

Table OFRT is used for routing in all DMS switches except the DMS-300 switch.

For the TL06 release, the following additional selectors are supported:

- SX
- N2

For the NA005.1A release, only the following selectors are supported:

- CND
- N
- S

The route reference table OFRT or subtable RTEREF is used if an originating call is being translated and a preceding stage identifies a route reference index. Refer to the descriptions of table OFRT and subtables HNPACONT.RTEREF, FNPACONT.RTEREF, and FNPACONT.FNPAST.RTEREF for more information on the preceding stages of translation that can point to the route reference tables.

A route reference index can point to

- a list of up to eight alternate routes
- a treatment list (in table OFRT only)

List of alternate routes

If translation of the call points to a route reference index in table OFRT, from other than treatment table TMTCNTL.TREAT, or in subtable RTEREF, the route list must be a list of alternate route list elements in order of preference.

A route list is composed of one to eight elements (nine elements for selectors DCRT and NODE only). The DMS switch allows nine elements to be datafilled, but the only time nine routes are valid is if the first selector is DCRT or NODE. If DCRT or NODE is not the first selector, only eight routes are supported. Each element usually contains the identity of a trunk group from which an idle outgoing trunk (if any) is selected. If no idle trunk is available, the system advances to the next element in the list.

ATTENTION

It is possible to create an infinite loop through the datafill, which will cause call deaths and traps.

Unlike line translations, circular hunt configurations should not be set up in trunk routing. The following figure shows an example of the type of datafill to be avoided.

Note: The NA010 ISP Even Call Distribution feature allows use of super-group translations for ISDN primary rate interface (PRI) circular hunting. Refer to “ISP Even Call Distribution” in the ISDN translations section of the Translations Guide for more information on this feature.

Example of an infinite loop in table OFRT

```
RTE   RTELIST
-----------------------------------------------------
801 (N D TRUNK1 O N N) (T OFRT 802) $
802 (N D TRUNK2 O N N) (T OFRT 803) (TRMT BUSY) $
803 (N D TRUNK3 O N N) (T OFRT 801) $
```

When route selector TRMT is used, calls are routed directly to treatment. If the end of the list is reached and no idle trunk is found, translation proceeds to subtable TMTCNTL.TREAT.

A route list element defines a combination of the following elements by means of predefined route selectors:

- next stage in call translation, either unconditionally or with conditions
- digit manipulation of the received digits that may already have been manipulated in preceding stages of translation
- redefinition of various factors associated with the originator of the call, such as charging, billing, screening, and type of call
- outpulsing of digits or signals or both, and generation of tones

Refer to table “Office parameters” for route element functions as a guide for the selection of the route selector.

Treatment route list

If translation of the call results in a treatment code and table TMTCNTL.TREAT points to a route reference index in table OFRT, the route list must be a list of tones, announcements, or states applied in the order listed.

Table OFRT in international translations

Table OFRT can be used in international translations only for treatments and standard routes. Nonstandard routing using this table does not work and results in a software error (SWERR) from NADTUI.

If a nonstandard route is required, use the appropriate international translation table (FTRTE, PXRTE, OFCRTE, FARTE, CTRTE, or ACRTE).

Treatment routes

For information on treatment routes, refer to the description of subtable TMTCNTL.TREAT.

Note on Cancel Normal Charges (CANCNORC) field

Examples of normal charges as interpreted by the DMS switch are described below.

If the call does not result in an abortive treatment and the called party goes off hook, the following occurs:

- If the type of call is NP (no prefix), the DMS switch takes appropriate action depending on where the call originated as follows:
  - For a call incoming on a one-party flat rate (1FR) line, no action for charging is taken.
  - For a call incoming on a one-party message rate (1MR) line, message rate register is pegged.
  - For a call incoming on a coin station (coin first [CCF], coin dial-tone first [CDF], or coin semi-postpay [CSP]) line, appropriate action is taken to collect coin depending on type of coin station.
  - For a call incoming on a trunk group, an off-hook signal is returned.
- If the type of call is DD (direct dial), the DMS switch takes appropriate action depending on where the call originated as follows:
  - For a call incoming on a 1FR or 1MR line, the call is recorded on Local Automatic Message Accounting (LAMA) or Centralized Automatic Message Accounting (CAMA) tape unless the call

goes out on a trunk group type capable of Automatic Number Identification (ANI) spill.

— For a call incoming on a coin station (CCF, CDF, or CSP) line, appropriate action is taken until the operator at the coin collection desk is reached.

— For a call incoming on a trunk group, an off-hook signal is returned.

- If the type of call is OA (operator assisted), the DMS switch takes appropriate action depending on where the call originated as follows:

  — For a call incoming on a 1FR or 1MR line, no special action is taken until the operator is reached.

  — For a call incoming on a coin station (CCF, CDF, or CSP) line, appropriate action is taken until the operator at the coin collection desk is reached.

  — For a call incoming on a trunk group, an off-hook signal is returned.

If the call results in an abortive treatment, the normal procedure is not to charge the caller even if the type of call indicates a chargeable call. Canceling normal charges results in appropriate action to charge the caller even if the type of call indicates a nonchargeable call.

If field CANCNORC is set to Y, a nonrevenue call is assumed and is reflected in the call code of the bearer capability (BC) Automatic Message Accounting (AMA) record.

If field CANCNORC is set to N, then a revenue record is assumed and reflected in the call code of the AMA record (provided nonrevenue is not indicated in another manner).

Partitioned Table Editor feature

In DMS offices with the Partitioned Table Editor (PTE) feature, non-operating company users can be authorized by the operating company to use the PTE feature to edit all tuples of subtables owned by them as follows:

- subtables HNPACONT.RTEREF: refer to the description of subtable HNPACONT.RTEREF for more information
- subtables FNPACONT.RTEREF: refer to the description of subtable FNPACONT.RTEREF for more information
- subtables FNPACONT.FNPASTS.RTEREF: refer to the description of subtable FNPACONT.FNPASTS.RTEREF for more information

The PTE feature allows the operating company to limit edit access to a table for a specified user to denied, read-only, change-only, or add and delete tuples.

It is recommended that PTE feature access is set for non-operating company users as follows:

- Subtables HNPACONT.RTEREF—add and delete tuples access
- Subtables FNPACONT.RTEREF—denied access
- Subtables FNPACONT.FNPASTS.RTEREF—add and delete tuple access

In subtables FNPACONT.FNPASTS, field COMMON_FNPA is set to N to ensure that a separate FNPACONT.FNPASTS.RTEREF subtable is created for each STS.

Refer to the description of table OWNER for information on the Customer Data Change feature.

Route element functions (Sheet 1 of 4)

	Route selector																								
Functions performed	**CND/NOT**	**DCRT**	**DN**	**INS**	**ISA**	**MEM**	**MN**	**N**	**N2**	**NODE**	**NPOS**	**NPOSDN**	**NQ**	**QH**	**RT**	**RX**	**S**	**SG**	**SQ**	**ST**	**SX**	**T**	**TC**	**TRMT**	**TS**
Proceed to (unconditionally)																									
First free member of CLLI					Y		Y	Y	Y		Y		Y				Y		Y	Y	Y				Y
Tested trunk MEMBER or CLLI																							Y		
Specified trunk MEMNUM of CLLI						Y																			
Tested subscriber line LEN																							Y		

Route element functions (Sheet 2 of 4)

	Route selector																								
Functions performed	**CND/NOT**	**DCRT**	**DN**	**INS**	**ISA**	**MEM**	**MN**	**N**	**N2**	**NODE**	**NPOS**	**NPOSDN**	**NQ**	**QH**	**RT**	**RX**	**S**	**SG**	**SQ**	**ST**	**SX**	**T**	**TC**	**TRMT**	**TS**
Table TABID at KEY																						Y			
Table at RTEREF																				Y					
TOFCNAME at SNPA OFCCODE			Y									Y													
Retranslate after Digits Change															Y	Y									
TMTCNTL.TREAT to treatment																								Y	
Proceed to (with condition)																									
Table at RTEREF	Y																								
List after SKIPNUM	Y																								
Table TABNAME at INDEX	Y																								
DESTNODE at DESTNAME		Y								Y															
Digit manipulation																									
Delete DELDIGS leading digits							Y	Y	Y		Y		Y												Y

Route element functions (Sheet 3 of 4)

Route selector																										
Functions performed	**CND/NOT**	**DCRT**	**DN**	**INS**	**ISA**	**MEM**	**MN**	**N**	**N2**	**NODE**	**NPOS**	**NPOSDN**	**NQ**	**QH**	**RT**	**RX**	**S**	**SG**	**SQ**	**ST**	**SX**	**T**	**TC**	**TRMT**	**TS**
Prefix digits PRFXDIGS							Y	Y	Y		Y		Y												Y
Prefix signals PRFXDIGS																									Y
Replace with REPLDIGS															Y										
Delete Digits Last Stage (DDLS)									Y																
Add Digits Last Stage (ADLS)									Y																
In table DIGMAN					Y											Y									
2-stage Out FSTNUM, FSTSTAGE																									Y
Redefine originators																									
Normal charges CANCNORC (Y/N)							Y	Y	Y		Y		Y		Y										Y
NPA as SNPA															Y										
NPA as STS																Y									
Billing code as BILLCODE							Y								Y										
Billing code as BILLDMI																Y									

Route element functions (Sheet 4 of 4)

Functions performed	Route selector																							
	CND/NOT	DCRT	DN	INS	ISA	MEM	MN	N2	NODE	NOPOS	NPODN	NQ	QH	RT	RX	S	SG	SQ	ST	SX	T	TC	TRMT	TS
Screening as ORIGSCRE														Y										
Type of call TYPCALL														Y	Y									
CALLTYPE and refinements					Y																			
Off-hook queuing time OTIME					Y								Y											
Off-hook queuing OHQ (Y/N)					Y							Y						Y						
Call back queuing CBQ (Y/N)					Y																			
Expensive route EXP (Y/N)					Y																			
ANI (Y/N) information required						Y																		
Tone out CSTHTONE, CSTLTONE						Y																		

Note: The route element selectors listed in this table are described on the following pages.

Selector descriptions

The following paragraphs describe the route element selectors listed in the above table “Route element functions”.

Route selector AFR
Used as an index to an advanced intelligent network (AIN) identifier in table TRIGINFO. If the AFR trigger is subscribed, and all preceding routes in the route list are busy, and the AFR selector is encountered, a query is sent to an off-board processor.

Route selector CND
Used if the call proceeds as specified in this route element only if a specified condition is met. If the condition is not met, the call is routed as specified in the next element of the route list.

Route selector DCRT
Used in offices with the Dynamically Controlled Routing (DCR) feature as the first element of a route list. If the DCR destination of the call is one link away from the switch, it blocks the call if the second leg of a DCR tandem recommendation is not available.

Route selector DN
Used if digit translation converts the received digits into a seven-digit directory number (DN) that terminates on the switch.

The DN selector allows calls to terminate on the DN described in the DN route element list. Call processing translation assumes the final routing destination is the DN found during translation. Subsequent route selectors are not searched nor advanced to.

Route selector FEAT (DMS-250)
Used on a DMS-250 switch for I800 (International 800) service and international virtual private network (IVPN) services.

Note: This description of table OFRT does not cover DMS-250 applications.

Route selector INS
Used only while editing a route list to insert a new element into the route list. The new element is inserted immediately ahead of the element that is replaced with INS. The replaced element is restored, and the user is prompted for the inserted route.

Route selector ISA
Selector ISA (integrated service access) routes to a primary rate access (PRA) interface.

The ISA service routes different call types (public, private, tie trunk to private branch exchange (PBX), foreign exchange (FX), wide area telephone service (WATS, and inbound WATS [INWATS]) over the same trunk group.

Route selector MEM
Used in offices with the Trunk Group Utilization Enhancements feature, if routing to a specified trunk group member is required. A lower and upper range must be supplied. If only one trunk member is used, the same number is supplied for the upper and lower range.

Route selector MN
Used if a call is routed to an operator and class of service tone is required.

Route selector N
Used if translation requires digit substitution or cancellation of normal charging.

Route selector N2
Used if translation requires the capability to strip off the NPA digits and/or add them back to the outpulsed digits to reach a uniform outpulsing schema. Route selector N2 is the same as route selector N, with the addition of two fields, Delete Digits Last Stage (DDLS) and Add Digits Last Stage (ADLS).

Route selector N2 is used as a substitute for the N route selector only when the DELDIGS and PRFXDIGS fields are used for purposes other than modifying the called number.

The DELDIGS field is assumed to be set to 15, because the N2 selector is only used when the OZZ digits are required and the PRFXDIGS field is used to insert the OZZ digits. The DDLS field holds the value which determines the number of digits that will be deleted from the front of the called number to be outpulsed. The ADLS field holds the actual digits which will be prefixed onto the front of the called number to be outpulsed.

Route selector N2 is specific to Feature Group D (FGD) Equal Access calls and does not support any international call scenario. Use of the N2 selector is limited to IT, MF, and ISUP type trunks.

Because the N2 selector is a clone of the N selector, billing records are produced exactly as if the N selector was used. Digit manipulation done by the N2 selector is not shown in the billing records.

Route selector NIL
Used only while editing a route list to delete an element from the route list. The selector that is replaced by selector NIL is removed from the list.

Route selector NODE
Used in offices with the DCR feature. If the office is used as a DCR switch, routing proceeds to table DESTNODE, field DESTKEY which is equal to field DESTNAME associated with this selector.

Route selector NOT
Used if the call proceeds as specified in this route element only if a specified condition is not met. If the condition is met, the call is routed as specified in the next element of the route list. This selector is the opposite of selector CND.

Route selector NPOS
Used to indicate that no calling number identification is required for

- the operator number identification (ONI) from multiparty line, or
- the ANI-failure delay dial (DD)

In the following cases, selector NPOS is equivalent to route selector N:

- calls originated from trunk group types other than SuperCAMA (SC) or Traffic Operator Position System (TOPS) trunk groups
- calls without ONI or ANI-failure indication

Route selector NPOSDN
Used to indicate that no calling number identification is required for

- the ONI from multiparty line, or
- ANI-failure DD

In the following cases, selector NPOSDN is equivalent to route selector DN:

- calls originated from trunk group types other than SC or TOPS
- calls without ONI or ANI-failure indication

Route selector NQ
Not used.

Route selector QH
Used if segregation of low-tariff and high-tariff route elements in the route list is required.

When route selector QH is used in table OFRT, it routes the call to treatment. Due to this routing action, selector QH must only be used in table IBNRTE.

Route selector RT
Used if the incoming dialed digits are replaced by the number specified in field REPLDIGS (maximum 11 digits), and the call is retranslated starting from table HNPACONT.HNPACODE for the serving NPA specified in field SNPA.

The RT selector designates retranslation. This selector inserts new digits before retranslation is attempted. The RT route element lists are final if a call advances to a route element in the list during call processing.

Route selector RX
Used if retranslation is required and the new digits are listed in table DIGMAN.

The RX selector designates retranslation. This selector inserts new digits before retranslation is attempted. The RX route element lists are final if a call advances to a route element in the list during call processing.

Route selector S
Used if the outgoing trunk group type is IT (intertoll) and standard digit manipulation applicable to intertoll trunk groups is required.

This selector can also be used to route the call to a tone or announcement CLLI.

Route selector SG
Used to allow even call distribution across a set of trunk groups. Route selector SG allows selection of a trunk group from the groups defined in table SUPERTKG (Super Trunk Group). This table joins up to 220 trunk groups together into super-groups.

Optional DMI entries of 1 to 31,999 in the selector allow manipulation of digits by table DIGMAN. This is an index into table DIGMAN. The DMI option enables the called number characteristics to be manipulated by use of table DIGMAN.

Route selector SQ
Not used.

Route selector ST
Used if translation routes to another route reference in the same table.

Route selector SX ROUTE
This selector is used if translation routes to an expanded route table. It is used if the outgoing trunk group type is IT (intertoll) and standard digit

manipulation applicable to intertoll trunk groups is required. Interpretation and use of the SX_ROUTE selector is product-dependent. By default, this selector does nothing.

Route selector T
Used if translation routes to another table or to another route list in table OFRT.

If the T selector is routed to during call processing, the current route list is exhausted. Any subsequent route list elements are not routed to within the list.

For example, assume a T selector is used in a route list before an N selector. In this case, routing advances to the table and the T selector route element list points to the next step in translation. When the table route is exhausted, the table is exited and translation is stopped. The N selector is not advanced to, even though the N selector is in the route element list after the T selector.

Route selector TC
Used if the route list can only be accessed from the directory number or trunk defined in the first element of the route list.

Route selector TPBX (DMS-250)
Used in a DMS-250 switch to route calls by table DIGMAN to PBXs in a DMS-250 to PBX configuration.

Note: This description of table OFRT does not cover DMS-250 applications.

Route selector TRMT
Used if a call is routed to treatment.

Route selector TS
Used if two-stage outpulsing to international switching centers is required.

Route selector UOP
Use route selector UOP to set uniform outpulsing on calls to direct inward dial (DID), automatic intercept (AI), and PRA trunks. Selector UOP also provides operating company personnel with the capability of common digit replacement.

General

Table OFRT is required for route lists that are pointed to from tables other than HNPACONT and FNPACONT.

The following tables can specify a route list in table OFRT:

- Country Code Translator (CCTRNSL)
- FNPA Control (FNPACONT)
- INWATS Originating Route Reference (INWORIRT)
- INWATS Terminating Route Reference (INWTERTE)
- Position (POSITION)
- Route Reference (OFRTMAP)
- Standard Pretranslator (STDPRTCT.STDPRT)
- Trunk Group (TRKGRP)
- Network Management Reroute (REROUTE.NWMRROUT)
- Directory Number Route (DNROUTE)
- Terminating Office Name Table (TOFCNAME)
- Hunt Group (HUNTGRP)
- AMR Route (AMRROUTE)
- Class of Service Screening Control (CLSVSCRC)

An element in a route list can point to another route list in table OFRT. It can be any route list, except the route list to which the element is assigned.

Routes defined in the HNPACONT and FNPACONT tables have their routes defined in the HNPACONT and FNPACONT subtables.

Memory is allocated dynamically for table OFRT. The maximum number of route lists is 1024.

Route options

The available route option is ATGS (alternate trunk group selection).

Datafill sequence and meaning

If the T selector points to table OSNCCAP, table OSNCCAP must be datafilled before table OFRT.

For information about datafilling this table, see *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual*, 297-8021-351.09.03.

The following paragraphs contain information about changes that have occurred since the publication of *DMS-100 Family North American*

DMS-100 Customer Data Schema Reference Manual, 297-8021-351.09.03

Changes affecting OFRT by feature A00003487 in SN07

This feature made the following changes, all of which affect the CND and NOT route selectors.

- It deleted the PKT condition.
- It added the FABRIC condition.
- It added the BEARNET condition.

FABRIC condition

The FABRIC condition allows conditional routing based on the originator's network-fabric type.

The syntax of the FABRIC condition is as follows:

FABRIC <fabric>

where <fabric> is one of the following: ENET, AAL1, AAL1, IP

Here is an example of a tuple in table OFRT containing elements that use the FABRIC condition.

```
100 (CND FABRIC ENET ST 901)
    (CND FABRIC IP ST 902)
    (CND FABRIC FABRIC AAL1 ST 903)
    (CND FABRIC AAL2 ST 904) $ $
```

BEARNET condition

The BEARNET condition allows conditional routing based on the originator's bearer network.

Note 1: The BEARNET condition is different from the FABRIC condition because the CS 2000 can serve different bearer networks that have the same fabric type.

Note 2: The bearer network of the originator can be provisioned in one of the following tables: MNNODE, SERVRINV, or TRKOPTS (for dynamic packet trunks).

The syntax of the BEARNET condition is as follows:

BEARNET <bnetname>

where <bnetname> is the name of a bearer network, as specified in field BNETNAME of table BEARNETS

Here is an example of a tuple in table OFRT containing elements that use the BEARNET condition.

```
101 (CND BEARNET TDM_ENET ST 905)
    (CND BEARNET NET_IP ST 906)
    (CND BEARNET NET_AAL1 ST 907) $ $
```

Changes affecting OFRT by feature A00003686 in SN07

Feature A00003686 was for the European market, for Carrier Voice over IP on DMS (known as Succession on DMS at the time of SN07). The feature expanded the applicability of the NRR condition of the CND and NOT route selectors. The NRR condition specifies route advance if a certain ISUP cause value is received in an address complete message (ACM) or in a release message. (Table FLXCMAP must be provisioned to identify the ISUP cause value and to specify that route advance should occur if the cause value is received.) Feature A00003686 expanded the applicability of the NRR condition to ETSI ISUP V1, ETSI ISUP V2, and Belgian ISUP terminating agents.

The functionality of feature A00003686 is controlled by SOC XLAS0053.

Table size

0 to 1023 tuples.

Table history

NA017

Feature 59035336 introduces the Supergroup (SG) option.

SN07

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

Feature A00003487 deleted the PKT condition, added the FABRIC condition (replacing PKT), and added the BEARNET condition. For information on these changes, see Changes affecting OFRT by feature A00003487 in SN07.

Feature A00003686 expanded the applicability of the NRR condition of the CND and NOT route selectors. For details, see Changes affecting OFRT by feature A00003686 in SN07.

PADDATA

ATTENTION
This table applies to new or modified content for SN06 (DMS) that is valid through the current release.

Pad Data

Table Pad Data (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 groups at datafill

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

A nil pad group (NPDGP) appears in table PADDATA. A tuple that uses the nil pad group can contain only 0 0 settings. 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.

Default keys and recommended DMS-100 loss values (Sheet 1 of 10)

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

Default keys and recommended DMS-100 loss values (Sheet 2 of 10)

PADGRP1	PADGRP2	PAD1TO2	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
ETLS	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 (Sheet 3 of 10)

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

Default keys and recommended DMS-100 loss values (Sheet 4 of 10)

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

Default keys and recommended DMS-100 loss values (Sheet 5 of 10)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
TPOS	TPOS	0	0
PPHON	STDLN	0	0
PPHON	UNBAL	0	0
PPHON	LRLM	0	0
PPHON	IAO	0	0
PPHON	LCO	0	0
PPHON	ELO	0	0
PPHON	ETLS	0	0
PPHON	ETLL	0	3L
PPHON	TLA	0	2L0
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

Default keys and recommended DMS-100 loss values (Sheet 6 of 10)

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
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
PKLNL	ETLL	0	6L

Default keys and recommended DMS-100 loss values (Sheet 7 of 10)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
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	CTT	0	6L
PKLNL	SATT	0	6L
PKLNL	SCTT	0	6L
PKLNL	SDTT	0	6L
PKLNL	ACO	0	6L
PKLNL	DCO	0	6L
PKLNL	ATO	0	6L
PKLNL	DTO	0	6L
PKLNL	RCVR	0	6L
PKLNL	PRAC	0	6L
PKLNL	PKLNL	3L	3L
PKNIL	NPDGP	0	0

Default keys and recommended DMS-100 loss values (Sheet 8 of 10)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
PKNIL	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
PKNIL	CPOS	0	9L

Default keys and recommended DMS-100 loss values (Sheet 9 of 10)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
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	ATO	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	6L
PRAC	IAO	3L	0
PRAC	LCO	3L	0
PRAC	ELO	0	0
PRAC	ETLS	0	0

Default keys and recommended DMS-100 loss values (Sheet 10 of 10)

PADGRP1	PADGRP2	PAD1TO2	PAD2TO1
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

Note: The value in field PAD2TO1 is 3 dB less than the accurate loss. A 3 dB fixed pad in the NT6X21 line card causes this condition.

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

The following table lists the datafill for table PADDATA.

Field, subfield, and refinement descriptions for table PADDATA (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PADKEY		see subfields	Pad data key. This field is the key to table PADDATA. This field contains subfields PADGRP1 and PADGRP2.
	PADGRP1	alphanumeric (maximum of 5 characters)	Pad group one. 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 (maximum of 5 characters)	Pad group two. 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, subfield, and refinement descriptions for table PADDATA (Sheet 2 of 2)

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. ***Note:*** 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. ***Note:*** 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.

Additional information

Table PADDATA is not used in TRAVER.

Table history

SN07

Table PADDATA migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

PADNDEV

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Patch Administration Device

The automatic patching application process uses table (Patch Administration Device) 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

The following table lists the datafill for table PADNDEV.

Field, subfield, and refinement descriptions for table PADNDEV (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DEVKEY		see 1, 2, or 3	Device key. 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.

Field, subfield, and refinement descriptions for table PADNDEV (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DEVICE		alphanumeric (1 to 12 characters)	Device name. Enter the device name that contains a patch. The name SFDEV (store file device), or a disk volume are correct device names.

Table history

SN07

Table PADNDEV migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

PATHSET

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

Datafill

The following table lists the datafill for table PATHSET.

Field, subfield, and refinement descriptions for table PATHSET

Field	Subfield or refinement	Entry	Explanation and action
PATHSET		up to 16 alphanumeric characters	Pathset Enter the name of the pathset to the USP.
SUFPATHS		0 to 16	Sufficient pathsets Enter the numbers of pathsets that can be available before a major USP alarm is raised. ***Note:*** The value 0 is a special case: a USP major alarm is raised if less than one half of the datafilled pathsets are available.

Table history

SN08

Table PATHSET was documented for software release SN08.

PECINV

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Product Engineering Code Inventory

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

0 to 256 tuples.

An office parameter that you can use to change the maximum number of tuples in this table is not available. The maximum size is a constant. You can change the maximum number of tuples with a software upgrade.

Store for 256 tuples is pre-allocated in DSPROT. Each tuple approximately 20 bytes.

Datafill

The following table lists the datafill for table PECINV.

Field, subfield, and refinement descriptions for table PECINV

Field	Subfield or refinement	Entry	Explanation and action
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 nine multiples with SUBSYS, BASELINE, EXCPTN or $	Subsystem baselines. This field contains an optional vector of sub-tuples. 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.

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.

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

At the MAP terminal

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:

```
NT9X15AA
                ( LIMHW40 $) ( MSHW40 $) $
```

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                                          SSYSBASE
-------------------------------------------------
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.

Table history

SN07

Table PECINV migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

Table size increase included as per feature A00002433.

PMLOADS

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Peripheral Module Loads

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.

The system does not activate autoloading for tape devices. The storage of PMloads 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 PMload 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.

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 following table lists the datafill for table PMLOADS.

Field, subfield, and refinement descriptions for table PMLOADS (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
load name		alphanumeric (a maximum of 32 characters)	PM loadfile name. 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 (a maximum of 32 characters)	Active PM loadfile name. Enter the active PM load file name. ***Note:*** The active load file can be the original load file or a patched load file.
ACTVOL		alphanumeric (a maximum of 16 characters)	Active loadfile storage device. 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 (a maximum of 32 characters)	Backup PM loadfile name. Enter the backup load file name. ***Note:*** 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.
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).

Field, subfield, and refinement descriptions for table PMLOADS (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
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. ***Note:*** This field controls the ability of the load file to receive load file patching.

Additional information

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

Table history

SN07

Table PMLOADS migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

PXCODE

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Prefix Code

Table Prefix Code (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 tables ACCODE.

For a description of the universal translation tables, refer to table ACHEAD.

Datafill sequence and meaning

Table PXHEAD must be datafilled before tables PXCODE and PXRTE.

Datafill

Refer to table ACCODE for more information.

Table size

Refer to table ACCODE for more information.

Table history

SN07

Table PXCODE migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

PXHEAD

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Prefix Code Head

Table Prefix Code Head (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 meaning

Refer to table ACHEAD for more information.

Datafill

Refer to table ACHEAD for more information.

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.

Table history

SN07

Table PXHEAD migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

PXRTE

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

Prefix Code Route

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 meaning

Table PXHEAD must be datafilled before tables PXRTE and PXCODE.

Datafill

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

Table size

Refer to table ACRTE for more information.

Table history

SN07

Table PXRTE migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

NA017 (SN04)

Feature 59035336 introduces the Supergroup (SG) option.

QMSMIS

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

QMS MIS Link Definition

Table QMS MIS Link Definition (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 meaning

When field DATALINLK = MPC, datafill the tables in this 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

The maximum number of tuples is 16. Each tuple will be 11 words long. The entire table will be allocated when initialized. It is a relatively small table and remains static in size.

Datafill

The following table lists the datafill for table QMSMIS.

Field, subfield, and refinement descriptions for table QMSMIS (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfield	QMS Management Information System index. This field consists of subfield K.
	K	TOPS, QMSNILAP, OSSAIN	QMS Management Information System application in use. This is the key field of the table. The entries are: 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. QMSNILAP - non-TOPS QMS application 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.

Field, subfield, and refinement descriptions for table QMSMIS (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
DATALINK		see subfield	Data link. This field consists of subfield DATALINK and refinements.
	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. IP - Internet protocol. Datafill fields BUFXTIME and CONNLIST.

Field, subfield, and refinement descriptions for table QMSMIS (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
DATALINK (continued)	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.
	M	0 to 255	Multiprotocol controller number. Enter the multiprotocol controller (MPC) number. This entry must first be entered in table MPC.

Field, subfield, and refinement descriptions for table QMSMIS (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
DATALINK (continued)	L	0 to 3	Link number. Enter the link number. This entry must first be entered in table MPCLINK. ***Note:*** All link numbers must be 2 or 3 for QMS MIS applications.
	C	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.

Field, subfield, and refinement descriptions for table QMSMIS (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
DATALINK (continued)	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.
	DESTPORT	1024 to 32,767	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.

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 (Sheet 1 of 4)

Error message	Explanation and action
UNABLE TO OBTAIN OWNERSHIP OF CONVERSATION MPC <mpc number>, LINK <link number>, CHANNEL <channel number>, AT POSITION <position number> IN MLCLIST.	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: <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.
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. You must OFFL the old 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 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.

Error messages for table QMSMIS (Sheet 2 of 4)

Error message	Explanation and action
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.
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.

Error messages for table QMSMIS (Sheet 3 of 4)

Error message	Explanation and action
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.
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.

Error messages for table QMSMIS (Sheet 4 of 4)

Error message	Explanation and action
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 NUMBERIN 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.

Table history

SN07

Table QMSMIS migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

RESFEAT

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Residential Line Feature

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
OPM	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.

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
Note: 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.

If the subscriber line is connected to an LCM, LM, OPM, RLCM, or RLM, the pattern heard by the subscriber is short-short.

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.

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.

The duration for each segment is shown in the following table.

Segment durations

Short tone	Long tone	Inter-ring 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 dialing the SCA access code that is datafilled in table IBNXLA and enters the SLE sessions.

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 due 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 originate 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.

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)

This feature 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 meaning

The following tables must be datafilled before table RESFEAT:

- RESOFC
- IBNLINES

Datafill

The following table lists the datafill for table RESFEAT.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 1 of 13)

Field	Subfield or refinement	Entry	Explanation and action
LINE		see subfields	*Line* 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 69	*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, and refinement descriptions for table RESFEAT (Sheet 2 of 13)

Field	Subfield or refinement	Entry	Explanation and action
FEAT		ACB, ACRJ, ADSI, AR, CALLOG, CMWI, CNAB, CNAMD, CND, CNDB, COT, DDN, DRCW, DSCWID, RND, SCA, SCF, SCRJ, SCWID	*Class feature*. Enter ACB for Automatic Call Back. Enter ACRJ for Anonymous Caller Rejection. Enter ADSI for Analog Display Services Interface. Enter AR for Automatic Recall. Enter CALLOG for Call Logging. 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 Originated Trace. Enter DDN for Dialable Directory Number. Enter DRCW for Distinctive Ringing Call Waiting. Enter DSCWID for Deluxe Spontaneous Call Waiting Identification.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 3 of 13)

Field	Subfield or refinement	Entry	Explanation and action
FEAT (continued)			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.
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, ADSI, AR, CALLOG, CMWI, CNAB, CNAMD, CND, CNDB, COT, DDN, DRCW, DSCWID, RND, SCA, SCF, SCRJ, SCWID	*CLASS feature.* 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.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 4 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	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, INACT, UNIVA, UNIVI	*Status* 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.
	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.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 5 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	DTYPE	PROPRITY, ADSITIME, ADSICID, NODATA, NOCIDCW, COMPLETE, DEF, or others as defined	*DSCWID type* If the entry in subfield DF is DSCWID, datafill this refinement. The DSCWID type is the name defined in table DSCWDTYP. Enter the name of the DSCWID type assigned to the line as follows: • The PROPRITY tuple indicates the proprietary DSCWID type. • The ADSITIME tuple indicates that only time data is transmitted and only standard CWT is available to non-ADSI sets. • 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.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 6 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)			• 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. ***Note:*** You cannot use the PROPRITY value when adding DSCWID to a line.
	DEFTRMT	RING, FWD, ANNC, or DEF	*Default treatment* 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.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 7 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	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, and refinement descriptions for table RESFEAT (Sheet 8 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	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, and refinement descriptions for table RESFEAT (Sheet 9 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	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 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 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, subfield, and refinement descriptions for table RESFEAT (Sheet 10 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	CMDAVAILDLY	0 to 3276	*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.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 11 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)			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, and refinement descriptions for table RESFEAT (Sheet 12 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)	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. If subfield DF contains CNAMD, this field indicates how often the switch did not deliver a calling name and a calling number.

Field, subfield, and refinement descriptions for table RESFEAT (Sheet 13 of 13)

Field	Subfield or refinement	Entry	Explanation and action
VAR (continued)			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).

Additional 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

Table RESFEAT migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

REXSCHED

ATTENTION
This table applies to new or modified content for SN06 (DMS) that is valid through the current release.

Routine Exercise Schedule

Table Routine Exercise Schedule (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

0 to 64 tuples.

Normal size is 16 tuples.

Datafill

The following table lists the datafill for table REXSCHED.

Field, subfield, and refinement descriptions for table REXSCHED (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
REXTSTID		see subfield	Routine exercise test identifier. This field contains subfield REX_TEST_ID.

Field, subfield, and refinement descriptions for table REXSCHED (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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.
ENABLE		Y or N	Enable. Enter Y (yes) to enable or N (no) to disable the REx test. The default value for this field is Y.
			Note: 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	Period. 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.

Field, subfield, and refinement descriptions for table REXSCHED (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			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.
PARALLEL		0 to 99 See Note	Parallel. 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.

Field, subfield, and refinement descriptions for table REXSCHED (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			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 minimum 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. ***Note:*** For the LCM_REX_TEST tuple, this field can be a value from 1 to 4. For the LCMCOV_REX_TEST tuple, this field must 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, subfield, and refinement descriptions for table REXSCHED (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
DAYSDSBL		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 onetime 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.

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.

(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.

Note: Do not schedule the XLIU_REX_TEST to occur during a full REx of Table REXINTEN.

Table history

SN07

Table REXSCHED migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 9 of 12*, 297-8021-351.09.03.

This table was updated as per feature number 89007516.

RMMINV

Remote Maintenance Module Inventory

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. 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 or 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 these carry pulse code modulation (PCM) information, and the other two 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/RLDM 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 meaning

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.

Datafill

The following table lists the datafill for table RMMINV.

Field, subfield, and refinement descriptions for table RMMINV (Sheet 1 of 8)

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.

Field, subfield, and refinement descriptions for table RMMINV (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	RMMNO	0 to 254	*Remote maintenance module number* Enter the RMM number. This number is unique by office, not unique by site.
FRTYPE		DLE, MCRM, OPE, RCE, RCME, RLCM, or MISC	*Frame type* Enter the frame type on which the RMM is equipped, as follows: • Enter DLE (digital line equipment) if the RMM is used in the RDLM • Enter MCRM if the RMM is used in the cabinetized Meridian SL-100. • Enter OPE if the RMM is used in the OPM. • Enter RCE if the RMM is used in the RSC. • Enter RCME if the RMM is used in the convertible RLCM configurations. • Enter RLCM if the RMM is used in the RLCM. • Enter MISC if the RMM is hosted directly (not via an RLCM) on an ABI XPM in a "remote" office away from the ENET. • Entries outside this range are invalid.
FRNO		0 to 511	*Frame number* Enter the number of the frame on which this RMM is equipped.

Field, subfield, and refinement descriptions for table RMMINV (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
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. • Enter 21 if the RMM is located in the RCME. • Enter 38 or 55 if the RMM is located in the RCE. • Enter 56 is the RMM is located in the RCLM. Entries outside this range are invalid.
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 Z, AA to HH, JJ to NN, PP to ZZ	*Row* 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.

Field, subfield, and refinement descriptions for table RMMINV (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
EQPEC		6X1301, 6X13AA, 6X13BA, 6X13DA, 7X53AA, 8X98AA, FX14AA, or MX85AA	*Equipment product engineering code* Enter the equipment PEC as follows: • Enter 6X1301 for cabinetized Meridian SL-100 • 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.
LOAD		alphanumeric (vector of up to 8 characters)	*Load* 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).

Field, subfield, and refinement descriptions for table RMMINV (Sheet 5 of 8)

Field	Subfield or refinement	Entry	Explanation and action
CSPMINFO		see subfields	*C-side peripheral module information* This field consists of subfields RMMSELECTOR, CSIDEPM, and CSIDPORT.
	RMMSELECTOR	RMMDLM, RMMILCM, RMMLCM, RMMLTC, RMMRCC2, RMMRCC, RMMRCCI, RMMRCO2, RMMSMA2, RMMSRCC, or RMMSRU	*Remote maintenance module selector* 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, and refinement descriptions for table RMMINV (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	PMT	ALCM, ARCC, DLM, ELCM, ILCM, LCM, LTC, PLGC, PRCC, RCC2, RCC, RCCI, RCO2, RMMLTC, SMA2, SRCC, SRU, or TRCC	*Peripheral module type* Enter the PM type as follows: • Enter DLM if the entry in field RMMSELECTOR is RMMDLM • Enter ILCM if the entry in field RMMSELECTOR is RMMILCM • Enter ALCM, ELCM, or LCM if the entry in field RMMSELECTOR is RMMLCM • Enter RCC, TRCC, ARCC or PRCC if the entry in field RMMSELECTOR is RMMRCC • Enter LTC or RCC if the entry in field RMMSELECTOR is RMMLTC or RMMRCC • Enter PRCC for international PCM30 remote cluster controller (the PCM30 peripheral can be used if the entry in field RMMSELECTOR is RMMRCC or RMMRCCI)

Field, subfield, and refinement descriptions for table RMMINV (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	PMT (continued)	ALCM, ARCC, DLM, ELCM, ILCM, LCM, LTC, PLGC, PRCC, RCC2, RCC, RCCI, RCO2, RMMLTC, SMA2, SRCC, SRU, or TRCC	• Enter PLGC if the entry in field RMMSELECTOR is PLGC • Enter RMMLTC if the entry in field RMMSELECTOR is RMMLTC • Enter RCC2 if the entry in field RMMSELECTOR is RMMRCC2 • Enter RCCI if the entry in field RMMSELECTOR is RMMRCCI • Enter RCO2 if the entry in field RMMSELECTOR is RMMRCO2 • Enter SMA2 if the entry in field RMMSELECTOR is SMA2 • Enter SRCC if the entry in field RMMSELECTOR is RMMSRCC • Enter SRU if the entry in field RMMSELECTOR is RMMSRU

Field, subfield, and refinement descriptions for table RMMINV (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	EXTPMNO	0 to 63	*External peripheral module number* Enter the number of the external PM and the DS30A port to which the RMM is attached. Entries outside this range are invalid. This number must also be datafilled in tables LCMINV, OPMINV, RCCINV, or DLMINV, as required. ***Note:*** The number of the DS30A port must match the number provisioned in table LTCPSINV for the XPM.
	CSIDPORT	0 to 63	*C-side port* Enter the number of the C-side port connected to the RMM as follows: • If the entry in field RMMSELECTOR is RMMRCC2, RMMRCO2, or RMMSRCC, enter a value from 0 to 63 • If the entry in field RMMSELECTOR is RMMRCC, RMMRCCI, or RMMLTC, enter a value from 0 to 19 • If the entry in field RMMSELECTOR is SMA2, enter 52 ***Note:*** This restriction corresponds with a restriction on the provisioning of DS30A cards. These cards can only be provisioned on link 52 of the SMA2 in Table LTCPSINV.

Additional information

The RMM is only supported on the PLGC ABI XPM. It is not supported on the ENET-based version of this peripheral.

The CHANGE command cannot alter the content of the C-Side Port section of the tuple. If you attempt to alter this value, the tuple will be rejected by table control and an error message will be displayed.

If the C-side port information needs to be altered, you must delete the RMM and re-add it to the table.

Table history

SN08

Updated to provide information on PLGC and SMA2 in feature A00007749.

SBSMAP

SuperNode Billing System MAP

Table SBSMAP defines service data types. This table works with the SBSFMT table to map service data types to service data streams. These tables support the multiple stream/multiple collector feature. The formatter/storageagent (FSA) and collector process allow multiple streams and multiple collectors. The collector process receives raw billing data from an application and transfers it to an FSA process. The FSA process, or billing server, formats the raw billing data and transfers the formatted billing records to the distributed recording manager (DRM) that writes the data to disk. Applications that generate data for recording on disk with this feature provide the service data types that can be mapped to a service data stream.

Multiple streams allow applications to separate different call types in different streams. For example, there can be different streams for operator service records and normal call records.

The stream connection manager (SCM) supervises connections between collectors and FSAs. The SCM uses the following factors to determine which collector connects to an FSA:

- DRM priority assignments
- FSAs registered with the SCM
- FSAs that are active
- FSAs that have disk space available for streams

The FSA process resides on one file processor. An FSA can also reside on the computing module (CM) for emergency backup purposes to automatic message accounting/device-independent recording package, but application-specific support must support this. The collector process resides on the CM.

Datafill sequence and meaning

Datafill service data streams in table SBSFMT before datafilling service data types in table SBSMAP.

Table size

Maximum of 32 tuples. Adding or deleting dynamically created tuples in SBSMAP does not require restarts.

Datafill

CAUTION

Possible loss of billing data

Do not change stream mapping to NIL before all data is written to disk.

The following table lists the datafill for table SBSMAP.

Field, subfield, and refinement descriptions for table SBSMAP

Field	Subfield or refinement	Entry	Explanation and action
KEY		alphanumeric (up to 16 characters)	*Key* A 16-character vector that defines the service data type. The service data type is in the range sbs_service_datatype_range. Key assignments can be manual or predefined by software.
STREAM		NIL or stream datafilled in table SBSFMT	*Stream* This field maps the service data type to a service data stream in the KEY field of table SBSFMT. This field is in the range sbs_service_datastream_fullrange. Service data types cannot to mapped to the NIL stream.

Table history

SN08

Table SBSMAP was added for SN08.

SDMBILL

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

SDMBILL

The SDMBILL table is used to store information pertaining to the SDM billing platform on a by stream basis. The fields indicate either a billing stream is sent to the SuperNode Data Manager (SDM), Device Independent Recording Package (DIRP) or both. The fields holds the volumes (one or two) chosen for backup of the billing data.

There are CI commands available at the MAP level of SDMBILL (MAPCI;MTC;APPL;SDMBIL) that allows the user to adjust and view the tuples in the table. The table automatically contains all of the streams that are datafilled in table CRSFMT. The tuples are automatically deleted if the tuples are removed from table CRSFMT. This is the only way the tuples can be deleted from table SDMBILL. The stream's SDMBACT field needs to be OFF before deleting the stream from CRSFMT.

Datafill sequence and meaning

Table CRSFMT must be datafilled before table SDMBILL The datafill occurs automatically, adding a tuple for each stream.

Table size

The maximum number of tuples is 16. Each tuple will be 11 words long. The entire table will be allocated when initialized. It is a relatively small table and remains static in size.

Datafill

The following table lists the datafill for table SDMBILL.

Field, subfield, and refinement descriptions for table SDMBILL (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SDMBKEY		up to 16 characters	SuperNode Data Manager billing key. This is the key to the table. This is the call data stream name that is automatically datafilled from table CRSFMT field KEY to synchronize the two tables.
SDMBACT		ON, OFF, or BOTH	SuperNode Data Manager billing activation. ON sends billing data to the stream for SDM only. OFF only sends billing data to the stream for DIRP. BOTH sends billing data to the SDM and DIRP. The SDMBCTRL command can be used to modify this field which is a hidden menu command at the SDMBILL map level. Default: The default value is OFF. ***Note:*** Even though there may be several streams in the table, only the BCFMT format stream (AMA, which is hard coded to 1) is allowed to be turned to ON, or BOTH for the first release.

Field, subfield, and refinement descriptions for table SDMBILL (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SDMBSTAT		Insv, ISTb, ManB, Bkup, Rcvy, RBsy, Off, OffP, or SysB	SuperNode Data Manager billing status. This field indicates the current status of the stream, given in field SDMBKEY. This field is automatically datafilled as table CRSFMT is datafilled.
VOLUME1		up to 8 characters	Volume 1. The CONF menu command can be used to modify this field which is a hidden menu command at the SDMBILL map level.
VOLUME2		up to 8 characters	Volume 2. The CONF menu command can be used to modify this field which is a hidden menu command at the SDMBILL map level.

Table history

SN07

Table SDMBILL migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

SERVINFO

ATTENTION
This table applies to new or modified content for NA018 (SN05) that is valid through the current release.

Intelligent Network Service Information Table

Table SERVINFO contains information related to an international intelligent network (IN) service. Services are identified by the service index, which is the key to table SERVINFO. This gives the customer the ability to tailor and adapt IN services on a per-customer, per-service basis. (Service Profiling)

The role of table SERVINFO is to:

- determine the parameter content of the InitialDP operation
- determine whether a one-way or two-way speech path for in-band interaction between the calling party and a specialized resource function (SRF) is established
- determine whether to wait for the full Called Party Number before sending an InitialDP
- determine whether or not to use multiple PromptAndCollectUserInformation (P&CUI) operations to collect a single stream of incoming inband digits.
- determine how many (if any) digits are to be stripped from the called party number (CDPA)
- determine which AMA extension module (if any) is attached to the AMA billing record (28, 40, 199, 611, or 612)
- determine if post-Connect, post-EstablishTemporaryConnection (ETC) or post-Continue translations must start from one of the following locations:
  - — a specified universal translations system
  - — table IBNXLA
- determine whether table INNCOS is used to identify the point of re-entry into translations, or whether the network class of service (NCOS) is changed for the Capability Set 1 Refined (CS-1R) call
- indicate the type and format of data received by the DMS SSP in the BillingChargingCharacteristics parameter of the FurnishChargingInformation (FCI) operation

- control the automatic disarming of implicitly undetectable event detection points (EDP)
- optionally apply charging to backwards progress messages sent to previous exchanges
- determine whether to correlate multiple billing records closed during the progress of a call sequence arising from a single operation
- optionally specify CS-1R handling of the Continue and/or ContinueWithArgument operations
- optionally allows the use of UK ISUP proprietary INAP extensions on a per-service basis
- determine if support for interaction of IN triggering is supported with Network CCBS and Nodal CCBS

Note: CCBS is a world trade (WT) feature, and is not available in North American loads.

Datafill sequence and meaning

Table SERVINFO must be datafilled before the SERVIDX option is datafilled in table TRIGDIG.

Table size

0 to 1024 tuples

Table SERVINFO table size is dynamically allocated.

Datafill

ATTENTION
In subfield RESPONSE_INFO, you can remove a translator from the translations system due to deletion requests from the related xxHEAD universal translations table. Make sure that you remove translators from table SERVINFO before you remove the same translators from the universal translations tables. The removal of these translators at the wrong time can cause invalid call results related to point of re-entry control.

The following table lists the datafill for table SERVINFO.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 1 of 19)

Field	Subfield or refinement	Entry	Explanation and action
SERVIDX		0 to 9999	*SERVINFO index* This field indicates an IN service on the DMS SSP switch. This field is the key from tables TRIGINFO and TRIGDIG. Enter a key number to uniquely identify the IN service.
OPTION		INITDP_PARMS, BILL_INFO, DIGIT_COLLECTION_INFO, SRF_INFO, RESPONSE_INFO, EDPS_INFO, BCI_INFO, TCAP_INFO, FI, CS1R, INITDP_UK_EXTENSIONS, CCBS	These are the main categories from which various per-service options and controls reside. ***Note:*** CCBS is a world trade (WT) feature, and is not available in North American loads.
	INITDP_PARMS	see subfield INITDP_PARM_INFO	This entry controls what information is included as parameters to the InitialDP operation.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 2 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	INITDP_PARM_ INFO	SERVKEY, CDPA, CLI, CPC, BUS_GROUP, BC, EVENT_TYPE, OCN, RDN, DD, RD_INFO, FWD_CI	Enter SERVKEY to include the service key. Enter CDPA to include the Called Party Address. Enter CLI to include the Calling Line Identity (Calling Party Number). Enter CPC to include the Calling Party Category. Enter BUS_GROUP to include the BusinessGroupID and Network Class of Service information. Enter BC to include the bearer Capability parameter (if it was encoded). Enter EVENT_TYPE to include the eventTypeBCSM parameter. Enter OCN to include the originalCalledPartyID parameter (The DN originally dialed by the calling party). Enter RDN to include the redirectingPartyID parameter (The DN the call was redirected to).

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 3 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)			Enter DD to include the original untranslated dialled digits in the dialedDigits parameter.Enter RD_INFO to map the incoming ISUP IAM redirection information parameter into the InitialDP. Enter FWD_CI to make the ForwardCallIndicator parameter available in the InitialDP operation. When available, EINTRACE, a diagnostic tracing tool, will display the FWD_CI value. Enter RD_INFO to control the sending of the redirection information parameter of the InitialDP operation. This is mapped from the relevant call setup messages received. If RD_INFO is datafilled and is not obtainable, the redirection information will be sent and set to NO_REDIRECTION with the rest of the fields set to zero.
	BILL_INFO	see subfield BILLING_INFO _OPTION	This option controls options relating to the billing of IN services.
OPTION (continued)	BILLING_INFO_O PTION	AMA_OPT, FCI_OPT	Enter AMA_OPT to further specify IN-related billing options. Enter FCI_OPT to further specify what the format of the FCIBillingChargingCharacteris tics parameter contained in the FCI operation received will be, and stored in AMA module 199. This allows FCI compatibility with non-Nortel SCPs.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 4 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	AMA_INFO_OPTION (Subfield of AMA_OPT)	DIALED_DIGITS_INFO, AMA_XLA_OPT, CORRELATION_ID	Enter DIALED_DIGITS_INFO to further specify which, if any, AMA extension module is appended to the base billing record by the SSP to record the original dialled digits (translated in the case of calls triggering at TDP-3)
		see subfield	Enter AMA_XLA_OPT to control billing options relating to AMA billing translations data. Enter CORRELATION_ID to append an AMA module 611 (80014) with a significant digits count of 7 which only includes Correlation ID to associate all billing records produced by an IN call triggering at TDP-2 or TDP-3 resulting from a single call origination. A further optional parameter of RECORD_IND can be entered to also include additional information. If CORRELATION_ID is not present, no extension module will be appended. This functionality does not apply to the sFBillingChargingCharacteristics parameter of the ActivateServiceFiltering operation.
	CORRELATION_ID_ OPTIONS (Subfield of CORRELATION_ID)	RECORD_IND or leave blank	Enter RECORD_IND to increase the significant digit count to 10 to include Correlation ID, last Record Indicator and Record Count.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 5 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	DIALED_DIGITS_MODULE (Subfield of DIALED_DIGITS_INFO)	MODULE_28 or MODULE_40 or MODULE_612 or NONE	Enter MODULE_28 to add module code 028 to the base AMA record. Enter MODULE_40 to add module code 040 to the base AMA record. Enter MODULE_612 to add module code 612 (with context identifier 80012) to the base AMA record. Enter NONE to remove the DIALED_DIGITS_INFO option. Refer to the AMA Reference Guide,297-80nn-800, for more information on billing.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 6 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	AMA_XLA_INFO_OPT (Subfield of AMA_XLA_OPT)	MAINTN_CALL CODE, MAINTN_OCI	Enter MAINTN_CALLCODE to allow the SSP to open a billing record for terminating call legs that are set up subsequent to the original one, even if translations determines that the call is not billable. The Call Type Code in AMA records opened subsequent to the original one will have the same value as the original CTC of the AMA record opened during translations prior to triggering, unless a generic call code is specified in table AMAXLAID for the terminating call leg. This option allows the switch to override the CTC setting when a distinct call code is required in the AMA record for a particular termination. Enter MAINTN_OCI to use the original OCI (originating charge information) for all AMA records which are subsequently generated on a call triggering or retriggering at TDP-3. (In the case of retriggering at TDP-3, the latest OCI or CTC will be used from that point forwards)/

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 7 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	FORMAT (Subfield of FCI_OPT)	FREEFORM or FORMATID or NONE	Enter FREEFORM if the SCP is a Nortel SCP. The value from the octet string is placed in the Data Descriptor field of AMA module 199. Enter FORMATID if the SCP is a non-Nortel SCP. The range 127-255 is subsequently available to denote a vendor-specific FCIBCC format or IN service. This value is then placed in the Data Descriptor field of AMA module 199. If NONE is entered, the FCI_OPT tuple is disabled and the SSP defaults to non-Nortel FCIBCC processing. Value 255 is entered in the Data Descriptor field in AMA module 199.
	DIGIT_ COLLECTION_IN FO	see subfield COLLECTION_ OPTION	This option is used to control digit collection functionality. See Note 2 (below table) for restriction.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 8 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	COLLECTION_ OPTION	FULL_CDPA, PCUI_BUFFER , DEL_DIGS	Enter FULL_CDPA if the full CalledPartyAddress (translated if the call triggered at TDP-3) must be available before sending an InitialDP. If FULL_CDPA is not present, the benefits of overlap inpulsing are gained. The digits that were available when the call triggered will be present in the InitialDP. Enter PCUI_BUFFER to collect a single stream of incoming inband digits on the SSP using multiple P&CUI operations. If PCUI_BUFFER is not present, the SSP will disconnect its digit collection hardware upon completion of a single P&CUI operation. This will save on network resources. Enter DEL_DIGS to specify the number of leading digits to strip from the Called Party Number (CDPN) when building the InitialDP. If DEL_DIGS is not present, the full Called Party Number is sent in the InitialDP.
	DEL_DIGS (Subfield of COLLECTION_ OPTION)	1 to 30	This is the number of leading digits to be stripped from the CDPN when constructing the InitialDP.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 9 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	DEL_DIGS_FROM_ AMA (Subfield of DEL_DIGS)	DEL_DIGS_FROM_AMA	Enter DEL_DIGS_FROM_AMA to make the AMA record contain the stripped digits to match the CDPN of the InitialDP. Otherwise, the AMA record contains the unstripped digits.
	SRF_INFO	see subfield INTERNAL_SRF_INFO	This option defines the behavior of the specialized resource function (SRF) pertaining to the ConnectToResource (CTR) INAP operation.
	INTERNAL_SRF_ INFO	EARLY_ANS	Enter EARLY_ANS for the SSP to send an early answer message on receipt of a ConnectToResource (CTR) operation and establish a two-way speech path. If EARLY_ANS is not present, a one-way speech path is established between the SRF and the calling party.
	EARLY_ANS_DATA (Subfield of INTERNAL_SRF_ INFO)	ANS_ON_PCUI or NO_ANS	Enter ANS_ON_PCUI if it is necessary to send an early answer for the PromptAnd CollectUserInformation (PCUI) Internal IP operation only. Enter NO_ANS if an early answer message is not necessary for the Internal IP.
	RESPONSE_INFO	see subfield RESPONSE_INFO_OPTION	This option allows you to re-assign the NCOS value linked to a CS-1R call. This option also indicates the location in the universal translations table to begin post-Connect, Continue or ETC translations.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 10 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	RESPONSE_INFO_ OPTION	CONNECT_OPT, ETC_OPT, CONTINUE_OPT	Enter CONNECT_OPT to apply the CS-1R point of re-entry control information against the Connect operation. Also refer to Table 2. Enter ETC_OPT to apply the CS-1R point of re-entry control information against the ETC operation. Also refer to Table 2. Enter CONTINUE_OPT to apply the CS-1R point of re-entry control information against the Continue operation. Also refer to Table 2. You can enter CONNECT_OPT, ETC_OPT or CONTINUE_OPT as separate options in the tuple.
	EDPS_INFO	see subfield EDPS_INFO_OPTION	This category controls a range of options relating to EDP behaviour.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 11 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	EDPS_INFO_ OPTION	EXPLICIT, EDP8_DETECT, SUSPEND_RESUME_ALLOW, RCVR_FAILURE, EDP8_OPT, REDIRECTION_NUMBER	Enter EXPLICIT to activate explicit disarming of undetectable EDPs. If EXPLICIT is not present, then the default of implicit disarming is used, where undetectable EDPs are automatically disarmed by the SSP (i.e., EDPs 4, 5, 6, and 7 are disarmed when the call is answered). This also stops unnecessary dialog between the SSP and SCP. Enter EDP8_DETECT to determine the type of hardware that performs EDP8 supervision. If EDP8_DETECT is not present, an STR card performs EDP8 supervision. Enter REDIRECTION_NUMBER to control the sending of the redirection information parameter of the ERBCSM operation. If REDIRECTION_NUMBER is datafilled and the terminating agent has Redirection Number in the ISUP REL message, Redirection Number is mapped to the Event Report BCSM extension parameter and sent to the SCP.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 12 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)			If REDIRECTION_NUMBER is datafilled and Redirection Number is missing in the ISUP REL message for the terminating agent, no mapping is performed and the extension is not sent. Enter SUSPEND_RESUME_ ALLOW to tandem suspend and resume messages to the originator. If SUSPEND_RESUME_ ALLOW is not present, the SSP will treat the suspend as a release. Enter RCVR_FAILURE to further specify the behaviour of the call if EDP8 is armed and the receiver is out of service. Currently, only SRVC_NO_DROP can be entered which continues the call with IN. If SRVC_NO_DROP is not present, the call continues as a non-IN call. Enter EDP8_OPT to allow the passive call leg to be maintained on a per-service basis if event EDP-8 is encountered on the controlling leg.
	EDP8_DETECT (Subfield of EDPS_INFO_ OPTION)	SPAP	Enter refinement SPAP for the signal processing application peripheral (SPAP) card to perform EDP8 supervision.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 13 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	EDP8_OPT (Subfield of EDPS_INFO_OPTION)	OMIDCALL_RL_P_LEG	Controls the action to drop the passive call leg. If no datafill (default), the passive call leg is only dropped when EDP-8 is detected in the Alerting phase of the call (ringing is being applied to the far end). If set to 'Y', the passive call leg is dropped when EDP-8 is detected in the Active (call has been answered) or the Alerting phases of the call. The value of the default datafill is PRE_ANS. If set to 'N', the passive call leg is not dropped when EDP-8 is detected in either the Active (call has been answered) and the Alerting phases of the call.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 14 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)		OMIDCALL_WILDCARD_ZERO	If OMIDCALL_WILDCARD_ZERO is datafilled, the Service Switching Point (SSP) will assume that the: • Mid-call event specified will be the same as that sent in the iNServiceControlCodeLow parameter • Number of digits will be the same • Upper limit of the range of digits to be collected will be 9's, and have the same number of 9's as the number of 0's supplied in the iNServiceControlCodeLow parameter For example if the iNServiceControlCodeLow parameter has the value *000 and OMIDCALL_WILDCARD_ZERO is datafilled, the SSP assumes the value of the iNServiceControlCodeHigh parameter to be *999.
			If OMIDCALL_WILDCARD_ZERO is not datafilled default), it is not mandatory that the iNServiceControlCodeHigh must be received. If this parameter is not received AND OMID_WILDCARD_ZERO is not datafilled, the digits collected should match those supplied in the iNServiceControlCodeLow parameter. See Note 1 (below table)

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 15 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	RCVR_FAILURE (Subfield of EDPS_INFO)	SRVC_NO_DROP	If datafilled, the IN dialogue is maintained even if no Specialized Tone Receiver (STR) is available. If not datafilled (default), the call will continue as a non-IN call.
	BCI_INFO	see subfield BCI_INFO_OPTION	This option controls Backwards Call Indicator (BCI) information.
	BCI_INFO_OPTION	EARLY	Enter EARLY to control BCI options of an early ISUP ACM message.
	FIELD (Subfield of BCI_INFO_OPTION)	CHARGE_IND	Enter CHARGE_IND to control options of the charge indicator of the early ISUP ACM.
	CHARGE_INDICATION (Subfield of FIELD)	CHARGE	Enter CHARGE so that all calls that use this service and that cause an early ISUP ACM message to be sent backwards have the charge indicator sent to “charge”.
	TCAP_INFO	See subfield INAP_OPT & TCAP_VERSION	
	INAP_OPT	AUTO_CONTINUE	Indicates whether Auto-Continue is used.
	TCAP_VERSION	CCITT_V0, CCITT_V1	Indicates the version of TCAP used on the ITU IN SSP (Blue Book or White Book). CCITT_V0 indicates Blue Book. CCITT_V1 indicates White Book. Default = CCITT_V0.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 16 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	TCAP_INFO	see subfield TCAP_INFO_OPTION	This option allows per-service control of different TCAP-related parameters.
	TCAP_INFO_OPTION	U_ABORT	Enter U_ABORT to specify the behaviour when the IN dialogue is aborted by a U_ABORT/TC_END message. If U_ABORT is not present, the call will not be taken down by a U_ABORT message.
	U_ABORT_DATA (Subfield of TCAP_INFO_OPTION)	CLEAR_CALL	Enter CLEAR_CALL to take down the call on a U_ABORT message.
	FI	see subfield FI_OPTION	This option allows per-service control of interactions between IN and DMS-100 features.
		RETRIG_OPTION	This option controls the interaction of the Call Forward feature and its variants.
		RAG	If RAG is datafilled, interaction of IN with the Ring Again and Network Ring Again features is allowed and the call leg generated when the RAG feature is activated can trigger as an IN call. If RAG is not datafilled this restricts the use of the RAG feature.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 17 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)		ACB	If ACB is datafilled, interaction of IN with the Automatic Call Back feature is allowed and the call leg generated when the ACB feature is activated can trigger as an IN call. If ACB is not datafilled, this restricts the use of the ACB feature.
		AR	If AR is datafilled, interaction of IN with the Automatic Recall feature is allowed and the call leg generated when the AR feature is activated can trigger as an IN call. If AR is not datafilled, this restricts the use of the AR feature.
	FI_OPTION	3WC	Enter 3WC to control three way call interactions.
	FI_ACTION (subfield of FI_OPTION)	TAKE_CONTROL, or CLEAR_CALL, or DENY_FEATURE	Enter TAKE_CONTROL to allow the activated feature to take control of the call and abort the IN dialogue. Enter CLEAR_CALL to allow the call to be terminated if an attempt to activate the feature occurs when the IN dialogue is active. Enter DENY_FEATURE to prevent the feature being activated when the IN dialogue is active.
	CS1R	see subfield CS1R_INFO	This option allows CS-1R Handling of the INAP Operations specified on a per-service basis.

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 18 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)	CS1R_INFO	CONTINUE, CWA	Enter CONTINUE for CS-1R handling of the Continue operation. Enter CWA for CS-1R handling of the ContinueWithArguments operation.
	INITDP_UK_ EXTENSIONS	NATIONAL_F WD_CALL_ IND	Adds the National Forward Call Indicator to InitDP operation (if the parameter is supported in the incoming agent).
		PRESENTATI ON_NO	Adds the Presentation Number to InitDP operation (if the parameter is supported in the incoming agent).
		LAST_DIV_LIN E_ID	Adds the Last Diverting Line ID to the InitDP operation (if the parameter is supported in the incoming agent).
		PARTIAL_CLI	Adds the Partial Calling Line Identifier to the InitDP operation (if the parameter is supported in the incoming agent).
		CALLED_SUB S_BSM	Adds the Called Subscribers Basic Service Marks to the InitDP operation (if the parameter is supported in the incoming agent).
		CALLING_SUB S_BSM	Adds the Calling Subscribers Basic Service Marks to the InitDP operation (if the parameter is supported in the incoming agent).

Field, subfield, and refinement descriptions for table SERVINFO (Sheet 19 of 19)

Field	Subfield or refinement	Entry	Explanation and action
OPTION (continued)		CALLING_SUBS_OFM	Adds the Calling Subscribers Originating Facility Marks to the InitDP operation (if the parameter is supported in the incoming agent).
		CALLED_SUBS_TFM	Adds the Called Subscribers Terminating Facility Marks to the InitDP operation if the parameter is supported in the incoming agent.
		CLI_NAME	Controls the sending of the name extension parameter of the InitialDP operation. If CLI_NAME is datafilled the name parameter will be sent in the InitialDP. The name parameter for trunk-originating calls is derived from the IAM message. For line-originating calls it is derived from datafill of the DNATTRS table. If no name parameter can be found for the call, but CLI_NAME is datafilled, an empty name parameter (no length) is sent.
	CCBS		This option specifies whether Network CCBS and Nodal CCBS can interact with ITU IN. ***Note:*** CCBS is a world trade (WT) feature, and is not available in North American loads.

Note 1: **Wildcard Zero**

During a RequestReportBSCMEvent (RRBCSME) operation the legID parameter specifies the leg of a call that the system monitors for the occurrence of a specified event.

The MidCallControlInfo parameter indicates the specific mid-call events (OmidCall), which are requested to be Monitored. This is done as a result of the calling party pressing the * key, pressing the # key, or pressing either of those keys. The MidCallControlInfo parameter can contain one or two MidCallInfoType elements, each using iNServiceControlCodeLow to specify a single control code.

Prior to MMP16, the digits which caused EDP-8 to be encountered were limited to * or #. These digits were specified in the iNServiceControlCodeLow parameter, a subparameter of the MidCallInfoType parameter of the RRBCSME operation. EDP-8 can only be armed on the controlling leg. At MMP16, additional digits are supported for iNServiceControlCodeLow, and support for iNServiceControlCodeHigh is added. This allows the Service Control

Point (SCP) to specify a range of digits which must be collected when EDP-8 is encountered, in addition to the digit which would cause EDP-8 to be encountered.

The iNServiceControlCodeLow and iNServiceControlCodeHigh parameters of the RRBCSME are used to specify the mid-call event(s) to be detected and the number and range of digits that can be collected by the Service Switching Point (SSP) when EDP-8 has been armed. The iNServiceControlCodeHigh parameter specifies a mid-call event and the upper limit of the range of digits which can be collected. However, it is possible to datafill table SERVINFO (using EDP8_WILDCARD_ZERO) such that a mid-call event and a number and range of digits can be assumed without the need for a iNServiceControlCodeHigh parameter.

EDP8_WILDCARD_ZERO allows a range of digits to be accepted when only the iNServiceControlCodeLow parameter is received. If EDP8_WILDCARD_ZERO is datafilled, the range of digits collected will correspond to the number of zeroes contained in the iNServiceControlCodeLow parameter. For example, if the value of iNServiceControlCodeLow is *000, and EDP8_WILDCARD_ZERO is datafilled, the range of digits to be accepted is assumed to be *000 to *999 even though no iNServiceControlCodeHigh is received.

Note 2: **Digit buffering**

Buffering of digits dialled by the calling party in response to the PromptAndCollectUserInformation operation is not supported on IN calls originating on ETSI PRI or lines, or IN calls triggering on QSIG. Digits dialled after a P&CUI Return Result has been sent and before any subsequent P&CUI operation is received will be lost.

RESPONSE_INFO_OPTION=CONNECT_OPT, CONTINUE_OPT, ETC_OPT, or all

If the entry in the RESPONSE_INFO_OPTION subfield is CONNECT_OPT, CONTINUE_OPT, ETC_OPT, or all, add data to subfield RESPONSE_INFO_OPTION_ATTR as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RESPONSE_ INFO_OPTION_ ATTR	NCOS_MODIFY, XLA_REENTRY, or both	Response information option attribute. This optional subfield indicates that the following characteristics of the CS-1R call are subject to change: • NCOS value • post-Connect translations behavior • post-Continue translations behaviour • post-ETC translations behavior Enter NCOS_MODIFY to indicate that the NCOS value is subject to changes related to the INNCOS table during SCP response translations. Enter XLA_REENTRY to indicate that the translations behavior is subject to change during SCP response translations. Also refer to Table 3.

RESPONSE_INFO_OPTION_ATTR=XLA_REENTRY

If the entry in the RESPONSE_INFO_OPTION_ATTR subfield is XLA_REENTRY, add data to subfield XLA_REENTRY_ATTR as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	XLA_REENTRY _ATTR	INNCOS_ LOOKUP, UNIV_XLA, or both	Translations re-entry attribute. This optional subfield indicates the location in universal translations to begin post-SCP operation processing. Enter INNCOS_LOOKUP to indicate that post-SCP operation processing begins from a translations point indicated in the INNCOS table. Enter UNIV_XLA to indicate the location in universal translations to begin post-SCP operation processing. Also refer to Table 4.

XLA_REENTRY_ATTR=UNIV_XLA

If the XLA_REENTRY_ATTR subfield is UNIV_XLA, add data to subfield UXLA_DATA as described in the following table.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	UXLA_DATA	see subfields	Translations data. This subfield includes subfields XLASYS and XLANAME.
	XLASYS	AC, AM, CT, FA, FT, NSC, OFC, PX, or NIL	Translations system. Enter the translations system to identify the start point for post-SCP operation translations. Enter AC to indicate the access code system.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			Enter AM to indicate the ambiguous code system. Enter CT to indicate the city code system. Enter FA to indicate the system of the foreign area code.
			Enter FT to indicate the feature code system. Enter NSC to indicate the system of the number service code.
			Enter OFC to indicate the office code system. Enter PX to indicate the prefix code system. Enter NIL to indicate that no translations system is available.
	XLANAME	alphanumeric (1 to 8 characters)	Translator name. Enter the translator to identify the start point for post-SCP operation translations. Enter the index into the table identified by the XLASYS subfield.

RETRIG_OPTION=RETRIG_ACTION, RETRIG_ALLOW_BASIS, RETRIG_PRIORITY

RETRIG_OPTION has the suboptions and fields listed as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RETRIG_ACTION	DENY, DENY_AND_CLE AR, ALLOW	Controls whether an IN call can re-trigger on the call leg being forwarded by the CFW feature. DENY prevents the call leg from triggering. DENY_AND_CLEAR disallows the trigger and sends the call to treatment. ALLOW takes down the existing dialogue and allows the new leg to trigger a new IN dialogue
	RETRIG_ALLOW_BASIS	GT, GTE	This suboption must be datafilled if ALLOW is datafilled in RETRIG_ACTION above. It controls the priority of the attempted re-trigger over the existing dialogue.
	RETRIG_PRIORITY	0 to 255	Priority level of the new call leg.

Table history

SN07

Table SERVINFO migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

NA018 (SN05)

Added option CCBS to extend the capability for IN triggering at TDP2 and TDP3 to include Nodal and Network CCBS for feature 59038655.

NA017 (SN04)

Added suboption DEL_DIGS_FROM_AMA to the DEL_DIGS option as per CR 30374181.

New entry CLI_NAME added to field INITDP_UK_EXTENSIONS as per feature 59033637.

New entries RETRIG_OPTION, RAG, ACB & AR added to field FI as per feature 59033609.

Subfields INAP_OPT and TCAP_VERSION added as per feature 59033629.

Added suboption REDIRECTION_ NUMBER to the EDPS_INFO option and suboption RD_INFO to the INITDP_PARMS option as per feature 59033624.

SERVRINV

Server Inventory

Table SERVRINV stores provisioned data for a Gateway Controller (GWC) or an Audio Server (AUD), which are nodes in CS2000 cable network configuration. This table contains fields for a server name, which is a unique identifier of a GWC and its number for a given line or trunk GWC. The next field stores the server address, which is the IP address needed for inter-GWC communication. The server exec and server tone fields hold information for terminal and tone set type.

The customer must manually enter data in this table with the table editor ADD and NEW commands. You cannot use the table editor CHG command to change this table. Use the Service Order System (SERVORD) ADO, DEO, and CHF commands to change this table. The maximum number of GWCs you can provision is 210.

Datafill sequence and meaning

The following tables must be datafilled after you have datafilled table SERVSINV:

- LGRPINV
- LNINV

Table size

Maximum of 210 tuples. Allocation occurs dynamically.

Datafill

The following table lists the datafill for table SERVRINV.

Field, subfield, and refinement descriptions for table SERVRINV (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SRVRNAME	SRVR_KEY	SRVR_KEY is an area refinement of KEY. It is a multiple with PMTYPE PM_TYPE and PMNO XPM_NO (0to 255)	Server name. For the GWC, the PMTYPE is GWC and the PMNO is an integer from 0 to 255.
SRVRADDR	SRVRADDRES_AREA	Multiple with NETWORK (IP, ATM, NOADDR) refinements: IP, IPADDRSS table of 4 (0 to 255), ATM, multiple with ATMADDRSS, multiple with VIRTUAL_CHANNEL (0 to 255), VIRTUAL_PATH (0 to 255)	Server address. An IP address is needed for fabric control message (FCM). When the CM sends an FCM to a GWC, the GWC needs to know the IP address of the other GWC to communicate. ***Note:*** Only IP is available for the alpha 1 release.

Field, subfield, and refinement descriptions for table SERVRINV (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SRVREXEC	TERM_EXEC_TC_TAB	Type is TERM_EXEC_TC_TAB vector of up to 8 multiples with TRMTYPE TERM_TYPE, EXEC EXEC_LINEUP	*Server exec* For a GWC, EXECTAB could be (POTS POTSEX) $.
SRVRTONE	TONE_SET_TYPE	HONGKONG, INDIA, SRILANKA, CHINA100, AUS100, MEXDTMF, MEXMF, NZLGC, CHINA, MOROCCO, NZDTC, AUS300, CEP, CEP100, NORTHAM, JAPAN1, NORTHAA, NA_RAM	*Server tone* Specify the tone set for the GWC. For North America, specify NORTHAM.

Table history

SN08

Table SERVRINV was added for SN08.

Additional information

One Night Process (ONP) table transfer (tabxfr) from alpha 1 to alpha 1 load is supported.

SERVSINV

ATTENTION
This table applies to new or modified content for SN06 (DMS) that is valid through the current release.

Server Subtending Node Inventory

Table Server Subtending Node Inventory (SERVSINV) contains the names of the server subtending nodes and their associated gateways. The subtending nodes are the Audio Controller (AUD) and the Dynamic Packet Trunk (DPT).

Table SERVSINV supports the following commands:

- ADD
- DEL
- CHA

Note: CHA is only supported for the AUD node.

Datafill sequence and meaning

Enter datafill into table SERVRINV before table SERVSINV.

Enter datafill into the following tables after you enter datafill into table SERVSINV:

- ANNMEMS

Table size

Maximum of 256 tuples. You can datafill only 128 DPT tuples in table SERVSINV.

Datafill

The following table lists the datafill for table SERVSINV.

Field, subfield, and refinement descriptions for table SERVSINV (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
SRVSNAME		multiple with XPMTYPE PM_TYPE XPMNO (0 to 255)	Server Subtending Name. Enter AUD, DPT, or BCT for the PM type. Enter a PM number between 0-255.
SRVRNAME		multiple with XPMTYPE PM_TYPE XPMNO (0 to 255)	Server Name. Enter GWC for the PM type. Enter the PM number that is present in table SERVRINV.
NUMTERMS		1024, 2048, or 4095	Number of Terminals field. This field represents the number of terminals of the node. This field must be 2048 for DPT.
OPTIONS		SIPT, SIPSNODE, BICC, ANNC, 3PORT, 6PORT, ALTTERMS	Options field. Enter options: SIPT, SIPSNODE, BICC, ANNC, 3PORT, 6PORT, and/or ALTTERMS.

Field, subfield, and refinement descriptions for table SERVSINV (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
OPTION = SIPT, SIPSNODE or BICC			
			SIPT is used to provision SIP-T GWCs. This option adds the GWC node to the DDM's VRDN table node list. The GWC receives the list of VRDN information from the DDM during RTS static data download. Enter the IP address of the VRDN. Enter any valid IP address when provisioning a SIP-T GWC. BICC is used to provision the DPT subtending GWCs with Bearer Independent Call Control (BICC) capability. SIPSNODE is used to provision SIP Service Node resources on the DPT. ***Note:*** For OPTION = SIPT, SIPSNODE or BICC there are no subfields.
OPTION = ANNC			
OPTIONS			ANNC is used to control the number of announcement calls to an audio server.
	ANNTERMS	1 to 300	Announcement terminals. Defines the number of ports for announcement calls on the audio server. Enter value between 1 to 300.

Field, subfield, and refinement descriptions for table SERVSINV (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
OPTION = 3PORT or 6PORT			
			3PORT is used to indicate the number of 3-port conferencing circuits on the audio server. 6PORT is used to indicate the number of 6-port conferencing circuits on the audio server.
	CONFTERMS	3 to 4092 (for 3PORT)	Indicates the number of 3-port conference ports. Value has to be divisible by 3 and the result is the number of 3-port circuits reserved on the audio server. For example 30 ports provisioned means there are 10 3-port conference circuits. (This option requires that the UASCF3P CLLI be datafilled in table CLLI. If the number of ports specified in the CONFTERMS field is greater than 2046, then the UASCF3PX CLLI must also be datafilled in table CLLI.)
		6 to 2046 (for 6PORT):	Indicates the number of 6-port conference ports. Value has to be divisible by 6 and the result is the number of 6-port circuits reserved on the audio server. For example 30 ports provisioned means there are 5 6-port conference circuits. (This option requires that the UASCF6P CLLI be datafilled in table CLLI.)

Field, subfield, and refinement descriptions for table SERVSINV (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
OPTION = ALTTERMS			
			ALTTERMS is used to provision the number of BCT resources on the audio server.
	ALTTERMS	0 to 4095	Indicates the number of BCT resources. This number is usually the number of CG6000 cards dedicated to BCT multiplied by 90 (since there are 90 terminals per card). For ATM networks, this number should be 500 per audio server.

Field, subfield, and refinement descriptions for table SERVSINV (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
OPTION = PKTMA_MAX_CALLS			
			PKTMA_MAX_CALLS is used to control the number of Packet Media Anchor calls. This field contains subfield PKTMA_MAX_CALLS.
	PKTMA_MAX_CALLS	1 to 1000	Anchor calls. Defines the number of supported anchored calls on the audio server. Enter a value between 1 and 1000.

Error messages

The following table lists error messages for invalid datafills in Table SERVSINV.

Error messages for Table SERVSINV

`ERROR: BICC option is only valid with DPT tuple`	An attempt has been made to add a non-DPT tuple with BICC option.
`ERROR: Host PM must be a GWC`	An attempt to add a DPT tuple with BICC option does not have GWC as the XPMTYPE in the SRVRNAME field.
`ERROR: Coexistence of BICC and SIPT options in a DPT tuple is not supported`	An attempt has been made to add a DPT tuple with SIPT and BICC options.
`ERROR: Maximum DPT nodes already provisioned`	An attempt to add a DPT tuple with BICC option exceeds the maximum number of DPT tuples in table SERVSINV, which is set to 128.

Error messages for Table SERVSINV

`ERROR: Change is not allowed`	An attempt has been made to remove the BICC option from a DPT tuple. An attempt has been made to change the SRVSNAME field of an existing DPT tuple with BICC option. An attempt has been made to add BICC option to a DPT tuple with SIPT option. An attempt has been made to add SIPT option to a DPT tuple with BICC option. An attempt has been made to replace the BICC option in a DPT tuple with SIPT option. An attempt has been made to replace the SIPT option in a DPT tuple with BICC option. An attempt has been made to change the NUMTERMS field of an existing DPT tuple with BICC option.
`ERROR: DPT tuple must have either SIPT or BICC option`	An attempt has been made to add a DPT tuple without SIPT or BICC option.

Additional information

A GWC may support a maximum of one BCT node for Lawful Intercept (ALTTERMS) and one BCT node for the Packet Media Anchor (PKTMA_MAX_CALLS). Multiple appearances of either option, on a single GWC, are not permitted.

The PKTMA_MAX_CALLS option is limited to 1000 due to the requirement that each anchored call requires four Audio Server terminals. As a result, the NUMTERMS field should be provisioned with 4095 terminals.

The Audio Server must be configured to support three BCT resources and one announcement resource per call. Using the example above, the Audio Server should be configured with:

- 990 BCT resources (3 * PKTMA_MAX_CALLS) + ALTTERMS
- 600 ANNC resources (initial ANNC value) + (PKTMA_MAX_CALLS)

Recommendations for provisioning CONFTERMS

Recommendations for provisioning the number of CONFTERMS specified against the 3PORT and 6PORT options:

In order to avoid a mismatch between the CM and the Audio Server gateways, the combined number of terminals (or ports) specified against the 3PORT and 6PORT options must match the number of conference ports engineered on the UAS gateways (for a given GWC or AUD node).

The distribution of these terminals or ports in the CM against the 3PORT and 6PORT options is dependent on the need of the individual services which make use of the conferencing resources. For example, 3-way calling uses 3PORT resources while meet-me and station controlled conferencing make use of 6PORT resources. The existing guidelines for assigning TDM-based 3-port conference circuits in table CONF3PR (and 6-port circuits in CONF6PR) one must consider that one 3-port circuit maps to 3 conference terminals (against the 3PORT option) and one 6-port circuit maps to 6 conference terminals (against the 6PORT option).

The provisioning of conference ports against the 3PORT and 6PORT options is reflected by the addition of UASCF3P, UASCF3PX and UASCF6P circuits in the CM. Like their TDM counterparts (CF3P, CF3PX and CF6P), these circuits may be posted at the TTP level of the MAP.

Since conferencing services always select circuits from the pool available in the CM, it is important that the number of conference terminals specified against the 3PORT and 6PORT options match the number of conference ports engineered on the UAS gateways. If the CM is under-provisioned in conference terminals, then this will result in the conference ports on the UAS never being fully utilized. Conversely, if the CM is over-provisioned, then the additional circuits allocated in the CM will remain in the NMB state and will never be made available for call processing.

The following table illustrates how 30 conference ports provided by 2 CG6000 cards on a UAS can be provisioned in table SERVSINV

(bearing in mind that the number of 3PORT terminals must be divisible by 3 and the number of 6PORT terminals must be divisible by 6):

3PORT confterms	6PORT confterms
30	not assigned
24	6
18	12
12	18
6	24
not assigned	30

It is also important to note that under the given circumstances these are the only valid configurations. Any other configuration would result in the CM being either over or under provisioned with respect to the UAS.

Furthermore, although the CM cares about the distribution of conference terminals between the 3PORT and 6PORT options, the GWC does not. It will only report the total number of conference ports available in a single POOL INIT message sent to the CM. The CM then distributes these between the 3PORT and 6PORT options based on the ratio of conference terminals (CONFTERMS) provisioned in table SERVSINV.

To illustrate, we will consider the case where the Core is over-provisioned. For example, assume that both the 3PORT and 6PORT options are provisioned with 18 conference terminals for a total of 36. This maps to 6 UASCF3P circuits and 3 UASCF6P circuits. Furthermore, we will assume that this is 18 more ports than are engineered on the UAS. In this case, the ratio of 3PORT to 6PORT terminals is 1 to 1, so the Core will attempt to distribute the 18 ports reported in the Pool INIT message accordingly.

However, since it cannot give 9 ports to each (since 9 is not divisible by 6), it will provide 12 for 3PORT and 6 for 6PORT (the 3PORT option is always favored over 6PORT in such situations). This will be reflected by 4 of the 6 UASCF3P circuits being in the IDLE state and the other 2 being NMB. Similarly, 1 of the 3 UASCF6P circuits will be IDLE, the other 2 will be NMB.

Table history

SN08

Added information about option PKTMA_MAX_CALLS for feature A00007120.

SN07

Table SERVSINV migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

Added information about UASCF3P, UASCF3PX, and UASCF6P to resolve CR Q00737124.

SITE

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

SITE

Table SITE contains data for the DMS-100 switch and all other sites that depend on the DMS-100. Table SITE also contains the site name (SN) for each remote location. The operating company defines site names for the local sites.

The first entry in table SITE must be HOST for the host switching unit.

The test desk SN for a line equipment number (LEN) enables the testers to choose a two- or three-digit SN. This SN corresponds to the site the testers want to dial. The number 11 precedes the two-digit SN to indicate the dialing of a LEN is taking place. The number 12 precedes the three-digit SN to indicate the dialing of a LEN is taking place. Seven digits that represent the LEN come after the two- or three-digit SN. For example, 11 + 2-digit SN + 7 digits, 12 + 3-digit SN + 7 digits.

Set the module count. It must equal zero (0). The system automatically updates this value as line modules (LM) on site are added to tables LMINV and LCMINV.

The switching unit has a fixed code VER90 in table CLLI for the operator verification trunk group. The operating company defines the codes for the operator verification trunk group at the other sites. To assign these trunks to the metallic test access, refer to table MTAHORIZ. Assign these trunks in table TRKGRP with trunk group type VR.

The operating company assigns three signal distributor points at the other remote sites. The three are critical alarms, major alarms, or minor alarms. The operating company cannot assign the four remaining signal distributor points in this signal distributor group to lines for line features.

Datafill sequence and meaning

Table CLLI must be datafilled before table SITE.

Table size

1 to 255 tuples.

The system continuously increases table SITE in blocks of 32, as needed. At the initial program load (IPL), the system allocates data store (DS) for the first 32 tuples.

Datafill

The following table lists the datafill for table SITE.

Field, subfield, and refinement descriptions for table SITE (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
NAME		alphanumeric (1 to 4 characters)	Site name. Enter the site name assigned to the host or remote switching unit. The first character must be alphabetical. Site names can be a vector of up to four characters in length. You do not use PM type names for site names. An exception is RLCM. You do not use the name ALL as a site name.
LTDSN		0 to 255	LEN test desk SN. Enter the two or three numbers required to dial the site that appears under field NAME.
MODCOUNT		0 to 1000	Module count. Enter zero (0). The system updates the value to reflect the number of line modules (LM) on site. This update proceeds as you add the LMs to tables LMINV and LCMINV.

Field, subfield, and refinement descriptions for table SITE (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
OPVRCLLI		VER90 or alphanumeric	Operator verification common language location identifier. Enter the common language location identifier (CLLI) assigned to the operator verification trunk group at the remote location. The host switching unit has a fixed operator verification CLLI code VER90. Enter VER90 for the switching unit operator verification CLLI.
ALMDATA		see subfields	Alarm data. This field is for remote locations only and consists of subfields ALMTYPE, TMTYPE, TMNO, CKTNO, and POINT.
	ALMTYPE	CR, MJ, MN, NA	Alarm type. If the entry is for a remote location, enter the alarm type: critical (CR), major (MJ), or minor (MN). If the entry is for the host switching unit, enter NA.
	TMTYPE	RMM, RSM, or blank	Trunk module type. If the entry is for another location, enter the trunk module type, remote service module (RSM), or remote maintenance module (RMM). This trunk module is where the signal distributor point assigned to the alarm resides. If the entry is for the host switching unit, leave blank.

Field, subfield, and refinement descriptions for table SITE (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	0 to 2047	Trunk module number. If the entry is for another location, enter the number assigned to the remote service module. This module is where the signal distributor point assigned to the alarm resides. If the entry is for the host switching unit, leave blank.
	CKTNO	0 to 29 or blank	Trunk module circuit number. If the entry is for another location, enter the trunk module circuit number of the RSM or RMM. This module is where the signal distributor point assigned to the alarm resides. If the entry is for the host switching unit, leave blank.
	POINT	0 to 7 or blank	Point. If the entry is for another location, enter the signal distributor point number within the trunk module circuit number. If the entry is for the host switching unit, leave blank.
Note: Enter the continuation mark (+) in fields with multiple-possible entries when more data is specified on the next line or more records will be entered. Enter the end mark ($) in fields with multiple, possible entries after the last entry.			

Table history

SN07

Table SITE migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

SOSMMPC

System of Operative Searching Measures MPC

Table System of Operative Searching Measures MPC (SOSMMPC) provides the mechanism to allocate MPC cards for the DMS-Control Point X.25 Interface of SOSM feature. For each pair of channels, a tuple is added to this table.

Datafill sequence and meaning

The following tables must be datafilled in the sequence listed below:

- Table MPC
- Table MPCLINK
- Table SOSMMPC

Table size

0 to 8 tuples.

Datafill

The following table lists the datafill for table SOSMMPC.

Field, subfield, and refinement descriptions for table SOSMMPC (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SOSMLINK		0 to 7	The name of the key field is SOSMLINK. This field is used to index the table by the SOSM X.25 application. Up to eight pairs of channels may be datafilled. No default value.
DATACH1		MPCNO with range 0 to 255, LNKNO with range of 0 to 3	Specifies the MPC card and Link number to be used for DMS to CP Data Channel 1 (CP Command Interface). No default value.

Field, subfield, and refinement descriptions for table SOSMMPC (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DATACH2		MPCNO with range of 0 to 255, LNKNO with range of 0 to 3	Specifies the MPC card and Link number to be used for DMS to CP Data Channel 2 (Call Information Channel) No default value.

Additional information

SOSMMPC table entries can be edited only if the following criteria are met:

- SOSM0001 is ON
- SOSMCONF CI increment is accessed with a valid password, and
- SOSM system is inactive (not activated by a CP command).

Table history

SN07

Table SOSMMPC was added in SN07 by feature A00002173.

SOSMPARM

System of Operative Searching Measures (SOSM) Parameters

Table System of Operative Searching Measures Parameters (SOSMPARM) is used by SOSM system for saving SOSM specific parameters.

Datafill sequence and meaning

There is no specific datafill sequence required for table SOSMPARM.

Table size

3 tuples.

Datafill

The following table lists the datafill for table SOSMPARM.

Field, subfield, and refinement descriptions for table SOSMPARM (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PARMNAME		TOLL_EXIT_CODE INTRAZONAL_CODE or INTERNTNL_CODE	Parameter name. This is the name of the SOSM specific parameter.
PARMVAL	PARMSEL	TOLL, INTRAZONAL, INTERNTNL	This subfield is the selector which determines the refinement used for the corresponding SOSM parameter. TOLL is valid only for TOLL_EXIT_CODE. INTRAZONAL is valid only for INTRAZONAL_CODE INTERNTNL is valid only for INTERNTNL_CODE parameters.
	PARMSEL: TOLL EXIT_CODE	digit, 0 to 9	Toll exit code. Enter a single digit between 0-9.

Field, subfield, and refinement descriptions for table SOSMPARM (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PARMSEL: INTRAZONAL EXIT_CODE	digit, 0 to 9	Zonal exit code. Consists of a single digit between 0-9.
	PARMSEL: INTERNTNL EXIT_CODE	2 digits, each 0 to 9	International exit code. Consists of two digits, each between 0-9.

Additional information

It is not permitted to change PARMSEL for the default parameters (TOLL_EXIT_CODE, INTRAZONAL_CODE and INTERNTNL_CODE) by table editing commands.

Data in SOSMPARM table cannot be deleted.

SOSMPARM table entries can be edited only if the following criteria are met:

- SOSMCONF CI increment is accessed with a valid password, and
- SOSM0001 is ON,
- SOSM system is inactive (not activated by a CP command).

Table history

SN07

Table SOSMPARM was added in SN07 by feature A00002173.

SOSMTRK

System of Operative Searching Measures (SOSM) Trunk

Table System of Operative Searching Measures Trunk (SOSMTRK) is used by the SOSM system for mapping generic trunk groups into dedicated SOSM trunks. Each entry identifies a trunk group to be used for the PCM-30 group of MCLs.

Datafill sequence and meaning

The following tables must be datafilled in the sequence listed below:

- Table CLLI
- Table TRKGRP
- Table TRKSGRP
- Table TRKMEM
- Table SOSMTRK

Table size

0 to 8 tuples.

Datafill

The following table lists the datafill for table SOSMTRK.

Field, subfield, and refinement descriptions for table SOSMTRK

Field	Subfield or refinement	Entry	Explanation and action
SOSMGRP		0 to 7	This field identifies the PCM-30 group number.
CLLI		Common Language Name (CLLI)	Common Language Name (CLLI). This field identifies the trunk group to be used by SOSM. ***Note:*** The CLLI entered here must correspond to a valid trunk datafilled in tables CLLI, TRKGRP, TRKSGRP and TRKMEM.

Additional information

SOSMTRK table entries can be edited only if the following criteria are met:

- SOSM0001 is ON
- SOSMCONF CI increment is accessed with a valid password, and
- SOSM system is inactive (not activated by a CP command).

Table history

SN07

Table SOSMTRK was added in SN07 by feature A00002173.

SPMCHAST

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

SPM Messaging Channel Assignment

In the DMS-Spectrum Peripheral Module (SPM), the mapping between C-side and P-side channels are made dynamically. This ability is supported in the common equipment module (CEM) hardware by an internal time switch. In addition, mapping between C-side and P-side channels is not necessarily one-to-one. For example, some C-side channels are used for messaging between the DMS-Bus and the SPM without tying up any P-side channels.

To take advantage of this, a dynamic mapping table is maintained by the channel manager to make efficient use of the channels available. Table SPMCHAST is queried to find the next available channel, then updated when a channel is reserved or freed.

Table SPMCHAST keeps track of current DS0 channels being used for messaging in the SPM. It is implemented as a data table to be dumped and restored on the inactive side as part of the dump and restore process.

When SPM table control is restored on the inactive side, this messaging channel mapping table provides SPM table control with the channels being assigned for messaging. This is required to ensure that identical channels are allocated on the inactive side in preparation for the NORESTART SWACT.

Datafill sequence and meaning

There is no requirement to datafill other tables prior to table SPMCHAST. Table SPMCHAST datafill is controlled by the SPM link registration agent.

Table SPMCHAST cannot be datafilled by operating company personnel and is not accessible through the table editor.

Table size

24 to 1536 tuples.

The system continuously increases table SITE in blocks of 32, as needed. At the initial program load (IPL), the system allocates data store (DS) for the first 32 tuples.

Table size is dynamic and depends on the current configuration of the SPM. Each entry takes 6 bytes. There is a maximum of 4 x N entries, where N is the number of SPM nodes (maximum 64). However, a normal configuration usually has only one or two SPM nodes.

Minimum size: (4 x 1 node) x 6 bytes = 24 bytes

Maximum size: (4 x 64 nodes) x 6 bytes = 1536 bytes

Datafill

The following table lists the datafill for table SPMCHAST.

Field, subfield, and refinement descriptions for table SPMCHAST (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		See subfields	Key. This field consists of subfields NODE, LINK, and MSG_CHNL. This is the key field to table SPMCHAST.
	NODE	0 to 63	Node number. Enter the node number of the SPM node.
	LINK	0 to 97	Message link. Enter the message link number for the node.
	MSG_CHNL	0 to 3	Message channel. Enter the message channel number for the node.

Field, subfield, and refinement descriptions for table SPMCHAST (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
START		0-511	Start. This field indicates the starting DS-0 channel of the messaging channel. The default value is 0.
BANDWIDT		0-511	Bandwidth. This field indicates the number of DS-0 channels in the messaging channel. The default value is 0.
DISTANCE		0-511	Distance. This field indicates the distance between two consecutive DS-0 channels in the messaging channel. The default value is 0.
Note: Table SPMCHAST is indexed by the SPM node, link, and messaging channel number.			

Table history

SN07

Table SPMCHAST migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

SPMECAN

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

SPM Echo Canceller

Table SPM Echo Canceller (SPMECAN) is used to provision the DMS-Spectrum Peripheral Module (SPM) echo canceller (ECAN) control parameters.

Datafill sequence and meaning

There is no requirement to datafill other tables before table SPMECAN.

A tuple in this table can be referenced by any number of tuples in table TRKSGRP. To delete a tuple from table SPMECAN, there must be no reference to it in table TRKSGRP.

Tables must be datafilled in the following sequence:

- SPMECAN
- MNNODE

Table size

0 to 255 tuples.

The system continuously increases table SITE in blocks of 32, as needed. At the initial program load (IPL), the system allocates data store (DS) for the first 32 tuples.

Size of one tuple =7 bytes

Minimum size of table = 0 Kbytes

Maximum size of table = 256 × 7 = 1.75 Kbytes

Datafill

The following table lists the datafill for table SPMECAN.

Field, subfield, and refinement descriptions for table SPMECAN (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
TONMG		Y or N	Tone message. Enter Y (default) to send messages to the SPM resource manager every time the echo canceller is disabled by a valid G.164 or G.165 tone or enabled by silence below the specified threshold for ~300ms. ***Note:*** AUTON parameter must be set to 1 for the echo canceller to be enabled again after being disabled by the tone.
TONEDMOD		G164 or G165	Tone disabler mode. Enter G164 to use the G.164 tone disabler mode. Enter G165 (default) to use the G.165 tone disabler mode. ***Note:*** The only difference between G.164 and G.165 is the additional requirement for G.165. Specifically, the disabling tone must contain phase reversals to be detected.

Field, subfield, and refinement descriptions for table SPMECAN (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
S56KB		Y or N	Signal 56 kilobytes. Enter Y to enable the 56 Kbyte/s mode for tone disabler. The default is N. ***Note:*** This mode is used for data transfer. In the switched 56 Kbyte/s traffic mode, the least significant bit (LSB) of every frame is set to 1 for a busy circuit. The echo canceller is initially disabled by the detection of tone and remains disabled as long as an “all 1's" pattern is maintained. Following a violation of “all 1's" pattern, the echo canceller is enabled again when signal energy falls below the specified threshold.
AUTON		Y or N	Automatic on. Enter Y (default) to again enable the echo canceller when signal energy falls below a specified threshold.
NLP		Y or N	Center clipper. Enter Y (default) to enable the center clipper. The center clipper operates on residual echoes in the absence of near-end speech paths—this improves the ERLE after convergence.

Field, subfield, and refinement descriptions for table SPMECAN (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
NSMAT		Y or N	Noise matching. Enter Y (default) to enable noise matching. This function is active only if NLP is enabled. When the output signal from the echo canceller falls below a specified suppression threshold, it is replaced by white noise at the threshold level.
SOS		Y or N	SOS. Enter Y (default) to allow the ECAN to send SOS messages when the echo canceller cannot achieve the specification within a reasonable amount of time.
TDINC		Y or N	Enter Y (default) to enable the automatic increment of MDLA (maximum tail delay) when convergence cannot be achieved with the current setting. When field TDINC is set to Y, the normal SOS message is not sent when convergence is impossible; the MDLA is incremented to 128 ms. If the MDLA parameter is already 128 ms and convergence is still impossible, an SOS message is sent.
MDLA		16MS, 32MS, 48MS, 64MS, 80MS, 96MS, 112MS, 128MS	Maximum tail delay. This field sets the maximum tail delay recognized. Echoes with a delay greater than the maximum tail delay are not recognized. The default value is 32MS.

Field, subfield, and refinement descriptions for table SPMECAN (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
MERL		0DB, 3DB, 6DB	Minimum ERL. This field contains the minimum expected ERL (echo return loss). The default value is 6DB.
ACOM		20DB TO 70DB	Combined loss. This field enables customers to specify the expected limit of Combined Loss on a trunk subgroup basis. When the Combined Loss is less than the value of datafilled ACOM for a call, information on the suspect EC is documented in the SPM660 log The default value is 33DB.
FAREC		Y or N	Far end echo canceller. Enter Y if an external echo canceller is present at the far end. The default value is N. ***Note:*** FAREC and BK2BK fields cannot both be assigned a value of Y at the same time.
BK2BK		Y or N	Back to back. Enter Y to allow two ECANs to be hooked in back-to-back configuration. The default value is N. ***Note:*** FAREC and BK2BK fields cannot both be assigned a value of Y at the same time.

Field, subfield, and refinement descriptions for table SPMECAN (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
S2COMPAT		S2C_NONE, S2C_NORM, S2C_REV	MMP series 2 peripheral compatibility mode. Enter S2C_NONE to retain the expected SPM behavior in all non-MMP loads. Enter S2C_NORM for the SPM to replicate the MMP echo canceller behavior of series 2 peripherals in normal mode. Enter S2C_REV for the SPM to replicate the MMP echo canceller behavior of series 2 peripherals in reverse connected mode. The default value is S2C_NONE.
EC_BYTE_1		00-FF	This hex byte #1 applies to a third party echo canceller. By default, it is set to 00.
EC_BYTE_2		00-FF	This hex byte #2 applies to a third party echo canceller. By default, it is set to 00.
EC_BYTE_3		00-FF	This hex byte #3 applies to a third party echo canceller. By default, it is set to 00.
EC_BYTE_4		00-FF	This hex byte #4 applies to a third party echo canceller. By default, it is set to 00.

Additional information

If an attempt is made to delete a tuple in table SPMECAN which is referenced in table MNNODE, the attempt is rejected with the following error message:

```
CANNOT DELETE THIS TUPLE - IT IS USED BY SPM 14 IN
TABLE MNNODE.
```

Dump and restore

If the SPMECAN table is not present on the dump side, but is present on the restore side, it will come up empty on the restore side after the

one-night process (ONP). If table SPMECAN is present on both the dump and restore sides prior to ONP, it will be restored before table TRKSGRP.

Inter table dependencies

Inter table dependencies are as follows:

- An index is allowed in table TRKSGRP only if it already exists in table SPMECAN.
- If an index is being used by a trunk in table TRKSGRP, it cannot be deleted from table SPMECAN.
- The FAREC and BK2BK fields cannot both be assigned a value of Y in the same tuple instance.

Table history

SN07

Table SPMECAN migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

SN06 (DMS)

Tuples in table MNNODE may reference tuples in table SPMECAN.

SPMLDVAL

ATTENTION
This table applies to new or modified content for SN06 (DMS) that is valid through the current release.

Spectrum Load Name Validation

Table SPMLDVAL stores the device load sequence for different releases of the TDM spectrum peripheral module (SPM) loads.

The key for table SPMLDVAL is a combination of four parts as follows:

- Spectrum family load type indicator
- General release number
- Maintenance release number
- Emergency release number

The following applications retrieve data from table SPMLDVAL:

- The CI tool SPMLDINFO gets the load sequence information for different SPM load releases from table SPMLDVAL
- The command QUERYPM FILES compares the device loads in a DMS Call Processing (DMSCP) SPM with the load sequence of different SPM load releases datafilled in table SPMLDVAL in order to display the release load running on that SPM

Note 1: Table SPMLDVAL datafill is only applicable to DMSCP SPM release loads.

Note 2: For DMSCP SPMs, if table SPMLDVAL is not datafilled, the CI tool SPMLDINFO and the QUERYPM command display a warning that the SPM load lineup does not match datafill in table SPMLDVAL.

Datafill sequence and meaning

Table SPMLDVAL can be datafilled in the following ways:

- During peripheral module upgrade automation initiative (PANTHER) execution, if at least one DMSCP SPM node is provisioned in the office, the table SPMLDVAL is datafilled automatically during the PANTHER filecopy step. For offices with Succession Multi-Services Gateway 4 (SMG4), Interworking (IW), or Dynamic Packet Trunk

(DPT) SPMs but no DMSCP SPMs, the table is not datafilled during PANTHER execution.

- If tuples need to be added manually, then the administrator can use the RWOK ON option to enable write permission for the table.

Table SPMLDVAL does not have any dependencies on other table datafills.

Table size

0 to 255 tuples. Memory information is defined as protected memory.

Datafill

The following table lists the datafill for table SPMLDVAL.

Field, subfield, and refinement descriptions for table SPMLDVAL

Field	Subfield or refinement	Entry	Explanation and action
LOAD_TYPE		SP	Spectrum family load type indicator.
GEN_REL		1 to 99	General Release. Enter the milestone release number of the load.
MTC_REL		0 to 9	Maintenance Release. Enter 0 if the load is a general release.
EMG_REL		0 to 9	Emergency Release. Enter 0 if the load is a general release or maintenance release.
LOADLIST		List of up to 32 device loads.	Enter up to 32 valid device load names. Each load name is 7 character long.

Additional information

Translation and verification

Table SPMLDVAL does not use translation verification tools.

Protection level

The protection level of table SPMLDVAL is SYSPROT. This level prevents adding, deleting or modification of tuples in this table directly. To activate write permission enter the command:

```
> RWOK ON
```

Error conditions

During datafill the following error conditions can occur:

- If the same loadname is repeated in a tuple, then the tuple addition will be rejected with the following error message:

  ```
  ERROR: Loadname <loadname> is repeated in the
  tuple.
  ```

- If the length of any of the loadname entered is not 7 characters, then the tuple addition is rejected with the following message:

  ```
  ERROR: Loadnames must be 7 characters in length.
  ```

- Whenever a tuple with 32 or more loadnames are added, the following warning message is displayed to the user:

  ```
  WARNING: 32 loadname entries accepted. Any
  additional loadname entries will be discarded.
  ```

  If a tuple with more than 32 loadnames is added in the table, it will take only the first 32 loadnames entered and discard the remaining entries.

- If the table is already full, then addition of a new tuple will fail with the following message:

  ```
  TABLE IS FULL.
  ```

Table history

SN07

Table SPMLDVAL migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

SN06 (DMS)

Table SPMLDVAL was introduced by feature number A89007535.

SYNCLK

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Synchronous Clock

Switches arranged for synchronous clock operation require table Synchronous Clock (SYNCLK). You can enter data in this table for the DMS-100 switch (NT40) or the DMS-SuperNode switch.

DMS-100

Switches with synchronous clocks can be one of the following types of switches:

- A master external switch in which the central message controller (CMC) clocks synchronizes with an external reference clock.
- A master internal switch that uses the free running oscillator in the synchronizable master clock oscillator (NT3X15AA or NT3X16AA) as the network master clock.
- A slave switch that synchronizes to a master or another slave above the slave in the network hierarchy. This process occurs through clock signals on one of the two assigned DS-1 timing links.

Table SYNCLK allows the user to specify the location of the clock and the timing links. The clock and timing links are for the following peripheral module (PM) types:

- digital carrier module (DCM)
- digital trunk controller (DTC)
- line trunk controller (LTC)

The Stratum-3 and STRAT2P5 clocks (PEC NT3X15) are always on the same shelf as the central control (CC). The system supplies the default values for fields FRTYPE, FRNO, SHPOS, FLOOR, ROW, and FRPOS. The system supplies and ignores these fields.

The Stratum-2 clock (NT3X16) cannot reside on the CC shelf. The Stratum-2 clock can be on an input/output equipment (IOE) frame. This frame must be maximum of 200 feet away from the central message controller (CMC). Overwrite the default values for fields FRTYPE,

FRNO, SHPOS, FLOOR, ROW, and FRPOS to reflect the true position of the clock.

The contents of the phase register field do not affect the DCM. For LTCs and DTCs, the phase register field must select the specified register on the time switch card. This time switch card is hard-wired to the port. This configuration provides the timing link data.

DMS SuperNode

The synchronous clock system handles different office configurations. The synchronous clock system allows the DMS to be a node in the timing network.

In the master external office configuration, the message switch (MS) connects to an external reference source, like a Cesium. This connection synchronizes the DMS system clock. Offices at the top of the network hierarchy use this configuration. Dedicated links that connect to the DMS-bus clock paddleboard (NT9X54) synchronize the DMS clock.

The master internal office configuration uses the internal clock of the DMS to synchronize the office. Offices at the top of the hierarchy and non-Stratum-1 quality use this configuration.

Configuration of the Signaling Transfer Point (STP) offices must occur in the Master Internal Stratum 3 configuration.

The slave office configuration does not have dedicated links incoming to the office to supply the required timing. The system extracts the clock reference source from the incoming digital trunks. To select the digital trunks that the system can use as timing links, enter data in table SYNCLK. You can select two trunks as timing links.

The two trunks that the system uses as timing links do not have limits. The two trunks do not have limits if the following conditions apply:

- the trunks are digital trunks
- the trunks are not on the same DCM
- the trunks are not on the same circuit card if the trunks are on the same DTC or LTC
- the circuit numbers for PMs have a limit of 0 for card 0, and 2 for card 1
- the MS contains the system clocks. Each MS has one clock

Table SYNCLK allows the switch to synchronize the Stratum-3 system clock to the remote Stratum-2 or 2.5 clock. A remote clock contains a Stratum-2 or 2.5 quality oscillator in the NT3X95 remote oscillator shelf.

The DMS uses the slave office configuration to synchronize to another office. For the slave office configuration, the system extracts the synchronization reference from an incoming DS-1 timing link.

SPM OC-3

Spectrum Peripheral Module (SPM) optical carrier-level 3 (OC-3) can be provisioned as a timing link when an office is configured in slave mode.

In table SYNCLK, field OFFCONF must be datafilled as SLAVE. This datafill enables selection of SPM as a timing link in field LK0_PTYP or LK1_PTYP.

Field LK0_PNUM or LK1_PNUM can be datafilled only with existing SPMs defined in table MNNODE. If the requested SPM is not datafilled in table MNNODE, the datafill is rejected and the following message displays: “SPM XX is undefined.” Also, SPMs to be datafilled must be configured in internal timing mode in table MNNODE. Failure to configure the SPM in internal timing mode in table MNNODE results in the datafill being blocked and the following message displays: “SPM XX is not in INTERNAL mode.”

Fields LK0_PNUM and LK0_RMTYP or LK1_PNUM and LK1_RMTYP combine to form the timing link identifier for an SPM. This translates to a circuit pack on the SPM, which must be defined in table MNCKTPAK prior to the datafill in table SYNCLK. If the circuit pack is not defined correctly, the datafill is rejected and the following message displays: “No OC3 RMs found on SPM XX.” In addition, if the state of the SPM is anything but INSV, the following warning is displayed: “SPM XX is NOT INSV.”

The following list describes additional restrictions imposed in table SYNCLK for OC-3 line timing:

- Stratum 2 and Stratum 2.5 configurations are not supported. An attempt to provision OC-3 as a timing link with Stratum 2 or Stratum 2.5 configurations results in the following message: “SLAVE office with SPM as sync source. Office should be datafilled with STRAT3 clock.”
- A combination of SPM and other PMs as LINK0 and LINK1 is not allowed. An attempt to establish this combination results in the following message: “SPM timing links cannot be provisioned with other PTYP.”

SPMs currently datafilled in table SYNCLK cannot be deleted from table MNNODE without first being removed from table SYNCLK. If the SPMs are not removed from table SYNCLK first, the deletion from table MNNODE is blocked and the following warning displays: “SPM XX is provisioned as Link X in table SYNCLK.” (“Link X” represents LK0 when X=0 and LK1 when X=1. “SPM XX” corresponds to the SPM number being datafilled. XX can have integer values from 0 to 63.)

Datafill sequence and meaning

Enter data in the following tables before you enter data in table SYNCLK.

- LTCINV
- LTCPSINV
- DCMINV
- SYNOGLNK, if the load includes this table
- MNNODE, when provisioning SPM OC-3 as a timing link
- MNCKTPAK, when provisioning SPM OC-3 as a timing link

Table size

The system allocates memory for one default tuple.

Datafill

The following table lists the datafill for table SYNCLK.

Field descriptions for DMS-100 switches

The following table lists the datafill for DMS-100 switches.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Description
KEY		0	Key. Enter the index 0 in the synchronous clock table. Entries outside the range indicated for this field are not correct.
OFFCONF		MASTER_ EXT, MASTER_ INT, NON_SYNC, or SLAVE	Office configuration. Define the office configuration. Enter MASTER_EXT if the switching unit is configured as a master with an external reference clock. Enter MASTER_INT if the switching unit is configured as a master with the internal clock as a standard. Enter NON_SYNC if the switching unit does not contain synchronous clock hardware. The system initializes field OFFCONF with a value of NON_SYNC. Enter SLAVE if the switching unit is configured as a slave office synchronized through DS-1 to a master switching unit.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Description
CLK0DEF		NON_SYNC_ CLOCK or SYNC_ CLOCK	Clock 0 definition. Enter NON_SYNC_CLOCK if clock 0 is not a synchronous clock. Enter SYNC_CLOCK if clock 0 has synchronous clock hardware. The system initializes field CLK0DEF with a value of NON_SYNC_CLOCK.
CLK1DEF		NON_SYNC_ CLOCK or SYNC_ CLOCK	Clock 1 definition. Enter NON_SYNC_CLOCK if clock 1 is not a synchronous clock. Enter SYNC_CLOCK if clock 1 has synchronous clock hardware. The system initializes field CLK1DEF with a value of NON_SYNC_CLOCK.
LK0PTYP		D30_ADTC_TYPE D30_DCA_TYPE D30_DCMT_TYPE D30_IDTC_TYPE D30_PDTC_TYPE D30_TDTC_TYPE D30_TLTC_TYPE DS1_DCM_TYPE DS1_DTC_TYPE DS1_DTCI_TYPE DS1_ICP_TYPE DS1_LTC_TYPE DS1_RMSC_TYPE or SPM	Timing link zero peripheral module type. Enter the peripheral module (PM) type assigned to timing link 0. Entry D30_DCA_TYPE is for licensee (K+S) use. Entries D30_TDTC_TYPE and D30_TLTC_TYPE are for licensee use. Entries outside the range indicated for this field are not correct.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Description
LK0PNUM		0 to 511	Timing link zero peripheral module number. Enter the number of the PM assigned to timing link 0 in field LK0PTYP. The DTC or LTC PMs (peripheral modules) can have an assigned value from 0 to 63. SPM can have an assigned value from 0 to 63. Give PM DCM a value from 0 to 511.
LK0CCT		0 to 4	Timing link zero circuit number. Enter the circuit card number assigned to timing link 0. Assign DCM DS-1 ports links 0 to 4. The LTC, DTC, PDTC, ADTC, IDTC or DTCI can have DS-1 ports 0 and 2 assigned. The DCA (for K+S) can have DS-1 ports from 0 to 3 assigned. Entries outside the range indicated for this field are not correct.
LK1PTYP		D30_ADTC_TYPE D30_DCA_TYPE D30_DCMT_TYPE D30_IDTC_TYPE D30_PDTC_TYPE D30_TDTC_TYPE D30_TLTC_TYPE DS1_DCM_TYPE DS1_DTC_TYPE DS1_DTCI_TYPE DS1_ICP_TYPE DS1_LTC_TYPE DS1_RMSC_TYPE or SPM	Timing link one peripheral module type. Enter the PM type that belongs to timing link 1. Entry D30_DCA_TYPE is for licensee (K+S) use. Entries D30_TDTC_TYPE and D30_TLTC_TYPE are for licensee use. Entries outside the range indicated for this field are not correct.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Description
LK1PNUM		0 to 511	Timing link one peripheral module number. Enter the number of the PM assigned to timing link 1. If the entry in field LK1PTYP is a DCM type, the range is 0 to 511. The DTC or LTC PMs can have an assigned value from 0 to 63. SPM can have an assigned value from 0 to 63.
LK1CCT		0 to 4	Timing link one circuit number. Enter the circuit card number that belongs to timing link 1. If the entry in field LK1PTYP is a DCM type, the range is 0 to 4. The entry in field LK1PTYPE can be an ADTC, DTC, IDTC, LTC, PDTC, or DTCI type. In this condition, the entry can have DS-1 ports 0 and 2 assigned for office synchronization. If the entry in field LK1PTYPE is a DCA type (for K+S), the entry can have DS-1 ports 0 to 3 assigned. Entries outside the range indicated for this field are not correct.
MOFS		Y or N	Master of slaves. Enter Y if the switching unit is a master of slaves. If the switching unit is not the master of slaves, enter N. The system initializes field MOFS with a value of N.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Description
BEAT		Y or N	Beat detection. Enter Y if the switching unit is a MASTER_EXT office (field OFFCONF). If the switching unit is not a MASTER_EXT office, enter N. The default value is Y.
FRTYPE		CCC or IOE	Frame type. If the entry in field CLOCKPEC, in the following Field descriptions table, is NT3X16, enter data in this refinement. Enter IOE (input/output equipment) or CCC (central control complex). The default for this field is CCC. Entries outside the range indicated for this field are not correct.
FRNO		0 to 511	Frame number. If the entry in field CLOCKPEC, in the following Field descriptions table, is NT3X16, enter data in this refinement. Enter the frame number that contains the clock card. The default for this field is 0.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Description
SHPOS		0 to 77	Shelf position. If the entry in field CLOCKPEC, in the following Field descriptions table, is NT3X16, data enter this refinement. Enter the shelf position that contains the clock card. The default for this field is 43. Entries outside the range indicated for this field are not correct.
FLOOR		0 to 99	Floor. If the entry in field CLOCKPEC, in the following Field descriptions table, is NT3X16, enter data in this refinement. Enter the floor position that contains the clock card. The default entry for this field is 0.
ROW		A to Z, AA to ZZ, except I, II, O, and OO	Row. If the entry in field CLOCKPEC, in the following Field descriptions table, is NT3X16, enter data in this refinement. Enter the row on the floor that contains the clock card. The default entry for this field is A.
FRPOS		0 to 99	Frame position. If the entry in field CLOCKPEC, in the following Field descriptions table, is NT3X16, enter data in this refinement. Enter the frame position of the bay that contains the clock card. The default entry for this field is 0.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Description
CLOCKPEC		NT3X15 or NT3X16	Clock product engineering code. Enter the clock product engineering code (PEC). The PEC for the Stratum-2 clock is NT3X16. The other PECs, like Stratum-3, STRAT2P5) are NT3X15. See Additional information section for information for changes to the clock type.
LOWDRIFT		10 to 75	Lower percent drift. Enter the lower percent adjustment. This adjustment causes an alarm. The alarm indicates the sync clock oscillator is out of adjustment and needs readjustment. This value increases by 10, 11, 12.....75.
LALRMLVL		NO_ALARM MINOR MAJOR	Lower alarm level. Enter the alarm level the system raises. The system raises the alarm level when the sync clock oscillator reaches the percent adjustment that field LOWDRIFT specifies.
UALRMLVL		NO_ALARM MINOR MAJOR	Upper alarm level. Enter the alarm level the system raises. The system raises the alarm level when the sync clock oscillator reaches the upper percent adjustment that the system defines. The alarm level for UALRMLVL must be greater than or equal to the LALRMLVL alarm level.

Field descriptions for DMS SuperNode switches

The following table lists the datafill for DMS SuperNode switches.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Description
CLKKEY		0	Clock key. Enter 0 (zero).
CLKDATA		see subfields	Clock data. This field contains subfield CLKTYPE and associated refinements.
	CLKTYPE	STRAT2 STRAT2P5 STRAT3	Clock type. Enter the type of clock used in the office. If the entry value is STRAT2 or STRAT2P5, enter data in refinements CLKPEC, FRTYPE, FRNO, SHPOS, FLOOR, ROW, and FRPOS. Enter STRAT3 for STP offices. If the entry value is STRAT3, see refinement OFFCDATA that follows. See Additional information for information on changes to the clock type.
	CLKPEC	NT3X16AA NT3X16AB NT3X16BA NT3X16BB	Clock product equipment code. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. Enter the product engineering code (PEC) of the clock hardware.
	FRTYPE	IOE	Frame type. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. An IOE (input/output equipment) frame accommodates a STRAT2P5 or a Stratum-2 clock. Entries outside the range indicated for this field are not correct.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Description
	FRNO	0 to 511	Frame number. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. Enter the frame number of the clock card.
	SHPOS	0 to 77	Shelf position. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. Enter the shelf position that contains the clock card. Entries outside the range indicated for this field are not correct.
	FLOOR	0 to 99	Floor. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. Enter the floor position that contains the clock car.
	ROW	A to Z, AA to ZZ, except I, II, O, and OO	Row. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. Enter the position that contains the clock card.
	FRPOS	0 to 99	Frame position. If the entry in subfield CLKTYPE is STRAT2 or STRAT2P5, enter data in this refinement. Enter the frame position of the bay that contains the clock card.

Field, subfield, and refinement descriptions for table SYNCLK (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Description
	OFFCDATA	see subfields	Office data. This field contains subfield OFFCONF and the associated refinements.
	OFFCONF	MASTINT MASTEXT SLAVE	Office configuration. Enter the correct office configuration. System initialization to MASTINT presets the configuration. Enter MASTEXT for the master external office configuration. Enter data in refinements EXTFREQ and EXTSEL. Enter MASTINT for STP offices. Enter MASTINT for the master internal office configuration. This entry does not require additional refinements. Enter SLAVE for the slave office configuration. Enter data in refinements LK0_PTYP, LK0_PNUM, LK0_PCCT, LK0_REG, LK1_PTYP, LK1_PNUM, LK1_PCCT, and LK1_REG in the following section "OFFCONF = SLAVE".

OFFCONF = MASTEXT

If the system selects master external office (MASTEXT) configuration, enter data in subfields EXTFREQ and EXTSEL.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Description
	EXTFREQ	F64 F1000 F1024 F2048 F2560 F5000 F10000 F10240	External reference frequency. Enter the external reference frequency that the system uses to synchronize the office. The value that you enter defines the frequency in kHz units. For example, F1000 is 1.00 MHz.
	EXTSEL	ANALOG or COMPOSITE	External reference selector. Enter the type of external reference that synchronizes the system clocks. This reference determines the backplane connector on the 9X54AC card that connects to the external source. Stratum-1 type analog signals connect to the coaxial input. Composite signals connect to the 37-pin connector. Composite signals require a BITS connector. If the value of subfield EXTSEL is ANALOG, enter data in refinement EXTTERM.
	EXTTERM	T50 or T75	External reference termination. If the entry in subfield EXTSEL is ANALOG, enter data in this refinement. Enter the type of coaxial cable that connects the external reference. The ANALOG sources use the following cables: 50 ohm termination (Stratum-1 Cesium) and 75 ohm termination (Stratum-1 Loran-C).

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Description
	EXTALARM	MAJOR MINOR OFF	External alarm. This field indicates how the system handles SuperNode clock card problems. Enter MAJOR if the system reports Stratum-1 ALARM0 and ALARM1 clock problems. The A10 and A11 clock alarms must indicate problems on the MAP in the SYNC logs. The A10 and A11 clock alarms must reflect the QUERYCK command. Stratum-1 ALARM0 ALARM1 clock problems result in a system action. An example of a system action is a message switch of clock mastership or an office drop SYNC. Enter MINOR if the system reports Stratum-1 ALARM0 and ALARM1 clock problems. The A10 and A11 clock alarms must indicate the problems on the MAP. The clock alarms record the problems in the SYNC logs. The A10 and A11 clock alarms must indicate problems the QUERYCK command. The system action does not handle the Stratum-1 ALARM0 and ALARM1 clock problems. Enter OFF if the system does not report Stratum-1 ALARM0 and ALARM1 clock problems. The A10 and A11 clock alarms associated with these problems are not present on the MAP. The SYNC logs and the command interpreter (CI) QUERYCK command do not contain the A10 and A11 clock alarms associated with these problems.

OFFCONF = SLAVE

If the entry in field OFFCONF is slave, enter data in the following refinements:

- LK0_PTYP
- LK0_PNUM
- LK0_CCT
- LK0_RMTYP
- LK0_REG
- LK1_PTYP
- LK1_PNUM
- LK1_CCT
- LK0_RMTYP
- LK1_REG

Field descriptions for conditional datafill (Sheet 1 of 3)

Subfield or refinement	Entry	Description
LK0_PTYP	ADTC, DCA, DCM, DCMT, DTC, DTCI, IDTC, LTC, PDTC, RMSC, or SPM	Timing link zero peripheral module type. Enter the type of peripheral module (PM) assigned to timing link 0. • ADTC (Austrian digital trunk controller) • DCA (digital carrier access) ***Note:*** The DCA is for licensee (K+S) use. • DCM (digital carrier module) • DCMT • DTC (digital trunk controller) • DTCI (ISDN digital trunk controller) • LTC (line trunk controller) • PDTC (PCM30 digital trunk controller) • RMSC (remote mobile switching center) • SPM

Field descriptions for conditional datafill (Sheet 2 of 3)

Subfield or refinement	Entry	Description
LK0_PNUM	0 to 511	Timing link zero peripheral module number. Enter the number of the PM assigned to timing link 0. The range is restricted for SPMs from 0 to 63. Select an SPM that is datafilled as internal in table MNNODE.
LK0_CCT	0 to 4	Timing link zero circuit number. Enter the circuit card number that belongs to timing link 0. The DCMs have circuits 0 to 4. The DTC, LTC, PDTC, ADTC, or IDTC use 0 and 8. The DCA DS-1 ports can have circuits 0 to 3 assigned. CCT is not a datafilled value for SPM. Entries outside the range for this field are not correct.
LK0_RMTYP	OC3	Timing link zero resource module (RM) type. This field is a refinement over circuit number and was introduced for SPM. The field defines the carrier type of the timing link.
LK0_REG	0 or 1	Timing link zero phase register. This register indicates the count register from which the system extracts the phase samples. This field does not affect a DCM. Enter 0 or 1 to satisfy the table editor.
LK1_PTYP	ADTC, DCA, DCM, DCMT, DTC, DTCI, IDTC, LTC, PDTC, RMSC, or SPM	Timing link one peripheral module type. Enter the type of PM assigned to timing link 1. See field LK0_PTYP.

Field descriptions for conditional datafill (Sheet 3 of 3)

Subfield or refinement	Entry	Description
LK1_PNUM	0 to 511	Timing link one peripheral module number. Enter the number of the PM assigned to timing link 1. The range is restricted for SPMs from 0 to 63. Select an SPM that is datafilled as internal in table MNNODE.
LK1_CCT	0 to 4	Timing link one circuit number. Enter the circuit card number that the system assigns to timing link 1. The DCMs have circuits 0 to 4. The DTC, LTC, PDTC, ADTC or IDTC use circuits 0 and 8. The system assigns DCA DS-1 ports to circuits 0 to 3. CCT is not a datafilled value for SPM. Entries outside the range indicated for this field are not correct.
LK1_RMTYP	OC3	Timing link one RM type. This field is a refinement over circuit number and was introduced for SPM. The field defines the carrier type of the timing link.
LK1_REG	0 or 1	Timing link one phase register. This register indicates the phase count register from which the system extracts timing samples. This field does not affect a DCM. Enter 0 or 1 to satisfy the table editor.

Additional information

This section provides additional information about table SYNCLK.

Changes to the clock type

Changes to the data in table SYNCLK can cause a change in the clock type (stratum). If this condition occurs, the return to service (RTS) requires an out-of-band (OOBAND) option to operate. Use the TSTMS (test message switch) and RTS OOBAND commands to change the clock type. Do not use the standard RTS command.

Use the standard RTS command if data entry changes do not cause the clock type to change.

Table history

SN07

Table SYNCLK migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

SN06 (DMS)

Amended circuit card number that belongs to timing link 1 for a PDTC to use circuits 0 and 8 as per Q00708926.

TDBDAOPT

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

TOPS Database Directory Assistance Options

Table TOPS Database Directory Assistance Options (TDBDAOPT) contains restrictions for Automatic Directory Assistance Call Completion (ADACC). The fields of the table indicate which LATA statuses may be offered ADACC, and which billing options are available for ADACC.

Tuple 0 is the default and allows ADACC for all LATA statuses and all billing options.

Datafill sequence and meaning

Table TDBDAOPT is referenced by table TOPSDB and must be datafilled prior to table TOPSDB.

Tuples in the table cannot be deleted if they are referenced by table TOPSDB.

Default tuple 0 cannot be changed or deleted.

Table size

0 to 1000 tuples.

Table TDBDAOPT is a fixed-size table.

Datafill

The following table lists the datafill for table TDBDAOPT.

Field, subfield, and refinement descriptions for table TDBDAOPT (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
TDBDAIDX		0 to 1000	TOPS database directory assistance index. This is the table key and is indexed from table TOPSDB. Default tuple 0 is shown in the following datafill example and cannot be changed or deleted.
ADACCSRV		INTRALCL, INTRATOLL, INTER, OVERSEAS, ALL, or NONE	Automatic directory assistance call completion service. This field indicates is the LATA status that ADACC can be offered. The values are as follows: INTRALCL - local ADACC only INTRATOLL - non-local INTRA toll ADACC INTER - long distance toll ADACC OVERSEAS - DACC calls can be eligible for ADACC service if the datafill includes either OVERSEAS or ALL. ALL - INTER, INTRATOLL, OVERSEAS, and INTRALCL NONE - ADACC is not available
BILLOPT		Set of {CONTBIL, SENTPD, ALTBIL, OPERBIL}; or ALL, or NONE.	Billing options. Set of valid billing options for the call completion portion of an ADACC call. The values are described below.

Field, subfield, and refinement descriptions for table TDBDAOPT (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
		ALL	All billing types. ***Note:*** The information in field BILTYPES is passed to the NT Directory Assistance system, and is used for building the appropriate ADACC announcements for automated playback to the caller. In TOPS03, value OPERBIL was added to this field. Value OPERBIL is not recognized by the ADACC announcement software as a valid billing option, and building of the announcement fails if this value is received by the announcement subsystem. Therefore, for TOPS03 and up, values ALL and OPERBIL should not be used. Instead, only values CONTBIL, SENTPD, and ALTBIL should be used. If ALL is datafill prior to the TOPS03 upgrade, change to the values CONTBIL, SENTPD, and ALTBIL (excluding OPERBIL).
		ALTBIL	Alternate billing. Caller desires to bill call completion charges either to a calling card, to a third number, or collect.

Field, subfield, and refinement descriptions for table TDBDAOPT (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
		CONTBIL	Continue billing. Call completion charges billing must use billing method already established for DA portion of call. ***Note:*** CONTBIL is valid only if the preceding DA call was billable which insures that a valid billing method was established. If the billing method established for the DA call was bill to third party, then the entry in office parameter DACC_BILL_TO_THIRD in table VROPT determines if the CONTBIL option can be selected for call completion. If office parameter DACC_BILL_TO_THIRD in table VROPT contains N, CONTBIL is not an option offered to the subscriber.

Field, subfield, and refinement descriptions for table TDBDAOPT (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
		NONE	None. Retain billing method used prior to this alternate billing feature. The subscriber is not offered a selection of billing options for call completion. ***Note:*** Use of this value is changed by feature AN0262 in TOPS03. Refer to the history section for the functionality of this feature. Prior to AN0262, or if feature AN0262 is not active, specifying NONE indicates that the subscriber is not offered a selection of billing options for call completion, and that the billing approach used prior to Feature AF2086 (ADACC with Alternate Billing) is to be used. When feature AN0262 is active, value NONE indicates that no billing types are valid, except auto-collect. It is suggested that all instances of NONE be changed to either CONTBIL or SENTPD before activating feature AN0262. Note that NONE is still a valid entry but its use has changed in TOPS03.
		SENTPD	Sent paid. Call completion charges are billed to the calling party.
		OPERBIL	Operator billing. The subscriber is connected to a toll operator for billing the ADACC call. Note, this value should not be used. For further information, see the note under value ALL for this field.

Field, subfield, and refinement descriptions for table TDBDAOPT (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
ADASERV		N or Y	ADAS service. This field indicates if the incoming DN may use ADAS or ADAS+. The default is Y. This field is only used during DN screening. If set to Y, the subscriber is given automated DA service. If the subscriber desires a live operator, enter N.

Additional information

Error messages

The following error messages apply to table TDBDAOPT:

Error messages for table TDBDAOPT

Error message	Explanation and action
Tuple 39 is not datafilled in table TDBDAOPT.	Table TDBDAOPT is referenced by table TOPSDB and must be datafilled prior to table TOPSDB. If the craftsperson attempts to add or change a table TOPSDB tuple with a given TDBDAOPT prior to adding the tuple to table TDBDAOPT, the add or change is not allowed, and an error message is given.
Tuple referred to by another table - use TABREF to get potential table list.	If the craftsperson attempts to delete a table TDBDAOPT tuple which is referenced by table TOPSDB, the deletion is not allowed, and an error message is given.
Tuple 0 cannot be deleted or changed.	If the craftsperson attempts to change or delete default tuple 0, the change or deletion is not allowed, and an error message is given.

Table history

SN07

Table TDBDAOPT migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

TFANINT

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

Traffic Separation Intersection

The Traffic Separation Intersection (TFANINT) tables contain tables TFANINT and OCCTSINT.

The traffic separation measurement system (TSMS) uses table TFANINT to separate calls according to type of call. The TSMS separates calls at the intersection of specified source and destination traffic separation numbers.

The equal access traffic separation measurement system (EATSMS) uses table OCCTSINT to separate calls according to local access and transport area (LATA) and state attributes. The EATMSMS separates calls at the intersection of specified carrier and carrier trunk group traffic separation numbers.

The TSMS and EATSMS do not function together.

The use of table TFANINT in a DMS office can occur with TSMS. This condition occurs when the operating company must separate traffic according to the type of call.

The TSMS allows the operating company to separate direct dialed (DD), operator assisted (OA), and no prefix (NP) calls. The operating company can separate these calls for a maximum of 2048 traffic separation intersections.

The traffic separation numbers of the source and destination of the call index each entry in table TFANINT. The source can be a line or a trunk. The destination can be a line, trunk, announcement, or tone.

For each source traffic separation number and destination traffic separation number, table TFANINT has three registers. These registers correspond to the three types of calls, DD, OA, and NP. Each register contains a number that is an index to operational measurements (OM) group TFCANA.

For example, a caller can make a DD call from a line with a traffic separation number of 5. The caller makes this call to a trunk with a traffic separation number of 7. When this action occurs, the TSMS indexes the tuple in table TFANINT with field TFANIN = 5 and field TFANOUT = 7. The TSMS locates the DD register number that field DDREGNO specifies. The system uses this register number to increase the call count or to measure setup or connection use. Use the CI command OMSHOW or TFAN to view this data.

The assignment of source traffic separation numbers occurs in field TRAFSNO of table TRKGRP for incoming and two-way trunk groups. The assignment of source traffic separation numbers occurs in field TRAFSNO of table LINEATTR for line attributes.

The assignment of destination traffic separation numbers occurs in field TRAFSNO of the following tables:

- table TONES for tones
- table ANNS for announcements
- table LINEATTR for line attributes
- table TRKGRP for outgoing and two-way trunk groups

For a two-way trunk group or a line attribute, the source traffic separation number equals the destination traffic separation number.

Datafill sequence and meaning

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

- ANNS
- TRKGRP
- TONES
- LINEATTR

Table size

0 to 2047 tuples.

The system dynamically allocates memory. The system uses an average of 14 words of store for each tuple. You can assign the tuples in order. For example, tfanin/tfanout 1 0, 2 0, 3 0, 4 0. When you perform this action, the system uses an average of 8 words of store for each tuple.

Datafill

The following table lists the datafill for table TFANINT.

Field, subfield, and refinement descriptions for table TFANINT (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
INDX		see subfields	Index. This field contains subfields TFANIN and TFANOUT.
	TFANIN	0 to 127	Source traffic separation number. Enter the source traffic separation number assigned to the intersection. The maximum number of source traffic separation numbers you can specify is 127. If you specify this number, storage restrictions limit the maximum of destination traffic separation numbers you can specify to 125.
	TFANOUT	0 to 127	Destination traffic separation number. Enter the destination traffic separation number assigned to the intersection. The maximum number of destination traffic separation numbers you can be specify is 127. If you specify this number, storage restrictions limit the maximum number of source traffic separation numbers you can specify to 125.

Field, subfield, and refinement descriptions for table TFANINT (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DDREGNO		0 to 2047	Direct dial register number. Enter the register number assigned to the intersection for a peg count of DD calls. You can enter a number from 1 to 2047. If you do not require a peg count of DD calls, enter 0. The number you enter cannot exceed the value of office parameter NO_TFAN_OM_REGISTERS in table OFCENG. The maximum value for NO_TFAN_OM_REGISTERS is 2047.
OAREGNO		0 to 2047	Operator assisted register number. Enter the register number assigned to the intersection for a peg count of OA calls. You can enter a number from 1 to 2047. If you do not require a peg count of OA calls, enter 0. The number you enter cannot exceed the value of office parameter NO_TFAN_OM_REGISTERS in table OFCENG. The maximum value for NO_TFAN_OM_REGISTERS is 2047.

Field, subfield, and refinement descriptions for table TFANINT (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
NPREGNO		0 to 2047	No prefix register number. Enter the register number assigned to the intersection for a peg count of NP calls. You can enter a number from 1 to 2047. If you do not require a peg count of NP calls, enter 0. The number you enter cannot exceed the value of office parameter NO_TFAN_OM_REGISTERS in table OFCENG. The maximum value for NO_TFAN_OM_REGISTERS is 2047.

Table history

SN07

Table TFANINT migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 10 of 12*, 297-8021-351.09.03.

TMTCNTL

Treatment Control

The Treatment Control table contains the subtables listed below:

- TMTCNTL.TREAT (EXTTMTTNM = OFFTREAT)
- TMTCNTL.TREAT (EXTTMTTNM = ITTRKGRP)
- TMTCNTL.TREAT (EXTTMTTNM = INTRKGRP)
- TMTCNTL.TREAT (EXTTMTTNM = LNT)
- TMTCNTL.TREAT (EXTTMTTNM = TITRKGRP)
- TMTCNTL.TREAT (EXTTMTTNM = PXTRKGRP)
- TMTCNTL.TREAT (EXTTMTTNM = TOPS)
- TMTCNTL.TREAT (EXTTMTTNM = AOSSTKGP)
- TMTCNTL.TREAT (EXTTMTTNM = INT101TT)
- TMTCNTL.TREAT (EXTTMTTNM = PRIVLNTT)

As detailed in the description of subtable TMTCNTL.TREAT, the entry in field EXTTMTNM of Table TMTCNTL is predetermined by the software packages available in the switch. All EXTTMTNM values appear in the switch as valid entries. The entries appear in all software loads of a BCS vintage because the EXTTMTNM values are a part of the DMS base software.

Datafill sequence and implications

there is no requirement to datafill other tables prior to table TMTCNTL.

The following tables must be datafilled after table TMTCNTL:

- HNPACONT.HNPACODE
- TMTCNTL.TREAT
- TMTMAP

Table size

0 to 2048 tuples

Table history

SN08

Table TMTCNTL and its subtables were brought into the Carrier Voice Over IP suite from the DMS suite.

TMTCNTL.TREAT

Table TMTCNTL.TREAT

Treatments Subtable

The Treatments Subtable (TMTCNTL.TREAT) is used by the operating company to define the treatment that is returned to the originator of a call if a specified treatment code is encountered during call translation. A treatment is one of the following:

- Tone
- Announcement
- State, for example, IDLE or LOCKOUT, or
- Combinations of Tones, Announcements or States

Remote Message Indicator (RMI) modifies subtable TMTCNTL.TREAT as follows:

- RMIA treatment is added to the range of values for the TREATMT field.
- RMID treatment is added to the range of values for the TREATMT field.

Treatment codes are a set of DMS-defined mnemonics. Refer to “Description of treatment codes" in this table description for further details.

A call terminates in a specified treatment code either because the translations that are supplied by the operating company lead the call to a specified treatment, or because the DMS switch detects certain conditions and prescribes a treatment code without reference to operating company translations. These conditions make it impossible to complete the call (for example, all trunks busy). The treatment code can be part of a normal call completion process that includes, for example, an announcement to the originator before the call is completed.

Refer to the section “Operational measurements treatment categories" in this table description for a logical grouping of treatment codes.

If the call must terminate in a specified treatment code, call translations accesses the subtable TMTCNTL.TREAT to determine the announcement or tone to be returned to the originator, or the route in table OFRT that lists the sequence of announcements or tones, or both.

Individual TMTCNTL.TREAT tables do not list all the possible treatment codes. The DMS switch has to access several TMTCNTL.TREAT subtables until it encounters the prescribed treatment code result. The order for determining the result of the treatment code is as follows:

- 1: Search for a treatment code in the subtable at a position relevant to the originator of call (for example, position LNT for calls that originated from subscriber line). Refer to TREATMENT SUBTABLE POSITIONS in this table description for a description of available subtable positions.
- 2: Search for the treatment code in the subtable at position OFFTREAT.
- 3: Search for treatment code RODR in the subtable at position OFFTREAT.
- 4: Apply IDLE (dial tone returned to originator).

Treatment results for lines terminate after a prescribed sequence of announcement(s), tone(s) or both for the following:

- LOCKOUT: line sounds dead to the originator
- IDLE: dial tone is returned to the originator
- ROH: receiver off-hook tone is returned to the originator

Calls that originate from by trunks must never terminate to LOCKOUT, IDLE or ROH. Table TMTCNTL.TREAT at position OFFTREAT, (consulted last in order of precedence), must never contain ROH, IDLE, or LOCKOUT values; and the subtable at position OFFTREAT must list treatment results that are common to all trunk group types.

Note: See treatment GNCT on how to avoid a potential looping situation.

If an Integrated Business Network (IBN) line is call processing busy (CPB) and encounters an all-trunks-busy condition, the line status displays NIL.

The type of switch determines the TMTCNTL.TREAT subtable and treatment code used in a specific switch.

If a switch type is not listed against a treatment, the treatment is redundant in that switch and must be set to overflow or similar tone.

Datafill sequence and meaning

The following tables must be datafilled before table TMTCNTL.TREAT:

- DNINV
- DNROUTE

Table size

0 to 256 tuples. Two tuples are added to TMTCNTL.TREAT to describe RMIA and RMID treatments.

Switch types

The table below lists switch types that are used in this description.

Switch types

Type	Designation	Description
Local	DMS-100	Local
Toll	DMS-200	Toll
Local/Toll	DMS-100, DMS-200, DMS-100/200	Local, Toll, Combined Local/Toll
TOPS	DMS	Traffic Operator Position System
Gateway	DMS-300	International Gateway for North America
Tandem	DMS-250	Tandem Switch for Common Carriers
ISDN	DMS	Integrated Services Digital Network
ETSI ISDN	DMS-100E	European Integrated Services Digital Network

Signaling System 7

Table TMTMAP is accessed before table TMTCNTL where treatment occurs on a call incoming on a CCS7 trunk group with table TRKSGRP field SIGDATA set to C7UP and field PROTOCOL set to a protocol name found in table TMTMAP field PROTOCOL. Table TMTCNTL is accessed only if table TMTMAP field TMTPROC is set to LOCAL for that treatment.

Refer to the description of table TMTMAP.

Note: Treatment code mnemonics for all office types are defined in the DMS switch base software. This means that all offices at a

particular software release can see all of the treatment mnemonics available, even though the features do not exist to use them properly.

The operating company should note that this document does not cover treatment mnemonics for the following switching systems:

- DMS-MTX
- DMS-250
- GSM

Operational measurements treatment categories

Refer to the Operational Measurements Reference Manual for a description of separation of call treatments into logical categories and the corresponding separation of operational measurement (OM) registers into groups TRMTCU, TRMTCU2, TRMTCU3, TRMTCM, TRMTCM2, TRMTER, TRMTFR, TRMTFR3, TRMTFR2, TRMTRS, and TRMTPR.

TRMTCU, TRMTCU2 and TRMTCU3—customer unauthorized treatments

The customer unauthorized treatments (listed in the table that follows) notify customers that their actions are not authorized for one of the following reasons:

- an invalid sequence of digits was dialed, or
- improper procedures were followed.

TRMTCU, TRMTCU2 and TRMTCU3-customer authorized treatments

Treatment mnemonic and treatment	Treatment description
AARD	Automatic number identification (ANI) account recently disallowed
ADBF 65	ANI not found in database
ANBB 107	ANI Feature Group B blockage
ANIA 76	ANI account status not allowed
ATHF	Authentication failure
BBFS 132	Blue box fraud scanning

TRMTCU, TRMTCU2 and TRMTCU3-customer authorized treatments

Treatment mnemonic and treatment	Treatment description
BCNI 161	Bearer capability not implemented
CACB 124	Carrier access code blocked
CACE 79	Carrier access code in error
CCCF 149	Carrier call completion failure
CCNA 91	Calling card not allowed
CCNV 90	Calling card invalid
CGFL 154	ISDN closed user group call failed
CNAC 113	Call not accepted
CNDT 5	Coin denied termination
CNOT 55	Coin overtime
COSX 123	Class of service exceeded
DACD 84	Dial carrier access code
DCFC 56	Disallowed coin-free call
DNTR 33	Denied terminating
DODT 61	Denied origination data terminal
D950 80	Dial 950
EROR	Enhanced roamer validation (ERV) originator
ERTO	ERV timeout
ERTR	ERV terminator
ESNF	Customer unauthorized electronic serial number (ESN) fraud
FACJ	Facility rejected

TRMTCU, TRMTCU2 and TRMTCU3-customer authorized treatments

Treatment mnemonic and treatment	Treatment description
FDNZ 88	First digit not zero
FNAL 68	Feature not allowed
GFNV	Global fiber optic network card (FONCARD) not valid
HNPI 16	Home NPA intercept
ICCB	Incoming call barred within closed user group (CUG)
IDPB 112	International direct distance dialing (DDD) prohibited
ILRS 82	Inter-LATA restriction
INAC 4	Invalid account code
INAU 53	Invalid authorization code
INCC 97	Invalid city code
INPD 110	Invalid personal identification number (PIN) digits
ITCF 164	Information transfer capability request invalid
IVCC 108	Invalid corridor call
JACK 163	Justified alternate calling knowledge
LCAB 96	Local call area barred
LCNV 53	Local exchange carrier (LEC) calling card not valid
MSCA 7	Misdirected centralized automatic message accounting (CAMA) call (prefix digit dialed in error)
MSLC 8	Misdirected local calls (prefix digit not dialed)
MSOA	Misdirected operator-assisted announcement (0+ dialing not allowed)

TRMTCU, TRMTCU2 and TRMTCU3-customer authorized treatments

Treatment mnemonic and treatment	Treatment description
NACD 83	Do not dial carrier access code
NACK 78	Negative acknowledgment
NOCN 50	No coin
NPAR 111	NPA restricted
N00B 120	N00 call blocked
N950 81	Do not dial 950
ORSS 27	Originating service suspension
PTFL 156	POTS pseudo service call failed
RDIR	Maximum number of redirections
RSDT 63	Restricted date and time
SCUN 109	Service currently unavailable
TDND 21	Toll denied
TESS 28	Terminating service suspension
TINV 54	Temporarily invalid authorization code
UCCN 144	Unpaid credit card number
UNCA 13	Unauthorized CAMA call
UNIN 22	Unauthorized INWATS call
UNMC	User not member of closed user group (CUG)
UNOW 20	Unauthorized OUTWATS call
VPFL 155	ISDN virtual private network (VPN) call failed

TRMTCM and TRMTCM2—customer miscellaneous treatments

These customer miscellaneous treatments (listed in the table that follows) are call situations that are a result of customer action but are not related to authorization. They do not include treatments that are used to mark progress or completion of call features.

TRMTCM and TRMTCM2-customer miscellaneous treatments

Treatment mnemonic and number	Treatment description
ANCT 31	Machine intercept
ANTO 66	Answer time out
ATBS 59	Attendant busy
ATDT 106	Audio tone detector (ATD) time out
BLDN 18	Blank directory number
CBTN 114	Clearback tone
CFWV 77	Variable call forwarding verification
CHAF 118	Changed 800 number forward
CHAN 117	Changed 800 number announcement
CNAD 137	Call not allowed
CREJ 132	Call rejected
DISC 45	Disconnect timing
MTBL	Mobile trouble
NTRS 133	No terminal responding
NC8F 128	Network Control System (NCS) 800 service failure
N9DF 146	NCS 900 database failure
N9NS 148	NCS 900 number not in service
N9OB 147	NCS 900 number out of band
OPRT 29	Regular intercept

TRMTCM and TRMTCM2-customer miscellaneous treatments

Treatment mnemonic and number	Treatment description
OSVR 119	Operator services voice response
PDIL 2	Partial dial time out
PSIG 3	Permanent signal time out
RING 162	No terminal responding, release call
CCRG	Cumulative charge restriction for general subscribers
CCRH	Cumulative charge restriction for PHS (Personal) subscribers
CCRM	Cumulative charge restriction for mobile subscribers
CCRP	Cumulative charge restriction for general subscribers
CCRT	Cumulative charge restriction for third party billed calls
PODN	Ported out directory number
TDBR 62	Test desk bridged
TRBL 30	Trouble intercept
UNDN 17	Unassigned directory number
UNDT 0	Undefined treatment
UPAB 135	Universal public access blocked
VACS 65	Vacant speed number
VACT 6	Vacant code treatment
VCCT 95	Vacant country code treatment
VPFX 138	Vacant prefix code

TRMTER—equipment-related treatments

These equipment-related treatments (listed in the table that follows) are failures that are a result of switching equipment malfunction, and do not include treatments used to handle software or hardware resource shortages.

TRMTER-equipment-related treatments

Treatment mnemonic and number	Treatment description
AIFL 87	Auto identified outward dialing failure
ANFL 116	Announcement fail
CONP 98	Connection not possible
C7AP 130	CCS7 application failure treatment
DTFL 131	Datafill error
ERDS 70	Trunk PERM ground
FDER 92	Feature data error
INBT 127	Installation busy treatment
INOC 75	Invalid operator code
INVM 169	Invalid message
MTOC 115	Multifrequency compelled (MFC) time out or confusion
NCUN 105	Network Control System (NCS) unexpected error
NMZN 67	No metering zone
NONT 104	Not on network
PERR 168	Protocol error
PNOH 32	Permanent signal no receiver off-hook
PTOF 64	Premature trunk offering
RODR 25	Reorder
SCFL 100	Database system (DBS) communications failure

TRMTER-equipment-related treatments

Treatment mnemonic and number	Treatment description
SONI 170	Service option not implemented
SSTO 23	Start signal time out
STOB 71	Signal time out, Bell operating companies (BOC)
STOC 72	Signal time out, inter-LATA or international carrier (IC/INC)
SYFL 14	System failure

TRMTFR, TRMTFR2 and TRMTFR3—feature-related treatments

These feature-related treatments (listed in the table that follows) are a result of call situations due to certain call features, such as POTS, IBN, and so on. They do not include treatments used to deny access to features for authorization reasons.

TRMTFR, TRMTFR2, and TRMTFR3—feature-related treatments

Treatment mnemonic and number	Treatment description
ACPR 140	AUTHCODE prompt
ACRJ 166	Anonymous caller rejection
ADPA 142	Address digits prompt announcement
AIND 203	Advanced Intelligent Network Disconnect
AINF 204	Advanced Intelligent Network Final
BUSY 19	Busy line
CBDN 145	Call back destination number
CCAP 139	Credit card announcement prompt
CCDT 143	Credit card dial tone
CCTO 89	Calling card time out

TRMTFR, TRMTFR2, and TRMTFR3—feature-related treatments

Treatment mnemonic and number	Treatment description
CFOV 121	Call forwarding overflow
CONF 38	Confirm tone
CRTC	Call redirect
DSCN 176	Spontaneous Call Waiting Identification with Disposition (DSCWID) disconnect (DISCON)
FRDR 129	Feature reorder
ICNF 151	Invalid conference code
ICSA	In call service activated
ICSD	In call service deactivated
IIEC	Feature related; invalid information element component
ILRR 122	International line restrictions
ISAX	In session activation exit
IWUC 126	International wake-up call
LBSY 178	LCL busy
LDAA 211	Long distance signal activate added
LDAD 212	Long distance signal activate deleted
LECV 152	Local exchange carrier (LEC) calling card valid
MANL 26	Manual line
MHLD 60	Music on hold
MWKP	Mobile weak power
NCII 102	Network Control System (NCS) invalid ID code
NCIX 101	NCS incoming exclusion

TRMTFR, TRMTFR2, and TRMTFR3—feature-related treatments

Treatment mnemonic and number	Treatment description
NCTF 103	NCS translation failure
NINT 99	Changed number intercept
NVIP 165	Not very important person status
ORAC 42	Originating revertive action for two-party lines with coded ringing
ORAF 40	Originating revertive action for two-party lines with frequency ringing
ORMC 36	Originating revertive action for multiparty lines with coded ringing
ORMF 43	Originating revertive action for multiparty lines with frequency ringing
OTAE	Over the air activation service provisioning (OTASP) error
PNUN 142	Private network unavailable
PRSC 57	Priority screen fail
RFCD	Remote feature control denied
RFCE	Remote feature control error
RFCS	Remote feature control success
RMIA	Remote message indicator activation
RMID	Remote message indicator deactivation
RRPA 39	Revertive ring prefix announcement
RTEE 217-255	ISUP Hop Counter value expired
SCA 157	Selective call acceptance
SCRJ 150	Selective call rejection
SINT 125	Service interception

TRMTFR, TRMTFR2, and TRMTFR3—feature-related treatments

Treatment mnemonic and number	Treatment description
SORE 136	Station origination restriction error
SRRR 44	Single party revertive ringing
TBSY 179	Toll busy
TRGB	Trigger block
TRRF 41	Terminating revertive action for frequency ringing
UNPM	Unprogrammed mobile
WUCR 189	Wake-up call reminder (WUCR) treatment

TRMTRS—resource shortage treatments

These resource shortage treatments (listed in the table that follows) handle failures that occur due to software or hardware resource shortages, indicating inadequate capacity to handle the present load. They do not include treatments used to handle switching equipment malfunction.

TRMTRS-resource shortage treatments

Treatment mnemonic and number	Treatment description
CGRO 94	Customer group resource overflow
CHNF 160	Channel negotiation failure
CQOV 15	Centralized automatic message accounting (CAMA) queue overflow
EMR1 11	Emergency treatment 1
EMR2 12	Emergency treatment 2
EMR3 48	Emergency treatment 3
EMR4 49	Emergency treatment 4
EMR5 73	Emergency treatment 5

TRMTRS-resource shortage treatments

Treatment mnemonic and number	Treatment description
EMR6 74	Emergency treatment 6
FECG 35	Far-end congestion
GNCT 58	Generalized no-circuit
NBLH 9	Network blockage heavy traffic
NBLN 10	Network blockage normal traffic
NCRT 24	No circuit
NECG 34	Near-end congestion
NOSC 1	No service circuit
NOSR 93	No software resource
OTAR	OTASP resources unavailable
SORD 52	Storage overflow reorder
TOVD 37	Toll overload

TRMTPR—protocol-related treatments

These protocol-related treatments (listed in the table that follows) handle failures due to protocol translation or negotiation failure. They do not include treatments used to handle switching equipment malfunction.

Treatment mnemonic and number	Treatment description
NOBC 181	No bearer capability (BC) available
NORA 182	No routing available
PER1 183	Protocol error 1
PER2 184	Protocol error 2

Treatment mnemonic and number	Treatment description
PER3 185	Protocol error 3
PER4 186	Protocol error 4
PER5 187	Protocol error 5
CER1 188	Closed User Group (CUG) error 1

Treatment subtables

Treatment tables consist of control table TMTCNTL and treatments subtables TREAT at positions in the following list.

- OFFTREAT
- ITTRKGRP
- LNT
- TITRKGRP
- PXTRKGRP
- TOPS
- INT101TT
- PRIVLNTT
- FEATANNS

Each position is described in the following paragraphs.

Office Treatments Subtable
EXTTMTNM = OFFTREAT

Local/Toll, Gateway, Tandem Subtable OFFTREAT lists every treatment and provides a common set of treatments for incoming trunks. Treatments not applicable to incoming trunks must be routed to overflow or similar tone.

Treatments in subtable OFFTREAT must never contain code for receiver off-hook (ROH) in the route list and the route list must never terminate with codes for lockout (LKOUT) or idle (IDLE).

Note: See treatment GNCT on how to avoid a potential looping situation.

Intertoll Treatments Subtable
EXTTMTNM = ITTRKGRP

Local/Toll Subtable ITTRKGRP is optional and is used in toll or combined local/toll switches to list treatments for incoming and two-way intertoll trunk groups (type IT), that differ from treatments in subtable OFFTREAT.

Treatments in subtable ITTRKGRP must never contain code for receiver off-hook (ROH) in the route list, and must never terminate with codes for lockout (LKOUT) or idle (IDLE).

Note: See treatment GNCT on how to avoid a potential looping situation.

Incoming CAMA Treatments Subtable
EXTTMTNM = INTRKGRP

Local/Toll Subtable INTRKGRP is optional and used in toll or combined local-toll switches to list treatments for incoming or two-way CAMA/AMR5 trunk groups and trunk group type SC that differ from treatments in subtable OFFTREAT.

Treatments in subtable INTRKGRP must never contain code for receiver off-hook (ROH) in the route list, and the route list must never terminate with codes for lockout (LKOUT) or idle (IDLE).

Note: See treatment GNCT on how to avoid a potential looping situation.

Line Treatments Subtable
EXTTMTNM = LNT

Local/Toll Subtable LNT is used in all local and combined local/toll switches to specify routing for treatments associated with lines. Subtable LNT lists every treatment, and treatments that are not applicable to lines are routed to overflow or similar tone.

If the route list contains a treatment other than tone or announcement and an all-trunks-busy state occurs, then the calling line is automatically routed to reorder (RODR) treatment. If RODR is not required, the last two routes in the route list must be tone or announcement followed by lockout (LKOUT) or idle (IDLE).

All treatments routing to announcement or tone other than T60 or T120 in the route list must terminate with the code for lockout (LKOUT).

IDLE is a valid state, but use of IDLE extends disconnect time and causes originating OMs to increment twice per call.

All treatments without tones or announcements in the route list must not end in lockout (LKOUT) or idle (IDLE).

Lockout (LKOUT) or idle (IDLE) must not appear as the first element in the route list. They must always be preceded by tone or announcement.

Local Incoming Trunk Treatments Subtable
EXTTMTNM = TITRKGRP

Local/Toll Subtable TITRKGRP is optional and can be used in a combined local/toll switch to list treatments for incoming and two-way local trunk groups that differ from treatments in subtable OFFTREAT.

Subtable TITRKGRP must never contain code for receiver off-hook (ROH) in the route list, and the route list must never terminate with codes for lockout (LKOUT) or idle (IDLE).

Note: See treatment GNCT on how to avoid a potential looping situation.

PBX Two-way Trunk Treatments Subtable
EXTTMTNM = PXTRKGRP

Local/Toll Subtable PXTRKGRP is optional and can be used in local or combined local/toll switches to list treatments for two-way PBX DID/DOD trunk groups, and trunk group types PX and P2, that differ from treatments in table OFFTREAT.

Treatments in subtable PXTRKGRP must never contain code for receiver off-hook (ROH) in the route list, and must never terminate with codes for lockout (LKOUT) or idle (IDLE).

Note: See treatment GNCT on how to avoid a potential looping situation.

TOPS Treatments Subtable
EXTTMTNM = TOPS

Local/Toll with TOPS Subtable TOPS is optional and can be used in toll or combined local/toll switches with TOPS to list treatments for TOPS trunk groups and trunk group type TOPS that differ from treatments in subtable OFFTREAT.

Treatments in subtable TOPS must never contain code for receiver off-hook (ROH) in the route list, and must never terminate with codes for lockout (LKOUT) or idle (IDLE).

Note: See treatment GNCT on how to avoid a potential looping situation.

DMS-300 International 101 Test Trunk Treatments Subtable
EXTTMTNM = INT101TT

Gateway Subtable INT101TT is optional and can be used to list treatments for international 101 test trunk groups that differ from treatments in subtable OFFTREAT.

DMS-300 Private Line Trunk Treatments Subtable
EXTTMTNM = PRIVLNTT

Gateway Subtable PRIVLNTT is optional and can be used to list treatments for private line trunk groups that differ from treatments in subtable OFFTREAT.

Routing options for each treatment
If the DMS software encounters a treatment code, it accesses the TMTCNTL.TREAT table that applies to the originator of the call to determine the operating company-defined tone or announcement that the originator hears.

Each tone or announcement is identified by a CLLI code in table CLLI.

The operating company specifies a single-treatment CLLI or a succession of treatment CLLIs as follows:

- When routed to a single-treatment CLLI
  - FSTRTSEL = S
  - Field name = CLLI
- When routed through a route table through a succession of CLLIs
  - FSTRTSEL = T
  - Field name = TABID, KEY

The treatment route list is specified in the applicable tables as follows:

- Local/Toll = office route table OFRT
- Gateway = overseas route tables OVR0 to OVR9

Note: If these route tables are accessed as a result of a treatment, each treatment CLLI is connected to the originator or call in the same order listed for a length of time prescribed for each treatment CLLI.

If the route table is accessed normally, that is, not as a result of a treatment, it is a list of alternates. The first free trunk found in the list of alternates is the only trunk connected.

Treatment CLLIs
Each treatment CLLI must be defined in table CLLI and (except for fixed treatment CLLIs: IDLE, LKOUT, and COPP) in one of the following tables:

- TONES (software-generated tones)
- STN (hardware-generated tones)
- ANNS (recorded announcements)
- DRAMS (digital recorded announcements)

Fixed treatment CLLIs IDLE, LKOUT, and COPP are defined by the DMS software as follows:

IDLE Equivalent to originating line going off-hook, this must be the last treatment CLLI in route list. It is used in North America only.

LKOUT Originating line is locked out; that is, connected to nothing for as long as it stays off-hook. It must be the last treatment CLLI in the route list.

COPP Cutoff on permanent signal and partial dial that is associated with line treatments PSIG and PDIL to supply (on every standard line in the DMS-100 office) an open-battery signal as the first operation in processing permanent signal and partial dial subscriber line conditions. This routing list element has no impact on business sets, data units, or display phones.

The open-battery signal informs subscriber line equipment (suitably equipped), that the line has entered a permanent signal or partial dial state.

COPP cannot be used in other line treatments. If used for PSIG and PDIL line treatments, COPP must be first, and LKOUT must follow in the routing list.

Note: See treatment GNCT on how to avoid a potential looping situation.

Description of treatment codes

The following sections describe the treatment codes for the variety of switch types.

AARD

ANI account recently disallowed

ACPR

Authcode prompt (140)

Tandem This treatment is used in international DMS-250 switches with the Credit Card Calling feature (with or without remote database). Route it to the announcement requesting a four-digit authorization code.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

ACRJ

Anonymous caller rejection (166)

Local/Toll, IBN Anonymous call is detected on a line with announcement type ANN.

ADBF

ANI not found in the database (85)

Tandem Call processing cannot find subscriber's automatic number identification (ANI) in database.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

ADPA

Address digits prompt announcement (142)

Tandem This treatment is used in international DMS-250 switches with the Credit Card Calling feature (with or without remote database). Route it to an announcement prompting subscriber to enter destination digits.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

AIFL

Auto identified outward dialing failure (87)

Local, Local/Toll This treatment occurs on a call incoming on either a private branch exchange (PBX) line with the AIOD feature, or under the following conditions: on trunk group type PX or P2 with AIOD feature, field AIOD set to Y (yes). If the DMS switch fails to receive an AIOD message over the AIOD datalink within the specified delay and the operating company sets table AIODGRP field FAILDEF to TREATMENT then the call is sent to treatment.

Route it to the appropriate announcement or to an operator.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or similar tone.

AIND

Advanced Intelligent Network Disconnect Local,

Local/Toll This treatment is applied when a call is disconnected due to the request from the SCP/Adjunct.

AINF

Advanced Intelligent Network Final

Local, Local/Toll This treatment is applied when there is a fatal call-related error.

ANBB

ANI Feature Group B blockage (107)

Tandem Calls from other common carrier services subscriber (DCCS) attempts to access Feature Group B trunks, but originating ANI is not valid and is blocked in table ANISCRNU.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

ANCT

Machine intercept (31)

Local, Local/Toll Disconnected or out-of-service DNs are routed to announcement (machine intercept).

For information on assigning lines to this treatment, see OUT orders in the SERVORD Reference Manual.

Toll, Gateway, Tandem: with E800 Service Disconnected DNs are routed to announcement.

Toll, Gateway, Tandem: without E800 Service This treatment is redundant; set it to overflow or to a similar tone.

ANFL

Announcement fail (116)

Local/Toll, Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

ANIA

ANI account status not allowed (76)

Tandem, Gateway ANI is not found in database or ANI is found and set to block.

Local/Toll This treatment is redundant; set it to overflow or to a similar tone.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ANTO

Answer time out (66)

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ATBS

Attendant busy (59)

ISDN Normal unspecified (31).

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone. IBN treatments are handled in table AUDIO.

ATDT

ATD time out (106)

Tandem Office parameter ATD_TIMEOUT_OPTION in table OFCVARis set to Y (yes), and calling subscriber does not disconnect (remains off-hook) long enough for audio tone detector (ATD) default timer to time out.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

ATHF

Authentication failure

This treatment is used if an authentication failure occurs when setting up a mobile call.

BBFS

Blue box fraud scanning (132)

Tandem Incoming trunk circuits are scanned for blue box fraud.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

BCNI

Bearer capability not implemented (161)

ISDN Calling party attempts to establish a circuit-switched call, but the called party does not support circuit-switched bearer capabilities. The progress message contains cause 65:

```
Bearer capability not implemented
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

BLDN

Blank directory number (18)

Local, Local/Toll This is for the routing of unassigned directory numbers.

The thousand directory numbers, for each thousand group in table TOFCNAME with selector C, are automatically routed to this treatment upon initialization.

ISDN The called directory number is unassigned. The progress message contains cause 1:

```
Unallocated number
```

and progress indicator 8:

```
Inband information or appropriate pattern not
available
```

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

BLMO

Black listed mobile.

Local BLMO treatment is set when a blacklisted mobile originates or receives a call. Network operators blacklist a mobile when it has been stolen. A blacklisted mobile can only make an emergency call

ISDN

The called directory number is unassigned.

The progress message contains cause 1:

```
Unallocated number
```

and progress indicator 8:

```
Inband information or appropriate pattern not
available
```

BUSY

Busy line (19)

Local/Toll A line is busy when one of the following conditions exists:

- The line without intercom (INT) option is assigned in table LENLINES with called and calling DN the same.
- A line or trunk dials a busy DN and call waiting is not in effect.
- A called line is seized for testing or is out of service, and is not assigned the plug-up option.

Test equipment (for example, test desk, cabinet, CALRS, or incoming operator verifications trunks) can access busy lines, except if the busy line has the no-double-connection (NDC) option assigned in table LENLINES or in table IBNLINES.

ISDN The called directory number is busy

The progress message contains cause 17:

```
User busy
```

Gateway Call incoming on a private line, R1 signaling trunk, or international 101 test line. Call outgoing on a CCS6 signaling trunk.

During call connection, terminating exchange determines whether the called party line is busy, faulty, or out of service.

B900

Blocked 899 calls

Local/Toll, Toll, Tandem, Gateway This treatment blocks a call associated with a 900 number that has been detected as fraudulent call by the 900FP (900 Fraud Prevention) feature.

CACB

Carrier access code blocked (124)

Local/Toll (end office with Equal Access feature) Dialed carrier access code (CAC) is blocked because the carrier does not handle CAC calls, or because the carrier handles traffic from subscribers where it is the primary inter-LATA carrier.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CACE

Carrier access code in error (79)

Local/Toll (end office with Equal Access feature) Dialed carrier access code 10xxx is vacant or changed.

Route to announcement.

ISDN There is no route to the specified transit network. Progress message contains cause 2:

```
No route to specified transit network
```

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CBDN

Call back destination number (145)

Tandem This treatment is used in an international DMS-250 switch with the Call Back International Subscriber Dialed (ISD) feature. Route to the announcement requesting the subscriber to enter the destination number. The first digit entered stops the announcement.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CBFC

CASOP Blocked Final Carrier

Local/Toll This treatment is used when an automatic recall (AR) call is blocked in the second screening stage. The second screening stage occurs during the routing of the call.

CBTN

Clearback tone (114)

Local/Toll, Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CCAP

Credit card announcement prompt (139)

Tandem This treatment is used in an international DMS-250 switch Credit Card Calling feature (with or without remote database). Route to the announcement prompting subscriber to enter a 10-digit credit card number.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CCCF

Carrier call completion failure (149)

TOPS This treatment is used in a TOPS office with the Alternate Carrier Selection feature. It is for calls on incoming TOPS trunks with carrier call completion failure.

TANDEM This treatment occurs when a DMS250 switch receives an initial address message containing an ISUP hop counter (HC) value, and the HC value has expired. This causes a release (REL) message to be sent back through the network, with the cause value set to "Normal Unspecified".

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CCDT

Credit card dialtone (143)

Tandem This treatment is used in an international DMS-250 switch with the Credit Card Calling feature (with or without remote database). Route to the prompt tone that is used with the second dial tone option.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CCIR

Credit card invalid release (141)

Tandem This treatment is used in an international DMS-250 switch with the Credit Card Calling feature (with or without remote database). Route to the announcement that informs the subscriber that the credit card number is invalid (more than allowed number of code digits). The call is disconnected.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CCNA

Calling card not allowed (91)

Tandem This treatment is used in an international DMS-250 switch with the Credit Card Calling feature (with or without remote database) if a credit card number is marked as ABUSED in table CCTAB. The call is disconnected.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CCNV

Calling card invalid (90)

Tandem This treatment is used in a DMS-250 switch with the Mechanized Calling Card Service (MCCS) feature if the Travel Card Number (TCN) is invalid.

The subscriber has one more chance to enter a valid TCN. Route to the announcement: “Please dial a valid calling card number."

This treatment is used in an international DMS-250 switch with the Credit Card Calling feature (with or without remote database), if the credit card authorization code does not match the authorization code filed against the credit card number.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CCRG

Cumulative Charge Restriction for General Subscribers

This treatment is used to indicate that a general subscriber call has failed screening due to Cumulative Charge Restriction. The call is then routed to this treatment, which defaults to Call Not Allowed (CNAD).

CCRH

Cumulative Charge Restriction for PHS (Personal) Subscribers

This treatment is used to indicate that a PHS subscriber call has failed screening due to Cumulative Charge Restriction. The call is then routed to this treatment, which defaults to Call Not Allowed (CNAD).

CCRM

Cumulative Charge Restriction for Mobile Subscribers

This treatment is used to indicate that a mobile subscriber call has failed screening due to Cumulative Charge Restriction. The call is then routed to this treatment, which defaults to Call Not Allowed (CNAD).

CCRP

Cumulative Charge Restriction for Payphone Subscribers

This treatment is used to indicate that a payphone subscriber call has failed screening due to Cumulative Charge Restriction. The call is then routed to this treatment, which defaults to Call Not Allowed (CNAD).

CCRT

Cumulative Charge Restriction for Third Party Billed Calls

This treatment is used to indicate that a third party billed call has failed screening due to Cumulative Charge Restriction. The call is then routed to this treatment, which defaults to Call Not Allowed (CNAD).

CCTO

Calling card time out (89)

Tandem This treatment is used if the subscriber fails to enter a Travel Card Number (TCN) digit within 10 s (controlled by office parameter MCCS_CALLING_CARD_TIMEOUT in table OFCVAR).

Route it to an announcement.

If digits are not dialed after the announcement, the call is routed to partial dial time-out treatment (PDIL).

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CER1

CUG error 1 (188)

Gateway This treatment is used if the information in the initial address message with additional information (IAI) is incorrect.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

CFOV

Call forwarding overflow (121)

Local/Toll The call cannot be forwarded through the POTS Call Forwarding base station because the maximum simultaneous forwarding limit has been reached for the base station.

Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CFWV

Variable call forwarding verification (77)

Local, Local/Toll (end office with Variable Call Forwarding feature) A subscriber with Variable Call Forwarding is routed to CFWV if the call forwarding activation service access code is dialed and if call forwarding is already active on the line.

Local/Toll (without Variable Call Forwarding feature) Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CGRO

Customer group resource overflow (94)

Local/Toll An IBN call is routed if shortages occur on resources provisioned on a customer group basis. Resources include

- the number of six-port conference circuits datafilled against the customer group
- the number of parking queues datafilled against the customer group

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CHAF

Changed 800 number forward (118)

Originating Screening Office With Enhanced 800 Service This treatment is used if the 800+ response from the operating company (Bell Canada) database is as follows:

- changed 800 number-treatment 2
- route to national directory assistance

Local/Toll, Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CHAN

Changed 800 number announcement (117)

Originating Screening Office With Enhanced 800 Service This treatment is used if the 800+ response from the operating company (Bell Canada) database is as follows:

- changed 800 number-treatment 1
- route to the announcement that informs the subscriber that the dialed 800 number has changed and the number must be checked before redialing

Local/Toll, Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CHNF

Channel negotiation failure (160)

ISDN This treatment is used if the B-channel negotiation fails at the terminating end.

The progress message contains cause 41:

```
Temporary failure
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Local/Toll, Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CMGA

Call Management Group activation (224)

The CMG line receives this treatment when the end user activates simultaneous ringing status on the line.

CMGD

Call Management Group deactivation (225)

The CMG line receives this treatment when the end user deactivates simultaneous ringing status on the line.

CNAC

Call not accepted (113)

IBN with Open Number Translations feature Table IBNXLA selector NET DOD is datafilled, and table LINEATTR field XLASYS is not NIL or PX. A DFIL log is generated.

Tandem This treatment is used in an international DMS-250 switch with the Call Back International Subscriber Dialed (ISD) feature if the calling line ID (CLID) is not eight or nine digits in length; the call is disconnected if applied.

ISDN The bearer capability of the call originator is not compatible with the call terminator. Bearer capability is defined in table BCDEF, and assigned to ISDN terminals, data units, and electronic business sets in table KSETFEAT.

Progress message contains cause 88:

```
Incomplete destination
```

Local/Toll, Gateway This treatment is redundant; set it to overflow or similar tone.

CNAD

Call not allowed (137)

Tandem This treatment is used in an international DMS-250 switch with the Call Back International Subscriber Dialed (ISD) feature. The calling line ID (CLID) has the correct number of digits, but is invalid (listed as either delinquent or refused service), or called party address digits fail digit translation screening on third-party billed call.

Call is disconnected.

Local/Toll PVN SSP In a switch equipped with the Private Virtual Network (PVN) feature and a service switching point (SSP), this treatment occurs if the database returns call not allowed.

Local/Toll not PVN SSP, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CNDT

Coin denied termination (5)

Local, Local/Toll, Tandem The dialed coin line directory number terminates in a switch with the denied terminating (DTM) option.

Note: Calls to a non-coin line with option DTM result in treatment DNTR.

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CNOT

Coin overtime (55)

Local, Local/Toll This treatment is used if the switch has the Local Coin Overtime feature, and the coin line is terminated if coins are not deposited for an overtime period.

If the switch does not have the Local Coin Overtime feature, route to overflow or to a similar tone.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CONF

Confirm tone (38)

Local, Local/Toll This treatment is used if the activation code is dialed on a line with Call Forwarding or Speed Calling features.

If dial tone is required following a confirmation tone, route list elements consist of a confirmation tone and IDLE. Otherwise, route list elements consist of a confirmation tone, no tone, and lockout.

ISDN Normal unspecified (31).

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CONP

Connection not possible (98)

Tandem This treatment is used if the call cannot be completed by carriers because of 3L-to-3L blocking (transmission quality requirements).

ISDN Channel type not implemented.

Progress message contains cause 66:

```
Channel type not implemented
```

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

COSX

Class of service exceeded (123)

Tandem Translation encounters an invalid Class of Service (COS).

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

CQOV

CAMA queue overflow (15)

Local/Toll with TOPS This treatment can be used for switches that are equipped with TOPS; the call is routed if the queue overflows.

Local/Toll with no TOPS, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CREJ

Call rejected (134)

ISDN Functional terminal rejects call before it is answered.

The originating subscriber receives an audible ringback. To minimize the impact on the originating subscriber, the ringback generated by the tone set in table TONES with pseudo CLLI code *RING is continued before applying the busy tone, followed by lockout.

The progress message contains cause 21:

```
Call rejected
```

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

CRTC

Call redirect confirmation treatment

The Call Redirect feature controller (originator) receives this treatment after a successful translation of the routing DN.

C7AP

CCS7 application failure treatment (130)

Local/Toll AT or EAEO This treatment is used in an access tandem (AT) or equal access end office (EAEO) switch in service switching point (SSP) calls (for example, E800, 800+, and PVN) with CCS7 application failures, such as:

- service control point (SCP) database time out or trouble
- transaction capabilities application part (TCAP) message decoding problems
- no transaction identification available for service switching point (SSP) calls

The RODR treatment has been replaced by treatment C7AP. The RODR treatment is dedicated to distorted signals during dialing or impulsing.

Local/Toll other than AT or EAEO, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

DACD

Dial carrier access code (84)

Local/Toll (end office with Equal Access feature) 10xxx must be dialed.

Route call to announcement.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

DCFC

Disallowed coin free call (56)

Local, Local/Toll This treatment is used for a coinfree line or line class code CFD in table LINEATTR, when other than operator assisted (0+) call or three-digit service codes are dialed.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

DISC

Disconnect timing (45)

Local, Local/Toll This treatment is used if the subscriber fails to go on-hook within 10 s after the other party terminates a call.

The call is forcibly disconnected from a CAMA position served by a non TOPS switch.

An answer has not been received on a direct dial overseas DDO call within 5 min after call setup.

Origination (due to hardware failure) is used from an outgoing emergency service bureau (E911) trunk.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

DNTR

Denied terminating (33)

Local, Local/Toll This treatment is used when a noncoin line directory number is dialed, terminating with the denied terminating (DTM) option. This treatment is also used if the DN of an ACD INCALLS key is called directly.

Note: Calls to coin lines with option DTM result in treatment CNDT.

ISDN Incoming calls are barred.

The progress message contains cause 54:

```
Incomimg calls barred
```

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

DODT

Denied originating data terminal (61)

Local/Toll, Gateway This treatment is used if a data unit is attempting to originate a connect sequence without the RS-232 DTR signal present.

Tandem This treatment is redundant; set it to overflow or to a similar tone.

DSCN

Call waiting ID disconnect option (176)

Local/Toll, Local This treatment is used if a subscriber has the Spontaneous Call Waiting Identification with Disposition (DSCWID) feature and the subscriber chooses the announcement-before-disconnect (DISCON) option, which gives the calling party an announcement before disconnecting the call.

Tandem, Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

DTFL

Datafill error (131)

Tandem This treatment is used if a datafill error is encountered in offices with service access code network management (SACNWM) and code controls feature. If calls do not successfully complete, INWATXLA and NCS translations attempt to index table HNPACONT using the same STS used for SACNWM. The call initiates a continuous loop if allowed to continue.

Tandem A datafill error is encountered.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

D950

Dial 950 (80)

Local/Toll (end office with Equal Access feature) 10xxx is dialed instead of 950-1xxx. Table OCCINFO field ACCESS is set to INTERIM.

Route the call to an announcement.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

EMR1

Emergency treatment 1 (11)

Local/Toll, Tandem This treatment is used if a call is deflected by network management code blocking, destination code cancellation, or alternate route control, or if the subscriber set deflected calls to route EA1.

Gateway This treatment is redundant; set it to overflow or to a similar tone.

EMR2

Emergency treatment 2 (12)

Local/Toll, Tandem This treatment is used if a call is deflected by network management code blocking, destination code cancellation, or alternate route control, or where the subscriber set deflected calls to route EA2.

Gateway This treatment is redundant; set it to overflow or to a similar tone.

EMR3

Emergency treatment 3 (48)

Local/Toll with TOPS This treatment is used if the digits dialed are other than 0- and the deflect call threshold for queue is exceeded. (See table TQCQINFO fields CWON and CWOFF for enabling calls waiting. Also see table QMSCQDEF for information on queue length threshold tables.)

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

EMR4

Emergency treatment 4 (49)

Local/Toll with TOPS This treatment is used if the digits dialed are 0- and if the deflect call threshold for queue is exceeded. (See the description of table QTTIDX for information on queue length threshold tables.)

Local/Toll (without TOPS), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

EMR5

Emergency treatment 5 (73)

Local/Toll with TOPS MP DA This treatment is used in a TOPS switch equipped to connect directory assistance (DA) and intercept (INT) calls to TOPS multipurpose (MP) positions; excess calls in DA call waiting (CW) queue and DA call are not recalls.

Local/Toll (without TOPS MP DA), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

EMR6

Emergency treatment 6 (74)

Local/Toll with TOPS MP DA This treatment is used in a TOPS switch equipped to connect DA and INT calls to TOPS MP positions; excess calls in the DACW queue and INT calls are not recalls.

Local/Toll (TOPS MP DA), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ERDS

Trunk permanent ground (70)

Local/Toll, Gateway This treatment is used if a permanent ground is detected during a call; the call is disconnected and the cut-off relay is activated to save power.

Tandem This treatment is redundant; set it to overflow or to a similar tone.

EROR

ERV originator

ERTO

ERV timeout

ERTR

ERV terminator

ESNF

Customer unauthorized electronic serial number (ESN) fraud treatment

FACJ

Facility Rejected

This treatment is used (set) by the Closed User Group service to indicate that an incoming ISUP call with "CUG Without Outgoing Access" must be released with a cause value of #29 (Facility Rejected). This treatment is applied when, for example, an incoming call with "CUG Without Outgoing Access" attempts to access an outgoing network/agent without CUG capability.

FDER

Feature data error (92)

Local K&S (Austria) This treatment is used if an invalid call forward attempt is made; it is used by K&S (Austria) Call Forwarding features.

FDER cannot be used in North American switches.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

FDNZ

First digit not zero (88)

Tandem This treatment is used in a DMS-250 switch either with the Mechanized Calling Card Service (MCCS) feature on travel card number (TCN) call originations, or with the Call Back International Subscriber Dialed (ISD) feature, if the first digit of the address is not zero. The subscriber has one more chance to dial called number correctly. Route the call to an announcement.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

FECG

Far end congestion (35)

Local/Toll, Tandem The immediate cause of failure is the inability to get a path through the network over metallic access trunk due to far end congestion. This treatment is used if the far end encounters congestion on the network or outgoing trunks during call connection on the first attempt.

Gateway This treatment is used on a call incoming on a private line, R1 signaling trunk or international 101 test line, or a call outgoing on CCITT#5 signaling (N5) if

- the far-end office encounters congestion on the network or outgoing trunks during call connection on the first attempt.
- the call incoming on a private line, R1 signaling trunk, or international 101 test line is outgoing on an N5 signaling trunk.

This treatment is used if the connected call fails on the first attempt because of the following:

- proceed to send message was not received
- proceed to send message was removed before seizure removed
- release guard was not received

This treatment is used on the second attempt, if the far-end office encounters congestion on the network or on outgoing trunks.

FNAL

Feature not allowed (68)

Local/Toll This treatment is used if a caller attempts to use a feature that is not assigned to the line. This treatment is distinct from NACK, which occurs if a caller attempts to use a custom calling feature and the request cannot be served.

For example, if subscriber dials *73, the feature access code for call forwarding, but the subscriber line does not have the call forwarding feature, then the call is given FNAL treatment.

ISDN This treatment is used if the requested facility is not subscribed or the service or option is not implemented.

The progress message contains cause 50:

```
Requested facility not subscribed
```

Tandem This treatment is used in an international DMS-250 switch with the Call Back International Subscriber Dialed (ISD) feature. If the Calling Line ID (CLI) has the correct number of digits but indicates a mobile phone line or pay phone line, the call is disconnected.

Gateway This treatment is redundant; set it to overflow or to a similar tone.

FRDR

Feature reorder (129)

Local/Toll with the IBN Message Service feature This treatment is used if Voice Message Exchange (VMX) failure is detected during the activation or deactivation of the message waiting indicator.

Treatment RODR has been replaced by treatment FRDR. Treatment RODR is dedicated for distorted signals during dialing or impulsing.

A T120 tone is required by VMX. VMX users datafill treatment FRDR the same as RODR. This treatment increments the feature-related operational measurements (OM) treatment group rather than the equipment-related OM treatment group.

If FRDR is not datafilled in table TMTCNTL.TREAT, the default treatment is RODR.

Local/Toll without the IBN Message Service feature Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

GFNV

Global fiber optic network card (FONCARD) is not valid.

GNCT

Generalized no circuit (58)

Local/Toll This treatment is used if a trunk group is the last group in a route, and an all-trunks-busy condition is encountered.

Looping occurs if the last element in a route list for GNCT is busy and the treatment GNCT is selected again. To prevent looping, add tone T120 (never busy) as the last element in a route list.

Treatment GNCT is selected.

If the trunk group type is VR, the treatment NOSC (not GNCT) is selected and routed to a line or a trunk.

Gateway This treatment is used if call processing detects a no-circuit condition, excluding receivers and verification trunks.

Tandem This treatment is used if a call is originating on an incoming or two-way trunk, and all trunks that are associated with outgoing routes are busy.

ISDN No circuit or channel is available.

The call cannot be completed from the calling interface due to unavailable equipment or facilities.

Progress message contains cause 34:

```
Circuit/channel congestion
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

No channel is available at the calling interface because both B-channels are being used by other sets on the loop, or because the set attempting to originate has an active call and the set did not request an exclusive B-channel. The network sends the calling subscriber a release complete message cause 34:

Bearer capability not implemented

The network cannot allocate the channel that the calling subscriber indicated as exclusive in the originating setup message. The network sends the calling subscriber the release complete message cause 44:

```
Requested channel not available
```

HNPI

Home NPA intercept (16)

Local/Toll This treatment is used if home NPA digits are dialed and home NPA dialing is not permitted.

This treatment is assigned against the home numbering plan area (NPA) in table HNPACONT.HNPACODE with code type VCT.

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ICCB

Incoming Call Barred within Closed User Group (CUG)

This treatment is used (set) by the Closed User Group service to indicate that an incoming ISUP call must be released with a cause value of #55 (Incoming Call Barred within CUG). This treatment is

applied when an incoming call terminates in a CUG with this treatment activated.

ICNF

Invalid conference code (151)

Tandem This treatment is used in an international DMS-250 switch with the Three-Way Calling feature. The operating company can datafill ICNF, but it has no effect on what the subscriber hears. DMS-250 three-way conference calling software allocates 5 s of REORDER tone.

The originator and controller of the three-way conference call dials an invalid or inappropriate conference feature code.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

ICSA

In call service activated

Local, Local/Toll A line that has entered the ICSCTRL activation code (*02) is routed here.

ICSD

In call service deactivated Local,

Local/Toll A line that has entered the ICSCTRL deactivation code (*02) is routed here.

IDPB

International direct distance dialing prohibited (112)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem An international direct distance dialing (IDDD) call is originated by a subscriber whose AUTHCODE or Automatic Number Identification (ANI) database does not allow dialing IDDD destination numbers.

IIEC

Feature-related, invalid information element component

ILRR

International line restriction (122)

Local, Local/Toll (international end office) This treatment is used in an international end office with the International Line Restrictions (ILR) feature, if an attempt is made to originate a call restricted by ILR for the originating line.

Local/Toll (other than international end office), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ILRS

Inter-LATA restriction (82)

Local, Local/Toll (end office with Equal Access feature) This treatment is used if an inter-LATA call is originated, and if the line option inter-LATA toll denied (ITD) is assigned.

The subscriber with the Carrier Toll Denied (CTD) feature attempts to place a toll call using a carrier and is denied access. The call is either completed or blocked, and sent to an inter-LATA restricted (ILRS) treatment.

The decision to block a call to a carrier, defined as toll denied, depends on call characteristics, as described in the table that follows.

Call type descriptions

Call type	Description
(10xxx) 1 + 7/10D	Direct dial - ILRS treatment
(10xxx) 0 + 7/10D	Operator assisted - call let through
(10xxx) 011 + CC + NN	Direct dial - ILRS treatment
(10xxx) 01 + CC + NN	Operator assisted - call let through
10xxx + #	Direct dial - ILRS treatment
10xxx + 0	Direct dial - call let through
950<#0106>1xxx	Direct dial - ILRS treatment
1 + 800 + 4D	Direct dial - call let through

Call type descriptions

Call type	Description
(10xxx) 1 + NPA + 555 + 4D	Direct dial - ILRS treatment ***Note:*** The parentheses mean that the carrier digits are optional in the dialing sequence.

Route the call to an announcement.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

INAC

Invalid account code (4)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem Account code validation is required and the dialed account code is not valid for the trunk group.

INAU

Invalid authorization code (53)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem This treatment is used if

- the AUTHCODE is invalid.
- the city code screening specifies call blocked because the AUTHCODE was not dialed in a valid city of origin.
- the dialed security code digits associated with the AUTHCODE do not match the security code digits stored against the AUTHCODE

INBT

Installation busy treatment (127)

LOCAL (international NETAS) An incoming call attempts to terminate on a line in an installation busy (INB) state.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

INCC

Invalid city code (97)

Tandem This treatment is used if an invalid city code is dialed.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

INOC

Invalid operator code (75)

Local/Toll, Gateway Tandem This treatment is redundant; set it to overflow or to a similar tone.

INPD

Invalid PIN digit (110)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem This treatment is used if the dialed personal identification number (PIN) digits do not match PIN digits in the AUTHCODE database.

INVM

Invalid message (169)

Local/Toll, IBN This treatment is used if an invalid numbering plan indicator is received in the called party number, or if an invalid calling category is received.

ISAX

ISA exit

Local, Local/Toll (end office with custom calling features) This treatment is used when a caller has successfully selected an option from a first level menu but has not selected any option from a second or subsequent level menu.

ISDN The facility is rejected, or service or option is not allowed.

Progress message contains cause 29:

```
Facility rejected
```

Local/Toll (without custom calling features)

Local/Toll (without custom calling features) Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ITCF

Information transfer capability request fail (164)

Gateway This treatment is used if the information transfer capability (ITC) is not functional or an invalid calling category is received.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

IVCC

Invalid corridor call (108)

Local, Local/Toll (end office with Equal Access feature) This treatment is used if an invalid inter-LATA non-corridor call using OTC is made.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

IWUC

International wake-up call (126)

Local, Local/Toll (international end office) This treatment is used in an international end office with the international Wake-up Call (IWUC) feature during the wake-up process. Route the call to the wake-up announcement.

Tandem This treatment is used in an international DMS-250 with the call back ISD feature. Route to the announcement requesting subscriber disconnect (at the end of first stage). The announcement cannot be broken by dialing digits.

Local/Toll (other than international end office), Gateway This treatment is redundant; set it to overflow or to a similar tone.

JACK

Justified alternate calling knowledge (163)

Tandem This treatment is used if a hotel call fails line information (LIDB) verification twice. The treatment may route to an announcement tone or to a terminating trunk.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

LCAB

Local call area barred (96)

Tandem This treatment is used if a local call attempt is made over a carrier. Carriers are not authorized to complete calls that originate and terminate within the same local calling area.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

LBSY

Local busy (178)

Local, Local/Toll This treatment is used if a busy condition is encountered during a local call attempt. The DMS switch determines if the call is a local call, then routes the call to this treatment if it is unable to complete the call.

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

LCNV

LEC calling card not valid (153)

Tandem This treatment is used to prompt the subscriber to enter a valid local exchange carrier (LEC) calling card number, if the subscriber enters an invalid number the first time, or if the call times out due to a partial dial condition. The DMS-250 LEC Calling Card Validation (Bong Tone) feature must be present in the office.

Datafill in table TMTCNTL.TREAT for treatment LCNV has no effect on what a subscriber hears if this treatment is applied for LEC calling card calls. The LCNV entry must be datafilled in table MCCSANNS with an appropriate announcement CLLI recorded on a digital recorded announcement machine (DRAM).

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

LDAA

Long distance signal activated (211)

Local, Local/Toll A line that has entered the LDS activation code *49 (or 1149) is routed here.

LDAD

Long distance signal deactivated (212)

Local, Local/Toll A line that has entered the LDS deactivation code 1149 (or *49) is routed here.

LECV

LEC calling card valid (152)

Tandem This treatment informs the subscriber that the LEC calling card number validation was successful and that the call is progressing normally. The DMS-250 LEC Calling Card Validation (Bong Tone) feature must be present in the office.

Datafill in table TMTCNTL.TREAT for treatment LECV has no effect on what the subscriber hears if the treatment is applied for LEC calling card calls. The LECV entry must be datafilled in table MCCSANNS with the appropriate announcement CLLI recorded on a DRAM.

Note: A new cause value, currently listed as CSE_26 in table TMTMAP, is changed to MISRCALL.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

LNPM

LNP Misrouted Call to a Ported Number

This treatment indicates that an LNP call to a ported number was misrouted. LNPM can be mapped to a DRAM announcement that indicates the call did not complete.

MANL

Manual line (26)

Local, Local/Toll A line with originating manual service (option MAN assigned in table LENLINES) is routed to this treatment if it is originating a call.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

MHLD

Music on hold (60)

ISDN Normal unspecified (31)

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone. IBN treatments are handled in table AUDIO.

MSCA

Misdirected CAMA call (7) (prefix digit dialed in error)

Local/Toll This treatment is used in table STDPRTCL or table PFXTREAT for local calls that either attempt to switch through the toll network or dial the prefix digit 0 or 1 in error. Both call setups are not permitted.

ISDN This treatment is used if the call is a local seven-digit direct dialed (DD) number as determined in table LCASCRN; the prefix digit 1 is dialed in error on a local call and the treatment to which the call is routed is datafilled as misdirected CAMA (MSCA) in table PFXTREAT.

Progress message contains network specific cause 3:

```
Prefix 1 dialed in error
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

MSLC

Misdirected local calls (8) (prefix digit not dialed)

Local, Local/Toll, Tandem An operator-assisted call (0+) is originated to codes NPA555, 555, or 800.

A station ringer call is made if the last four digits do not match the calling line, and the call is not defined as no-prefix local in table PFXTREAT.

Prefix digit 0 or 1 is not dialed on a toll call, and table PFXTREAT specifies prefix digit mandatory on toll calls.

ISDN This treatment is used under two conditions:

- The call is a 10-digit call and dialing of prefix digits is specified as mandatory in table LCASCRN
- The prefix digit 1 is not dialed on a toll call and the treatment to which the call is routed is datafilled as MSLC (misdirected local call) in table PFXTREAT.

Progress message contains network specific cause 4:

```
Prefix 1 not dialed
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

MSOA

Misdirected operator assisted announcement (0+ dialing not allowed)

Local/Toll This treatment is used in table LCASCRCN to route not permitted operator assisted (OA) calls to a pre-recorded announcement.

ISDN This treatment is used if the prefix digit 0 is dialed in error as determined in table LCASCRN and the treatment to which the call is routed is datafilled as Y in field PFXFOR10 of table LCASCRN.

Progress message contains network specific cause 2:

```
Prefix 0 dialed in error
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

MTBL

Mobile trouble

MTOC

MFC time out or confusion (115)

Local/Toll, Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

MWKP

Mobile weak power

NACD

Do not dial carrier access code (83)

Local, Local/Toll (end office with Equal Access feature) 10XXX is dialed for a carrier equal to field PIC in table LENFEAT for the subscriber.

Route the call to an announcement.

Local/Toll (without the Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

NACK

Negative acknowledgement (78)

Local, Local/Toll (end office with custom calling features) This treatment is used when a feature request cannot be performed due to some feature interaction or feature restriction.

The NACK treatment is distinct from FNAL, where the subscriber attempts to use a custom calling feature that is not assigned to a line. For example, subscriber B call forwards to subscriber C; subscriber C is busy. Subscriber A dials subscriber B, hears busy tone, and attempts to RAG. The NACK treatment is returned because RAG is not permitted on a subscriber line that is call forwarded.

ISDN The facility is rejected, or service or option is not allowed.

Progress message contains cause 29:

```
Facility rejected
```

Local/Toll (without custom calling features)

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

NBLH

Network blockage heavy traffic (9)

Local/Toll The immediate cause of failure is the inability to get a path through the network. This treatment is used if one of the following conditions exists:

- a second failed attempt for a CAMA position, operator or receiver
- no path on three-way call between a conference circuit and a trunk
- no network path on an operator-to-line call
- no network path to a metallic access trunk
- no network path to the line test unit on a station ringer test call
- no network path from a conference port to a called line

Gateway The call incoming on a private line or R1 signaling trunk; the call is outgoing on a terminating 102 test line in the following states:

- an outgoing trunk is available, but it is in the wrong state (for example, not IDLE)
- an outgoing trunk is available, but the input or output control block (IOCB) cannot link
- an outgoing trunk is available, but there is no available network connection

If the call is incoming on a private line or international 101 test line; or the call is outgoing on a CCITT#5 (N5) signaling trunk, CCITT#6 (N6) signaling trunk, or international 101 test line, the following message is generated:

```
During call setup, terminating trunk found, but no
call condense block available
```

If the call is incoming on an R1 signaling trunk; or the call is outgoing on an N6 signaling trunk or international 101 test line, the following message is generated:

```
During call setup, terminating trunk found, but no
call condense block available
```

If the call is incoming on a private line, R1 signaling trunk, or an international 101 test line; or if the call is outgoing on a transmission test unit (ATME2), the following message is generated:

```
During call setup, cannot connect trunks because no
network connection is available, or integrity not
found over network connection
```

If the call is incoming on an R1 signaling trunk; or the call is outgoing on a terminating 104 test line, the following message is generated:

```
During call setup, outgoing trunk available, but no
network connection available
```

If the call is incoming on a private line or an R1 signaling trunk, or if the call is outgoing on an international 101 test line, the following message is generated:

```
During call setup, two attempts to get network
connection fail
```

If the call is incoming on an R1 signaling trunk, after call supervision, route the subscriber to an announcement if one of the following conditions exists:

- failed network connection
- failed announcement connection

The call should connect to announcement for the maximum number of announcement cycles.

Tandem Up to two attempts are made to reserve a network path from an incoming trunk to an outgoing trunk.

Up to two attempts are made to reserve a network path from an outgoing trunk to an audio tone detector.

ISDN There is switching equipment congestion.

Progress message contains cause 42:

```
Switching equipment congestion
```

NBLN

Network blockage normal traffic (10)

Local/Toll This treatment is used if a call is aborted because of blocking (failure to get a channel) in the terminating peripheral module at the far end.

ISDN There is no circuit or channel available.

The call cannot be completed from the calling interface because equipment or facilities are unavailable.

Progress message contains cause 34:

```
Circuit/channel congestion
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

No channel is available at the calling interface because both B-channels are being used by other sets on loop, or because the set attempting to originate has an active call and the set did not request exclusive B-channel.

The network sends the calling subscriber a release complete message containing cause 34:

```
Bearer capability not implemented
```

The network cannot allocate the channel that the calling subscriber indicated as exclusive in the originating setup message.

The network sends the calling subscriber release complete message containing cause 44:

```
Requested channel not available
```

This treatment is redundant; set it to overflow or to a similar tone.

NCII

NCS invalid ID code (102)

Tandem Action code 7 (invalid ID code) is received in the response message from the network control system (NCS). The ID code is a portion of the supplementary code collected from the subscriber.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NCIX

NCS incoming exclusion (101)

Tandem Action code 6 (incoming exclusion) is received in response message from NCS.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NCRT

No circuit (24)

Local/Toll, Tandem Routine call is deflected by network management to NCA.

Treatment can be specified by the network manager as an alternative to emergency 1 or 2 for calls aborted through operation of cancel-from or cancel-to network management controls.

With calls originating from a line or ATUP trunk or with calls outgoing on an ATUP trunk that signals a trunk during call connection, glare occurs on the outgoing trunk. A repeat attempt is not possible because a repeat was already attempted.

Gateway Call is incoming on a private line, R1 signaling trunk, or international 101 test line. Call is outgoing on an R1 signaling trunk.

During call connection, glare occurs on an outgoing trunk and a repeat attempt is not possible because of the following:

- one repeat was already attempted
- network management cancelled a repeat attempt
- an error occurred while expanding internal translation data
- an error occurred while condensing internal translation data

Call is incoming on a private line, R1 signaling trunk, or international 101 test line. Call is outgoing on an N5 signaling trunk.

During call connection, glare occurs between central control (CC) and an N5 peripheral module (PM) or between an N5 PM and far-end PM. A repeat attempt is not possible because of the following:

- one repeat was already attempted
- network management cancelled a repeat attempt

- an error occurred while expanding internal translation data
- an error occurred while condensing internal translation data

Call is incoming on a private line, R1 signaling trunk, or international 101 test line. Call is outgoing on an R1 signaling trunk.

During call connection, an outgoing trunk registers call failure before the answer because of the following:

- no leading edge was received (similar to proceed to send)
- no start dial signal was received
- an unexpected off-hook was received

A repeat attempt is not possible because

- one repeat was already attempted
- network management cancelled a repeat attempt

Call is incoming on a private line, R1 signaling trunk, or international 101 test line. Call is outgoing on an N5 signaling trunk.

During call connection, an outgoing trunk registers a call failure before an answer because of the following:

- proceed to send message was not received
- proceed to send message was removed before seizure was removed
- proceed to send message was not removed
- release guard message was not received

A repeat attempt is not possible because of the following:

- one repeat was already attempted
- network management cancelled a repeat attempt

ISDN This treatment is used if no circuit or channel is available, or if the requested circuit is not available.

The call cannot be completed from the calling interface because of unavailable equipment or facilities.

Progress message contains cause 34:

```
Circuit/channel congestion
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

No channel is available at the calling interface because both B-channels are being used by other sets on the loop, or the set attempting to originate has an active call and the set did not request an exclusive B-channel.

The network sends a calling subscriber release complete message cause 34:

```
Bearer capability not implemented
```

The network cannot allocate the channel that the calling subscriber has indicated as exclusive in the originating setup message.

The network sends a calling subscriber release complete message cause 44:

```
Requested channel not available
```

NCTF

NCS translation failure (103)

Tandem The action code returned indicates one of the following NCS translation failures:

- 9-misdialed number
- 12-supplementary code required
- 13-outgoing trunk not found
- 14-ANI not found
- 15-NPA_Nxx not found
- 16-pilot number not found
- 17-associated partition not found
- 18-agent data framework (ADF) format error
- 19-switch ID not found

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NCUN

NCS unexpected error (105)

Tandem A Virtual Private Network (VPN) call is routed if action code 8 (unexpected error) in a response message is received from an NCS.

The action code returned by NCS is 5, or 23 to 63 (unused).

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NC8F

NCS 800 service failure (128)

Tandem The action code returned by NCS is one of the following:

- 20 800 number not found
- 21 800 number out of band
- 22 800 number no longer in service

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NECG

Near end congestion (34)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Gateway If the call is incoming on a private line, R1 signaling trunk, or international 101 test line, the following message is generated:

```
During call routing, all routes in route list are
unavailable
```

If the call is incoming on a private line or international 101 test line, the following message is generated:

```
During call supervision or repeat attempt, call or
previous call attempt fails due to network congestion
```

If the call is incoming on a private line, R1 signaling trunk, or international 101 test line, the following message is generated:

```
During translation verification, all routes in route
list are unavailable
```

NINT

Changed number intercept (99)

Tandem The called number has been changed and can no longer be reached.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NMZN

No metering zone (67)

NONE This treatment handles billable calls if no metering zone is found in translations.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

NOCN

No coin (50)

Local, Local/Toll This treatment is used on a coin calling line if there is no coin present on chargeable call.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

NOBC

No bearer capability available (181)

Gateway This treatment is used if the bearer capability (BC) is missing from the additional calling party information (ACPI) message.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

NONT

Not on network (104)

Tandem This treatment is used if a call conforms to the dialing plan but is not on the network. This treatment is datafilled as a route choice. For example, if area code 214 is not supported, table HNPACONT contains NONT as route choice for area code 214.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

NORA

No routing available (182)

Gateway This treatment is used if there is no routing information in the first indicator octet (FIO).

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

NOSC

No service circuit (1)

Local/Toll This treatment is used if all hardware resources are busy. Conditions include the following:

- all receivers, senders, or verification 90 (CLLI, VER90) trunks are busy
- the number of trunks queuing for the Centralized Automatic Message Accounting (CAMA) position trunk is equal to or greater than the quantity specified for field DEFLECT for the number of CAMA positions occupied in table CAMACSW
- no CAMA position is available after a second try
- operator queue overflow, including all queues for CAMA and TOPS operators
- no conference circuit is available
- time-out in CAMA queue, including all queues for CAMA and TOPS operators
- no metallic test access connection is available
- no resources for 108 test line call are available
- no tone or announcement available on an intercom call
- the last trunk group of group type VR (operator verification trunk) in a route list encounters on all trunks busy condition

Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem This treatment is used if

- no recording units are available for Call Detail Recording (CDR) billing and the call is blocked as specified by office parameter CDR_UNAVAIL_BLOCK in table OFCVAR.
- echo suppression is specified but not available for test line calls (terminating to T100, T101, or T102).

ISDN This treatment is used is the call is not completed from the calling interface because of unavailable equipment or facilities.

Progress message contains cause 34:

```
Circuit/channel congestion
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

If no channel is available at the calling interface because both B-channels are being used by other sets on the loop, or the set attempting to originate has an active call and the set did not request an exclusive B-channel, the network sends calling subscriber release complete message cause 34:

```
Bearer capability not implemented
```

If the network cannot allocate the channel that the calling subscriber indicated as exclusive in the originating setup message, then the network sends calling subscriber release complete message cause 44:

```
Requested channel not available
```

NOSR

No software resource (93)

Local/Toll This treatment is used if all software resources are busy. Conditions include the following:

- no multiblocks, recording units, or local automatic message accounting (LAMA) blocks are available
- no custom calling software resources are available, such as:
  - portperm extension block
  - custom calling feature extension block
  - supplementary data block
  - feature data block
- CPWAKEUP request cannot be scheduled

ISDN The progress message contains cause 47:

```
Resource unavailable
```

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

NPAR

NPA restricted (111)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem This treatment is used if the subscriber dials an INWATS call, but the NPA is marked BLOCKED in table IEXCLUDE.

This treatment is also used if the subscriber dials a universal access code to obtain dial tone from a DMS-250 switch and then dials an 800 number.

NTRS

No terminal responding (133)

ISDN This treatment is used if the functional terminal fails to respond when it is offered a call.

The originating subscriber receives an audible ringback. To minimize the impact on the subscriber, continue to apply the ringback as generated by the tone as in the example in table TONES with CLLI code *RING, before applying busy tone, followed by a lockout.

The progress message contains cause 18:

```
No user responding
```

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

NVIP

Not very important person status (165)

Local/Toll, IBN This treatment is used on all calls made to NON-VIP subscribers in local exchange codes with undnVIP screening enabled.

N00B

N00 call blocked (120)

Tandem This treatment is used in DMS-250 switches that have the CCS7 TCAP-based N00 service feature if the N00 number is blocked by a negative N00 database query.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

N9DF

NCS 900 database failure (146)

Tandem This treatment is used if an NCS 900 database failure occurs in offices with the NCS 900 services feature.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

N9NS

NCS 900 number not in service (148)

Tandem This treatment is used if an NCS 900 number that is not in service occurs in offices with the NCS 900 services feature.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

N9OB

NCS 900 number out of band (147)

Tandem This treatment is used if an NCS 900 number out-of-band occurs in offices with the NCS 900 services feature.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

N950

Do not dial 950 (81)

Local, Local/Toll (end office with Equal Access feature) This treatment is used if the number 950-1xxx is dialed instead of 10xxx, if table OCCINFO field ACCESS is set to EAP.

Route the call to an announcement.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

OPRT

Regular intercept (29)

Local, Local/Toll This treatment is used if disconnected or out-of-service directory numbers are routed to an operator (regular intercept). For information on assigning lines to this treatment, see the *SERVORD Reference Manual.*

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ORAC

Originating revertive action for two-party lines (42) with coded ringing

Local, Local/Toll This treatment is used if a two-party line with coded ringing attempts to terminate to a party on the same line.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ORAF

Originating revertive action for two-party lines (40) with frequency ringing

Local, Local/Toll This treatment is used if a two-party line with frequency ringing attempts to terminate to a party on the same line.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ORMC

Originating revertive action for multiparty lines (36) with coded ringing

Local, Local/Toll This treatment is used if a multiparty line with coded ringing attempts to terminate on the same line.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ORMF

Originating revertive action for multiparty lines (43) with frequency ringing

Local, Local/Toll This treatment is used if multiparty line with frequency ringing attempts to terminate to a party on the same line.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ORSS

Originating service suspension (27)

Local, Local/Toll This treatment is used if a call is originated on a line with the denied originating option or suspended service option assigned in table LENLINES or table IBNLINES.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

OSVR

Operator services voice response (119)

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

OTAE

Over The Air Activation Service Provisioning (OTASP) Error

This treatment is used when an error occurs during the processing of an OTASP call. When an error occurs during the processing of an OTASP call, the call is routed to this treatment, which provides the wireless subscriber a meaningful OTASP related explanation for the error.

OTAR

OTASP resources unavailable

This treatment is used if OTASP (over the air service provisioning) software or hardware resources or both are unavailable for a mobile call.

PDIL

Partial dial time out (2)

Local/Toll, Tandem This treatment is used if one digit is received, but not all digits are required, to complete the call.

For calls on multifrequency (MF) trunks, PDIL instead of permanent signal (PSIG) is administered

if the MF key pulse (KP) signal is received. If the MF signaling terminal (ST) signal is not received, PDIL is the correct treatment. If the received

ST signal is invalid in the context of the call, the proper treatment is RODR.

Note: Treatment CLLI COPP can be used as the first element in a route list.

Gateway This treatment is used for calls incoming on private or international 101 test lines.

```
This treatment is used for calls that fail during
call digit collection
```

This treatment is used on calls incoming on R1 signaling trunks.

```
This treatment is used if the digit string has
insufficient digits for translation during
translation verification
```

This treatment is used for calls incoming on private or international 101 test lines.

```
There is an insufficient number of digits to complete
translation during call translation
```

This treatment is used for calls incoming on a private line, R1 signaling trunk, or international 101 test line. This treatment is used for calls outgoing on CCITT6 signaling (N6) trunks.

```
This treatment is used if there are insufficient
digits to complete a call. If the caller has
transmitted digits to the terminating exchange, and
the terminating exchange has received ST or timed out
waiting for more digits
```

ISDN This treatment is used if there is an invalid number format or an incomplete address.

Progress message contains cause 28:

```
Incomplete number format
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Tandem This treatment is used in an international DMS-250 switch with the Call Back ISD feature. If the subscriber starts to dial after receiving the call back announcement, but fails to enter the minimum number of digits before PDIL (5 s, group parameter), then the call is taken down.

PERR

Protocol error 1 (183)

Gateway This treatment is used if the signaling capability and the signaling path indicator have conflicting information.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

PER1

Protocol error 1 (183)

Gateway This treatment is used if the signaling capability and the signaling path indicator have conflicting information.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

PER2

Protocol error 2 (184)

Gateway This treatment is used if the ITC and signaling path indicator have conflicting information.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

PER3

Protocol error 3 (185)

Gateway This treatment is used if the protocol control indicators are set to invalid combinations in the initial address message (IAM).

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

PER4

Protocol error 4 (186)

Gateway This treatment is used if the protocol control indicators are set to invalid combinations in the address complete message (ACM).

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

PER5

Protocol error 5 (187)

Gateway This treatment is used if the requested call path indicator (CPI) and service handling protocol (SHP) are an invalid combination.

Local, Toll This treatment is redundant; set it to overflow or to a similar tone.

PNOH

Permanent signal no receiver off-hook (32)

Local/Toll, Gateway, Tandem This treatment is not available, set it to overflow or to a similar tone.

PNUN

Private network unavailable (142)

This treatment is used if the Virtual Private Network cannot be accessed.

PODN

Ported Out Directory Number

This treatment indicates that a directory number, whose office code (NPANXX) is native, has ported to another switch. PODN can be mapped to a tone or announcement.

RMID

Remote Message Indicator Deactivation

This treatment is used by the Remote Message Indicator (RMI) feature. When an RMI subscriber dials the vertical access code which deactivates the RMI feature, the subscriber is offered the RMID treatment in order to confirm deactivation of the RMI feature.

PRSC

Priority screen fail (57)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem This treatment is used if the priority of the AUTHCODE subscriber is lower than the current office priority.

PSIG

Permanent signal time out (3)

Local/Toll This treatment is used if no digits are received before a time-out condition occurs. Calls for which distorted signals are received (rather than none at all) are routed to reorder (RODR) treatment.

Note: Treatment CLLI COPP can be the first element in a route list for PSIG.

Gateway This treatment is used if a call is incoming on a R1 signaling trunk:

```
If during call digit collection, the last received
digit on an MF trunk and digit stream contain invalid
ST and invalid KP
```

This treatment is used if a call is incoming on a R1 signaling trunk:

```
If during translation verification, there are not ST,
no KP1, and no KP2 in digit stream
```

This treatment is used if a call is incoming on a private line, R1 signaling trunk, or international 101 test line:

```
During call digit collection, receiver times out
waiting for digits
```

Tandem This treatment is used if a call origination occurs on an incoming or two-way trunk, but no digits are dialed within the time specified by trunk subgroup value for PSPDSEIZ.

Tandem This treatment is used in an international DMS-250 switch with the Call Back International Subscriber Dialed (ISD) feature. If subscriber does not answer callback within the time specified by office parameter CALL_BACK_ANSWER_TIME in table OFCVAR (default 40 seconds), then the call is taken down.

ISDN The destination is missing and direct call is not subscribed.

Progress message contains cause 90:

```
Dest missing
```

PTFL

POTS pseudo service call failed (156)

Gateway This treatment is used if an unauthorized attempt is made to use plain ordinary telephone service (POTS). The DMS-300 Service Screening by Destination on Issue feature must be present in the office.

Local/Toll, Tandem This treatment is redundant; set it to overflow or to a similar tone.

PTOF

Premature trunk offering (64)

NONE This treatment is used if calls receive a trunk offering signal before translation is finished.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

RDIR

Maximum number of redirections. The call links to an announcement that indicates that the maximum number of redirections has been reached.

RFCD

Remote feature control denied

RFCE

Remote feature control error

RFCS

Remote feature control success

RING

No terminal responding, release call (162)

ISDN This treatment is used if an ISDN terminal receives the message:

```
No terminal responding; release call
```

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

RMIA

Remote Message Indicator Activation

This treatment is used by the Remote Message Indicator (RMI) feature. When an RMI subscriber dials the vertical access code which activates the RMI feature, the subscriber is offered the RMIA treatment in order to confirm activation of the RMI feature.

RMID

Remote Message Indicator Deactivation

This treatment is used by the Remote Message Indicator (RMI) feature. When an RMI subscriber dials the vertical access code which deactivates the RMI feature, the subscriber is offered the RMID treatment in order to confirm deactivation of the RMI feature.

RODR

Reorder (25)

Local/Toll This treatment is used if distorted signals are received during dialing or impulsing. This includes instances of extra or mutilated pulses on incoming digits, noise during signaling, distorted frequencies, invalid ST control digits, or failure during ANI impulsing.

Also, the treatment can occur if an attempt is made to outpulse too many digits for trunk group type OP.

Gateway This treatment is used if a call is incoming on a private line, R1 signaling trunk, or international 101 test line. Also affected are calls outgoing on R1 signaling trunks, N5 signaling trunks, N6 signaling trunks, or international 101 test lines.

```
During call routing, a selector in the chosen route
list is unknown
```

This treatment is used for calls incoming on private lines, R1 signaling trunks, or international 101 test lines, and for calls outgoing on N6 signaling trunks.

```
A time out condition occurs, waiting for digits
```

For calls incoming on private lines, R1 signaling trunks, or international 101 test lines, failure during call translation occurs because of the following:

- invalid translation result
- invalid KP signal
- invalid signaling type (for example N7 signaling)

Tandem This treatment is used for the following conditions:

- the number of digits dialed is more than the maximum number of digits required for call
- for foreign exchange office (FXO) and foreign exchange station (FXS) circuits, a digit receiver is necessary but not available, or a receiver is obtained but no network path is available
- a valid speed number is dialed, but not enough digits are returned from the speed number database for translations to make a determination
- an unexpected error condition occurs on an outgoing trunk while a call is up (for example, network integrity loss, invalid A and B bit state received, or force release ordered from MAP position for terminating circuit)
- treatment set does not appear in trunk group-specific treatments subtable, or in subtable TMTCNTL.OFFTREAT

ISDN This treatment is used if the message is invalid or unspecified.

Progress message contains cause 28:

```
Incomplete number format
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

RRPA

Revertive ring prefix announcement (39)

Local/Toll, Gateway, Tandem Not currently available; set it to overflow or to a similar tone.

RSDT

Restricted date and time (63)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem Restriction class in AUTHCODE does not allow subscriber to access network.

RTEE

Routing Error (dynamic) 217-255

Local, Toll, Local/Toll This treatment occurs when an intermediate switch receives an initial address message containing an ISUP hop counter (HC) value, and the HC value has expired. This causes a release (REL) message to be sent back through the network with a cause value set to ``Exchange routing error".

Tandem, Gateway This treatment is redundant; set it to overflow or to a similar tone.

SCA

Selective call acceptance (157)

Local Calling directory number is not found in the SCA list of terminating line with Custom Local Area Signaling Services (CLASS) SCA feature.

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

SCFL

DBS communications failure (100)

Tandem This treatment is used if

- a failure occurs in the communications link to NCS preventing processing of VPN calls
- a request is dropped because the wait_for_ack queue is full (VPN Transaction Processing feature)
- NCS communications software in the DMS-250 switch failed to respond after waiting 4 times the timeout value NCSTIMEOUT in table OFCENG
- error is detected in data received from NCS
- no communication links are available to NCS

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

SCRJ

Selective call rejection (150) local

Local The called line has activated the CLASS SCRJ feature and the calling number appears on its rejection list.

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

SCUN

Service currently unavailable (109)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem Zero (0) + ONNET calls are routed. Zero (0) + ONNET calls do not allow operator access.

SCUN treatment is used in offices with Service Access Code (SAC) network management and Code Controls feature, if table INWATXLA indexes into card_type CRTCARD (not supported).

SINT

Service interception (125)

Tandem Universal translation tables are datafilled to route incorrectly dialed numbers (entered wrong, duplicated, and so on).

Route call to TOPS if the call is handled using the Service Interception (SVI) facility.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

SONI

Service option not implemented (170)

Local/Toll, IBN Invalid circuit existence indicator is received or TELESERVICE indicator is received from initial address message (IAM).

SORD

Storage overflow reorder (52)

Tandem This treatment is used if the DMS-250 runs out of NCS extension blocks during translation of a VPN call.

This treatment is used if the DMS-250 runs out of FTR control blocks during a Travel Card Number Service (TCN) call origination.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

SORE

Station origination restriction error (136)

Local/Toll with MDC This treatment is used in offices with Meridian Digital Centrex (MDC) station origination restrictions (SOR) feature if a subscriber in a customer group with the SOR option attempts a call that is not allowed by the subscriber restriction level.

Local/Toll without MDC, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

SRRR

Single party revertive ringing (44)

Local, Local/Toll This treatment is used for subscribers with the intercom option (single party revertive ringing).

If the switch office option INTERCOM is set to Y (yes) in table OFCOPT, a line with option intercom (INT) in table LENLINES, is routed to SRR if dialing own directory number to ring extension phone.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

SSTO

Start signal time out (23)

Local/Toll This treatment is used if expected signals are not received from a far-end office during call setup. Expected signals are

- time out waiting for operator answer
- ANI outpulse failure or time-out (includes failures during outpulsing of called number or of ANI information)
- failure on outgoing trunks during ROTL tests

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

STOB

Signal time out BOC (71)

Local, Local/Toll (end office with Equal Access feature) This treatment is used if a call is completed in an Equal Access environment over an AT trunk, and the AT trunk does not get an EAEO wink.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

STOC

Signal time out IC/INC (72)

Local, Local/Toll (end office with Equal Access feature) This treatment is used if a call is completed in an Equal Access environment over an AT trunk, and the EAEO/AT trunk does not get an IC/INC wink.

Local/Toll (without Equal Access feature), Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

SYFL

System failure (14)

Local/Toll This treatment is used if a call is aborted because of a software or hardware switch failure.

Failure type areas follows:

- call failure or integrity lost from port 1
- miscellaneous messages from port 2
- software failures or error conditions
- line-to-line, line-to-trunk, or trunk-to-line error takedown
- miscellaneous failures during overlap outpulsing
- miscellaneous error returns during set up
- called line module (LM) busy or under test
- failed Automatic Number Identification (ANI) test due to data error
- ANI failure on local Call Detail Recording (CDR) call
- data error
- failure in line number control processor
- integrity lost while receiving digits
- incoming or two-way CAMA trunk (trunk group type SC) with Bell format is routed if the start signal received is not the same as the one specified in field SDATA (subfield GRPTYPE) in table TRKGRP
- ring failure

Gateway If this treatment is used for calls incoming on private lines, R1 signaling trunks, or international 101 test lines, the following error message is generated:

```
During call routing, routing procedure aborts
```

If this treatment is used for calls incoming on private lines, signaling trunks, or international 101 test lines, the following error message is generated:

```
During translation verification, routing procedure
aborts
```

If this treatment is used for calls incoming on private lines, R1 signaling trunks, or international 101 test lines, the following error message is generated:

```
During call screening, call access table DCACCTL, and
data in table is invalid
```

If this treatment is used for calls outgoing on N6 signaling trunks, the following error message is generated:

```
Call failure occurs
```

Tandem This treatment is redundant; set it to overflow or to a similar tone.

TBSY

Toll busy (179)

Local, Local/Toll This treatment is used if a busy condition is encountered during a toll call attempt. The DMS switch determines if the call is a toll call, then routes to this treatment if it is unable to complete the call.

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

TDBR

Test desk bridged (62)

Local, Local/Toll If an AT&T mechanized loop tester or a 14 local test desk (LTD) signaling type trunk (trunk group type TD) is connected to a line with option SUS, RSUS, PLP or RMB activated, and the trunk is connected in idle bridge mode to that line, the line routes to this treatment if either the test desk closes its tip or ring loop, or the line itself goes off-hook.

This treatment consists of a one second dial tone burst, then lockout.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

Recommended datafill For TDBR to function properly, the following tables must be datafilled as shown below:

- A pseudo CLLI must be datafilled in table CLLI.
- Table OFRT must contain an office route to point to entry DTBURST in table TONES.
- Table TMTCNTL.LNT must contain an entry for TDBR.
- Table TONES must be datafilled to provide the one second dial tone burst.

For table CLLI, the recommended datafill is

```
DTBURST <adnum> <trkgrpsiz> DIAL_TONE_BURST
```

For table OFRT, the recommended datafill is

```
<number> S D DTBURST S D LKOUT $
```

For table TMTCNTL.LNT, the recommended datafill is

```
TDBR N T OFRT <number>
```

For table TONES, the recommended datafill is

```
DTBURST 0 100 1000000000000000 DIAL_TONE 7 10
```

TDND

Toll denied (21)

Local/Toll This is the treatment that a line or trunk is routed to if one of the following conditions are encountered:

- a POTS or IBN line with the toll denied option (option TDN assigned in table LENLINES) originates a dial direct call that is not intercepted by class of service screening
- a coin line with toll denied option (option TDN assigned in table LENLINES) originates an operator assisted (OA) call that is not intercepted by class of service screening (where the switch has AMR5 signaling and a line other than coin, with toll denied option, originates a zero plus (0+) or zero minus (0-) call and field ZEROMPOS in table LINEATTR is other than AMR5)

- incoming or two-way CAMA/AMR5 (trunk group type SC) with AMR5 signaling format, if the category code requires toll denied treatment
- the category code to originating type toll denied is specified in table AMRCAT
- a POTS or IBN line routed to this treatment during toll call other than 1 555; 1 NPA555; or 1 800, and IBN line has toll denied restriction specified with direct outward dial access code in table IBNXLA

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

TESS

Terminating service suspension (28)

Local, Local/Toll This treatment is used if an incoming operator (trunk group type OI) verification call is made to a busy line with suspended service option (SUS) assigned in table LENLINES or table IBNLINES.

A call is made from a line or trunk to a line that has the option SUS assigned in table LENLINES or IBNLINES.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

ISDN This treatment occurs if incoming calls are barred.

TINV

Temporarily invalid authorization code (54)

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Tandem Status of authorization code is temporarily invalid.

TOVD

Toll overload (37)

Local, Local/Toll This treatment is used if the calling line is denied access to toll network due to activation of Toll Network Protection feature.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

TRBL

Trouble intercept (30)

Local, Local/Toll A call is routed to an incoming operator (trunk group type OI) verification call to busy line which has the plug up option (PLP) assigned in table LENLINES or IBNLINES.

A call is routed if a test desk (trunk group type TD) position tries to post a line using directory number (as opposed to LEN) dialing and the line has plug up (PLP) option assigned in table LENLINES or IBNLINES.

A call is routed to TRBL if a line or trunk calls a line that has option plug up (PLP) assigned in table LENLINES or IBNLINES.

ISDN This treatment is used for calls to DNs that are in a manually set trouble busy state.

Progress message contains cause 27:

```
Destination out of order
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

TRGB

Trigger block

TRRF

Terminating revertive action for frequency ringing (41)

Local, Local/Toll This treatment is required for local or combined local/toll switching units that have multiparty lines with frequency ringing.

This is the treatment that a called party is routed to if, upon going off-hook, both the calling and called parties share the same multiparty line provisioned with frequency ringing.

Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

UCCN

Unpaid credit card number (144)

Tandem This treatment is used in an international DMS-250 switch with Credit Card Calling feature (with or without remote database) if a credit card number is marked as UNPAID in table CCTAB.

The call is taken down once this treatment is applied.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

UNCA

Unauthorized CAMA call (13)

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

UNDN

Unassigned directory number (17)

Local/Toll This treatment is used if, for the digits dialed, the operating company has specified (in table DNROUTE), that treatment UNDN is to be applied.

Gateway Call incoming on private line, R1 signaling trunk, or international 101 test line. Call outgoing on N6 signaling trunk.

```
During call connection, terminating exchange
determines that national number received has ceased
to be used, and called subscriber must be reached by
another number
```

ISDN Number is unassigned (unallocated).

Progress message contains network specific cause 1:

```
Vacant code
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

Tandem This treatment is redundant; set it to overflow or to a similar tone.

UNDT

Undefined treatment (0)

Local/Toll This is the default value for entries in class of service screening and prefix treatment tables if treatment is not required.

The standard datafill for this treatment should be T120.

Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

UNIN

Unauthorized INWATS call (22)

Local/Toll This treatment is used in a toll or combined local/toll switch for the following types of calls:

- INWATS originating call if a 800 Nx2 number is dialed from outside the state and NX2 codes are reserved for intrastate calls
- INWATS originating call if an 800 NNx-xxxx number is dialed from within the state
- INWATS terminating call
  - — if the call originated from a band that is farther away than the terminator has paid for to an INWATS line if the called number is not a valid INWATS number (800), the call is not direct dialed, or
  - — if the call originates in the local free calling area and is therefore not billable

Local/Toll AT or EAEO This treatment is used in an access tandem (AT) or equal access end office (EAEO) switch in service switching point (SSP) calls such as E800, 800+, and PVN, if there is a CCS7 application failure such as an invalid carrier identification for 800 calls.

Tandem In offices with the Service Access Code (SAC) Network Management and Code Controls feature, treatment UNIN is provided if a call reaches the SACNWM selector in table HNPACONT without first having been declared a SAC call.

Gateway This treatment is redundant; set it to overflow or to a similar tone.

UNMC

User Not Member of Closed User Group (CUG)

This treatment is used (set) by the Closed User Group service to indicate that an incoming ISUP call must be released with a cause value of #87 (User Not Member of CUG). This treatment is applied when, for example, an incoming call with "CUG Without Outgoing Access" attempts to access a called user which is not subscribed to the CUG service.

UNOW

Unauthorized OUTWATS call (20)

Local, Local/Toll This is the treatment in a local or combined local/toll switch to which an OUTWATS line is routed if dialing an out-of-band code.

For information on assigning bands to codes, see table OWTZONES.

For information on assigning bands to OUTWATS lines, see table LENFEAT.

Local/Toll, Gateway, Tandem This treatment is redundant; set it to overflow or to a similar tone.

UNPM

Unprogrammed mobile

UPAB

Universal public access blocked (135)

Tandem This treatment is used if call origination by universal public address class (UPAC) phones is disallowed.

Local/Toll, Gateway, ISDN This treatment is redundant; set it to overflow or to a similar tone.

VACS

Vacant speed number (65)

Tandem This treatment is used if a subscriber dials a number that is a public speed form, but the speed number is not in the database.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

VACT

Vacant code treatment (6)

Local/Toll This treatment is used if one of the following conditions is encountered:

- A line dials a toll terminating center code (code type TTC in table HNPACODE); operator code (code type OPC3, OPC4 or OPC5 in table HNPACODE); a terminating INWATS number (1XB-xxxx), a tandem INWATS number (0XB-NNx-xxxx); an NPA code; or a number where the entry for the number in the foreign NPA code table (FNPA) specifies unauthorized CAMA.
- a 0 DA call including 0 411; 0 555; 0 NPA555; and 0 800. These calls are toll denied by setting the office parameter BLOCK_0_INF_INW_CALLS in table OFCVAR to Y (yes)
- An unassigned code in the country code table is dialed.
- No translation system is specified in the standard pretranslator subtable for digit or digits that have preroute selectors N, V, Z, R or P. This generates a software error message.
- There is an originating INWATS call, and no data is specified in table INWORICN for the INWATS number dialed.
- There is an originating INWATS call, if the originating screening office is also the terminating screening office, but no terminating service office (TSO) code has been specified in the INWATS originating control table for the NXX code dialed.
- There is a terminating INWATS call, if no data has been specified in the INWATS terminating control table for the incoming digits
- A station ringer call and the last four digits do not match those of the calling line, and the call is defined as no prefix local. • Blue box call cutoff occurs.
- A line-to-testline or operator-to-testline call occurs.
- There is failure to dial single party direct dial (SPDD) or single circuit.
- There is a failure or not enough digits on speed calling or call forwarding updates.
- There is a three-way call attempt to automatic number announcement, outgoing service desk, or revertive call.

Gateway Call incoming on R1 signaling trunk.

During call digit collection, call failure occurs because of the following:

- no start dial
- integrity failure
- mutilated digit

The last digits received on MF trunk and digit stream contains a valid KP signal but the ST digit is one of the following:

- non-existent
- a second KP
- invalid

Call incoming on private line, R1 signaling trunk, or international 101 test line. Call outgoing on N6 signaling trunk.

```
Call has transmitted national number to terminating
exchange, and terminating exchange has determined
that transmitted national number is vacant or spare
```

Call incoming on private line, R1 signaling trunk, or international 101 test line.

During call screening, call failure occurs because of the following:

- call uses table DESTCTL and table not datafilled
- result from table DCACCTL is D

Call incoming on private line, R1 signaling trunk, or international 101 test line.

During call translation, call failure occurs because of the following:

- overseas call on trunk group that has NCTR specified against field CCTRNSL
- country code table specified on trunk group not datafilled
- terminating call to North America and table OVNTRNSL not datafilled
- subscriber dialed terminating call to North America with D or E digit equal to 0 or 1
- subscriber dialed terminating call to North America with digits NPA-555-xxxx
- number of digits received greater than maximum number specified in tables MMAX, INPRTRNS, or OVNTRNSL

Tandem This is the treatment to which a call is routed if an unassigned NPA code, office code, or country code is dialed, or incoming exclusion specifies that a call is to be blocked because a subscriber dialed a number in the local calling area.

ISDN Number is unassigned (unallocated).

Progress message contains network specific cause 1:

```
Vacant code
```

and progress indicator 8:

```
In-band information or appropriate pattern not
available
```

VCCT

Vacant country code treatment (95)

Tandem This is the treatment to which a call is routed if call processing returns from translating an IDDD call as designated by the pretranslator (prefix digits 011 or 01), and there was no datafill for the network for country code dialing. This DMS-250 treatment applies to universal translations as well as normal international translations.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

VPFL

Virtual private network call failure (155)

Local, Local/Toll, IBN This treatment is used if a subscriber attempts a virtual private network (VPN) call, but does not subscribe to the service. Operational measurements and logs are kept to compile statistics on call attempts.

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

VPFX

Vacant prefix code (138)

Tandem This treatment is used in an international DMS-250 switch with Call Back International Subscriber Dialed (ISD) feature, if the XY (prefix) or ZZ (special service) digits are not datafilled correctly.

This treatment is used in an international DMS-250 switch with Credit Card Calling feature (with or without remote database), if the 00XY digits or the service code digits are not datafilled in translator.

The call is taken down once this treatment is applied.

Local/Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

WUCR

Wake-up call request (189)

Local, Local/Toll, IBN, ISDN This treatment is used after a third attempt is made at a subscribers wakeup call. After an unsuccessful third attempt, the call is routed to this treatment and the event recorded in a log and also recorded as an operational measurement (OM).

Toll, Gateway This treatment is redundant; set it to overflow or to a similar tone.

Datafill

The following table lists the datafill for table TMTCNTL.TREAT.

A description of field names for subtable TMTCNTL.TREAT if the treatment datafill consists of a CLLI from one of the tones in table TONES is shown in the table that follows.

Field, subfield, and refinement descriptions for table TMTCNT.TREAT

Field	Subfield or refinement	Entry	Explanation and action
TREATMT		alphanumeric (1 to 4 characters)	Treatment. Enter the treatment name.
LOG		Y or N	Log. Enter Y (yes) for a trunk or line message 138 printout each time translation is routed to a treatment. Otherwise, enter N (no).
FSTRTE		see subfields	First route. This field consists of subfields FSTRTSEL and CLLI.
	FSTRTSEL	S	First route selector. Enter the first route selector S.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI of the tone to which translation routes.

A description of field names for subtables TMTCNTL.TREAT if the treatment datafill points to a route list in table OFRT as shown in the table that follows.

Note: TABID entries for IBNTRE, IBNRT1, IBNRT2, IBNRT3, IBNRT4, TOPSAMA, RRTE, TTL4, and TOPS are not valid for table TMTCNTL, subtable TREAT.

Field, subfield, and refinement descriptions

Field	Subfield or refinement	Entry	Explanation and action
TREATMT		alphanumeric (1 to 4 characters)	Treatment. Enter the treatment name.
LOG		Y or N	Log. Enter Y (yes) for a trunk or line message 138 printout each time translation is routed to a treatment. Otherwise, enter N (no).
FSTRTE		see subfields	First route. This field consists of subfields FSTRTSEL, TABID, and KEY.
	FSTRTSEL	T	First route selector. Enter the first route selector T.
	TABID	OFRT, OFR2, OFR3, or OFR4	Table name. Enter the office route table name .
	KEY	Table name. Enter the office route table name.	Key. Enter the index into the office route table which defines the route list for the treatment. The entry zero (0) cannot be datafilled by the operating company.

Table history

NA013

Added treatment CRTC to the range of values for the TREATMT field.

EUR010

Added treatment RDIR to the range of values for the TREATMT field. Activity AU3275.

NA010

Added treatments CMGA and CMGD to the range of values for the TREATMT field.

NA009

Added PODN treatment for LNP.

NA008

Added treatments RMIA and RMID.

EUR006

Added treatments FACJ and UNMC as part of ETSI ISDN world trade support. Added reference to operational measurements group, TRMTCU3.

NA007

Added treatments LNPM and QRNF for Local Number Portability (LNP).

Added treatments ICSD and ICSA.

TL006

Added treatments MSOA, ATHF, OTAR, UNPM, PNUN and ISAX.

NA005

Added treatment RTEE.

Added Exchange Routing Error (25) to the causemap table.

NA004

Treatments LDAA and LDAD were added.

CSP02

Added treatments AIND and AINF. A sentence was added to the explanation of treatment DNTR about the DN of an ACD INCALLS key.

TMTMAP

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Table name

Treatment to Cause Map Table

Table TMTMAP

Table TMTMAP provides mapping of DMS-100 treatments to call failure messages supported by certain Signaling System 7 protocols. Datafill in the table determines whether the treatment is reported to the preceding exchange (and if so, by what message), or whether the DMS switch applies the treatment locally, in which case the usual datafill in table TMTCNTL, subtable TREAT, determines the outcome.

Table TMTMAP also provides mapping of DMS-100 treatments for remote failure call scenarios between TS14 or ETSI PRI and AISUP, ANSI-ISUP, and I-ISUP calls.

For trunk type GTRK (global trunks), datafill table TRKTRMT instead of table TMTMAP.

There are as many variations in mapping of treatments to causes as there are protocols. However, for any protocol, there is only one fixed cause-to-treatment mapping that can occur in the DMS-100 switch.

Table TMTMAP changes the treatment-to-cause mapping. In NA14 (prior to SN01), the FLXCMAP table allows operating company personnel to assign a treatment to a cause.

The key to table TMTMAP is the signaling system protocol variant, the treatment code, and bearer capability. The protocol variant is an attribute of the incoming trunk and is derived from datafill in table TRKSGRP.

TS14 or ETSI PRI and AISUP, ANSI-ISUP, and I-ISUP calls do not datafill protocol variant PRI in table TRKSGRP.

Each time a new treatment code is added to subtable TMTCNTL.TREAT, tuples for the new treatment can be datafilled in table TMTMAP. For example, if a new treatment called FRED is

created in an office with the software packages having ISUP, BTUP, TUPPLUS, DPNSS, and IBNISUP defined in them, the following key fields can be datafilled in table TMTMAP:

- ISUP FRED ALLBC
- BTUP FRED ALLBC
- TUPPLUS FRED ALLBC
- DPNSS FRED ALLBC
- IBNISUP FRED ALLBC

If an event is encountered that requires the application of a treatment for which a match in table TMTMAP cannot be found, CCS7 call processing software provides a default TMTMAPVAR for the unmatched treatment, which goes to Reorder (treatment 25). The default value is:

```
Q764 RODR ALLBC ISUP NOLOCAL NORMUNSP LOCLNET N
```

Cause-to-treatment reference

If an originating or interworking office receives a CAUSE value in an ISUP release with a CAUSE message, the receiving office accesses table CAUSEMAP to map the CAUSE value back to a treatment and then applies the treatment.

Note: Unlike the contents of table TMTMAP, table CAUSEMAP is hard-coded and cannot be viewed or modified using the DMS table editor.

The following cross-reference tables have been completed to allow operating companies to reference treatments to causes. The following conditions apply to the table:

- The cause descriptor is an internal DMS-100 long-form description for the cause indicator.
- The cause number is the American National Standards Institute (ANSI) cause value, a telecommunications industry standard number.
- The cause abbreviation is the value that can be viewed in table TMTMAP under field CAUSE, which is datafilled by the operating company.

- The treatment is a value that is datafilled in table TMTCNTL, subtable TREAT, which is datafilled in field TMT by the operating company.
- The treatment number is a value that is assigned to a TREATMENT and is referenced by number by operating company personnel.

ISUP cause to DMS-100 treatment cross-reference (from table CAUSEMAP)

Cause Descriptor	Number	Abbreviation	Treatment	Number
ADDRESS_INCOMPLETE	28	ADDINCOM	PDIL	2
BC_NOT_AUTHORIZED	57	BCNAUTH	CNAC	113
BC_NOT_IMPLEMENTED	65	BCNIMPL	BCNI	161
BC_NOT_PRESENTLY_AVAIL	58	BCNAVAIL	CNAC	113
CALL_REJECTED	21	CALLREJ	CREJ	134
CHNLTYPE_NOT_IMPL	66	CHNLNIMP	CONP	98
DEST_OUT_OF_SERVICE	27	DOOSRVC	TRBL	30
EXCHANGE_ROUTING_ ERROR	25	XLAFAIL	RTEE	dynamic 217-255
FACILITY_NOT_IMPL	69	FACNIMP	FCNI	167
FACILITY_REJECTED	29	FACREJ	RODR	25
IC_CALLS_BARR_CUG	55	INCBCUG (see note 1 at end of table)	FNAL	68
INCOMPATIBLE_DEST	88	INCOMDST	CNAC	113
INTERWORKING_UNSPEC	127	INTWUNSP (see note 1 at end of table)	RODR	25
INVALID_CALL_REF_VALUE	81	INVCRVAL (see note 1 at end of table)	RODR	25
INVALID_MESSAGE	95	INVMSG (see note 1 at end of table)	INVM	169
			RODR	25
INV_PARM_CONTENTS	100	INVPARMC (see note 1 at end of table)	SSTO	23

ISUP cause to DMS-100 treatment cross-reference (from table CAUSEMAP)

Cause Descriptor	Number	Abbreviation	Treatment	Number
MISDIALED_TRK_PREFIX	5	MISDTRPR (see note 1 at end of table)	RODR	25
MISROUTED_CALL_TO_ PORTED_NUMBER	26	MISRLNP	LNPM	dynamic 217-255
MSGTYPE_NOT_IMPL	97	MSGNIMPL (see note 1 at end of table)	SSTO	23
NORMAL_CLEARING	16	NORMCLR	RODR	25
NO_ANS_FROM_USER	19	NOANSWER	ANTO	66
			RODR	25
NO_PREEMPT_CIRCUIT_ AVAIL	46	NPMPTCKT	BLPR	47
CI_NO_CIRCUIT_AVAILABLE	34	NOCIRCAV	NOSC	1
NO_USER_RESPONDING	18	NOUSRESP	NTRS	133
NR_TO_DESTINATION	3	NRTODEST	VACT	6
NR_TO_TRANSIT_NTWK	2	NRTOTN	CACE	79
NTWK_OUT_OF_ORDER	38	NTWKOOO	SYFL	14
NORMAL_UNSPECIFIED	31	NORMUNSP	DISC	45
NUMBER_CHANGED	22	NUMCHANG	CNAC	113
OUTGOING_CALLS_BARRED	52	OTGCBARD	CNAD	137
PARAMETER_NOT_IMPL	99	PARMNIMP	IIEC	180
PARM_NOT_IMPL_PASSED_ ON	103	PNIPASS	SSTO	23
PREEMPTION	45	PREEMPT	PMPT	51
PROTOCOL_ERROR	111	PROTERR	PERR	168
			SSTO	23
REQ_CHANNEL_UNAVAIL	44	CHANUNAV	NCRT	24
RESOURCE_UNAVIALABLE	47	RESUNAV	NOSR	93

ISUP cause to DMS-100 treatment cross-reference (from table CAUSEMAP)

Cause Descriptor	Number	Abbreviation	Treatment	Number
RESTRICTED_BC_INFO	70	RESBCINF	CNAC	113
SEND_SPECIAL_INFO_TONE	4	SSINFTN	RODR	25
SERV_OPT_NOT_AVAIL	63	SONAVAIL	NACK	78
SERV_OPT_NOT_IMPL	79	SONIMPL	FNAL	68
SWITCHING_EQUIP_CONG	42	SWEQCONG	FECG	35
TEMPORARY_FAILURE	41	TEMPFAIL	CHNF	160
UNALLOCATED_NUMBER	1	UNALLOC	BLDN	18
			UNDN	17
USER_BUSY	17	USERBUSY	BUSY	19
USER_INFO_DISCARDED	43	UNIFDISC	RODR	25
USER_NOT_MEMBER_CUG	87	USERNCUG	UNMC	dynamic

Note 1: Represents a CAUSE with a default treatment.

Note 2: For causes 1, 17, and 27, when the calling party category in the ISUP IAM is equal to “test call”, the only valid cause values that can be provided are “User Busy”, “Destination out of Service”, or “Un-allocated Number”. The terminating party is assumed to be test equipment and if the terminating party is neither busy nor out of service (for example ringing time-out), a cause value of “Un-allocated Number” is returned.

Note 3: For cause 19, when the TMTPROC is set to LOCAL and the treatment is hit after the ACM message is sent, for example, ringing time-out of the called party, a PAM or a CPG (depending on XPM load) message with the properly coded cause value is sent to the originating switch. Otherwise, the cause value is coded in the Optional Backward Call Indicator of the ACM. This behavior also applies to ISLOCAL, INTLOCAL, ISDNLCL, and ISDNRTE TMTPROCs if the conditions for handling them locally are met (see definitions of these TMTPROCs for more information).

The following *ISUP cause indicator class default treatment* table lists the conditions that apply to each cause class treatment defined in table CAUSEMAP. In addition:

- The cause classes are taken from ANSI standards for ISUP causes.
- A generic treatment is assigned to a cause class in order to fit the class functionality. If new causes in a class are developed, the default treatment for the cause is used until a more appropriate treatment for a cause is developed.

The *ISUP cause indicator class default treatment* table below details the class default treatments.

ISUP cause indicator class default treatment

Cause class number	Cause indicator range description	Cause class range	Class default treatment
1	Normal event	0 to 31	RODR
2	Resource unavailable	32 to 47	NOSR
3	Service or option not available	48 to 63	FNAL
4	Service or option not implemented	64 to 79	NACK
5	Invalid message	80 to 95	RODR
6	Protocol error	96 to 111	SSTO
7	Interworking	112 to 127	RODR

The following *PRI cause to DMS-100 treatment cross-reference* table lists cause values mapped for ISUP to PRI and PRI to ISUP interworking for the APC market.

PRI cause to DMS-100 treatment cross-reference

Cause descriptor	Number	Cause abbreviation	Treatment	Number
ADDRESS_INCOMPLETE	28	ADDINCOM	PDIL	2
BC_NOT_AUTHORIZED	57	BCNAUTH	SCUN	109
BC_NOT_IMPLEMENTED	65	BCNIMPL	BCNI	161
BC_NOT_PRESENTLY_AVAIL	58	BCNAVAIL	NOBC	181
Note: Represents a CAUSE with a default treatment				

PRI cause to DMS-100 treatment cross-reference

Cause descriptor	Number	Cause abbreviation	Treatment	Number
CALL_REJECTED	21	CALLREJ	CREJ	134
REQUESTED_CIRCUIT_NOT _AVAILABLE	44	CHANUNAV	GNCT	58
CHNLTYPE_NOT_IMPL	66	CHNLNIMP	SONI	170
CHANNEL_UNACCEPTABLE	6	CHUNACC	CHNF	160
CALL_AWARDED_AND_BEING_ DELIVERED_IN_AN_ESTABLISHED _STATE	7	CALLAWRD	CREJ	134
DEST_OUT_OF_SERVICE	27	DOOSRVC	TESS	28
FACILITY_NOT_IMPL	69	FACNIMP	CREJ	134
FACILITY_REJECTED	29	FACREJ (see note)	NACK	78
IDENTIFIED_CHANNEL_DOES_ NOT EXIST	82	ICHNEXT	CHNF	160
INCOMPATIBLE_DEST	88	INCOMDST	CNAC	113
INTERWORKING_UNSPEC	127	INTWUNSP (see note)	CREJ	134
INVALID_CALL_REF_VALUE	81	INVCRVAL (see note)	PERR	168
INVALID_MESSAGE	95	INVMSG (see note)	SONI	170
INV_PARM_CONTENTS	100	INVPARMC (see note)	SONI	170
INVALID_TRANSIT_NETWORK_ SELECTION	91	INVTNSEL	CREJ	134
MSGTYPE_NOT_IMPL	97	MSGNIMPL (see note)	SONI	170
MSGTYPE_NOT_COMPATIBLE	101	MSGNCWCS	SONI	170
MSGTYPE_NOT_COMPATIBLE_ WITH_CALL_STATE	98	MSGNCWSMT	PERR	168

Note: Represents a CAUSE with a default treatment

PRI cause to DMS-100 treatment cross-reference

Cause descriptor	Number	Cause abbreviation	Treatment	Number
NORMAL_CLEARING	16	NORMCLR	CREJ	134
CI_NO_CIRCUIT_AVAILABLE	34	NOCIRCAV	GNCT	58
NO_USER_RESPONDING	18	NOUSRESP	NTRS	133
NR_TO_DESTINATION	3	NRTODEST	VACT	6
NR_TO_TRANSIT_NTWK	2	NRTOTN	CACE	79
NTWK_OUT_OF_ORDER	38	NTWKOOO	FECG	35
USER_ALERTING_NO_ ANSWER	19	NOANSWER	CREJ	134
NORMAL_UNSPECIFIED	31	NORMUNSP	CREJ	134
NON-SELECTED_USER_ CLEARING	26	NSUSERESP	CREJ	134
NUMBER_CHANGED	22	NUMCHANG	CHAN	117
PARAMETER_NOT_IMPL	99	PARMNIMP	IIEC	180
PROTOCOL_ERROR	111	PROTERR	PERR	168
RESPONSE_TO_ENQUIRY	30	RSPTENQ	RODR	25
RESOURCE_UNAVAILABLE	47	RESUNAV	NOSR	93
RESTRICTED_BC_INFO	70	RESBCINF	SCUN	109
PARAMETER_NOT_PRESENT	96	REQINFNP	SONI	170
REQUESTED_FACILITY_NOT_ SUBSCRIBED	50	RFACNSCRB	FNAL	68
RECOVERY_ON_TIMER	102	RONTMREXT	RODR	25
QUALITY_OF_SERVICE_ UNAVAILABLE	49	QSVCUNAV	CREJ	134
SERV_OPT_NOT_AVAIL	63	SONAVAIL	SCUN	109
SERV_OPT_NOT_IMPL	79	SONIMPL	SONI	170
SWITCHING_EQUIP_CONG	42	SWEQCONG	NBLH	9

Note: Represents a CAUSE with a default treatment

PRI cause to DMS-100 treatment cross-reference

Cause descriptor	Number	Cause abbreviation	Treatment	Number
TEMPORARY_FAILURE	41	TEMPFAIL	SYFL	14
UNALLOCATED_NUMBER	1	UNALLOC	BLDN	18
USER_BUSY	17	USERBUSY	BUSY	19
USER_INFO_DISCARDED	43	UNIFDISC	RODR	25
Note: Represents a CAUSE with a default treatment				

Datafill sequence and implications

The following tables must be datafilled before table TMTMAP:

- BCDEF
- TMTCNTL
- DNROUTE

Although the datafill in tables TMTMAP and TMTCNTL is closely related in the operation of this feature, there is no dependency that limits the datafill sequence. Default data is automatically added when the software load is prepared for each protocol variant in the switch. Because protocol variants depend on the software package, it is unlikely that all protocol variants will appear in one switch.

For trunk type GTRK (global trunks), datafill table TRKTRMT instead of table TMTMAP.

Table size

0 to 3540 tuples.

The total number of tuples is 0 to 256 times the number of protocols in the switching unit tuples. The current number of protocols available is 15. The absolute maximum number of tuples is 3584 (256 x 15).

When DPNSS is included in the load, the table is increased by a number of tuples equal to the number of treatment codes defined in the DMS-100 switch.

When BTUP is included in the load, the table minimum is 0 and the table maximum is 32767 tuples. Table size, set at entry time, depends on software; the number of tuples depends on the number of protocols added to table TMTMAP and the number of DMS-100 treatments.

No office parameters influence the table size or control store use.

Each tuple in table TMTMAP requires three bytes of data store memory. Memory is dynamically allocated.

Datafill

The following table defines datafill for table TMTMAP.

Field, subfield, and refinement descriptions for table TMTMAP

Field	Subfield or refinement	Entry	Explanation and action
TMTMAP		see subfields	*Key to table TMTMAP* This field consists of subfields PROTOCOL, TMT, and BC_CT.
	PROTOCOL		*Protocol* Enter one of the following values:
		AISUP	Enter AISUP if this tuple applies to group type IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(ISUP).
		ATUP	Enter ATUP if this tuple applies to gateway type GW trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(ATUP).
		BTUP	Enter BTUP if this tuple applies to trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(BTUP).
		CCITT7	Enter CCITT7 if this tuple applies to IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(CCITT7).
		DPNSS	Enter DPNSS if this tuple applies to trunks that are datafilled in table TRKSGRP with SIGDATA(DPNSS).
		IBNISUP	Enter IBNISUP if this tuple applies to IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(IBNISUP).
		ISUP	Enter ISUP if this tuple applies to IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(ISUP).

Field, subfield, and refinement descriptions for table TMTMAP

Field	Subfield or refinement	Entry	Explanation and action
		JPNISUP	Enter JPNISUP if this tuple applies to type IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(JPNISUP).
		NCC17	Enter NCCI7 if this tuple applies to type IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(NCCI7).
		Q764	Enter Q764 if this tuple applies to type IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(Q764).
		Q767	Enter Q767 if this tuple applies to type IBN7 trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(Q767).
		Q931	
		R2	Enter R2 if this tuple applies to gateway (GW) type trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(R2).
		SSUTR2	Enter SSUTR2 if this tuple applies to the French TUP protocol.
		TUP	Enter TUP if this tuple applies to type GW trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(TUP).
		TUPE	Enter TUPE if this tuple applies to type GW trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(TUPE).
		TUPPLUS	Enter TUPPLUS if this tuple applies to type GW trunks that are datafilled in table TRKSGRP with SIGDATA(C7UP) and PROTOCOL(TUPPLUS).

Field, subfield, and refinement descriptions for table TMTMAP

Field	Subfield or refinement	Entry	Explanation and action
		PRI	Enter PRI if this tuple applies to ISUP to PRI and PRI to ISUP networkings. Note: In the UK market, the protocols available on the DMS-100 switch may be limited, depending on the switch load.
	TMT	alphanumeric (1 to 4 characters)	*Treatment code* Enter one of the treatment codes defined in table TMTCNTL.TREAT, field TREATMT. (See Description of Treatment Codes section in TMTCNTL.TREAT module) This is the treatment that is applied to the specific ISUP cause value indicated in field CAUSE.
	BC_CT	ALLBC, SPEECH, VOICE, DATA, 64KDATA, 56KDATA, 3_1KHZ, or 7_KHZ	*Bearer capability call type* Enter the specific bearer capability call type that is mapped differently from other bearer capability call types. The default value is ALLBC, meaning that all bearer capability call types are mapped to the same treatment. Bearer capability types must be datafilled in table BCDEF before they can be datafilled in subfield BC_CT. ***Note:*** Changing the value of this subfield on BTUP or DPNSS trunks may not have any effect.
TMTMPVAR		see subfield	*Treatment MAP* This field consists of selector field FORMAT.
	FORMAT	Alphanumeric	*Protocol format* Enter one of the following values:
		ATUP	ATUP for PROTOCOL(ATUP)
		BTUP	BTUP for PROTOCOL(BTUP)
		TUPPLUS	TUPPLUS for PROTOCOL(TUPPLUS)
		R2	R2 for PROTOCOL(R2)
		IBNISUP	IBNISUP for PROTOCOL(IBNISUP)

Field, subfield, and refinement descriptions for table TMTMAP

Field	Subfield or refinement	Entry	Explanation and action
		TUPE	TUPE for PROTOCOL(TUPE)
		DPNSS	DPNSS for PROTOCOL(DPNSS)
		ISUP	PROTOCOL(AISUP), PROTOCOL(CCITT7), PROTOCOL(ISUP), PROTOCOL(JPNISUP), PROTOCOL(NCCI7), PROTOCOL(Q764), or PROTOCOL(Q767) ***Note:*** In the UK market, the protocol formats available on the DMS-100 switch may be limited, depending on the switch load.
		PRI	PRI for PROTOCOL(PRI)
		SSUTR2	SSUTR2 for the French TUP protocol

Format = ATUP

If the entry in field FORMAT is ATUP, datafill the following refinements

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfield	*ATUP treatment procedure format* This field consists of selector field TMTPROC and refinements. This field determines what action an ATUP gateway trunk takes upon encountering a treatment.
	TMTPROC		*ATUP treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave remaining refinements blank if the treatment is applied locally, according to datafill in table TMTCNTL, subtable TREAT. An in-band tone or announcement is generated, depending on the treatment code in table TMTCNTL, subtable TREAT.
		NOLOCAL	Enter NOLOCAL and datafill refinements MSG and LOG if the user notification is given from a switching office closer to the calling party. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	MSG	ADI, CFL, CGC, FRL, ISC, LOS, NNC, RIN, SCC, SEC, SLI, SSB, SST, or UNN	*ATUP failure message* This field specifies the ATUP failure message sent.
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log is generated, depending on the datafill in table TMTCNTL, subtable TREAT. Otherwise enter N (no). The treatment route list in table TMTCNTL, subtable TREAT is not used, but the Log Report field is. Therefore, a TRK138 log only appears if the particular treatment code has the Log Report enabled in both tables. For TMTPROC(LOCAL), leave this field blank.

FORMAT = BTUP

If the entry in field FORMAT is BTUP, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfield	*BTUP treatment procedure format* This field consists of selector field TMTPROC and refinements. This field determines what action a BTUP gateway trunk takes upon encountering a treatment.
	TMTPROC		*BTUP treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave remaining refinements blank if the treatment is applied locally, according to datafill in table TMTCNTL, subtable TREAT. An in-band tone or announcement is generated, depending on the treatment code in table TMTCNTL, subtable TREAT.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		NOLOCAL	Enter NOLOCAL and datafill refinements BTUPMSG, AFTERACM, and LOG if the user notification is given from a switching office closer to the calling party. This is achieved by sending in the backward direction (toward the originating exchange) a BTUP message that advises the exchange of a call and indicates the reason, so that the originating exchange can take appropriate action. The sending of this message initiates a sequence that releases the incoming trunk, thereby reducing the holding time for calls that are routed to treatment. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**
	BTUPMSG	see subfields	*BTUP pre-ACM failure message* This field consists of selector field PREACM and PREACM value-dependent refinement. This field specifies the failure message that is sent if the treatment occurs prior to the generation of a BTUP address complete message (ACM). If treatment occurs after sending an ACM, the AFTERACM field is consulted instead.
	PREACM		*BTUP pre-ACM fail message selector* Enter the BTUP message sent, if the treatment occurs prior to the generation of a BTUP address complete message (ACM) by entering one of the following values:
		CNA	Connection not admitted. Also complete refinement CNACAUSE.
		CONG	Congestion. Leave the refinement field blank.
		REL	Release. Also complete refinement RELCAUSE.
		SEN	Subscriber engaged. Leave the refinement field blank.
		SOOO	Subscriber out of order. Leave the refinement field blank.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		STR	Subscriber transferred. Leave the refinement field blank.
		TCON	Terminal congestion. Leave the refinement field blank.
	CNACAUSE	0 to 255	*BTUP CNA cause* Enter the reason parameter, in the form of an integer, that appears in the BTUP connection not admitted (CNA) message. Aside from checking the range 0 to 255, the DMS switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2).
	RELCAUSE	0 to 255	*BTUP release cause* Enter the reason parameter, in the form of an integer, that appears within the BTUP release (REL) message. Aside from checking the range 0 to 255, the DMS switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2). **WARNING** **The release cause must not allow immediate reattempts. If the terminating line/trunk is blocked, a reattempt will create a release loop.**
	AFTERACM	see subfield	*BTUP after-ACM failure message* This field consists of selector REL and refinement RELCAUSE. The field specifies the BTUP failure message sent if the treatment occurs after the DMS switch generates a BTUP address complete message (ACM).
	REL	REL	*BTUP after-ACM failure message selector* Enter the type of BTUP message sent if the treatment occurs after the DMS switch has generated a BTUP address complete message (ACM) by entering REL. The only current type is REL.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RELCAUSE	0 to 255	*BTUP after-ACM release cause* Enter the reason parameter, in the form of an integer, that appears in the REL message. Aside from checking the range 0 to 255, the DMS switch does not validate the integer against the values defined in the BTUP specification (BNTR 167, Section 3, Issue 2).
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log report is generated if field LOG in table TMTCNTL, subtable TREAT is set to Y for the treatment code. The route list field FSTRTE of table TMTCNTL, subtable TREAT is not used. Enter N (no) if a log report is not required. For TMTPROC(LOCAL), leave this field blank.

FORMAT = DPNSS

If the entry in field FORMAT is DPNSS, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfields	*Treatment procedure* This field consists of selector field TMTPROC.
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave remaining refinements blank if the treatment is always applied locally.
		NOLOCAL	Enter NOLOCAL and datafill refinements CAUSE and LOG if the treatment is mapped into backward failure information. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE	AB, ACK, AI, BY, CHOS, CNR, CON, CT, FNR, ICB, INC, MISRLNP, MNU, NT, NU, PFR, REJ, ROS, SI, SNU, SOS, SNV, SSI, STU, SU, TRFD, or UNR	*Clearing cause* This field specifies the DPNSS clear request message (CRM) returned. For TMTPROC(LOCAL), leave this field blank.
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log is generated if the datafill in table TMTCNTL, subtable TREAT is used. The treatment route list in table TMTCNTL, subtable TREAT is not used, but the Log Report field is. Therefore, a TRK138 log only appears if the particular treatment code has the Log Report enabled in both tables. Otherwise, enter N (no). For TMTPROC(LOCAL), leave this field blank.

FORMAT = IBNISUP

If the entry in field FORMAT is IBNISUP, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfields	*Treatment procedure* This field consists of selector field TMTPROC.
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave refinement MSG and LOG blank if treatment is always applied locally.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		NOLOCAL	Enter NOLOCAL and datafill refinements MSG and LOG if the user notification is given from a switching office closer to the calling party. This is done by sending, in the backwards direction (towards the originating exchange), an IBNISUP message that advises the exchange of a call, and indicates the reason so that the originating exchange can take appropriate action. The sending of this message initiates a sequence that releases the incoming trunk, thereby reducing the holding time for calls that are routed to treatment. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**
	MSG	ACB, ADI, CFL, CGC, DPN, LOS, MPR, NNC, SEC, SSB, SST, or UNN	*IBNISUP failure message* This field specifies the IBNISUP failure message sent. ***Note:*** A requirement of the IBNISUP protocol is that an EUM message cannot be generated on IBNISUP trunks. Therefore, entry EUM is not allowed in field MSG.
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log is generated, depending on the datafill in table TMTCNTL, subtable TREAT. Otherwise enter N (no). The treatment route list in table TMTCNTL, subtable TREAT is not used, but the Log Report field is. Therefore, a TRK138 log only appears if the particular treatment code has the Log Report enabled in both tables. For TMTPROC(LOCAL), leave this field blank.

FORMAT = ISUP

If the entry in field FORMAT is ISUP, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ISUPPROC	see subfield	*ISUP procedure* This field consists of selector subfield TMTPROC.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		INTLOCAL	Enter INTLOCAL (interworking local) and datafill refinements CAUSE and LOG if the treatment is applied locally. The other conditions required for the use of INTLOCAL are: • The ISDNUP indicator bit must be set to NOT_ISUP_ALL_THE_WAY • The treatment is mapped to a cause and included in a release message if the ISDNUP indicator bit is set to other than NOT_ISUP_ALL_THE_WAY
		ISDNLCL	Enter ISDNLCL (ISDN local) and datafill refinements CAUSE and LOCATION for the treatment that sends a properly coded ACM (ISUP address complete message) to the originating switch only if: • The originating agent is a basic rate access functional (BRAF) set. • The connection is ISUP_ALL_THE_WAY. • A treatment is applied at the local switch.
		ISDNRTE	Enter ISDNRTE (ISDN remote) and datafill refinements CAUSE and LOCATION for the treatment that sends a properly coded ACM (ISUP address complete message) to the originating switch only if: • The originating agent is a BRAF set. • The connection is ISUP_ALL_THE_WAY. • A treatment is applied at a remote switch over per-trunk signaling (PTS) facilities.
		ISLOCAL	Enter ISLOCAL (ISUP local) and complete refinement fields CAUSE, LOCATION, and LOG if the treatment is applied locally. The other conditions required for the use of ISLOCAL are: • The ISDNUP indicator bit must be set to ISUP_ALL_THE_WAY. • The treatment is mapped to a cause and included in a release message if the ISDNUP indicator bit is set to other than ISUP_ALL_THE_WAY.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		LOCAL	Enter LOCAL and leave refinements CAUSE and LOG blank if the treatment is always applied locally.
		NOLOCAL	Enter NOLOCAL and datafill refinements CAUSE, LOCATION and LOG if the treatment is mapped to a cause and always included in a release message. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**

ISUP normal event class (0 to 31)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is normal event (0 to 31), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		ISUP cause. Enter one of the following values:
		ADDINCOM	*Address incomplete* This cause indicates that the called party cannot be reached because the number in a valid format or is not complete.
		CALLREJ	*Call rejected* This cause indicates that the equipment sending this cause does not wish to accept this call, although it could have accepted the call because the equipment sending this cause is neither busy or incompatible.
		DOOSRVC	*Destination out of service* This cause indicates that the called party cannot be reached because the interface to the destination is not functioning correctly. The term *not functioning correctly* indicates that a signaling message could not be delivered to the called party. This could be caused by a physical layer or data link layer failure at the called party, user equipment off-line, or other.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		FACREJ	*Customer interface facility rejected* This cause indicator is sent on receipt of a facility request message from a signaling link.
		MISDTRPR	*Misdialed trunk prefix* Not specified for North American networks.
		MISRLNP	*LNP misrouted a call to a ported number* This cause indicates that an LNP call to a ported number was misrouted.
		NOANSWER	*No answer from user, user alerting* This cause is used if the called party has been alerted but does respond with a connect indication (answer). The ringing time-out value is set using office parameter RNG_TMEOUT_NO_OF_SECS in table OFCENG. The network sends a call clearing message to the calling user.
		NORMCLR	*Normal call clearing* This cause indicates that the call is being cleared because one of the users involved in the call has requested that the call be cleared. In a normal situation, the source of this cause is not the network.
		NRTODEST	*No route to destination* This cause indicates that the called party cannot be reached because the network through which the call has been routed does not serve the destination desired. This cause is supported on a network-dependent basis.
		NOUSRESP	*No user responding* This cause is used if a called party does not respond to a call establishment message with either an alerting or connect indication within the prescribed period of time.
		NORMUNSP	*Normal, unspecified* This cause is used to report a normal event only if no other cause in the normal class applies.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		NUMCHANG	*Number changed* This cause is returned to a calling party if the called number indicated by the calling party is no longer assigned. The new called number can optionally be included in the diagnostic field. If a network does not support this capability,
		NRTOTN	*No route to specified transit network* This cause indicates that the equipment sending this cause has received a request to route the call through a particular transit network, either because the transit network does not exist or because the particular transit network, while it does exist, does not serve the equipment that is sending the cause. This cause is supported on a network-dependent basis.
		SSINFTN	*Send special information tone* This cause indicates that the called party cannot be reached for reasons that are of long-term nature and that the special information tone should be returned to the calling party.
		UNALLOC	*Unallocated number* This cause indicates that the called party cannot be reached, although the number is in a valid format, because it is not currently assigned (unallocated).
		USERBUSY	*User busy* This cause is used if the called party has indicated the inability to accept another call. It is noted that the user equipment is compatible with the call.
		XLAFAIL	This cause occurs when an intermediate switch receives an initial address message (IAM) containing an ISUP hop counter (HC) value, and the HC value has expired. This causes a release (REL) message to be sent back through the network with a cause value set to ìExchange routing errorî.
		XLAFAIL_ANSI	This cause occurs when an intermediate switch receives an initial address message (IAM) containing an ISUP hop counter (HC) value, and the HC value has expired. This causes a release (REL) message to be sent back through the network with a cause value set to “Exchange routing error”. This entry will set the coding standard to National (ANSI) for this cause.

ISUP resource unavailable class (32 to 47)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is resource unavailable (32 to 47), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		*ISUP cause.* Enter one of the following values:
		CHANUNAV	*Requested channel unavailable* Not specified.
		NOCIRCAV	*No circuit available* This cause indicates that there is no appropriate circuit presently available to handle the call.
		NPMPTCKT	Reserved field
		NTWKOOO	*Network out of order* This cause indicates that the network is not functioning correctly and that the condition is likely to last a relatively long period of time. Immediately re-attempting the call is not likely to be successful.
		PREEMPT	Preemption This cause indicates that the equipment sending this cause has pre-empted the circuit for a new call and the existing call should be cleared.
		RESUNAV	*Resource unavailable, unspecified* This cause is used to report a resource unavailable event only when no other cause in the resource unavailable class applies.
		SWEQCONG	*Switching equipment congestion* This cause indicates that the switching equipment generating this cause is experiencing a period of high traffic.
		TEMPFAIL	*Temporary failure* This cause indicates that the network is not functioning correctly and that the condition is not likely to last a long time. The user can attempt another call almost immediately.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		UINFDISC	*User information discarded* This cause indicates that the network could not deliver user information to the remote user as requested. The type of information that could not be delivered includes user-to-user information, low layer compatibility, high layer compatibility, or subaddress, as indicated in the diagnostic. The particular type of user information discarded is optionally included in the diagnostic.

ISUP service unavailable class (48 to 63)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is service not-available (48 to 63), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		*ISUP cause.* Enter one of the following values:
		BCNAUTH	*Bearer capability not authorized* This cause indicates that the user has requested a bearer capability that is implemented by the equipment that generated this cause but the user is not authorized to use it.
		BCNAVAIL	*Bearer capability not presently available* This cause indicates that the user has requested a bearer capability that is implemented by the equipment which generated this cause but that is not available at this time.
		INCBCUG	IC_CALLS_BARR_CUG A TR846 ISDN cause.
		OTGCBARD	OUTGOING_CALLS_BARRED Call not allowed. A TR846 ISDN cause.
		SONAVAIL	*Service or option not available, unspecified* This cause is used to report a service or option not available event only if no other cause in the service or option not available class applies.

ISUP service not implemented class (64 to 79)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is service not implemented (64 to 79), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		*ISUP cause.* Enter one of the following values:
		BCNIMPL	*Bearer capability not implemented* This cause indicates that the equipment sending this cause does not support the bearer capability requested.
		CHNLNIMP	*Channel type not implemented* Not specified.
		FACNIMP	*Facility not implemented* This cause indicates that the requested facility is not implemented and therefore cannot be accessed at this time.
		RESBCINF	*Restricted bearer capability information* Only restricted digital information bearer capability is available. This cause indicates that the calling party has requested an unrestricted version of the requested bearer capability.
		SONIMPL	*Service or option not implemented, unspecified* This cause is used to report a service or option not-implemented event only if no other cause in the service or option not implemented class applies.

ISUP invalid message class (80 to 95)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is invalid message (80 to 95), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		*ISUP cause* Enter one of the following values:

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		INCOMDST	*incompatible destination* This cause indicates that the equipment sending this cause has received a request to establish a call that has low layer compatibility or high layer compatibility attributes (for example, data rate) that cannot be used for this call.
		INVCRVAL	*invalid call reference value* This cause indicates that the equipment sending this cause has received a message with a call reference that is not currently in use.
		INVMSG	*Invalid message, unspecified* This cause is used to report an invalid message event only if no other cause in the invalid message class applies.
		USERNCUG	CDN_USER_NOT_IN_CUG

ISUP protocol error class (96 to 111)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is protocol error (96 to 111), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		*ISUP cause* Enter one of the following values:
		INVPARMC	*Invalid parameter contents* This cause indicates that the equipment sending this cause has received a parameter that it has implemented, but for which one or more of the fields in the parameter are coded in a way that has not been implemented by the equipment sending this cause.
		MSGNIMPL	*Message type non-existent or not implemented* This cause indicates that the equipment sending this cause has received a message with a message type it does not recognize either because this is a message not defined or defined but not implemented by the equipment sending this cause.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		PARMNIMP	*Parameter non-existent or not implemented* This cause indicates that the equipment sending this cause has received a message with optional parameters not recognized because the parameter name is not defined or it is defined but not implemented by the equipment sending the cause.
		PNIPASS	*Parameter not implemented passed on* This cause can be due to either of the following events: • An invalid circuit indicator is received. • A tele-service indicator is received in an Initial Address Message (IAM).
		PROTERR	*Protocol error, unspecified* This cause is used to report a protocol error event only if no other cause in the protocol error class applies.

ISUP interworking class (112 to 127)

If the entry in field FORMAT is ISUP, the entry in field TMTPROC is any entry other than LOCAL, and the class is interworking (112 to 127), datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CAUSE		*ISUP cause* Enter one of the following values:
		INTWUNSP	*Interworking, unspecified* This cause indicates that there has been interworking with a network that does not provide a cause for action it takes. The precise cause for the message cannot be determined.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LOCATION		*Cause indicator location* Enter the LOCATION value included in the cause indication parameter (CIP) included in ISUP ACMs (CCS7 address complete message) and RELs (CCS7 Release message), if the message is sent as part of a treatment. The LOCATION field is stored as a unique 4-bit value in the CIP. The value of the LOCATION field varies with call scenarios, but the common denominator of all these scenarios is that the public network is serving the local user. This field is only applicable if TMTPROC is not LOCAL. The default value is LOCLNET.
		INTLNET	Enter INTLNET if the cause value in the release message is to reference an international switching office.
		LICBS	Enter LICBS if the cause value in the release message is to reference a local interface controlled by a signaling link.
		LOCLNET	Enter LOCLNET if the cause value in the release message is to reference a local public switching office.
		PRIVNET	Enter PRIVNET if the cause value in the release message is to reference an local private switching office.
		RLOCLNET	Enter RLOCLNET if the cause value in the release message is to reference a remote public switching office.
		RPRIVNET	Enter RPRIVNET if the cause value in the release message is to reference a remote private switching office.
		SP1	Reserved for future use
		SP2	Reserved for future use
		TRANSNET	Enter TRANSNET if the cause value in the release message is to reference a transit network switching office.
		UNKNOWN	Enter UNKNOWN if the cause value in the release message is to indicate that the switching office location is unknown.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		USER	Enter USER if the cause value in the release message is to reference the user's switching office.
	LOG	Y or N	*Generate log* Enter Y (yes) to generate a TRK138 log if a release with cause is sent. Otherwise, enter N (no). For TMTPROC(LOCAL), leave this field blank.

FORMAT = R2

If the entry in field FORMAT is R2, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfields	*Treatment procedure* This field consists of selector subfield TMTPROC.
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave refinements MSG and LOG blank if the treatment is always applied locally.
		NOLOCAL	Enter NOLOCAL and datafill refinements MSG and LOG if the user notification is given from a switching office closer to the calling party. This is achieved by sending, in the backwards direction (towards the originating exchange), an R2 message that advises the exchange of a call, and indicates the reason so that the originating exchange can take appropriate action. The sending of this message initiates a sequence that releases the incoming trunk, thereby reducing the holding time for calls that are routed to treatment. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**
	MSG	ACB, ADI, CFL, CGC, DPN, LOS, MPR, NNC, SEC, SSB, SST, or UNN	*IBNISUP failure message* This field specifies which IBNISUP failure message is sent. ***Note:*** A requirement of the IBNISUP protocol is that EUM message cannot be generated on R2 trunks. Therefore, EUM is not an allowable entry in field MSG.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log is generated if the datafill in table TMTCNTL, subtable TREAT. The treatment route listed in table TMTCNTL, subtable TREAT is not used, but the Log Report field is. Therefore, a TRK138 log only appears if the particular treatment code has the Log Report enabled in both tables. Otherwise, enter N (no). For TMTPROC(LOCAL), leave this field blank.

FORMAT = SSUTR2

If the entry in field FORMAT is SSUTR2, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfield	*SSUTR2 treatment procedure format* This field consists of selector field TMTPROC and refinements. This field determines what action an FTUP trunk takes upon encountering a treatment.
	TMTPROC		*SSUTR2 Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave remaining refinements blank if the treatment is applied locally, according to datafill in table TMTCNTL, subtable TREAT. An in-band tone or announcement is generated, depending on the treatment code in table TMTCNTL, subtable TREAT.
		NOLOCAL	Enter NOLOCAL and datafill refinements MSG and LOG if the user notification is given from a switching office closer to the calling party. The default value is NOLOCAL. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	MSG	ACB, ADI, CFL, CGC, LOS, NNC, SEC, SSB, or UNN	*SSUTR2 failure message* This field specifies the SSUTR2 failure message sent. The default treatment is CR.
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log is generated, depending on the datafill in table TMTCNTL, subtable TREAT. Otherwise enter N (no). The default value is N. The treatment route list in table TMTCNTL, subtable TREAT is not used, but the Log Report field is. Therefore, a TRK138 log only appears if the particular treatment code has the Log Report enabled in both tables. For TMTPROC(LOCAL), leave this field blank.

FORMAT = TUPE

If the entry in field FORMAT is TUPE, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfield	*Treatment procedure* This field consists of subfield TMTPROC.
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave refinements MSG and LOG blank if the treatment is always applied locally.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
		NOLOCAL	Enter NOLOCAL and datafill refinements MSG and LOG if the user notification is given from a switching office closer to the calling party. This is achieved by sending in the backwards direction (towards the originating exchange) a TUPE message that advises the exchange of a call and indicates the reason, so that the originating exchange can take appropriate action. The sending of this message initiates a sequence that releases the incoming trunk, thereby reducing the holding time for calls that are routed to treatment. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**
	MSG	ACB, ADI, CFL, CGC, DPN, LOS, MPR, NNC, SEC, SSB, SST, or UNN	*TUPE failure message* This field specifies the TUPE failure message sent. ***Note:*** A requirement of the TUPE protocol is that EUM message cannot be generated on TUPE trunks. EUM is not an allowable value in this field.
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log is generated, depending on the datafill in table TMTCNTL, subtable TREAT. Otherwise enter N (no). The treatment route list in table TMTCNTL, subtable TREAT is not used, but the Log Report field is. Therefore, a TRK138 log only appears if the particular treatment code has the Log Report enabled in both tables. Otherwise enter N (no). For TMTPROC(LOCAL), leave this field blank.

FORMAT = TUPPLUS

If the entry in field FORMAT is TUPPLUS, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfields	*TUPPLUS Treatment procedure* This field consists of selector subfield TMTPROC. This field determines the action taken by a TUP+ gateway trunk after the trunk is routed to treatment.
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave remaining refinements blank if the treatment is applied locally according to datafill in table TMTCNTL, subtable TREAT. An in-band tone or announcement is generated, depending on the treatment code in table TMTCNTL, subtable TREAT.
		NOLOCAL	Enter NOLOCAL and datafill refinements MSG, Q931, and LOG if the user notification is given from a switching office closer to the calling party. This is achieved by sending, in the backwards direction (towards the originating exchange), a TUP+ message that advises the exchange of a call, and indicates the reason so that the originating exchange can take appropriate action. The sending of this message initiates a sequence that releases the incoming trunk, thereby reducing the holding time for calls which are routed for treatment. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**
	MSG	see subfield	*TUP+ failure message* This field consists of selector subfield MSGCODE. This field specifies what TUP+ failure message is sent. ***Note:*** Optionally, the Q931 field may be datafilled to define a different failure message that applies specifically to calls originated from ISDN Q.931 access. (The distinction, if needed, operates from information in the Initial Address message with Additional information (IAI)).

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	MSGCODE		*TUP+ failure message selector* Select the TUP+ message sent by entering one of the following values:
		ACB	Access barred (heading code H1 1010). Leave the refinement field blank.
		ADI	Address incomplete (heading code H1 0100). Leave the refinement field blank.
		CFL	Call failure (heading code H1 0101). Leave the refinement field blank.
		CGC	Circuit group congestion (heading code H1 0010). Leave the refinement field blank.
		EUM	Extended unsuccessful backward set-up information message (heading code H1 1111). Datafill refinement EUMCAUSE.
		LOS	Line out of service (heading code H1 1000). Leave the refinement field blank.
		NNC	National network congestion (heading code H1 0011). Leave the refinement field blank.
		NRU	Network resource unavailable (heading code H1 1101). Leave the refinement field blank.
		SEC	Switching equipment congestion (heading code H1 0001). Leave the refinement field blank.
		SSB	Subscriber busy (heading code H1 0110). Leave the refinement field blank.
		SST	Send special information tone (heading code H1 1001). Leave the refinement field blank.
		UNN	Unallocated number (heading code H1 0111). Leave the refinement field blank.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	EMUCAUSE	0 to 255	*TUP+ EUM failure message cause* Enter the reason parameter, in the form of an integer, that appears in the TUP+ extended unsuccessful backward setup information message (EUM). Aside from checking the range 0 to 255, the DMS switch does not validate the integer against the values defined in the TUP+ specification T/SPS-43-02 Q723+.
	Q931	see subfield	*Alternate TUP+ failure message* This field consists of selector subfield Q931. This field allows the specification of different TUP+ messages for use with calls identified (from information in the initial address message with additional information (IAI)) as Q.931 access.
	Q931	ACB, ADI, CFL, CGC, EUM, LOS, NNC, NRU, SEC, SSB, SST, UNN, or $	*Alternate TUP+ failure message selector* Enter one of two choices: • $ to indicate that no Q931 distinction is necessary. (In this case, the message given by the MSG field is used for all calls without regard to the Q.931 access marking.) • the TUP+ message code sent for calls having originated from Q.931 access as described in fields MSGCODE and EUMCAUSE
	LOG	Y or N	*Generate log* Enter Y (yes) to indicate that a TRK138 log report is generated if field LOG in table TMTCNTL, subtable TREAT is set to Y for the treatment code. The route list field FSTRTE of table TMTCNTL, subtable TREAT is not used. Enter N (no) if a log report is not required. For TMTPROC(LOCAL), leave this field blank.

FORMAT = PRI

If the entry in field FORMAT is PRI, datafill the following refinements.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC	see subfields	*Treatment procedure* This field consists of subfield TMTPROC.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMTPROC		*Treatment procedure selector* Enter one of the following values:
		LOCAL	Enter LOCAL and leave refinements CAUSE and LOG blank if the treatment is always applied locally.
		NOLOCAL	Enter NOLOCAL and datafill refinements CAUSE and LOG if the user notification is given from a switching office closer to the calling party. **WARNING** **You must enter NOLOCAL if any of the trunks using this node are based on SIP or H323**
	CAUSE	PRI_CAUSE	Enter the cause value to send to the originating PRI trunk.
		Y or N	Enter Y to generate a TRK138 log. For TMTPROC (LOCAL), leave this field blank.

Table history

SN07 (DMS)

Added new cause value XLAFAIL_ANSI to map cause value of "exchange routing error" using a coding standard of National (ANSI) if needed.
CR Q00760514-10.

NA014

Added reference to the FLXCMAP table which allows operating company personnel to assign a treatment to a cause.

MMP13

Added protocol SSUTR2 for French TUP.

CCM11

Added causes MISRLNP, OTGCBARD, INCBCUG, and USERNCUG.

APC009

Added protocol variant PRI and conditional datafill applicable to ISUP to PRI interworking.

NA009

Added treatment MISROUTED_LNP_NUMBER.

Treatment PODN added to range of values in field TMTMAP_KEY.TMT

TOLLTRKS

TOLLTRKS

Table TOLLTRKS stores the common language location identifiers (CLLI) of all trunk groups carrying incoming toll completing traffic, and LDI evaluates the CLLI name to determine the long distance status.

Datafill sequence and meaning

The following tables must be datafilled in the sequence listed below:

- Table TRKGRP
- Table TOLLTRKS

Table size

0 to 8192 tuples.

Datafill

The following table lists the datafill for table TOLLTRKS.

Field, subfield, and refinement descriptions for table TOLLTRKS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric, 1 to 16 characters	Common language location identifier. This field specifies the trunk over which long distance calls can come into an office. Enter the CLLI from table TRKGRP (1 to 16 characters)

Table history

SN07

Table TOLLTRKS was added in SN07 by feature A00002558.

TONES

Table TONES

Table TONES defines tones that are generated by line or trunk peripheral modules (PMs).

ATTENTION
For Carrier VoIP loads that support GWCs, ensure that the field FNTONID is not set to TONE_NULL for tones meant for Carrier VoIP lines and trunks. A valid value is required to play the proper tones. Failure to do this will result in unpredictable tone behavior.

The special tones listed below are generated on cards located on a trunk module (TM) or maintenance trunk module (MTM), and defined in table STN instead of table TONES:

- BVTONE: IBN busy verification tone
- CWT: call waiting tone
- DISTCWT: distinctive call waiting tone
- EBOT: executive busy override tone
- ERWT: expensive route warning tone
- OHQT: offhook queuing tone
- ROH: receiver offhook tone

The special tones listed below are generated on cards located on a TM or MTM, and are defined in table SVRCKT instead of table TONES:

- SVDTMF: DIGITONE outpulsing circuit
- SVOBSV: service observing circuit

Where field KIKEY in table KEY_ITEM is datafilled with an entry of TONEKEY, the maximum number of tones that can be allocated is determined by the value of field SIZE in table KEY_ITEM.

Where field DATSKEY in table DATASIZE is datafilled with an entry of TONES, memory for table TONES is allocated in accordance with the value of field SIZE in table DATASIZE.

To extend the length of the table, the size in the DATASIZE table must be increased and a cold restart performed.

Datafill sequence and meaning

There is no requirement to datafill other tables before datafilling table TONES.

The following tables must be datafilled after table TONES:

- CLLIMTCE
- OFRT
- OFR2
- OFR3
- OFR4

Table size

0 to 20 tuples.

United Kingdom

If the switching unit is a DMS-100 switch in the United Kingdom and office parameter MARKET_OF_OFFICE in table OFCENG is set to UK PABX, the recommended values for the entry in table CUSTPROT with field TABNAME equal to TONES are shown in the following table.

UK PABX datafill for table CUSTPROT

Field name	Entry
TABNAME	TONES
READPROT	15
UPDTPROT	30
ALLPROT	30

Datafill

The following table lists the datafill for table TONES.

Field, subfield, and refinement descriptions for table TONES (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the code assigned to the tone in table CLLI.

Field, subfield, and refinement descriptions for table TONES (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
TRAFSNO		0 to 127	*Traffic separation number* LOCAL, TOLL, LOCAL/TOLL, GATEWAY or INTERNATIONAL only: If the switching unit has the optional Traffic Separation software feature, enter the outgoing traffic separation number 0 to 127 assigned to the tone. If traffic separation is not required, enter 0 (zero). The range of values for the outgoing traffic separation number is dependent upon office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. It is recommended that outgoing traffic separation numbers 1 to 9 be reserved for generic separation numbers. See table TFANINT for the assignment of incoming to outgoing traffic separation numbers. With the traffic separation feature, a peg count of all calls, by type of call, can be accumulated between an incoming source (incoming trunk or an originating line attribute) and an outgoing source (outgoing trunk, terminating line attribute, tone or announcement). Direct Dial (DD), Operator Assisted (OA) and No Prefix (NP) are the call types supported.
SEGTIME		10 to 250	*Segment time* Enter the duration of one segment of tone specified in multiples of 10 ms (for example, 20 = 200 ms).

Field, subfield, and refinement descriptions for table TONES (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
OFFTIME		10 to 250	*Offtime* enter the duration of the no-tone period specified in multiples of 10 ms (for example, 20 = 200 ms).
TONEPATT		numeric (16 digits)	*Tone pattern* Enter a 16-digit string of 0s and 1s. Each digit corresponds to one segment of tone pattern and represents the binary state on the tone, where: • 0 = tone off • 1 = tone on
TONETYP		alphanumeric	*Tone type* Enter the type of tone generator required. New tones are added as necessary, and the list below is not fully comprehensive. Since some of the tone generators listed below are mutually exclusive, only a subset of these tone generators can be found in a given software load.
		HI	*High tone* This is a general-purpose high-frequency tone generator.
		HZ400_5DB	*400-Hz tone, 5 decibels* This is the tone generator for 400 Hz at -5 dBm.
		INTL_ROH_TONE	*International ROH tone* This is for use in an international DMS when the entry in field CLLI is IROH.

Field, subfield, and refinement descriptions for table TONES (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
		LO	*Low tone* This is a general-purpose low-frequency tone generator.
		1024HZ_TONE	Datafill this field for any CLLI when setting up the Bangladesh feature tones. This datafill is not active until you have set FEATURE_TONE_SET to BNGLDTC in table OFCENG.
		SILENT_TONE	*Silent tone* Silence
OFFTONE		alphanumeric	*Off tone* Tone types are as for TONETYP.
MAXDURN		1 to 255	*Maximum duration* Enter the maximum time in seconds that a call condense block can be attached. For information on office parameter NCCBS (Number of Call Condense Blocks), see table OFCENG. The maximum duration for silent tone is 10 seconds.

Field, subfield, and refinement descriptions for table TONES (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
MAXCONN		127	*Maximum connections* Enter 127 to satisfy the table editor. Entry values other than 127 are not valid. ***Note:*** This field is operative in table ANNS and STN because members of such trunk groups represent real physical resources, but is not operative in table TONES because LM-generated tones do not represent real physical resources. The DMS maintains a count of tone usage but does not prohibit the number of users from exceeding MAXCONN.
FNTONID		alphanumeric	*Functional tone identity* This field is used for Carrier VoIP Networks operation only. Enter a tone identity from the Unified Toneid range. For Carrier VoIP Networks operation, CLLI and FNTONID are the only fields in this table that require datafill. This field has no impact on TDM operation. ***Note:*** After an ONP in a Carrier VoIP load, the FNTONID value defaults to TONE_NULL. This must be changed to a useful value, or a software error will occur in the GWC. Refer to FNTONID values and the associated signal for a list of all FNTONID values and the associated signal that will be sent over H.248, Aspen, and MGCP protocols.

Field, subfield, and refinement descriptions for table TONES (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
TONESGRP		Y or N	*Table TONESGRP* This field indicates whether there are additional tone definitions in table TONESGRP.

FNTONID values and the associated signal

FNTONID	H.248	Aspen 2.0/2.1	NCS MGCP	MGCP v.1.0
TONE_NULL				
TONE_LO	test/low	test/low	NS	NS
TONE_HI	test/high	test/high	NS	NS
TONE_LOUD	test/loud	test/loud	NS	NS
TONE_FAINT	test/faint	test/faint	NS	NS
TONE_SLOW_INTERRUPTED	test/slow	test/slow	NS	NS
TONE_FAST_INTERRUPTED	test/fast	test/fast	NS	NS
TONE_CREDIT_CARD_ SERVICE	xsrvtn/ccst	NS	NS	NS
Functional_Spare_11	NS	NS	NS	NS
Functional_Spare_12	NS	NS	NS	NS
Functional_Spare_13	NS	NS	NS	NS
Functional_Spare_14	NS	NS	NS	NS
Functional_Spare_15	NS	NS	NS	NS
TONE_SILENT				
TONE_DIAL	cg/dt	cg/dt	dl	dl
TONE_AUD_RING	cg/rt	cg/rt	rt	rt
TONE_DIST_AUD_RING	cg/cr	cg/cr	rt	rt

FNTONID values and the associated signal

FNTONID	H.248	Aspen 2.0/2.1	NCS MGCP	MGCP v.1.0
TONE_BSY	cg/bt	cg/bt	bz	bz
TONE_CONGESTION	cg/ct	cg/ct	ro	ro
TONE_CONFIRMATION	srvtn/conf	srvtn/conf	cf	cf
TONE_SPECIAL_DIAL	xcg/spec	xcg/spec	sl	sl
TONE_COMFORT	xcg/cmft	xcg/cmft	cf	cf
TONE_SPECIAL_ INFORMATION	cg/sit	cg/sit	--------	------
TONE_WARNING	cg/wt	cg/wt	--------	------
TONE_PAYPHONE_ RECOGNITION	cg/pt	cg/pt	--------	------
TONE_NACK	xcg/nack	xcg/nack	ro	ro
TONE_VACANT	xcg/vac	xcg/vac	ro	ro
TONE_RECALL_DIAL	srvtn/rdt	srvtn/rdt	sl	sl
TONE_HELD	srvtn/ht	srvtn/ht	--------	------
TONE_MESSAGE_WAITING	srvtn/mwt	srvtn/mwt	mwi	mwi
TONE_TRANSFER_DIAL	xsrvtn/xferdt	xsg/spec	sl	sl
TONE_CALL_FORWARD	xsrvtn/cft	--------	--------	------
TONE_INTRUSION_PENDING	int/pend	--------	--------	------
TONE_INTRUSION	int/int	--------	--------	------
TONE_INTRUSION_ REMINDER	int/rem	--------	--------	------
TONE_TOLL_BREAK_IN	int/tbi	--------	--------	------
TONE_CONFERENCE_ ENTER	conftn/enter	--------	--------	------
TONE_CONFERENCE_EXIT	conftn/exit	--------	--------	------

FNTONID values and the associated signal

FNTONID	H.248	Aspen 2.0/2.1	NCS MGCP	MGCP v.1.0
TONE_CONFERENCE_LOCK	conftn/lock	--------	--------	------
TONE_CONFERENCE_TIME_ LIMIT_WARNING	conftn/timelim	--------	--------	------
TONE_PRESET_ CONFERENCE_NOTIF	xconftn/preconf	--------	--------	------
TONE_PRESET_ CONFERENCE_PREC_NOTIF	xconftn/pcprec	--------	--------	------
TONE_CAMP_ON				
TONE_CARRIER_DIAL	carr/cdt	cg/dt	dt	dt
TONE_CARRIER_ANSWER	carr/ans	--------	--------	------
TONE_CARRIER_LONG_ DISTANCE_IND	carr/ldi	--------	--------	------
TONE_CALL_WAITING	cg/cw or alert/cw(1)	cg/cw or alert/cw(1)	wt1	wt1
TONE_CALLER_WAITING	cg/cr	cg/cr	--------	------
TONE_CALL_WAITING2	alert/cw(2)	alert/cw(2)	wt2	wt2
TONE_CALL_WAITING3	alert/cw(3)	alert/cw(3)	wt3	wt3
TONE_CALL_WAITING4	alert/cw(4)	alert/cw(4)	wt4	wt4
TONE_EXPENSIVE_ROUTE_ WARNING	biztn/erwt	cg/wt	rt	rt
TONE_OFF_HOOK_ QUEUEING	biztn/ofque	--------	--------	------
TONE_EXECUTIVE_BUSY_ OVERRIDE	int/tbi	int/tbi	--------	------
TONE_RECEIVER_OFF_ HOOK	xcg/roh	xcg/roh	ot	ot
TONE_DIST_PRIOR_AUD_ RINGBACK	prectn/precrt	NS	NS	NS

Note 1: Refer to the appropriate ITU and RFCs for details on H.248 and MGCP protocols.

Note 2: NS = Not Supported

Additional information

Tone types are not specific to TDM or Carrier VoIP operation. For Carrier VoIP operation, equivalent FNTONIDs must be defined for all tones.

For Carrier VoIP loads, only the CLLI and FNTONID fields are used. The equivalence between CLLIs and FNTONIDs in this case is as follows:

- ENGAGED - busy tone
- BRAGCNT - tone_congestion
- CONFMN - tone_confirmation
- NROH - tone_receiver_off_hook
- NOBT - tone_vacant
- BRAFNL - tone_nack
- BRANACK - tone_nack

Any provisioned tone that can be played to both TDM and Carrier VoIP agents must have complete datafill.

Table history

SN09

Q01232967

SN07

Q00999115

SN06 (DMS)

A59022704
New fields added: OFFTIME, OFFTONE, and FNTONEID. Range for SEGTIME increased. Datafill information updated to show both DMS (TDM) and Succession operation.

SN04 (DMS)

59033657
Datafill example added for Brazil tonesets BRASMF and BRASMFC.

TOPSFTR

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

TOPS Features

Table TOPS Features (TOPSFTR) is a TOPS table which allows optional TOPS functions to be activated and deactivated easily. Once the SOC option has been turned on for a TOPS feature, the customer can use Table TOPSFTR to turn the function on and off.

Datafill sequence and meaning

There is no requirement to enter datafill into other tables.

Table size

44 tuples. Tuples cannot be added nor deleted.

Datafill

The following table lists the datafill for table TOPSFTR.

Field, subfield, and refinement descriptions for table TOPSFTR (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FTRNAME		AUTHORIZATION_CODE_BILLING AUTOMATED_ROOM_AND_AUTH_NUM_COLL BELLCORE_NUMBER_PORTABILITY CALL_REST_FOR_WSALE CALLING_CARD_DENIAL_REASONS CANADIAN_EQUAL_ACCESS CELLULAR_AUTOMATIC_DA_CALL_COMP COMMERCIAL_CREDIT_CARD_SUPPORT COUNTRY_DIRECT DISALLOWED_CARD_ISSUER ESTIMATE_OF_CHARGES EXTERNAL_RATING FLEX_ANI GLOBAL_COMPETETIVE_ACCESS GOSS7_ANSI GOSS7_ETSI, IN_OPERATOR_BACKUP INTRA_LATA_PIC_VIA_OLNS ISUP_FOR_TOPS	Feature enable. This field is fixed, read only, it cannot be changed. This field indicates the feature name to be enabled or disabled in field FTRENABL. In order for a feature to be completely enabled, all of the following must be met. • SOC option OSB00101 must be on to enable the TOPS system. Refer to functionality TOPS On/Off Switch, OSB00101. • The SOC governing the feature must be on. • In table TOPSFTR, the tuple for the feature must be set to Y. ***Note:*** Tuple RLT_FOR_GSM is supported through the TOPS GSM ADACC function.

Field, subfield, and refinement descriptions for table TOPSFTR (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FTRNAME (continued)		MESSAGE_DELIVERY_SERVICE	
		MUSIC_AND_ANN_IN_QUEUE	
		NUMBER_PORTABILITY	
		OLNS_FOREIGN_LANGUAGE	
		OLNS_NO_AUTOMATION	
		ORIGINATING_LINE_NUMBER_SCREEN	
		OSS7_OSNC	
		OSSAIN_INITIAL_RELEASE	
		OSSAIN_RELEASE_07	
		OSSAIN_RELEASE_09	
		OSSAIN_RELEASE_10	
		OSSAIN_RELEASE_11	
		OSSAIN_RELEASE_12	
		OSSAIN_RELEASE_20	
		PRE_PAID_COIN	
		QMS_BILLING_SATISFIED	
		QMS_CASER	
		RLT_FOR_GSM	
		RLT_FOR_ISUP	
		RLT2_FOR_ISUP	
		SCREEN_FOR_BILLING_AGREEMENT	
		SECONDS_BASED_ANNOUNCEMENTS	
		TOPS_ON_OFF_SWITCH	

Field, subfield, and refinement descriptions for table TOPSFTR (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
FTRNAME (continued)		UNBUNDLING_BRANDING_VIA_SPID UNBUNDLING_LIDB_QUERY_ROUTING UNBUNDLING_REFINEMENT_FOR_SPID UNBUNDLING_SPID_IN_MIS_STREAM UNBUNDLING_TRANSLATIONS_VIA_SPID	
FTRENABL		Y or N	Feature enable. This field enables (set to Y) or disables (set to N) the feature.

Additional information

Error Messages

Warning messages are provided in the SOC procedures to caution the user of conflicting interactions. For example, if a given SOC option is changed from IDLE to ON, then for each SOC feature controlled by that SOC option, a message is displayed listing the state as specified in TOPSFTR. This enables the user to be aware of what features are enabled when the given SOC option is turned ON. Similarly, if a given SOC option is changed from ON to IDLE, a message is displayed listing all SOC features that would no longer be active.

Warning messages are also displayed if there is a conflict in the enable/disable status of a feature in TOPSFTR and the state of the SOC option controlling that feature. For example, when the user attempts to enable a SOC feature in TOPSFTR by setting FTRENABL to Y, a warning message is displayed if the SOC option controlling that feature is IDLE.

Table history

SN07

Table TOPSFTR migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 11 of 12*, 297-8021-351.09.03.

A new entry (OSSAIN_RELEASE_20) was added to field FTRNAME as per feature A00003704.

A new entry (RLT_FOR_GSM) was added to field FTRNAME as per feature A00003687.

TOPSMCDB

TOPS Message Center Database

Table TOPS Message Center Database (TOPSMCDB) provides datafill for a TOPS SMS SS7-based message center simulator.

An operator position or automated node can send SMS messages using either IS-41 TCAP or GSM TCAP. When the simulator receives the SMS, it looks up the data stored against the SMS destination number to determine the disposition of the SMS.

The simulator can successfully acknowledge the SMS, send back a failure message, or ignore the SMS so the TOPS SMS time-out code executes.

Datafill sequence and meaning

Table TOPSTLDN must be datafilled before table MSCIDMAP.

Table size

0 to 64 tuples.

Datafill

The following table lists the datafill for table TOPSMCDB.

Field, subfield, and refinement descriptions for table TOPSMCDB (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DESTDIGS		1-18 digits	Destination number. Digilator field containing the destination number
RESULT		SUCCESS, REJECT, or ERROR	Result. Tells disposition of SMS to this destination number
	PROBTYPE Subfield of RESPAREA when RESULT set to REJECT	GENPROB, TRANSPROB, ERRPROB, RESPPROB, or INVPROB	Problem type. Defines problem type.

Field, subfield, and refinement descriptions for table TOPSMCDB (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PROBCODE Subfield of RESPAREA when RESULT set to REJECT	tbd: Numerous codes, depending on contents of PROBTYPE, will copy them in here later	Problem code. Defines problem code. The choices for problem code vary based on the problem type.
	IS41CODE Subfield of RESPAREA when RESULT set to ERROR	tbd: Numerous cause codes defined in IS-41, will copy them in here later	IS41 cause codes.
	GSMCODE Subfield of RESPAREA when RESULT set to ERROR.	tbd: Numerous cause codes defined in GSM, will copy them in here later	GSM code.
DELAYSEC		0 to 255	Delay in seconds. Delay in seconds before sending response. Helps simulate real-world response time.

Table history

SN07

Table TOPSMCDB was added in SN07 by feature A00003687.

TOPSPARM

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

TOPS Office Parameter Table

Table TOPSPARM lists office parameters unique to TOPS offices.

Datafill sequence and meaning

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

Table size

25 to 34 tuples

Memory is automatically allocated for 25 tuples.

Datafill

The following table lists the datafill for table TOPSPARM.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 1 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
AABS_ OPTIMIZATION	ON or OFF	This parameter determines whether optimization can be used for Automated Alternate Billing System (AABS) calls. This parameter has two states: ON and OFF. When set to OFF and the parties go on-hook, the DMS switch waits for a message from the automated voice system (Voice Service Node - VSN, or Interactive Voice System - IVS) before releasing the port. When this parameter is set to ON, the DMS switch automatically releases the port when the parties go on-hook.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 2 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
		This parameter must be set to OFF for AABS calls to the VSN and ON for AABS calls to the IVS. The following paragraph explains this requirement. This parameter is created by functionality GR317/GR394 ISUP to/from TOPS (OSEA0005). The VSN is upgraded in release TOPS05 to support this functionality, but the IVS is not upgraded. Since ISUP calls cannot use AABS optimization, this parameter must be OFF for the VSN and ON for the IVS. This is also true for non-ISUP calls since the VSN does not differentiate between ISUP and non-ISUP calls. When the IVS is upgraded, this parameter will not be necessary.
ACCOUNT_ CODE_ BILLING_ ENABLE	Y or N	Enter ACCOUNT_CODE_BILLING_ENABLE to allow the operating company to turn the Account Code Billing feature on or off. Enter Y (yes) to allow the operating company to turn the Account Code Billing feature on. Otherwise, enter N (no). If the parameter is set to N, it only disables account code billing for calls designated with the Account Code Billing feature. This parameter also exists in table VSNOPT. Field PARMVAL must be set to the same value in both tables TOPSPARM and VSNOPT for the feature to function properly. The default is Y. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 3 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ACTS_ DOLLAR_COINTEST	Y or N	*Automatic Coin Toll Service dollar coin test* This parameter enables coin testing using dollars. Set this parameter to Y for phones that do accept dollars, or to N for phones that do not accept dollars. The default is N. If the test fails, a TOPS117 log is produced. For further information on coin testing, refer to functionality Automatic Coin Toll Service, ENSV00002.
ADAS_ CASSETTE_ ICON	Y or N	Enter ADAS_CASSETTE_ICON to allow the operating company to enable or disable the cassette icon. This icon is used to indicate that the directory assistance call was automated. Enter Y if the cassette tape icon is displayed on call origination for directory assistance calls that have been routed to the Automated Directory Assistance Service (ADAS) Voice Processing System (VPS). Enter N if the cassette tape icon is not displayed on call origination for ADAS-handled calls. The default is N. Activation is immediate. ***Note:*** if you are using IBM DA, a text string will appear instead of an icon.
ADAS_BARGE_ IN	Y or N	This parameter enables or disables ADAS Barge-In. The values are Y (enable) and N (disable). For more information, refer to functionality ADAS Base Barge-In, ALPP0001.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 4 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ADAS_ ENABLE	Y or N	Enter ADAS_ENABLE to allow the operating company to enable or disable the Automated Directory Assistance Service (ADAS) Voice Processing System (VPS) feature. Enter Y to enable the ADAS VPS feature. Otherwise, enter N. If the parameter is set to N, this feature is disabled and all directory assistance calls are routed directly to the operator, bypassing ADAS. The default is N. Activation is immediate.
ADAS_INWARDS_ ENABLE	Y or N	Enter ADAS_INWARDS_ENABLE to allow the operating company to enable or disable the ADAS for 131 inward calls. Enter Y to allow 131 inwards calls to route to ADAS prior to receiving operator assistance. Enter N to disallow service for 131 inwards calls. The default is N. Activation is immediate.
ADAS_OPR_ PROFILE_ICON	Y or N	Enter ADAS_OPR_PROFILE_ICON to allow the operating company to enable or disable the operator profile icon. The operator profile icon is used to indicate that a call was not automated. Enter Y to display the operator profile icon for non-automated (non-ADAS) directory assistance calls. Enter N to disable the display. The default is Y. Activation is immediate. ***Note:*** If you are using IBM DA, a text string will appear instead of an icon.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 5 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ADASPLUS_ ARU_WINK	N or Yx (x is 1-20)	This parameter disables/enables and determines the duration of the reverse wink (on-hook or off-hook) sent on the ADASPLUS ARU when it is connected to the operator. If set to N, no wink is sent. If set to Y, plus a value in the range 1-20 (10ms), a wink of the value duration is sent. For example, a value of 5 sends a wink of 50 milliseconds.
ADASPLUS_ CALLER_ JOINED_TONE	NONE, REGDACA, LOWHIGH, and HIGHLOW	For ADAS+, this parameter is used to choose a tone to be played to the operator when the calling party is joined to the operator. This occurs after ADAS+ playback to the operator or when the operator split/joins or RLS CLD during playback. ADAS+ is provided by feature AN0880 in DA Automation I/F, OSDA0006. The values are as follows: • NONE - No call arrival tone. • REGDACA - Regular DA call arrival tone. • LOWHIGH - Low to high ADAS+ call arrival tone. • HIGHLOW - High to low ADAS+ call arrival tone. The default is NONE.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 6 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ADASPLUS_ENABLE	Y or N	This parameter enables (Y)/disables (N) routing of eligible calls to ADAS+. ADAS+ is provided by feature AN0880 in DA Automation I/F, OSDA0006. In order for ADAS+ to function properly, the following conditions must be met: • ADASPLUS_ENABLE must be set to Y • In table SERVICES: — the protocol must be set to CCI — ADASPLUS must be set to Y — VERSION must be greater than or equal to 3 • SOC option OSDA0006 must be ONY Value Y can only be set if SOC option OSDA0006 has been set to ON. It can be set to N at anytime. Option OSDA0006 can only be set to IDLE if ADASPLUS_ENABLE is set to N. The correct setting is described in section “Activation” of DA Automation I/F, OSDA0006. The default is N.
ADASPLUS_POST _ DEFLECT	Y or N	*ADAS Plus post deflect* This tuple allows ADAS Plus calls to be deflected from queue to treatment after ADAS Plus processing based on table QMSCQDEF field DEFLAREA. This field indicates the wait time and number of calls in the queue before deflection. Enter Y for deflection. Otherwise, enter N for no deflection. The default is N.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 7 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ADAS_ RINGING_ DURING_ PLAYBACK	Y or N	When set to Y, the subscriber is connected to ringing while ADAS plays the recordings to the operator. When set to N, the subscriber hears nothing while ADAS play the recordings to the operator. ADAS+ is provided by feature AN0880 in DA Automation I/F, OSDA0006. The default is N. Activation is immediate.
ADAS_WITH_ PARS_ENABLE	Y or N	Enter ADAS_WITH_PARS_ENABLE to allow the operating company to route ADAS-handled calls to the personal audio response system (PARS) when the call is presented to an operator. Enter Y if the subscriber is played an introductory greeting by PARS. Enter N if no introductory greeting is played. The default is N. Activation is immediate.
ALERT_ TONE_TIME	5 to 30	Prior to the expiry of the allocated time for a fixed-duration call, a warning tone warns the subscriber that the call is about to end. Enter ALERT_TONE_TIME to specify the number of seconds that a warning tone is heard before the subscriber's call is disconnected. Enter the number of seconds that the warning tone is heard before the subscriber is disconnected. The default is 5. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 8 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ALL_CALLS_USE_ OPR_SVC_ AGRMTS	Y or N	This parameter allows the operator services provider to wholesale their billing agreements when CLECs do not want to secure their own agreements. The values are as follows: • Y - All calls incoming on TOPS/ISUP trunks use the operator services billing agreements for the checks. The agreement groups are obtained from TOPSPARM parameter OPR_SVC_AGRMTS, if OPR_SVC_AGRMTS is set to Y. • N - Determine whether to use the operator services agreements on an individual basis by field BILAGRMT in table TOPEACAR or SPIDDB.
APS_DISPLAY_ DOLLAR_SIGN	Y or N	This parameter controls display of the dollar sign in the CHARGE field of the APS log in the range APS100-APS121. Enter Y to display $ in front of the charge. Enter N for no $.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 9 of 61)

Field PARMNAME	Field PARMVAL	Explanation and action
ARAN_ STATUS	NONE, BOTH, HOTEL, INSTN	This parameter activates/deactivates ARAN on an office wide basis. Allowable values are: • NONE - ARAN deactivated for hotel and institution subscribers. Both hotel and institution calls are not routed to ARAN. Instead, hotel calls that require room number collection are sent to an operator for manual room number collection and institution calls tandem through the TOPS office. • BOTH - ARAN activated for hotel and institution subscribers. Both hotel calls that require room number collection and institution calls are routed to ARAN. • HOTEL - ARAN activated for hotel subscribers only. Only hotel calls that require room number collection are routed to ARAN. However, institution calls tandem through the TOPS office. • INSTN - ARAN activated for institution subscribers only. Only institution calls are routed to ARAN. However, hotel calls that require room number collection are sent to an operator for manual room number collection. The default is NONE. ***Note:*** If ARAN_STATUS is activated for hotel subscribers, then it is activated for numbers datafilled in tables SPLDNID and TDBCLASS.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 10 of

Field PARMNAME	Field PARMVAL	Explanation and action
AUTO_MDS_ QMS_CQPROF	N or Yxx (xx is queue)	Enter AUTO_MDS_QMS_CQPROF to enable a coin subscriber's keypad upon presentation to the automated message delivery system (MDS). If the call queue profile number of the automated MDS is datafilled as the parameter value for parameter AUTO_MDS_QMS_CQPROF and the origination station is a coin phone, the subscriber's keypad is enabled. Enter Yxx, where xx is the desired call queue number; otherwise, enter N. The default is N. Activation is immediate.
AUTO_ OUTPULSE_ UPON_CCV_ SUCCESS	Y or N	This parameter determines whether the DMS switch automatically outpulses the forward number if a valid calling card is entered. The values are Y (auto outpulse, the same as prior to OSSAIN) and N (no auto outpulse). The default is Y.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 11 of

Field PARMNAME	Field PARMVAL	Explanation and action
BRAND_ USING_ DEFAULT_SPID	Y or N	This parameter enables front end (calling party) branding for non-carrier calls using the SPID in TOPSPARM parameter DEFAULT_SPID. The values for BRAND_USING_DEFAULT_SPID are Y (enable) and N (disable). Therefore, if BRAND_USING_DEFAULT_SPID = Y and no SPID is given in table DNSCRN for the calling party's DN, then the default SPID in TOPSPARM parameter DEFAULT_SPID is used for front end branding. Also, data in table SPIDDB is used for the branding. If BRAND_USING_DEFAULT_SPID = N or no SPID is assigned to the calling DN, the NBEC code is used for branding of non-carrier calls. No SPID is assigned if an SPID is not provided by an OSSAIN SN or OLNS query, there is no SPID entry in table DNSCRN, or parameter DEFAULT_SPID is not datafilled with a default SPID. ***Note:*** This parameter does not automatically appear in the table, it must be added.
CCARD_ SALES_ REPORT_ ACTIVE	Y or N	This parameter enables the commercial credit card sales report. The values are Y (enable) and N (disable). This capability is described in functionality TOPS Commercial Credit Card, ABS00008.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 12 of

Field PARMNAME	Field PARMVAL	Explanation and action
CC_CARRIER_ SELECT_ DEFAULT	ALLOW or BLOCK	This parameter determines default outpulsing of calling card calls when selecting a terminating carrier. This parameter is used if a match is not found in table CCCSOPTS. The values are: • ALLOW - Outpulse the existing translations: network prefix + country code + national number. Note that there is no carrier code, so the following network (international gateway) needs to perform translations to select the carrier. • BLOCK - Disallow outpulsing. A display is presented on the operator screen. The default is ALLOW. For further information, refer to feature AF7021 in functionality Carrier Selection, ENSV0001.
CC_CARRIER_ SELECT_ ENABLE	Y or N	This parameter enables calling card carrier selection. The values are Y (enable) and N (disable). This functionality introduces a serious operator outpulsing restriction; therefore, this parameter is required to limit the application of this restriction. The restriction is that an operator is blocked from outpulsing an outbound call until a valid billing method is selected. This restriction is enforced when this parameter is activated and the called number is foreign. The default is N. For further information, refer to feature AF7021 in functionality Carrier Selection, ENSV0001.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 13 of

Field PARMNAME	Field PARMVAL	Explanation and action
CCV_ACCS_ 15TH_DIGIT_ TIMER	1 to 15	Specifies the time that ACCS will wait for entry of a 15th digit after the 14th digit is entered. This parameter does not apply to AABS. It does apply to ACCS, as the name implies. Range is 1 to15 seconds. The default is 2.
CDIR_ CARRIER_ SELECT_ DEFAULT	ALLOW or BLOCK	This parameter determines default outpulsing of country direct calls when selecting a terminating carrier. This parameter is used if a match is not found in either table CDCSOPTS nor CDCSOPT2. The values are: • ALLOW - Outpulse the existing translations: network prefix + country code + national number. Note that there is no carrier code, so the following network (international gateway) needs to perform translations to select the carrier. • BLOCK - Disallow outpulsing. A display is presented on the operator screen. The default is ALLOW. For further information, refer to feature AF7021 in functionality Carrier Selection, ENSV0001.
CDIR_ DEDICATED_DN	Y or N	Determines the calling number. If set to N, the digit stream is used. If set to Y, a 10 digit DN (datafilled after the Y) is used (with possible modification) as the calling number for all Country Direct calls in that office. If a country code is sent, it replaces the last 3 digits of the datafilled DN. If no country code is sent, the datafilled DN is used without change.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 14 of

Field PARMNAME	Field PARMVAL	Explanation and action
CDIR_RATING	Y or N	This parameter is used in a GOS environment to indicate which signalled codes to base rating of country direct calls. The values are: • Y (the default) - Base the rate on the signalled country and carrier codes. Then, use the special country direct tables to derive an SSETNAME for entering the GOS rating system. • N - Base the rate on the signalled access, country and carrier codes. These codes are used to index table CLGSSET which gives an SSETNAME for entering the GOS rating system. For further information, refer to functionality Auto Country Direct, ENSV0010.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 15 of

Field PARMNAME	Field PARMVAL	Explanation and action
CHECK_BILL_ AGRMT_USING_ BSP_SPID	Y or N	The LIDB can return both an AO SPID and a BSP SPID. This feature allows for screening on both the AO and BSP SPIDs. Screening is always done on the AO SPID. Optional screening on the BSP SPID is controlled by this parameter. If no AO or BSP SPID is returned from the LIDB, the default behavior is defined by field NOSPDERR in applicable table SPIDDB or TOPEACAR. The values of this parameter are as follows: • Y - screen on both the AO and BSP SPID. If both an AO and a BSP SPID are returned by the LIDB, then screening is done on the basis of the AO SPID first. If an agreement based on the AO SPID is not found, then the BSP SPID is used to screen. If, however, an agreement is found based on the AO SPID, then no further screening on the basis of the BSP SPID is done. • N - screen only on the AO SPID

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 16 of

Field PARMNAME	Field PARMVAL	Explanation and action
CHG_ DISPLAY_ DECIMAL	0 to 3	Enter CHG_DISPLAY_DECIMAL for a TOPS Global Operator Services (GOS) office. This parameter specifies how many decimal digits to place to the right of the decimal point for display of call charge values. This is useful for countries with decimal currency systems since charge values can be displayed in a format familiar to the TOPS operator. If the monetary system is not based on decimal units, then the GOS rating system is not able to convert the results into the proper units. However, the calculations are still valid in the base units. This parameter is not available in North American TOPS offices. If this parameter is set to 0, then no decimal point is displayed. The default is 2. Activation is immediate.
CLD_DNSCRN_ ENABLED	Y or N	This parameter determines whether or not the called number is screened for restricted attributes (UNPAID, BLCKCALL) in table DNSCRN. The range is Y (screen) and N (do not screen). The default is N.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 17 of

Field PARMNAME	Field PARMVAL	Explanation and action
COIN_PAY_ SEQUENCE	POSTPAY or PREPAY	Enter COIN_PAY_SEQUENCE to select either pre-pay or post-pay for all coin phones that are routed to a TOPS Global Operator Services (GOS) office. This selection determines how calls are charged. If the value is set to POSTPAY, the customer is asked to deposit the necessary amount for the initial coin recall period. When this period has expired, no additional payment deposit is required. After each subsequent recall period expires, the call is brought back to the TOPS position and the customer is requested to deposit the necessary amount to cover the charges for the period that just expired. When the call is terminated, the call is brought back to the TOPS position so that the charges for the unpaid portion of the call can be collected. If the value is set to PREPAY, the customer is requested to deposit the necessary amount before each recall period. When the call is terminated, the call does not recall to the TOPS position since no incurred charges are unpaid. The default is POSTPAY. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 18 of

Field PARMNAME	Field PARMVAL	Explanation and action
CZECH_ OFFICE	Y or N	This parameter was created for use by SPT (the Czech Republic Telephone Company). When set to Yes, this parameter allows the table TQMSOPT parameter, QMS_BLOCK_RECALL_SERVICE_ CHANGE, to be activated. In order to set CZECH_OFFICE=Y, table TOPSPARM parameter NUMBERING_PLAN must first be set to OPEN_NUMBERING. For more information, refer to feature AN1085 in GOS Enhancements, GOS00001. This parameter only appears in a global load.
DACC_CIC_ OVERRIDE_ ENABLE	Y or N	This parameter enables an override of the carrier associated with an interLATA ADACC call. Then, a replacement carrier is selected in one of the following ways: • office wide basis in TOPSPARM parameter DACC_OVERRIDE_CIC • service provider basis in table SPIDDB, field DACICOVR The values are Y (enable) and N (disable). If the carrier override functionality is not required, then this parameter should be set to N.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 19 of

Field PARMNAME	Field PARMVAL	Explanation and action
DACC_OVERRIDE _CIC	Y and cic or N	This parameter overrides the carrier associated with an interLATA ADACC call. This parameter is valid only if TOPSPARM parameter DACC_CIC_OVERRIDE_ENABLE = Y. Then, DACC_OVERRIDE_CIC is checked, which has the following values: • Y - Enable override on an office wide basis. Refinement CARRNO appears, which is a 4-digit carrier number. The carrier must be datafilled in table TOPEACAR. If DACC_OVERRIDE_CIC and table SPIDDB, field DACICOVR are both set to Y, then DACC_OVERRIDE_CIC has precedence. • N -Disable override. This value is required for override on a service provider basis in table SPIDDB, field DACICOVR.
DANI_ DISPLAY_ CLG_NUM	Y or N	Enter DANI_DISPLAY_CLG_NUM to specify whether the calling number is displayed to the operator for all calls over TOPS trunk groups with a calling group identification (CLGID) of DANI. Enter Y to display the calling number. Otherwise, enter N. The default is Y. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 20 of

Field PARMNAME	Field PARMVAL	Explanation and action
DEFAULT_ LOCLZONE	Y or N	This parameter is used for calls with no incoming trunk group (Delay and system initiated) to enable local screening and select an initial zone name. The values are as follows: • Y - use GOS Local Determination to determine if the call is local and datafill refinement LOCLZONE with a\ zone name defined in table TLCLZONE. • N - use the universal translations method with the CLASS option. This value is the default. For calls on a trunk group, table TRKGRP, subfield LOCLZONE provides this equivalent function.
DEFAULT_ PRODUCT	NA100 or GLOBAL	This parameter determines which TOPS product controls processing of switch originated calls (that is, Operator and OSSAIN service node originated calls). This parameter is necessary when multiple TOPS products are combined. The values are NA100 and GLOBAL. In TOPS07, this is a read-only parameter where the value is automatically set according to the environment and cannot be changed. Therefore, no data entry is required or allowed for this TOPS07 release since only single product loads are available. For future releases with loads that contain multiple products, this parameter is automatically initialized but can be changed.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 21 of

Field PARMNAME	Field PARMVAL	Explanation and action
DEFAULT_SPID	Yxxxx or N (xxxx are characters)	This parameter indicates the default account owner (AO) SPID on an office wide basis. This parameter is used if no AO SPID is assigned by an OSSANI SN, OLNS query, calling or ANI digits, table DNSCRN, or table TOPSTOPT. The AO SPID is used for TOPS protocols, screen updates, AMA processing, and front end (calling party) branding of non-carrier calls. Table SPIDDB provides supportive data. The values for DEFAULT_SPID are Y and N, indicating a default SPID is or is not specified, respectively. If Y is entered, also enter the default SPID, previously datafilled in table SPID. If BRANDING_USING_DEFAULT_SPID = N or no SPID is assigned to the calling DN, the NBEC code is used for branding of non-carrier calls. This is dependent upon the service being enabled in table SPIDDB. If a DEFAULT_SPID is specified and parameter BRANDING_USING_DEFAULT_SPID = Y, the DEFAULT_SPID is used for branding This is dependent upon the service being enabled in table SPIDDB. If the service is disabled, no branding is provided, not even using the NBEC code.
		An SPID cannot be removed from table SPID if it is datafilled as the DEFAULT_SPID in table TOPSPARM. ***Note:*** This parameter does not automatically appear in the table, it must be added.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 22 of

Field PARMNAME	Field PARMVAL	Explanation and action
DELAY_SPECIFIED_SNPA	SNPA from HNPACONT or SNPANAME	This parameter specifies the SNPA used to expand a 7-digit calling number to 10 digits for a delay call. Enter an SNPA that is defined in table HNPACONT or SNPANAME.
DEVICE_OUTPUT_CR	Y or N	Device output carriage return. This parameter determines if an extra LF/CR is put into a character string that is longer than 80 characters. This parameter should be set to N (do not include extra LF/CR) for a Call Store Buffer/TLCS VQ made by CGI. For all other VQ TTYs, set this parameter to Y. The default is N. With functionality TOPS IDDD 15 Digit Expansion (OSB00001), some Hobic devices require more than 80 ASCII characters to display one billing record. The calling and called number fields are increased to handle up to 19 digits. Since the TOPS device buffer is only 80 characters, an extra LF/CR is used to send the record in two lines. However, the VQ TTY in some sites is not a TTY but a Call Store Buffer/TLCS made by CGI and the VQ uses the LF/CR as a flag to indicate end/beginning of a new record. Since the CGI equipment cannot be modified to allow for the extra LF/CR, one billing record looks like two.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 23 of

Field PARMNAME	Field PARMVAL	Explanation and action
DISPLAY_ CALLED_ NUMBER	NONE, MP, OPP, or BOTH	This parameter indicates the type of TOPS position to receive the called number from the DMS switch, if sent. Following are the values: • NONE - The called number is not sent to any TOPS position. • MP - The called number is sent and displayed at TOPS MP positions. • OPP - The called number is sent and displayed at OPP-compatible positions. • BOTH - The called number is sent and displayed at both TOPS MP and OPP-compatible positions. The default is N.
DISTINCT_ NUM_CALL_ ARRIVAL_ TONES	Y or N	Enter DISTINCT_NUM_CALL_ARRIVAL_TONES to activate or deactivate the Distinct Number of Call Arrival Tones feature. If the parameter is set to Y, one call arrival tone indicates a toll assistance (TA) call arrival at the operator's position, two call arrival tones indicate an intercept call arrival or operator number identification (ONI) call arrival, and three call arrival tones indicate a directory assistance (DA) call arrival. If the parameter is set to N, one call arrival tone indicates a TA or DA call, and two call arrival tones indicate an intercept or ONI call. The default is Y. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 24 of

Field PARMNAME	Field PARMVAL	Explanation and action
DOM_CCARD_ FORMAT_ CHECKS	Y or N	*Domestic calling card format checks* This parameter allows disabling of RAO and NPA checks on North American 14-digit domestic calling card number formats. This parameter is provided for countries in North America that have open numbering, so do not have these format requirements. The values for this parameter are: • Y - Enable the RAO and NPA checks as prior to this parameter. These checks are the following: — In North America, domestic calling card number formats are checked for one of the following: – The card number has a 0 or 1 as its forth digit, making it an RAO card. – The card number begins with a valid North American NPA; that is, the first digit is in the range 2-9. — Also, the following requirements are enforced: – The card number does not begin with 700, 800, or 900. – The card number begins with a valid North American NPA; that is, the first digit is in the range 2-9. – The four digit personal identification number (PIN) does not begin with 0 or 1.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 25 of

Field PARMNAME	Field PARMVAL	Explanation and action
DOM_CCARD_ FORMAT_ CHECKS (continued)		• N - Disable the RAO and NPA checks as follows: — The domestic calling card number is not checked to determine if it is an RAO card. — Since the domestic calling card number is not an RAO card, checks in tables RAO and RAOCHECK are skipped. Also, the RAO number is not removed from the billing number field of module codes 061 and 066. Additionally, the RAO number is not recorded as a “special number” in the Billing Type Identification field of module codes 052 and 061; it is instead recorded as a calling card. — Since this card is not an RAO card but a valid NPA card, checks in tables NPACHECK are skipped. And, since datafill in table NPACHECK determines whether further checks in table CHKDIGIT are involved, table CHKDIGIT is also ignored. — “Fay” is no longer displayed to the operator if a non-RAO domestic calling card's first three digits are not in table NPACHECK and table CHKDIGIT is no longer checked.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 26 of

Field PARMNAME	Field PARMVAL	Explanation and action
DOM_CCARD_ FORMAT_ CHECKS (continued)		• N (continued) — The following check is not performed: Verification that a domestic calling card number does not begin with digits 700, 800, or 900, or have 555 as digits 4-6. — Verification that the PIN begins with a digit in the range 2-9 is skipped. The default is Y. The following calling card checks are independent of card format and numbering plan so are not affected by this parameter: • regional domestic credit card checks in tables DOMBILL and REGNUM • able HOTLIST checks This parameter is checked on all TOPS office call types that may be billed to a domestic calling card number. This includes operator-assisted (OA), MCCS, AABS, and OSSAIN calls. This parameter is checked in North American and open numbering plan offices. This parameter also affects card numbers in table INTCCFMT that require transitional validation. These card numbers use an ITU-T format, but are subject to the same format validation as 14-digit domestic calling cards. For further information, refer to SR 50058693 in functionality TOPS Call Processing Features (Call Processing), OSB00001.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 27 of

Field PARMNAME	Field PARMVAL	Explanation and action
FIXED_ DURATION	ALL, COIN, HOTEL, NONE, RESTRICT, STATION	Enter FIXED_DURATION to specify the set of call types that are marked as fixed duration calls upon call arrival. Enter the call types that are marked as fixed duration calls upon call arrival. The default is NONE. Activation is immediate.
FIXED_ DURATION_APS	Y or N	This parameter indicates if APS calls are marked as fixed duration. APS calls are marked as fixed duration by either this parameter or the operator. When a call is marked as fixed duration, the operator must first enter a duration for the call. Then, the operator can release the call. When the duration period ends, the switch ends the call and generates a record with the charges. The values are Y (yes, APS calls are fixed duration) and N (no, APS calls are not fixed duration). Table TOPSPARM parameter ALERT_TONE_TIME indicates the number of seconds before the duration period ends that a notification tone sounds.
FORWARD_ ANI_AS_CLI	Y or N	Forward Automatic Number Identification as Calling Line Identification. Enables conversion of ANI on an incoming trunk to CLI for an outgoing ISUP trunk. If set to N, ANI is not forwarded as CLI. If set to Y, ANI may be forwarded as CLI. Forwarding of CLI also depends on table ISUPTRK, field ANI2CLI, and table TOPSTOPT, field ANITOCLI. ANI is forwarded as CLI only if all 3 values are set to Y. The default is N.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 28 of

Field PARMNAME	Field PARMVAL	Explanation and action
FOUR_DIGIT_ CIC_STATUS	THREEDIG, FOURDIG, or PERMISSIVE	Enter FOUR_DIGIT_CIC_STATUS to specify how many carrier identification codes (CIC) the office can process. Enter THREEDIG if the office can only process three-digit CICs. Enter FOURDIG if the office can only process four-digit CICs that begin with 0 (zero), 5, or 6 (that is, 0xxx, 5xxx, or 6xxx). Enter PERMISSIVE if the office can handle both three-digit and four-digit CICs. The default is THREEDIG. Activation is immediate.
GCACALL_ DEFAULT	Y or N	This parameter is used if there is no tuple for the call in table GCASCRN. It determines if the call should be considered a GCA call. If set to Y, the call is a GCA call; otherwise, it is an Operating Company call. The default value is N. This parameter is visible only in a TOPS global load.
GCA_PHASE	PHASE_1 or PHASE_2	This parameter allows a graceful change of GCA from phase 1 to phase 2. At installation, the value is set to PHASE_1. While preparing datafill to convert from phase 1 to phase 2, the value should be set to PHASE_1. Once datafill is complete or the site is a new GCA site, set the value to PHASE_2. The default value is PHASE_1. This parameter is visible only in a TOPS global load.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 29 of

Field PARMNAME	Field PARMVAL	Explanation and action
GEN_DNSCRN_ INVALID_CIC_ LOG	Y or N	This parameter specifies if the TOPS130 log should be generated when an invalid CIC is encountered in table DNSCRN. If Y, the log is generated. If N, the log is not generated. A CIC is invalid if it is not datafilled in table TOPCACAR. Due to the size of table DNSCRN, there are no cross checks to prevent deletion of a CIC from table TOPCACAR that is datafilled in table DNSCRN. The default value is Y. This parameter is visible only in a TOPS global load.
GEN_NO_BILL_ AGRMT_LOG	Y or N	This parameter enables generation of new log TOPS612, No Billing Agreement, which is generated under the following conditions: • billing is blocked due to the lack of a billing agreement • no Billed AO or BSP SPID is returned from the LIDB database • no Calling AO SPID and TOPSPARM parameter OPR_SVC_AGRMTS is set to N BLOCK The values of the parameter are as follows: • Y - enable generation of the log • N - disable generation of the log

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 30 of

Field PARMNAME	Field PARMVAL	Explanation and action
IN_NTERWORKING_ RESPONSE_ TIMER	1 to 60	This parameter indicates the amount of time in seconds that the TOPS switch waits for a message from the SSP after sending a response to a previous Invoke. The default is 5. The timer is started when the TOPS switch sends an ISUP FAR or FAC message to the SSP. When the timer expires, the following occurs • The ISUP connection is released. • The operator terminal is notified of the release. • Log TOPS 608, IN Interworking Response Timer Popped, is generated.
IPPOS_AUDIT_ INTERVAL	5 to 15	This parameter specifies the interval of time between each audit cycle. The values are in seconds and the default is 5. Setting this parameter higher saves CM realtime and messaging but may delay the time it takes for the audit and position to recognize a loss of data connectivity. Setting it lower has the opposite effect.
IPPOS_AUDIT_ THRESHOLD	2 to 5	The parameter specifies how many consecutive times an OPP Audit Request should be sent to a position without receiving a response before the state of the position is changed to SYSB. The default is 3. Increasing the threshold increases the messaging and real time but it also reduces the number of positions being put into a SYSB state because of an occasional packet loss.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 31 of

Field PARMNAME	Field PARMVAL	Explanation and action
LANG_ ERROR_ SCREEN_ DISPLAY	alphanumeric (1 to 4 characters)	Enter LANG_ERROR_SCREEN_DISPLAY for error display on TOPS 4 operator consoles. It provides a method of displaying error conditions to the operator when one or more incorrect digits are entered by the operator. The displayed message is a character string that can be customized by the operating company. Enter the customized message. The default is LANG. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 32 of

Field PARMNAME	Field PARMVAL	Explanation and action
LNP_QUERY_ FOR_AMA_ ONLY	CLG, SPL, ALL, or NONE	This parameter specifies which numbers are valid for LNP queries for AMA module 720 recording purposes only. The values are: • CLG - calling number Including CLG in the set has no effect unless TOPSTOPT field LNPCLGAM is `Y' for the originating trunk group. • SPL - Special (third and 14-digit line-based calling card) numbers • ALL - All (CLG and SPL) numbers. This is the default value. A value of ALL does not always cause LNP modules to be appended. For example, if table TOPSTOPT has the LNPCLGAM field set to N (for calling number), then no LNP information for AMA is required. So no LNP module would be appended. • NONE - No numbers. A value of NONE does not prevent appending LNP modules for calling and special billing numbers since: — Queries for these numbers can be made for reasons other than AMA recording. For example, in a delay call, an LNP query is made for the calling number so it can route to the back party. — The LRN associated with the calling number may be datafilled against the incoming trunk group.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 33 of

Field PARMNAME	Field PARMVAL	Explanation and action
LNP_QUERY_ FOR_AMA_ ONLY (continued)		The called number is not included as a value, because if LNP information is required, the query is made for routing rather than for AMA purposes. AMA information on a called number is recorded without consulting this parameter. This parameter is specific to North American TOPS switch loads and is only referenced when TOPS LNP is active.
LNP_ TIMEOUT	1 to 60	This parameter is referenced when an LNP query is launched to determine how long TOPS call processing waits for a response to its query. The range is 1 - 60 seconds. The default is 2. This parameter is specific to North American TOPS loads and is only referenced when TOPS LNP is active.
MF_TRUNK_ WINK_ REQUEST_ DELAY	1 to 200	Enter MF_TRUNK_WINK_REQUEST_DELAY to specify the delay time before a wink is sent from a TOPS office to an end office to request automatic number identification (ANI). This parameter also controls the delay before a wink is sent by a TOPS office for treatment supervision. This parameter only applies to multifrequency (MF) TOPS trunks utilizing MF receivers that gather automatic number identification (ANI) digits spilled from the end office. Enter the delay time, in 10-ms increments, before a wink is sent from a TOPS office to an end office to request ANI. The default is 25. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 34 of

Field PARMNAME	Field PARMVAL	Explanation and action
MP_DISPLAY_ POSSIBLE_ AUTOMATION	Y or N	Enter MP_DISPLAY_POSSIBLE_AUTOMATION to control the display of an icon indicating whether calls reaching the TOPS position could have been automated. Enter Y if a question mark icon is displayed on the screen whenever a call reaches the TOPS position that could have been automated, but was not. Enter N if the display is the same as before and no indication of possible automation is provided. The default is N. Activation is immediate.
MULTI_NPA_ INWARD_XLA	Y or N	Enter MULTI_NPA_INWARD_XLA to determine whether the inwards code entered by the operator on an inwards call is translated using information from tables TRKGRP and TOPSBC instead information from table OPRTRANS alone. Enter Y if inwards calls are routed using the calling party's trunk group data. Enter N if translations are performed using the operator's translations data for routing. The default is N. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 35 of

Field PARMNAME	Field PARMVAL	Explanation and action
MULTI_NPA_ NO_AMA_XLA	Y or N	Enter MULTI_NPA_NO_AMA_XLA to activate or deactivate the Multiple Trunk Group per NPA feature. Enter Y for an operator assisted call that is not billable, the called number entered by the operator is translated with information from tables TRKGRP and TOPSBC. Enter N if the called number entered by the operator is translated with information from table OPRTRANS. The default is N. Activation is immediate.
NOTIFY_RECALL_ OPTIONS	Y or N	When set to Y (yes), this parameter enables the following functions (fields) provided by feature AN1085 in GOS Enhancements, GOS00001: • MUTED_NFY_RECALL (muted notify recall) • AUTO_NFY_RECALL (automatic notify recall) • NFY_RECALL_CNT (notify recall count) Each field is enabled by setting to Y. Refer to the datafill example at the end.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 36 of

Field PARMNAME	Field PARMVAL	Explanation and action
NSC_800PLUS_ QUERY_AT_ POSITION	Y or N	This parameter indicates where NSC processing is done for an 800 Plus call at an operator position. The values are as follows • Y - Do NSC processing at the current TOPS switch. The call is routed with the DN received from the database. LNP processing is done at an adjacent switch. This process is the same as before this functionality. • N - Do NSC processing at an adjacent switch. The calling and toll-free numbers are signalled to the adjacent switch. LNP processing also is done at the adjacent switch. If the adjacent switch is not a tandem switch, a looparound trunk to the same office ensures that LNP processing occurs soon enough in the network to avoid last resort routing. For trunking recommendations, refer to the Operator handled calls section in functionality 800+ Interworking with LNP, OSB00001 of this manual. The default is Y.
NUMBERING_ PLAN	N_ANERICAN, or OPEN_ NUMBERING	Enter NUMBERING_PLAN to allow the TOPS software to function in an Open Numbering Plan environment. This parameter is used for internal purposes only. It cannot be accessed by the operating company. The default is N_AMERICAN. Activation is set during software load-build.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 37 of

Field PARMNAME	Field PARMVAL	Explanation and action
OCIPDL_AUDIT_ THRESHOLD	2 to 10	Operator Centralization Internet Protocol Data Link (OCIPDL) maintenance audit threshold in seconds. OCIPDL audits typically occur every 30 seconds for in-service links. So, every 30 seconds an audit message is sent by the near end switch over the OCIPDL to maintenance at the far end switch. The near end waits up to 5 seconds for an audit response, which indicates the far end is in-service. If a response is not received within 5 seconds. the audit is considered a failure; however, the audits continue. If a consecutive number of audit failures equals this parameter, the ODIPDL changes state from INSV to SYSB. The link can be recovered as follows: • The continuing audits become successful, which is automatic. • The far end initiates recovery. • The near end manually busies and RTSes to initiate recovery. The default value is 3.
OC_PMIST_ FORMAT	OFF or FULL	This parameter enables decoding and formatting of the PMIST message for the operator centralization (OC) protocol. The range is OFF and FULL. When set to OFF, the message is displayed in hexadecimal format. When set to FULL, the message is displayed in both the hexadecimal and decoded formats. The default is OFF.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 38 of

Field PARMNAME	Field PARMVAL	Explanation and action
OFFER_LOCAL_ DACC	NONE, LCL, NLCL, or ALL	This parameter indicates the DA call completion choice for Operating Company calls. The values are as follows: • NONE - call completion is not allowed. • LCL - call completion is allowed only for local calls • NLCL - call completion is allowed only for non-local calls. • ALL - call completion is allowed for both local and non-local calls.
OFFER_LOCAL_ STDCC	NONE, LCL, NLCL, or ALL	This parameter indicates the standard call completion choice for Operating Company calls. The values are as follows: • NONE - call completion is not allowed for local calls. • LCL - call completion is allowed only for local calls • NLCL - call completion is allowed only for non-local calls. • ALL - call completion is allowed for both local and non-local calls.
OLNS_EAANI_ DACC	Y or N	This parameter determines whether or not the DACC indicator is considered when determining what ANI ID digits to spill to the carrier on interLATA calls. The range of values is Y and N. Enter Y to consider the DACC indicator. Refer to section “Spilling ANI ID to carrier on InterLATA calls” in functionality TOPS OLNS Interface (ABS00012) for more details. The default is N.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 39 of

Field PARMNAME	Field PARMVAL	Explanation and action
OLNS_EAANI_ ADD_BILLSRV	Y or N	This parameter determines whether or not the Additional Originating Billing Services Indicator is considered when determining what ANI ID digits to spill to the carrier on interLATA calls. The range of values is Y and N. Enter Y to consider the DACC indicator. Refer to section “Spilling ANI ID to carrier on InterLATA calls” in functionality TOPS OLNS Interface (ABS00012) for more details. The default is N.
OLNS_ILP_ DACC	Y or N	Originating line number screening intraLATA presubscription directory assistance call completion. This parameter indicates whether ILP should be offered on intraLATA toll DACC calls. The values are Y (offer ILP) and N (do not offer ILP). Refer to functionality OLNS IntraLATA Presubscription, OSEA00006. The default is N.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 40 of

Field PARMNAME	Field PARMVAL	Explanation and action
OLNS_ RESTRICTED_ DACC	Y or N	This parameter is used to determine if a call is restricted when an ANI ID 7 is signalled. The values are: • Y - The TA (sent paid, collect, third, calling card, and special BNS) and DA (sent paid, collect, third, calling card, special BNS, and DACC) indicators are checked. • N - The TA (sent paid, collect, third, calling card, and special BNS) and DA (sent paid, collect, third, calling card, and special BNS) indicators are checked. Note that error handling is applied to calls with no billing restriction which are signalled with an ANI ID 7. These calls are treated as ANIF, routed to an operator, and a TRK118 log is generated. ***Note:*** This parameter does not automatically appear in the table, it must be added.
OLNS_ TIMEOUT	1 to 15	This parameter indicates the timeout period in seconds for an OLNS response message. This value can range from 1 to 15 seconds with a default value of 2 seconds.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 41 of

Field PARMNAME	Field PARMVAL	Explanation and action
OPP_ALWAYS_ SEND_SPID_ INFO	Y or N	This parameter indicates whether both trunk group and SPID display information should be sent to an OPP compatible position if both are applicable. If this parameter is N, then the switch passes either the SPID display or the trunk group display to the position as applicable. Otherwise, both displays are sent if available. For further information, refer to table SPIDDB. ***Note:*** This parameter does not automatically appear in the table, it must be added. This capability is available on a trunk group basis in table TOPSTOPT, field DISPSIPD.
OPP_PMIST_ FORMAT	BRIEF, FULL, or OFF	Enter OPP_PMIST_FORMAT to control the formatted peripheral module intercept system test (PMIST) output for Open Position Protocol (OPP) messages. Enter BRIEF to select a condensed format, FULL to provide the full format, or OFF to turn off the formatting. The default is FULL. Activation is not applicable.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 42 of

Field PARMNAME	Field PARMVAL	Explanation and action
OPR_ COMPROMISED_ CALL_ OVERRIDE	Y or N	Enter OPR_COMPROMISED_CALL_OVERRIDE to specify how an operator can complete compromised calls. This option allows operators to be notified about possible billing problems without having to restrict the calls being handled. Enter Y if the operator can complete compromised calls without changing the billing method. Enter N if the operator can only complete compromised calls by changing the billing method and taking a manual ticket, or by just taking a manual ticket. The default is N. Activation is immediate.
OPR_SVC_ AGRMTS	Y or N	This parameter allows CLECs to use their own billing agreements or use the billing agreements already established by the Operator Services wholesaler. This parameter identifies the billing agreement groups of the Operator Services wholesaler. This parameter is used as the default behavior when no Calling AO SPID is associated with the call.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 43 of

Field PARMNAME	Field PARMVAL	Explanation and action
OPR_SVC_ AGRMTS (continued)		The values are as follows: • Y - There are operator services billing agreements. Datafill the following refinements: — CCVAGRMT - Call card validation. Enter a billing agreement group name defined in table BAGNAME. This name is used as part of an index into table CCVAGRMT. — BNSAGRMT - Billed number screening. Enter a billing agreement group name defined in table BAGNAME. This name is used as part of an index into table BNSAGRMT. — NOSPDERR - No SPID is returned from the database. The values for error handling are as follows: – ACCPT—Accept the call. – BLOCK—Block the call. – OPER—Send the call to an operator if the call is not at an operator (that is, at an automated system), or if at an operator, block that billing method and allow the operator to prompt for another method of payment.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 44 of

Field PARMNAME	Field PARMVAL	Explanation and action
OPR_SVC_ AGRMTS (continued)		• N - There are no operator services billing agreements. This value is allowed only if TOPSPARM parameter ALL_CALLS_USE_OPR_SVC_AGRMTS = N and no SPID in table SPIDDB nor CIC in table TOPEACAR is using the operator services billing agreements. Datafill refinement NO_CLG_AO_ACTION. This refinement allows the Operator Services wholesaler to define default handling when there is no Calling AO SPID associated with the call (for LEC calls only) and no Operator Services Agreements are datafilled. The values are as follows: — ACCPT - Accept the call (default). This value allows the feature to be activated through SOC and screening for billing agreement to be done on a per SPID basis. After all necessary datafill is in place for all SPIDs in table SPIDDB, this field can be changed to BLOCK if desired. — BLOCK - block the call
OPR_ SPECIFIED_ SNPA	SNPA from HNPACONT or SNPANAME	This parameter specifies the SNPA used to expand a 7-digit calling number to 10 digits for an operator call. Enter an SNPA that is defined in table HNPACONT or SNPANAME.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 45 of

Field PARMNAME	Field PARMVAL	Explanation and action
OSNC_OUTGOING _DEFAULT	Y or N	This parameter allows all outgoing ISUP calls to default to OSNC signalling. This parameter eliminates the need to add the OSNCCAP selector to all route lists that should be using OSNC signalling. The values are as follows: • Y - All outgoing ISUP traffic is routed with OSNC signalling unless overridden by the OSNCCAP selector indicating not to use OSNC signalling for incoming OSNC calls • N - All outgoing ISUP traffic is routed with TOPS/ISUP (functionality GR317/GR394 ISUP to/from TOPS, OSEA0005) signalling unless OSNC signalling is specified in the route list by selector OSNCCAP for incoming OSNC calls.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 46 of

Field PARMNAME	Field PARMVAL	Explanation and action
OVERRIDE_ ANIFSPL_ HANDLING	Y or N	*ANI ID failure special* This subfield determines on a switch wide basis whether an ANI failure call should be displayed as ANI success to the operator. An ANI failure occurs if the call is marked as special and no calling number is found in table SPLDNID or DNSCRN. The values are as follows: • Y - An ANI failure is allowed to proceed through the system, no restrictions are marked against the call, and the call is displayed as ANI success. This parameter has precedence over table TOPSTOPT field ANIFSPL. Therefore, when this parameter is set to Y, field ANIFSPL is not valid. • N - An ANI failure is displayed as ANI failure as prior to this feature. This value is the default. For this value only, an ANI failure can be displayed as ANI success on a trunk group basis according to table TOPSTOPS field ANIFSPL. This behavior applies to calls marked as special by the ANI ID tables (OSSCAT, BELLCAT, and OPENANI) that arrive on STATCLAS = DNLOOKUP or RESTBIL trunk groups.
		When a call arrives with an ANI ID marked as special, the screening tables are used to identify the calling service (for example, coin, restricted, and so forth). When there is no data in these tables for a call marked as special and the datafill indicates not to mark this call as ANI failure, the calling service is marked as station.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 47 of

Field PARMNAME	Field PARMVAL	Explanation and action
PARS_PMIST_ FORMAT	OFF or FULL	This parameter enables decoding and formatting of the PMIST message for the personal audio response (PARS) protocol. The range is OFF and FULL. When set to OFF, the message is displayed in hexadecimal format. When set to FULL, the message is displayed in both the hexadecimal and decoded formats. The default is OFF.
POSITION_ SANITY_TIMER	Nor Yx (x is 1 to 60)	Enter POSITION_SANITY_TIMER to set the TOPS position sanity timer on or off in a TOPS office. Enter Y to turn on the sanity position timer and then enter a timer duration in the range of 1 to 60 seconds. Otherwise, enter N to turn off the timer. The default is N. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 48 of

Field PARMNAME	Field PARMVAL	Explanation and action
POST_WINK_ PRE_OFFHOOK_ DELAY	1 to 200 (80 is the default value)	This parameter indicates the delay in 10ms increments between each trunk signalled ACK and OFFHK. That is, multiply the entry by 10ms. Therefore, the range is 1 (10ms) to 200 (2000ms). This parameter is used for the intermittent problem of calls routing to a position and then going to reorder. This happens when an end office takes the call down and generates a TRK121 log due to no start dial. This only occurs when the TOPS trunk is set for COMFGD. The end office is missing the OFFHK from the TOPS office and reports a CALL_FAILURE_MSG in the XPMIST. XPMIST shows the interval between the EXECS sent to the XPM for the final wink and the answer offhook to be a minimum of 300ms. The XPM data shows the DMS100 switch side of the TOPS switch is being sent these messages in 60—70ms. The LSSGR states that the minimum time between these two should be 250ms. If the table OFCSTD parameter WK_DD_PRE_DIAL_DELAY is set way below the default (80ms) to 40ms, the failures stop occurring. However, changing this OFCSTD parameter is difficult to activate and the change must be performed in each end office. Therefore, this table TOPSPARM parameter provides a convenient solution.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 49 of

Field PARMNAME	Field PARMVAL	Explanation and action
POST_WINK_ PRE_OFFHOOK_ DELAY (continued)		If the above problem description occurs, increase the value. Start at the default value of 80 and increase the value in increments of 10 ms until the problem no longer occurs. ***Note:*** This parameter does not automatically appear in the table, it must be added.
PPCO_ DISCONNECT	Y or N	Pre-paid coin overtime disconnect. This parameter indicates whether to route a call to an operator when the caller does nothing after all the ACTS prompts and time-outs for overtime payment are finished. Enter N to route the call to an operator. Or, enter Y to disconnect the call. The default value is N.
RLT_SUPPORT_ ISO_CARDS	Y or N	Specifies if the ISO card number is signaled on the RLT for commercial credit and ITU cards. The default value is N.
RONI_TAKE_ DOWN_DELAY	Y or N	Enter RONI_TAKE_DOWN_DELAY to indicate whether additional time is required to wait for a successful digits indication from centralized automatic message accounting (CAMA) offices. Enter Y if additional time is allocated. Enter N if no additional time is allocated to wait for the indication. The default is N. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 50 of

Field PARMNAME	Field PARMVAL	Explanation and action
RTRS_ADACC_ DAS_ANN_QUERY	Y or N	This parameter enables/disables the ADACC surcharge query sent to the external real-time rating system. The values are as follows: • Y - Perform the ADACC surcharge query. Use this value when ADAC calls can have different surcharges. This value is the default. • N - Disable the ADACC surcharge query. This value should only be used if all of the following conditions are met: — All ADACC calls have the same surcharge. — The DAS has a pre-recorded hardcoded announcement of the static surcharge or the charges are not announced.
RTRS_ADACC_ QUERY_FAIL_ ACTION	BLOCK, OPER, or FREE	This parameter indicates the error recovery action if a rate could not be obtained for the ADACC portion of a real-time rated call. This takes place from a coin or hotel phone. Following are the values: • BLOCK: The subscriber is given an announcement indicating technical difficulties and the call is terminated. • OPER: The subscriber is connected to an operator. • FREE: The subscriber is not charged for the ADACC service and the call progresses. The default is OPER.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 51 of

Field PARMNAME	Field PARMVAL	Explanation and action
RTRS_ DEFAULT_ COMPANY_ CODE	000000 to 999999	This parameter provides the default company code for calls requiring real-time rating which do not have an associated company code in table COMPCODE per their origination status (trunk, NPA-NXX). The range is 000000 to 999999. The default is 000000.
RTRS_ DEFAULT_ SYSTEM	INTERNAL or EXTERNAL	This parameter determines the real-time rating system (INTERNAL or EXTERNAL) for calls requiring real-time rating which do not have an entry in table COMPCODE per their origination status (trunk, NPA-NXX), A value of INTERNAL selects the older table driven real-time rating system is used in determining the call's rate(s). A value of EXTERNAL selects the external real-time rating system (the RTRS) to query the call's rate(s). The default is INTERNAL.
RTRS_FIRST_ MTS_COIN_ QRYFL_ACTION	BLOCK, OPER, or FREE	This parameter indicates the error recovery action if a rate could not be obtained from the RTRS for the first period of a coin call (pre or post pay overtime) if at ACTS. Following are the values: • BLOCK: The subscriber is given an announcement indicating technical difficulties and the call is terminated. • OPER: The subscriber is connected to an operator. • FREE: The subscriber is not charged for the first coin time period and the call progresses. The default is OPER.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 52 of

Field PARMNAME	Field PARMVAL	Explanation and action
RTRS_SUBSE_ MTS_COIN_ QRYFL_ACTION	OPER or FREE	This parameter indicates the error recovery action if a rate could not be obtained from the RTRS for a non-initial period of a coin call (pre or post pay overtime) if at ACTS. • OPER: The subscriber is connected to an operator. • FREE: The subscriber is not charged for the coin time period and the call progresses.
RTRS_TIMEOUT	0 to 600	This parameter indicates the time in seconds when a query to the RTRS is considered timed-out. The range is 0 to 600 (seconds). The default is 1.
RTRS_VERSION	VERSION_1 or VERSION_2	This parameter indicates the external rater protocol version. The values are: • VERSION_1 - This version is the original release (TOPS04) of this functionality. This is the default value. • VERSION_2 - This version is the current release (TOPS09) and beyond of this functionality. For more information, refer to functionality External RTRS Interface, ENSV0009

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 53 of

Field PARMNAME	Field PARMVAL	Explanation and action
SA_ QUEUEING_ BY_REQUEST_ AGE	Y or N	Enter SA_QUEUEING_BY_REQUEST_AGE to allow old SA/IC (service assistant/in-charge) requests to be dequeued on the basis of the time spent waiting in the queue to be serviced by the next available team. This allows an SA/IC request that has been waiting the longest in the queue to be connected to the most recently released SA/IC team, as long as the service is compatible. Enter Y to allow old SA/IC requests to be dequeued on the basis of the time spent waiting in the queue to be serviced by the next available team. Enter N if the enqueued request is only serviced by the team on which it was enqueued. The default is N. Activation is immediate.
SEND_SECONDS_ TO_HOBIC	Y or N	This parameter enables sending of minutes and seconds to the HOBIC device for display. This parameter applies only to the external real-time rater, not the internal rater. The values are as follows: • Y - Send minutes and seconds. • N - Send only minutes. This value is the default, the process before this functionality. Since down stream processors must be ready to use the seconds based information, use value N during preparation.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 54 of

Field PARMNAME	Field PARMVAL	Explanation and action
SPECIAL_ HANDLING_ COLLECT	Y or N	This parameter activates the global functionality Special Handling for Collect Calls, GOS00101, and specifies a new route for collect calls when this feature is active. The values are Y (activate this feature) and N (disable this feature). For Y only, enter a valid XLASYS and XLANAME to index table PXCODE. This parameter is valid only in a global environment, not in North America.
SPLIT_CLG_FOR_ COLLECT	Y or N	This parameter indicates if the calling party should be split on collect calls when the called number is outpulsed. The values are Y (split) and N (do not split). This parameter is created by the global functionality Special Handling for Collect Calls, GOS00101. This parameter is valid only in a global environment, not in North America.
TBI_AUTO_ SPLIT	Y or N	Manual Toll Break-In (MTBI) automatic split. The values are as follows: • Y - The calling party (who is requesting the break-in) is automatically split from the call when the operator attempts MTBI via the Trunk Offer Start (TOS) function. When MTBI ends, the operator uses the Trunk Offer End (TOE) function. This causes the system to restore the calling party's voice path back to either split or joined as prior to the TOS function. • N - TOS does not automatically split the calling party's voice path out of the call. The operator must use the split/join function. This parameter appears in global loads only.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 55 of

Field PARMNAME	Field PARMVAL	Explanation and action
TMT_FOR_INTC_ FAILURES	Y or N	This parameter indicates handling of the following types of intercept failures: • failure to get an ARU • failure of the DAS to find a listing • timeout of the DAS to find a listing • failure of a facility during playback • a wake up message received during playback • split referral The values for this parameter are as follows: • Y - Send intercept failures to Emergency Route 6 (EMR6) in an Operator Centralization (OC) configuration. This value enables this feature. • N - Send intercept failures to the queue management system (QMS) refinement tables. This value is the default and disables this feature.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 56 of

Field PARMNAME	Field PARMVAL	Explanation and action
TOPS06_DEVICE_ ENHANCEMENTS	Y or N	This parameter enables additional information in the output reports for TOPS TTY devices for the commands listed below. Enter Y to enable or N to disable the new information. Value Y is the default. Following are the commands, devices, and new information: • RA/EA (assign a study register) - Used on TADS, SADS, SADSHADS, and QTADS devices. The response, when successful, now indicates how many study registers are in use by the team and how many are available for assignment. • RQ/EN (query study register assignments) - Used on TADS and QTADS devices. The response now indicates how many study registers are available for assignment. This parameter is non-optional, that is, it is valid regardless of the SOC state of functionality QMS Customer Service Enhancements, ADVQ0006. Also, this parameter is applicable in the TOPSACD and QMS environments. For more information about these commands, refer to the applicable (TOPS MP, MPX, or IWS) Force Management Guide.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 57 of

Field PARMNAME	Field PARMVAL	Explanation and action
TOPS11_DEVICE_ ENHANCEMENTS	Y or N	This parameter controls appearance of the calling number in TOPS devices. The values are as follows: • N - The devices output the same as before this TOPS11 parameter. The calling number usually does not appear, but can appear in some cases such as a collect call billed to a hotel, or a charge adjustment not associated with an AQ or DUAQ device in table TOPSDEV or HOBICDEV. This parameter value is the default. • Y - The calling number appears in the billing records output by TOPS autoquote (AQ), voice quote (VQ), dial-up autoquote (DUAQ0, and record devices. Also, the calling number appears in charge adjust records generated on the hotel administration data system (HADS), VQ, or record devices. Charge adjust records appear when the operator makes a charge adjustment. This parameter is not optional and appears in all loads, North American and global. Refer to functionality TOPS Call Processing Features (Billing), OSB00001, under feature 50095068, in the Translations Guide for more information.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 58 of

Field PARMNAME	Field PARMVAL	Explanation and action
TOPS_RLT_REL_ VIA_CCTO	Y or N	This parameter provides support of release link trunking (RLT) in the end office. This parameter indicates the Service Activation Parameter (SAP) feature value sent to the DMS-100 end office if field RLT In table ISUPTRK Is set to RLT_REL 1. The values are:. • N - Send the SAP feature indicator value of RLT_REQUEST_MSG. This value is supported in NA0015 and up. • Y - Send the SAP feature indicator of CCTO_ALL_ISUP or CCTO_NOT_ALL_ISUP (as applicable). This value (Y) is the default. This value represents the behavior prior to this parameter. This value must be used if any DMS-100 end office connected to the TOPS office is below NA0015 and using RLT_REL.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 59 of

Field PARMNAME	Field PARMVAL	Explanation and action
TWO_AMA_REC_ FOR_SERVED_ 0MINUS_EA	Y or N	This parameter applies to 0- call originations that turn out to be EA calls destined for carriers that are SERVed by the Operating Company. The term SERVed means table TOPEACAR, field OPSERV, subfield OPSERVSEL= SERV. For these calls, this parameter enables generation of two AMA records that are identical except as follows: • One record has a call code 190 and the other record has call code 192. For the record with the call code 192, if the operator enters a carrier ID but no called number and makes no attempt to outpulse (that is, cancels calls and releases position), then a call code 196 replaces 192. • The call code 190 record does not have a call completion module, Module Code 051, nor a Module Code 316. In addition, Module Codes 314, 315, 184, 186, and 187 are not included on the call code 190 record. These modules are only included on the call code 192, if applicable to the call.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 60 of

Field PARMNAME	Field PARMVAL	Explanation and action
TWO_AMA_REC_ FOR_SERVED_ 0MINUS_EA (continued)		The values of this parameter are as follows: • Y - Enable generation of the two AMA records as described above. This feature only applies to 0-dialed calls. 00-, 10XXX0-, and 10XXX00- calls routed to the TOPS system do not generate the access record. • N - Generate one AMA record (Structure Code 752 with call code 192) with a call completion module (module code 51) indicating that completion service was provided for the call. In addition, module code 53 is also included to identify the carrier associated with the call. If Origination Line Number Screening (OLNS) is in use, then Structure Code 772 is generated instead of Structure Code 752.
ZENITH_EA_ ROUTING	Y or N	Enter ZENITH_EA_ROUTING to specify whether Zenith calls are to use TOPS equal access (EA) translations. Enter Y if calls receive local access and transport area (LATA) screening and are routed through equal access (EA) translations. Enter N if no LATA screening is performed and calls use standard non-EA translations. The default is N. Activation is immediate.

Field, subfield, and refinement descriptions for table TOPSPARM (Sheet 61 of

Field PARMNAME	Field PARMVAL	Explanation and action
ZENITH_TEN_ DIGIT_DIALLING	Y or N	Enter ZENITH_TEN_DIGIT_DIALING to allow individual offices to select seven- or ten-digit Zenith numbers. Enter Y if the Zenith number remains ten digits. Enter N if the area code is stripped from Zenith numbers that have the same area code as the TOPS operator position. The default is N. Activation is immediate.

Additional information

This section provides additional information regarding table TOPSPARM.

Error Messages

The following error messages apply to table TOPSPARM.

Error messages for table TOPSPARM

Error message	Explanation and action
`Auto muted notify does not apply unless muted notify is set.`	Muted notify recalls must be allowed for automatic muted notify recalls to be permitted. If an attempt is made to change the value of AUTO_NFY_RECALL to Y when MUTED_NFY_RECALL is N, then the change is not allowed.
`Parameter NOTIFY_RECALL_OPTIONS only applies when the office numbering plan is open numbering.`	Parameter NOTIFY_RECALL_OPTIONS only applies to open numbering offices. If a craftsperson attempts to change parameter NOTIFY_RECALL_OPTIONS in a North American office, the change is allowed and the warning message is displayed.

Table history

SN07

Table TOPSPARM migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 11 of 12*, 297-8021-351.09.03.

TOPSTOPT

ATTENTION
This table applies to new or modified content for NA017 (SN04) that is valid through the current release.

Traffic Operator Position System Trunk Options Table

Table TOPSTOPT is used to specify different options for Traffic Operator Position System (TOPS) trunks. The Automatic Call Distribution (ACD) field is used to specify the processing used on a trunk group basis. An entry of QMSCAM in field ACD is not permitted in BCS32. The ACD used is TOPSACD for trunks not datafilled in this table for BCS32.

Standard dump and restore applies after BCS32. This table can be left empty. If the table is empty, TOPSACD is used internally.

Fields SPIDPRC and TRKSPID interact as follows.

Control of SPID processing by fields SPIDPRC and TRKSPID

Field SPIDPRC	Field TRKSPID	Effect on calling AO SPID assignment
N	N	SPID processing is not performed, so no value is assigned to the calling AO SPID. This condition applies even if an attempt is made to assign one. An AO SPID assignment attempt can be made from an OLNS query, table DNSCRN, and so forth.
N	Y nnnn	SPID processing is not performed, so no value is assigned to the calling AO SPID. A default SPID value `nnnn' can be entered, but does not effect SPID assignment.

Control of SPID processing by fields SPIDPRC and TRKSPID

Field SPIDPRC	Field TRKSPID	Effect on calling AO SPID assignment
Y	N	SPID processing occurs, but the calling AO SPID has no value at this point. SPID assignment may occur later (for example, from an OLNS query, table DNSCRN, and so forth).
Y	Ynnnn	SPID processing occurs, and a default SPID value `nnnn' is assigned to calling AO SPID. This initial SPID value may be overridden later (for example, from an OLNS query, and so forth).

The following table shows how field DISPSPID and the indicated parameter combinations determine the SPID display.

Field and parameter interactions for SPID display

Table TOPSTOPT field DISPSPID value	Table TOPSPARM parameter OPP_ALWAYS_SEND_SPID_INFO value	CSPID display sent to position?
N	N	no
Y	N	yes
N	Y	yes
Y	Y	yes

Datafill sequence and meaning

The following tables must be datafilled before table TOPSTOPT:

- CLLI
- TRKGRP
- SPID
- WSALEOPT
- TRKOPTS (if field MAXCONNS is set to a non-zero value)

If the common language location identifier (CLLI) in table TOPSTOPT is an Integrated Business Networks (IBN) trunk, the CLLI is interlocked to the corresponding CLLI in table TRKGRP(IBN). An IBN trunk CLLI must be datafilled in table TRKGRP(IBN) prior to being datafilled in table TOPSTOPT.

Table size

0 to 8191 tuples

Actual table size is based on the entry TRKGRP in table DATASIZE.

Datafill

The following table lists the datafill for table TOPSTOPT.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 1 of 17)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* GRPKEY consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter a valid incoming or two-way trunk CLLI used for TOPS traffic. This entry must be datafilled in table CLLI and table TRKGRP. If the CLLI is an IBN trunk, it must be datafilled in table TRKGRP(IBN) before being datafilled in table TOPSTOPT.
ORGAREA		see subfield	*Originating area* This field consists of subfield ORGCRIT_SEL.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 2 of 17)

Field	Subfield or refinement	Entry	Explanation and action
	ORIGCRIT_SEL	Y or N	*Originating criterion selector* If calls are to be CT4Q refined by the originating criteria (table CTQORIG and associated tables), enter Y and datafill refinement ORGCRIT. Otherwise, if there is no criterion, enter N and do not datafill ORGCRIT.
ORGAREA (continued)	ORGCRIT	name from TQORGNAM	*Originating criteria* This field is valid only if field ORGCRIT_SEL = Y. Enter a call originating location name from table TQORGNAM. This field segregates traffic on a trunk group basis according to the calling number and is used in table CT4QORIG.
DISPCLG		Y or N	*Display calling number* Enter Y if the calling number is displayed at the TOPS terminal for use by the TOPS operator. The default value is N, calling number is not displayed.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 3 of 17)

Field	Subfield or refinement	Entry	Explanation and action
ADASERV		NONE, ADAS, or ADASPLUS	*Automated directory assistance service availability* ADAS service allowed for calls on trunk. The values are defined as follows: • NONE - Do not to use any ADAS system. • ADAS - Use the ADAS system in functionality ADAS, OSDA0004. • ADASPLUS - Use the ADAS system in functionality DA Automation I/F, OSDA0006. The default value is NONE.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 4 of 17)

Field	Subfield or refinement	Entry	Explanation and action
ADASANS		NA, IMMEDIATE or DELAYED	*ADAS answer supervision* Controls when answer supervision is returned to the originating trunk. Entries are: • NA - Not applicable. Use when ADASERV is set to anything other than ADAS or ADASPLUS, (i.e. NONE). When ADASERV equals ADAS or ADASPLUS, ADASANS cannot be set to NA. • IMMEDIATE - Answer supervision is provided when the incoming trunk is initially connected to ADAS. • DELAYED - Answer supervision is not provided until the call arrives at the operator position. DELAYED can only be used for Intertoll or TOPS ONI trunks.
ANITOCLI		see subfield	*Automatic Number Identification to Calling Line Identification* This field consists of subfield ANI2CLI.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 5 of 17)

Field	Subfield or refinement	Entry	Explanation and action
ANITOCLI (continued)	ANI2CLI	Y or N	*Automatic Number Identification to Calling Line Identification* Enables conversion of ANI on an incoming trunk to CLI for an outgoing ISUP trunk. If set to N, ANI is not forwarded as CLI. If set to Y, ANI may be forwarded as CLI, depending on tables ISUPTRK and TOPSPARM. When set to Y, datafill subfield BLKCLI. CLI is forwarded if field ANITOCLI is set to Y in tables ISUPTRK and TOPSTOPT, and parameter FORWARD_ANI_AS_CLI is set to Y in table TOPSPARM.
	BLKCLI	Y or N	*Block Calling Line Identifier* This subfield is present only if field ANITOCLI = Y. Set BLKCLI = Y to mark all calls incoming on the given trunk as `presentation restricted'; that is, mark the caller's ID (number) as blocked. Set to N to allow presentation of the CLI. When set to N, table TDBCLASS, field BLKCLI is searched before forwarding the CLI with presentation allowed.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 6 of 17)

Field	Subfield or refinement	Entry	Explanation and action
OLNSQRY		NONE or ALL	*Originating Line Number Screening Query* This field indicates which calls can launch a query on a given incoming trunk. The following are descriptions of the values: • NONE - No OLNS queries are made for incoming calls. • ALL - OLNS queries are made on all calls prior to arrival at the operator position except for intercept and inwards calls. For these two call types, OLNS queries are not made since the subscriber calling number is not signalled to the DMS switch. For the ALL case, if the call is ONI or ANI fail, the query is launched automatically when the calling number is entered by the operator at position. No more than one OLNS query is made for a call unless the calling number is changed as can be done for operator number identification (ONI) or ANI fail calls.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 7 of 17)

Field	Subfield or refinement	Entry	Explanation and action
DCIBIDX		0 to 511	Disallowed card issuer blocking index This field is an index into table DCICSET for blocking calling cards on a trunk group basis. The default value is 0, which means that the disallowed card issuer blocking functionality is not offered on this trunk group. This field is used the two conditions as follow are true: • The DCIB SOC (ABS00014) is ON • This trunk is not eligible for OLNS; that is, field OLNSQRY = NONE.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 8 of 17)

Field	Subfield or refinement	Entry	Explanation and action
LNPCLGAM		Y or N	*Local number portability calling number AMA* This field specifies whether to append a module 720 to the AMA record for calls that originate on the trunk group. The value Y indicates that the LRN of the calling number should be included in the AMA record. The default is N, indicating LNP information for AMA is not required. If a trunk is not datafilled in TOPSTOPT, then LNP information for AMA is not required. A value of N does not always prevent an LNP module for the calling number from being appended to the AMA record. For example, a module 720 is appended if a query is made for the purpose of routing to that calling number. Likewise, a value of Y does not always cause an LNP module for the calling number to be appended to the AMA record. For example, even when this value is Y, no module 720 is appended if an LRN is not datafilled against the incoming trunk group (table TRKGRP) and the parameter LNP_QUERY_FOR_AMA_ONLY does not include the value CLG (table TOPSPARM).

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 9 of 17)

Field	Subfield or refinement	Entry	Explanation and action
LNPCLGAM (continued)			This field is only available in North American TOPS switch loads and is specific to TOPS LNP. It is only referenced when TOPS LNP is active.
XLASCHEM		see subfield	*Translation scheme* This field consists of subfield NEWXLA.
	NEWXLA	Y or N	*New TOPS translations* This field enables this trunk group (field GRPKEY) for use by the new TOPS translations process. Enter Y (enable) or N (disable). For value Y, datafill refinement XLAGRP. The default is N.
	XLAGRP	name from table XLAGRP	*Translations group* Datafill this field if field NEWXLA = Y. Enter a translations group name defined in table XLAGRP that contains this trunk group (field GRPKEY).

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 10 of

Field	Subfield or refinement	Entry	Explanation and action
SPIDPRC		Y or N	*Service provider identifier processing* This field enables SPID processing for this incoming trunk group. Enter Y (enable) or N (disable). For value N, the earlier method of translations applies for this trunk group. The default is Y. The value of this field does not stop entering a value in field TRKSPID. However, if SPIDPRC= N, the TRKSPID field is not used. ***Note 1:*** This field affects all SPID processing in the whole unbundling functionality group (UNBN0001). ***Note 2:*** The “Functional description” section describes the interaction of fields SPIDPRC and TRKSPID.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 11 of

Field	Subfield or refinement	Entry	Explanation and action
TRKSPID		Y or N	*Trunk Service Provider Identifier* This field indicates whether a default SPID has been assigned for the given trunk group. If this field is set to N, there is no trunk-associated default SPID. If this field is set to Y, then datafill refinement SPID ***Note:*** The "Functional description" section describes the interaction of fields SPIDPRC and TRKSPID.
	SPID	4 characters	*Trunk Service Provider Identifier* Datafill this field if TRKSPID = Y with the default SPID to be associated with this trunk group.
BILLSCRN		see subfield	*Billing screening* This field consists of subfield BILLSCRN.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 12 of

Field	Subfield or refinement	Entry	Explanation and action
BILLSCRN (continued)	BILLSCRN	Y or N	*Billing screening* This field indicates whether screening methods apply to the trunk group. Wholesale screening is considered only if DN screening finds no restrictions for non-directory assistance call completion (non-DACC) calls. The values are as follows: • Y - Enable screening and enter datafill in subfields WSIDX, SCRNIDX, DACCSCRM, and ANIDSCR. • N - Disable screening. This value is the default.
	WSIDX	0-99	*Wholesale Index* This subfield is an index into table WSALEOPT.
	SCRNIDX	0-100	*Screening index* This subfield is an index into table RESTBIL (TA call) or DARSTBIL (DA call). This subfield is used for trunk based screening when table WSALEOPT field INTRA or INTER contains TRK. Value 100 is nil.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 13 of

Field	Subfield or refinement	Entry	Explanation and action
BILLSCRN (continued)	DACCSCR	Y or N	*Directory Assistance Call Completion screening* This subfield indicates whether wholesale screening should apply to Directory Assistance Call Completion (DACC) calls. The values are Y (yes) and N (no).
	ANIDSCR	Y or N	Automatic number identification screening This subfield determines whether calls should be screened based on the ANI ID. This screening is only considered if DN screening finds no restrictions for non-DACC calls and table WSALEOPT screening is attempted but there are no entries in applicable field INTER or INTRA. The values are as follows: • Y - Enable screening. The signaling type is determined from table TRKGRP field SIGTYPE to access applicable table BELLCAT, OSSCAT, or OPENANI field SCRNIDX (all tables). The applicable table provides an index into applicable table RESTBIL (TA call) or DARSTBIL (DA call). • N - Disable screening.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 14 of

Field	Subfield or refinement	Entry	Explanation and action
ANIFSPL		Y or N	*ANI ID failure special* This subfield determines on a trunk group basis whether an ANI failure call should be displayed as ANI success to the operator. An ANI failure occurs if the call is marked as special and no calling number is found in table SPLDNID or DNSCRN. The values are as follows: • Y - An ANI failure is allowed to proceed through the system, no restrictions are marked against the call, and the call is displayed as ANI success. This value is valid only if table TOPSPARM parameter OVERRIDE_ANIFSPL_HANDLING = N, since this parameter has precedence over field ANIFSPL • N - An ANI failure is displayed as ANI failure as prior to this feature. This value is the default.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 15 of

Field	Subfield or refinement	Entry	Explanation and action
ANIFSPL (continued)			This behavior applies to calls marked as special by the ANI ID tables (OSSCAT, BELLCAT, and OPENANI) that arrive on STATCLAS = DNLOOKUP or RESTBIL trunk groups. When a call arrives with an ANI ID marked as special, the screening tables are used to identify the calling service (for example, coin, restricted, and so forth). When there is no data in these tables for a call marked as special and the datafill indicates not to mark this call as ANI failure, the calling service is marked as station.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 16 of

Field	Subfield or refinement	Entry	Explanation and action
MAXCONNS		0 to 2016	*Maximum connections* This field indicates the maximum number of voice over IP (VoIP) connections that can be initiated on a trunk group reserved for TOPS VoIP calls. Each VoIP connection corresponds to a trunk member. Although the MAP display indicates the range maximum is 32767, the effective maximum is 2016, since a TOPS dynamic trunk group may have at most 2016 members. Entering a value greater than 2016 has no effect; the maximum number of connections for that trunk group remains at 2016. MAXCONNS applies to all TOPS dynamic trunk types: remote OC-IP voice links, host OC-IP voice links, and IP position voice links. For all other trunk types (non-dynamic), set this field to 0. MAXCONNS has no effect on trunk groups that are not datafilled as OC or POS dynamic trunks in table TRKOPTS. In table TRKOPTS, indicate the trunk group is reserved for OC or POS dynamic trunks before setting field MAXCONNS in table TOPSTOPT.

Field, subfield, and refinement descriptions for table TOPSTOPT (Sheet 17 of

Field	Subfield or refinement	Entry	Explanation and action
DISPSPID		Y or N	*Display SPID* This field determines on a trunk group basis if the SPID display information from table SPIDDB (field SCRNDISP) should be sent to the OPP-compatible position on carrier calls. Enter Y to send the display or N to not send the display. This same functionality is available on an office-wide basis in table TOPSPARM parameter OPP_ALWAYS_SEND_SPID_INFO. Refer to the table at the beginning of this module for the interaction of this parameter and field DISPSPID.

Additional information

This section provides information on possible error messages when datafilling table TOPSTOPT.

Error message for table TOPSTOPT

Error message	Explanation and action
`The DCIBIDX index must be datafilled in Table DCICSET prior to use in Table TOPSTOPT.`	A DCIBIDX value cannot be datafilled in table TOPSTOPT until it has been defined in table DCICSET. If an attempt is made to datafill a DCIBIDX that has not been defined in table DCICSET, the table change is not allowed and this error message is displayed.
`Trunk group not marked as a dynamic trunking application in Table TRKOPTS. MAXCONNS must be 0.`	This message appears when attempting to increase MAXCONNS to a nonzero value for a trunk group not reserved for TOPS VoIP calls. The tuple addition or change is not allowed.
`Warning: MAXCONNS is set to 0. No connections will be allowed on this trunk group.`	This warning message appears when attempting to set MAXCONNS to zero for a TOPS dynamic trunk group. The tuple addition or change is allowed.
`Warning: MAXCONNS is set higher than the maximum per trunk group. A maximum of 2016 connections will be used by call processing.`	This warning message appears when setting MAXCONNS to a value higher than 2016. The tuple addition or change is not allowed.
`Warning: TOPS VoIP usage limits are not supported in this load. MAXCONNS will be set to the maximum per trunk group, which is 2016.`	This warning message appears when trying to use VoIP usage limits, but the required DMS-100 software is not present in the load. The tuple addition or change is allowed. The MAXCONNS field will be set to 2016, and VoIP Usage Limits will not be used.

Table history

SN07

Table TOPSTOPT migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 11 of 12*, 297-8021-351.09.03.

TRKLATA

Trunk Local Access and Transport Area Table

Table TRKLATA allows the operating company to determine the originating local access and transport area (LATA) of a call. Table TRKLATA uses the common language location identifier (CLLI) of the incoming trunk group and either the calling numbering plan area (NPA) code, or the NPA and the station code together (NPA-NXX), to determine the originating LATA of the call.

Table TRKLATA must contain at least one tuple for each incoming trunk for which the INTERLATA conditional route selector is used in table OFRT.

If the end office associated with a trunk group serves more than one LATA, multiple entries can be made to associate different NPA or NPA-NXX codes with LATAs.

If an incoming trunk group and the associated calling digits are not datafilled in table TRKLATA, the call is treated as an intraLATA call.

Table TRKLATA must contain at least two tuples for each super centralized automatic message accounting (superCAMA) and each Traffic Operator Position System (TOPS) trunk group that carries LATA Equal Access System (LEAS) traffic. One of these tuples must have the entry in field DIGITS equal to 000, so that the trunk group can be identified as included in LEAS prior to the arrival of automatic number identification (ANI), and in cases of ANI fail.

Table TRKLATA is datafilled initially by operating company personnel when the office is commissioned. The table can be modified by operating company personnel using the table editor.

Datafill sequence and implications

The following tables must be datafilled before table TRKLATA:

- LATANAME
- TRKGRP
- PICNAME (in an LEAS switch)

Table size

0 to 32 767 tuples

Table TRKLATA can have one or more entries for any trunk group. Up to 8191 trunk groups can be included in the table. The size of table

TRKLATA is controlled by the entry for table TRKGRP in table DATASIZE.

Datafill

The following table lists the datafill for table TRKLATA.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ORIGKEY		see subfields	*Originating key* This field consists of subfields TRUNKNM and DIGITS.
	TRUNKNM	alphanumeric (1 to 16 characters)	*Trunk name* Enter the common language location identifier (CLLI) name of the incoming trunk group as defined in table CLLI.
	DIGITS	numeric (1 to 18 digits)	*Digits of calling number* Enter the numbering plan area (NPA) or the NPA and station code (NPA-NXX) of the calling number in an incoming call. Enter 000 for intertoll trunks, and for all centralized automatic message accounting (CAMA) trunks that do not provide the calling number for automatic number identification (ANI) fail and operator number identification (ONI) calls.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ORIGLATA		alphanumeric (1 to 8 characters)	*Originating local access and transport area name* Enter the name of the local access and transport area (LATA) defined in table LATANAME for the originating non-equal access end office.
LEASTRNK		see subfield	*Local Access and Transport Area Equal Access System trunk* This field indicates whether or not a trunk carries LATA Equal Access System (LEAS) traffic, and specifies the default carrier or treatment for that trunk. Field LEASTRNK consists of subfield LEASTRK.
	LEASTTRK	Y or N	*LATA Equal Access System trunk selector* Enter N for all trunks in a non-LEAS office. In a LEAS office, enter Y (yes) for Traffic Operator Position System (TOPS) trunks if field ENDOFFICE in table TOPEATRK is set to NCONFORM, or for superCAMA trunks. Datafill refinement CARRTRMT. Enter N for all other types of trunks in a LEAS office. No refinements require datafill.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CARRTRMT		C or T	*Carrier or treatment selector* If the entry in subfield LEASTRK is Y, datafill this refinement. This field specifies the default assignment for the LEAS trunk group. Enter C (carrier) and datafill refinement CARRIER. Enter T (treatment) and datafill refinement TREAT.
CARRIER		alphanumeric (1 to 16 characters)	*Carrier name* If the entry in subfield LEASTRK is Y and the entry in refinement CARRTRMT is C, datafill this refinement. Enter the name of the interLATA carrier or international carrier defined in table OCCNAME, used as the default assignment.
TREAT		alphabetic (4 characters)	*Treatment name* If the entry in subfield LEASTRK is Y and the entry in refinement CARRTRMT is T, datafill this refinement. Enter the name of the treatment used as the default assignment. The recommended treatment is DACD (dial access code announcement), which instructs the subscriber to dial 10XXX.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKMEM

ATTENTION
This table applies to new or modified content for SN06 (DMS) that is valid through the current release.

Trunk Member

Table TRKMEM lists the data for each trunk specified in tables TRKGRP and TRKSGRP.

Table TRKMEM does not include members of intertoll trunk groups that have common channel interoffice signaling (CCIS) and members of CCITT7 trunk groups in DMS-300 gateway switches.

For members of intertoll trunk groups with CCIS, see table C7TRKMEM. For members of CCITT7 trunk groups in DMS-300 switches, see tables N7TRKMEM and NO7TKMEM. For members of Global Trunks, see table TRKBCHNL.

Spectrum Peripheral Module (SPM) is datafilled into the PMTYPE field of table TRKMEM.

TRKMEM records the following data for each trunk group member and for each analog or digital trunk, including the spare trunks:

- the code assigned to the trunk group in table CLLI
- the external trunk number assigned by the operating company
- the number of the trunk subgroup
- the equipment number

To change a trunk member from a working trunk group to a spare, delete the member from the working trunk group in table TRKMEM, then add the member to the spare trunk group in table TRKMEM.

Note: If the switch has remote operation, the digital carrier module (DCM) assignments in table LMINV cannot be used for assignment to trunk groups.

Assign Common Channel Signaling (CCS7) links with a linkset type (field LSTYPE value ALINK in table C7LKSET) and an allocation scheme (field ALLOC value STBASIC or STPOOL in table C7LINK) to different digital trunk controllers (DTC) in table TRKMEM to provide for

redundancy. Failure to do this leads to CCS7 outage if the DTC goes out of service.

Cross checking is performed on table TRKMEM tuples to table TRKSGRP and TRKOPTs to ensure that only BICC IT trunks have the ECSTAT field in TRKSGRP set to INTERNAL. If an attempt is made to add an tuple for an IT trunk group to table TRKMEM (BICC trunks are not datafilled in table TRKMEM) with ECSTAT in TRKSGRP set to INTERNAL, the attempt is rejected.

Packet Telephony (PT) solutions PT-IP / PT-AAL1 / UA-AAL1 do not support trunk subgroups with both legacy and packet members. This restriction derives from the fact that all members in a given trunk subgroup share the same echo cancellation datafill via TRKSGRP and these values may be interpreted differently by packet and legacy peripherals.

For this reason, we suggest that packet members be combined in one trunk subgroup and legacy members be combined in a second trunk subgroup if both types are needed in the same trunk group. This requirement is not enforced but a notification message is generated during provisioning when both packet and legacy members are detected in the same trunk subgroup.

Trunk groups DTU, LTU, MTU, TTT, and TTU

Each member of the trunk groups with a common language location identifier (CLLI) of DTU, LTU, MTU, TTT or TTU consists of two trunk circuits that are always located in adjacent slots in the trunk or maintenance trunk module. For product engineering code DTU4X23AA both circuits must be specified in the trunk member table. For the following PECs, only the physical location of the circuit is required in the trunk member table:

- TTT2X96AA
- TTU2X47AA
- LTU2X11AA
- MTU4X97AA
- DTU4X23AA

The line test units for the host switch and its associated remote location are all listed under the fixed pseudo-CLLI code LTU.

Datafill an LTU or MTU in table TRKMEM before adding them to table MTAHORIZ. If the LTU or MTU is deleted from table TRKMEM, the corresponding tuple in table MTAHORIZ is marked as deleted, but it is

automatically restored if the LTU or MTU is reentered in table TRKMEM.

The following table indicates how the datafill in table TRKMEM corresponds with the time slots.

Datafill and time slots

Trunk	Timeslot	Trunk	Time slot
1	1	16	16
2	2	17	17
3	3	18	18
4	4	19	19
5	5	20	20
6	6	21	21
7	7	22	22
8	8	23	23
9	9	24	24
10	10	25	25
11	11	26	26
12	12	27	27
13	13	28	28
14	14	29	29
15	15	30	30

Note 1: Time slot 16 cannot be datafilled because it is reserved for signaling. Only a maximum of 30 trunks can be datafilled in a particular carrier. If time slot 16 is activated, a maximum of 31 trunks

can be datafilled. To activate time slot 16, the following conditions must be met:

- Table LTCINV must be datafilled for optional card NT6X28.
- Table LTCPSINV carriers must be CCS. Channel 16 cannot be datafilled on a CAS or digital private network signaling system (DPNSS) carrier.

Note 2: If offices are equipped with time slot flexibility for PCM30 carriers, the maximum number of non-signaling trunks that can be added to a PDTC is 480. Since datafill checks are not made to prevent operating company personnel from datafilling more than 480 non-signaling trunks, care must be exercised when adding new trunk circuits to a PDTC. If a PDTC is equipped with more than 480 trunks, PM180 switch error messages will result. In such a case, the following message is an indication that the capacity of the non-signaling trunks in the PDTC has been exceeded:

```
NO DB AVAIL
```

Note 3: All trunks with a signaling type of a DPNSS in table TRKSGRP must have their associated signaling links and inter-peripheral message links datafilled before they can be added to table TRKMEM.

Note 4: For trunk groups using the auto-identified outward dialing (AIOD) trunk feature, a tuple is automatically added to or deleted from table AIODTKN for each TRKMEM tuple added or deleted. The external trunk number of the trunk member is used as the AIOD token for table AIODTKN. The external trunk number must be unique over all trunks and lines using the same AIOD group for AIOD servicing.

X.75 trunk groups

For an X.75 trunk member to be datafilled in table TRKMEM, the following conditions must be satisfied:

- The trunk member must be datafilled first in table X75INFO.
- The DS0 channel must be datafilled in table SPECCONN against an XSG channel.

X.25 trunk groups

For an X.25 trunk member to be datafilled in table TRKMEM, the DS0 channel must be datafilled in table SPECCONN against an XSG channel.

Restricting access to table TRKMEM

Access to table TRKMEM can be restricted by datafilling table CUSTPROT. For United Kingdom customers, access to table TRKMEM must be restricted by datafilling table CUSTPROT to prevent

the operating company from moving physical trunks into a different trunk group.

Datafill sequence and meaning

The following tables must be datafilled before table TRKMEM:

- CLLI
- TRKGRP
- TRKSGRP
- RCCINV
- RCCPSINV
- X75INFO (for an X.75 trunk member)
- SPECCONN (for an X.75 or X.25 trunk member)
- DS0 links on a PCM30 digital trunk controller (PDTC) must first be datafilled in table LTCPSINV before digital jack trunks can be datafilled
- RCCINV (Synchronous Optical Network (SONET) remote cluster controllers (SRCC) must be datafilled first in table RCCINV)
- DS1 must be defined on its P-side in table RCCPSINV
- For PMTYPE of DTM, tables TMINV and TRSGRP must be datafilled before this table. Tables DRAMS and EDRAMINV must also be datafilled.
- When the office is configured with SPMs that have integrated services digital network (ISDN) user part (ISUP) or per trunk signaling (PTS) trunks, datafill table TRKMEM after table MNCKTPAK.

Table OAVLMAP must be datafilled after table TRKMEM. Deletions in table TRKMEM are not allowed if table OAVLMAP has a reference to the tuple being deleted.

When an ISUP or a PTS trunk is added to an SPM, the following dependencies apply:

- AB-bit resources must be datafilled in table MNCKTPAK before a PTS trunk is added in TRKMEM.
- At least one MF resource must be datafilled in table MNCKTPAK before a PTS trunk with an incoming pulse type of MF is added to table TRKMEM (on a given SPM node). The incoming pulse type is datafilled in the associated trunk subgroup (table TRKSGRP).

- At least one dual-tone multifrequency (DTMF) resource must be datafilled in table MNCKTPAK before a PTS trunk with an incoming pulse type of DT is added to table TRKMEM (on a given SPM node).
- If the PM type of the TRKMEM tuple = SPM, the incoming pulse type (IPULSTYP) field in the associated table TRKSGRP tuple cannot be datafilled as NP (nil_pulse_type).
- An ISUP trunk must be datafilled in table TRKMEM before it can be datafilled in table C7TRKMEM.

Table size

0 to 16 000 000 tuples

Note: The SPM tuples in the TRKMEM table use a refinement of the MEM_VAR_AREA, which is part of the TRUNK_MEMBER_DATA_TUPLE area. Therefore, no reformats are needed for dump and restore.

Datafill

The following table lists the datafill for table TRKMEM.

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned to the trunk group to which the trunk is a member. This CLLI code is assigned in table CLLI.
EXTRKNM		numeric (0 to 9999)	*External trunk number* Enter the external trunk number that is assigned to the trunk. For members of trunk groups using the AIOD option, the external trunk number must be unique over all trunks and lines using the same AIOD group.

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SCRP		numeric (0 to 1)	*Subgroup number* Enter the subgroup number to which the trunk is assigned.
MEMVAR		see subfield	*Variable data for members* This field consists of subfield PMTYPE and refinements.
	PMTYPE	ADTC AIM ALGC ARCC ATM DCA DCM DTC DTCI DTM ICP IDT IDTC ILTC ISM LGC LTC MMA MTM OAU PDTC PLGC PTM RCC RCC2 RCO2 RMM RMSC RSM SMA SMA2 SPM SMU SRCC STM TAN T8A TM2 TM4 TM8 TMA or TMS	*Peripheral module type* Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Each refinement entry must be separated from the next by a blank space. If the CLLI code is for a trunk group of type TPS101, it must be assigned to a maintenance trunk module (MTM) or packaged trunk module (PTM). If the value of field PMTYPE is ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, PLGC, datafill subfields DEQNO, DEQCKTNO, and DEQCKTTS. If the value of field PMTYPE is AIM, ATM, DTM, ISM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA, datafill subfields TMNO and TMCKTNO.

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
MEMVAR (continued)			If the value of field PMTYPE is DCM, datafill subfields DCMNO, DCMCKTNO, and DCMCKTTS. If the value of field PMTYPE is DTC, datafill subfields DTCNO, DTCCKTNO, and DTCCKTTS. If the value of field PMTYPE is DTCI, datafill subfields DTCINO, DTCICKTNO, and DTCICKTTS. If the value of field PMTYPE is ICP, datafill subfields ICPNO, ICPCKTNO, and ICPCKTTS. If the value of field PMTYPE is IDT, datafill subfields IDTNO and SHELFSLT. If the value of field PMTYPE is FWC, datafill subfields GWCNO, GWCNODENO, and GWCTRMNO for CS 2000 only. If the value of field PMTYPE is LGC, datafill subfields LGCNO, LGCCKTNO, and LGCCKTTS. If the value of field PMTYPE is LTC, datafill subfields LTCNO, LTCCKTNO, and LTCCKTTS.

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
MEMVAR (continued)			If the value of field PMTYPE is RCC, datafill subfields RCCNO, RCCCKTNO, and RCCCKTTS. If the value of field PMTYPE is RCC2, datafill subfields RCC2NO, RCC2CKTNO, and RCC2CKTTS. If the value of field PMTYPE is RCO2, datafill subfields RCO2NO, RCO2CKTNO, and RCO2CKTTS. If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS. If the value of field PMTYPE is SMA, datafill subfields SMANO, SMACKTNO, and SMACKTTS. If the value of field PMTYPE is SMA2, datafill subfields SMA2NO, SMA2CKTNO, and SMA2CKTTS. If the value of field PMTYPE is SMU, datafill subfields SMUNO, SMUCKTNO, and SMUCKTTS.

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
MEMVAR (continued)			If the value of field PMTYPE is SPM, datafill subfields SPMNO, SPMCKTNO, and SPMCKTTS. If the value of field PMTYPE is SRCC, datafill subfields SRCCNO, SRCCCKTNO, and SRCCCKTTS. If the value of field PMTYPE is TMS, datafill subfields TMSNO, TMSCKTNO, and TMSCKTTS. ***Note:*** PRA type trunks can be datafilled on an ISDN Austrian digital trunk controller (ADTC). These trunks can be datafilled on ports 1 to 31. All members must have an interface identifier specified in table LTCPSINV before they can be added. An ISDN capable ADTC shelf differs from the standard ADTC because it has an ISP card NTBX01AA and a universal time switch NT6X44EA card present. The shelf PEC is 6X02NA, the frame type is LTEI. Time switch cards AX73 and AX79 can also be used. For offices with PTMs, datafill the value MTM. PTMs are manufacturer discontinued.

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
MEMVAR (continued)			If the peripheral module is PDTC, digital jack trunks can be datafilled if optional package NTXK50AA (TTP-digital jack ended trunks) is in the load. Digital jack trunks can only be datafilled on time slot 1. The PDTC must be datafilled in table LTCINV and the specified circuit must be datafilled as a DS0 link in table LTCPSINV. If the peripheral module is PDTC, PRA type trunks can be datafilled on ports 0 through 15 and on circuits 1 through 31. Time slot 16 can be datafilled for IDTCs with carriers of signaling type CCS. If an attempt is made to datafill time slot 16 with carriers of type CAS or DPNSS, an error message is output. For NFA trunk member, the type of peripheral module (PM) is restricted to either DTC or LTC. These PMs must be equipped with universal tone receiver (UTR).

Field, subfield, and refinement descriptions for table TRKMEM (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
MEMVAR (continued)			The RCO2 is a remote unit part of the CPM (Common Peripheral Module) family, used in the DMS-100 family for international applications. It is the international version of the RCC2. The RCO2 has the same architecture as the RCC2 and is based on two shelves (introduced for the Domestic RCC2 program in BCS33). RCO2 supports up to 16 PCM30 on the C-side (mapping towards the LGCO) and up to 46 PCM30 on the P-side including 24 PCM30 on the extension shelf. RCO2 supports several types of lines, trunks, and certain small remotes on its P-side, as listed below: • line concentrating module (LCM) • extended line concentrating module (LCME) • community dial office (CDO) trunks • PBX trunks • remote unit (TBD) RCO2 supports up to 16 PCM30s on the C-side (mapping towards the LGCO) and up to 46 PCM30s on the P-side, including 24 PCM30s on the extension shelf.

PMTYPE = ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, or PLGC

If the value of field PMTYPE is ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, or PLGC, datafill subfields DEQNO, DEQCKTNO, and DEQCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DEQNO	numeric (0 to 511)	*Trunk module number* Enter the number assigned to the trunk module on which the trunk group number is assigned.
	DEQCKTNO	numeric (0 to 19)	Digital equipment circuit number Enter the number of the digital equipment module circuit card to which the trunk group member is assigned.
	DEQCKTTS	numeric (1 to 31)	*Digital equipment circuit time slot* Enter the number of the digital equipment circuit card time slot to which the trunk group member is assigned. If the flexible time slot feature is not turned on, the range of valid entries is 1 to 30. Datafill NT6X28 as an optional card in table LTCINV to turn on the flexible time slot feature.

PMTYPE = AIM, ATM, ISM, DTM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA

If the value of field PMTYPE is AIM, ATM, ISM, DTM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA, datafill subfields TMNO and TMCKTNO as described below.

Field descriptions for conditional datafill (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TMNO	numeric (0 to 2047)	*Trunk module number* Enter the number assigned to the trunk module on which the trunk group number is assigned.
	TMCKTNO	numeric (0 to 29)	*Trunk module circuit number* Enter the number of the trunk module circuit to which the trunk group member is assigned. The value for each subfield must be separated by a blank space.
		numeric (1 to 15 and 17 to 29)	See note added to table STN. or
		numeric (7 to 10), 11, 12, 13 to 16, 17 or 18, 19, 20 to 21, 22, 23, 24, 25, 26 to 28	(Aim type TM only) If trunk emulation is provided for NT2X75AA/BA, enter 7 to 10. If trunk emulation is provided for NT1X54AA or NT2X72AA/AB/AC/BA and FX48AA is datafilled for AIM in table TMINV, enter 11. ***Note:*** Only one emulation type can be used at a time for NT2X72xx, NT2X81xx and NT2X90xx

Field descriptions for conditional datafill (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			If trunk emulation is provided for Montalk and FX48AA is datafilled for AIM in table TMINV, enter 12. If trunk emulation is provided for NT5X30AA/BA, NT2X95AA, NT2X82AA or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 13 to 16. If trunk emulation is provided for NT2X82AA, NT2X95AA or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 17 or 18. If trunk emulation is provided for NT5X30AA/BA and FX48AA is datafilled for AIM in table TMINV, enter 19. If trunk emulation is provided for NT2X71AA and FX48AA is datafilled for AIM in table TMINV, enter 20 or 21.

Field descriptions for conditional datafill (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			If trunk emulation is provided for NT2X81AA/AB/BA, NT2X90AD or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 22. ***Note:*** Only one emulation type can be used at a time for NT2X72xx, NT2X81xx and NT2X90xx If trunk emulation is provided for NT1X54AA, NT2X72AA/AB/AC/BA, enter 23. ***Note:*** Emulation of NT2X72xx on circuit 23 and NT2X81xx on circuit 25 may not be used at the same time If trunk emulation is provided for NT5X30AA/BA, enter 24. If trunk emulation is provided for NT2X81AA/AB/BA, NT2X90AD or Montalk, enter 25. ***Note:*** Emulation of NT2X72xx on circuit 23 and NT2X81xx on circuit 25 may not be used at the same time If trunk emulation is provided for NT2X90AD or Montalk, enter 26 to 28.

Field descriptions for conditional datafill (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
		numeric (4 to 24, 25 to 27, 28)	(AIM based RMM type TM only) If trunk emulation is provided by a pass-through to the RMM shelf, enter 4 to 24. ***Note:*** Non-AIM circuit packs can be provisioned in these circuits and used if the RMM is not AIM based If trunk emulation is provided for NT2X90AD or Montalk, enter 25 to 27. If trunk emulation is provided for Montalk, enter 28.

PMTYPE = DCM

If the value of field PMTYPE is DCM, datafill subfields DCMNO, DCMCKTNO, and DCMCKTTS as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DCMNO	numeric (0 to 511)	*Digital carrier module number* Enter number of the digital carrier module (DCM) to which the trunk group member is assigned.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DCMCKTNO	numeric (0 to 4)	*Digital carrier module circuit number* Enter the number of the DCM circuit card to which the trunk group member is assigned.
	DCMCKTTS	numeric (1 to 24)	*Digital carrier module circuit time slot* Enter the number of the DCM circuit card DS1 time slot to which the trunk group member is assigned.

PMTYPE = DTC

If the value of field PMTYPE is DTC, datafill subfields DTCNO, DTCCKTNO, and DTCCKTTS as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DTCNO	numeric (0 to 511)	*Digital trunk controller number* Enter number of the digital trunk controller (DTC) module to which the trunk group member is assigned.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DTCCKTNO	numeric (0 to 19)	*Digital trunk controller circuit number* Enter the number of the DTC circuit card to which the trunk group member is assigned.
	DTCCKTTS	numeric (1 to 24)	*Digital trunk controller circuit time slot* Enter the number of the circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = DTCI

If the value of field PMTYPE is DTCI, datafill subfields DTCINO, DTCICKTNO, and DTCICKTTS as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DTCINO	numeric (0 to 511)	*ISDN digital trunk controller number* Enter the number of the ISDN DTC (DTCI) module to which the trunk group member is assigned.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DTCICKTNO	numeric (0 to 19)	*ISDN digital trunk controller circuit number* Enter the number of the DTCI DS1 span to which the trunk group member is assigned.
	DTCICKTTS	numeric (1 to 24)	*ISDN digital trunk controller circuit time slot* Enter the number of the circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = GWC

If the value of field PMTYPE is GWC, datafill subfields GWCNO, GWCNODENO, and GWCTRMNO as described below. The peripheral module type of GWC applies to CS 2000 only.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	GWCNO	numeric (0 to 255)	*Gateway control number* Enter the number of the Gateway control number (GWC) for the assignment of the trunk group number.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	GWCNODENO	numeric (0 to 4095)	*Gateway control node number* Enter the number of the GWC node number for the assignment of the trunk group member.
	GWCTRMNO	numeric (1 to 3999)	*Gateway control terminal number* Enter the number of the GWC terminal number for the assignment of the trunk group member.

PMTYPE = ICP

If the value of field PMTYPE is ICP, datafill subfields ICPNO, ICPCKTNO, and ICPCKTTS as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ICPNO	numeric (0 to 511)	*Integrated cellular peripheral number* Enter the number of the integrated cellular peripheral (ICP) to which the trunk group member is assigned.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ICPCKTNO	numeric (0 to 19)	*Integrated cellular peripheral circuit number* Enter the number of the ICP circuit card to which the trunk group member is assigned.
	ICPCKTTS	numeric (1 to 31)	*Integrated cellular peripheral circuit time slot* Enter the number of the ICP circuit card time slot to which the trunk group member is assigned.

PMTYPE = IDT

If the value of field PMTYPE is IDT, datafill subfields IDTNO and SHELFSLT as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	IDTNO	numeric (0 to 255)	*Integrated digital terminal number* Enter the number of the integrated digital terminal (IDT) to which the trunk group member is assigned.
	SHELFSLT	see subfields	*Integrated digital terminal shelf and slot* This subfield consists of refinements SHELF and SLOT.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SHELF	numeric (1 to 31)	*Integrated digital terminal shelf number* Enter the number of the IDT shelf to which the trunk group member is assigned.
	SLOT	numeric (1 to 99)	*Integrated digital terminal slot number* Enter the number of the IDT slot number to which the trunk group is assigned.

PMTYPE = LGC

If the value of field PMTYPE is LGC, datafill subfields LGCNO, LGCCKTNO, and LGCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LGCNO	numeric (0 to 511)	*Line group controller number* Enter the number of the line group controller (LGC) to which the trunk group member is assigned.
	LGCCKTNO	numeric (0 to 19)	*Line group controller circuit number* Enter the number of the LGC circuit card to which the trunk group member is assigned.
	LGCCKTTS	numeric (1 to 24)	*Line group controller circuit time slot* Enter the number of the LGC circuit card time slot to which the trunk group member is assigned.

PMTYPE = LTC

If the value of field PMTYPE is LTC, datafill subfields LTCNO, LTCCKTNO, and LTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	*Line trunk controller number* Enter the number of the line trunk controller (LTC) to which the trunk group member is assigned.
	LTCCKTNO	numeric (0 to 19)	*Line trunk controller circuit number* Enter the number of the LTC circuit card to which the trunk group member is assigned.
	LTCCKTTS	numeric (1 to 24)	*Line trunk controller circuit time slot* Enter the number of the LTC circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = RCC

If the value of field PMTYPE is RCC, datafill subfields RCCNO, RCCCKTNO, and RCCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RCCNO	numeric (0 to 511)	*Remote cluster controller equipment number* Enter the number of the remote cluster controller (RCC) equipment to which the trunk group member is assigned.
	RCCCKTNO	numeric (0 to 19)	*Remote cluster controller equipment circuit number* Enter the number of the RCC equipment circuit card to which the trunk group member is assigned.
	RCCCKTTS	numeric (1 to 24)	*Remote cluster controller equipment circuit time slot* Enter the number of the RCC equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RCC2

If the value of field PMTYPE is RCC2, datafill subfields RCC2NO, RCC2CKTNO, and RCC2CKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RCC2NO	numeric (0 to 511)	*Compact remote cluster controller equipment number* Enter the number of the compact RCC (RCC2) equipment to which the trunk group member is assigned.
	RCC2CKTNO	numeric (0 to 47)	*Compact remote cluster controller equipment circuit number* Enter the number of the RCC2 equipment circuit card to which the trunk group member is assigned.
	RCC2CKTTS	numeric (1 to 24)	*Compact remote cluster controller equipment circuit time slot* Enter the number of the RCC2 equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RC02

If the value of field PMTYPE is RCO2, datafill subfields RCO2NO, RCO2CKTNO, and RCO2CKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RCO2NO	numeric (0 to 511)	*Offshore remote cluster controller equipment number* Enter the number of the compact RCC (RCC2) equipment to which the trunk group member is assigned.
	RCO2CKTNO	numeric (0 to 47)	*Offshore remote cluster controller equipment circuit number* Enter the number of the RCCO equipment circuit card to which the trunk group member is assigned.
	RCO2CKTTS	numeric (1 to 31)	*Offshore remote cluster controller equipment circuit time slot* Enter the number of the RCCO equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RMSC

If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RMSCNO	numeric (0 to 511)	*Remote mobile switching center number* Enter the number of the remote mobile switching center (RMSC) module to which the trunk group member is assigned.
	RMCCKTNO	numeric (0 to 19)	*Remote mobile switching center circuit number* Enter the number of the RMSC module circuit card to which the trunk group member is assigned.
	RMCCKTTS	numeric (1 to 31)	*Remote mobile switching center circuit time slot* Enter the number of the RMSC equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMA
If the value of field PMTYPE is SMA, datafill subfields SMANO, SMACKTNO, and SMACKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SMANO	numeric (0 to 511)	*Subscriber carrier module-100s access mobile switching center number* Enter the number of the subscriber carrier module 100S access (SMA) mobile switching center module to which the trunk group member is assigned.
	SMACKTNO	numeric (0 to 19)	*Subscriber carrier module-100s access mobile switching center circuit number* Enter the number of the subscriber module access (SMA) mobile switching center module circuit card to which the trunk group member is assigned.
	SMACKTTS	numeric (1 to 24)	*Subscriber carrier module-100s access mobile switching center circuit time slot* Enter the number of the SMA mobile switching center module circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMA2

If the value of field PMTYPE is SMA2, datafill subfields SMA2NO, SMA2CKTNO, and SMA2CKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SMA2NO	numeric (0 to 511)	*Expanded subscriber carrier module-100s access mobile switching center number* Enter the number of the expanded subscriber carrier module 100S access (SMA2) mobile switching center module to which the trunk group member is assigned.
	SMA2CKTNO	numeric (0 to 47)	*Expanded subscriber carrier module-100s access mobile switching center circuit number* Enter the number of the expanded subscriber module access (SMA2) mobile switching center module circuit card to which the trunk group member is assigned.
	SMA2CKTTS	numeric (1 to 24)	*Expanded subscriber carrier module-100s access mobile switching center circuit time slot* Enter the number of the SMA2 mobile switching center module circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMU

If the value of field PMTYPE is SMU, datafill subfields SMUNO, SMUCKTNO, and SMUCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SMUNO	numeric (0 to 511)	*Subscriber carrier module-100s urban number* Enter the number of the subscriber carrier module 100 urban (SMU) to which the trunk group member is assigned.
	SMUCKTNO	numeric (0 to 19)	*Subscriber carrier module-100 urban circuit number* Enter the number of the SMU circuit card to which the trunk group member is assigned.
	SMUCKTTS	numeric (1 to 24)	*Subscriber carrier module-100 urban circuit time slot* Enter the number of the SMU circuit card time slot to which the trunk group member is assigned.

PMTYPE = SPM

If the value of field PMTYPE is SPM, datafill subfields SPMNO, SPMCKTNO, and SPMCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SPMNO	numeric (0 to 63)	*SPM number* Enter the number of the SPM to which the trunk group member is assigned.
	SPMCKTNO	numeric (0 to 181)	*SPM circuit number* Enter the number of the circuit card to which the trunk group member is assigned. The maximum number of circuits in an SPM is 84.
	SPMCKTTS	numeric (1 to 31)	*SPM circuit time slot* Enter the number of the PCM30 time slot to which the trunk group member is assigned. Enter the number (in the range 1 to 24) of the DS1 time slot to which the trunk group member is assigned. The DMS-100 MMP switch generates an error message if you attempt to enter data for a DS1 carrier with a time slot greater than 24.

PMTYPE = SRCC

If the value of field PMTYPE is SRCC, datafill subfields SRCCNO, SRCCCKTNO, and SRCCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	SRCCNO	numeric (0 to 511)	*SONET remote cluster controller number* Enter the number of the SONET remote cluster controller (SRCC) to which the trunk group member is assigned.
	SRCCCKTNO	numeric (0 to 47)	*SONET remote cluster controller circuit number* Enter the number of the SRCC circuit card to which the trunk group member is assigned.
	SRCCCKTTS	numeric (1 to 24)	*SONET remote cluster controller circuit time slot* Enter the number of the SRCC circuit card time slot to which the trunk group member is assigned.

PMTYPE = TMS

If the value of field PMTYPE is TMS, datafill subfields TMSNO, TMSCKTNO, and TMSCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TMSNO	numeric (0 to 255)	*TMS number* Enter the number of the Traffic Operator Position System (TOPS) message switch (TMS) to which the trunk group member is assigned.
	TMSCKTNO	numeric (0 to 19)	*TMS circuit number* Enter the number of the TMS circuit card to which the trunk group member is assigned.
	TMSCKTTS	numeric (1 to 31)	*TMS circuit time slot* Enter the number of the TMS circuit card time slot to which the trunk group member is assigned.

Additional information

This section explains the error messages that can occur if you enter data incorrectly in table TRKMEM.

Error message table (Sheet 1 of 3)

Error message	Explanation and action
`Delete the AINPRI entry before deleting TRKMEM.`	An attempt was made to delete a tuple that is being referenced by table AINPRI.
`DATA IN ASSOCIATED TABLES NOT DELETED YET`	An attempt was made to enter data out of sequence. A tuple in table TRKMEM can be deleted, added, or changed only if the tuple is empty or has been deleted from table C7TRKMEM.

Error message table (Sheet 2 of 3)

Error message	Explanation and action
Failed to get AB bit resource. Increase count of AB bit resources for DSPs on this SPM in table MNCKTPAK.	An AB-bit resource is not available for the SPM DS1 carrier to be used by the given PTS trunk.
ERROR: The IPULSTYP field = nil_pulse_type in table TRKSGRP. Trunks datafilled on an SPM node cannot have a nil incoming pulse type.	An attempt was made to enter data for an SPM PTS trunk and the associated incoming pulse type (IPULSTYP) field in table TRKSGRP = NP (nil_pulse_type).
ERROR: This trunk has an associated IPULSTYP = MF in table TRKSGRP, but there are no MF resources provisioned in table MNCKTPAK.	An attempt was made to enter data for a PTS trunk whose associated incoming pulse type = MF, but there are no MF resources provisioned in table MNCKTPAK.
ERROR: This trunk has an associated IPULSTYP = DT in table TRKSGRP, but there are no DTMF resources provisioned in table MNCKTPAK.	An attempt was made to enter data for a PTS trunk whose associated incoming pulse type = DT, but there are no DTMF resources provisioned in table MNCKTPAK.
ERROR: Carrier does not support the time slot specified.	An attempt was made to enter data for a DS1 carrier with a time slot greater than 24 (time slots 25 to 31 are for PCM30 carriers only).

Error message table (Sheet 3 of 3)

Error message	Explanation and action
Table TRKOPTS DYNAMIC option is assigned. Manual operations are not allowed in Table TRKMEM.	No tuples of a dynamic trunk group can be manually added, changed, or removed from table TRKMEM. Trunk groups are defined as dynamic in table TRKOPTS by field OPTION = DYNAMIC. In order to make changes to trunk members of a dynamic trunk group, use the application-specific method, such as table IPINV for the TOPS OC application. The TOPS OC application automatically allocates 48 dynamic trunk members in table TRKMEM when an IP gateway node is defined in table IPINV.
ERROR: MG4000 does not support this GRPTYP in Table TRKGRP.	An attempt was made to provision an unsupported trunk type on a Multi-service Gateway 4000 (MG 4000) node. Refer to Multi-service Gateway 4000 Customer Information Guide the list of supported trunk types.
ERROR: GWC <n> currently has more than 1008 PTS trunks provisioned against it. The limit is 1008 PTS trunks per GWC according to Nortel engineering guidelines.	An attempt was made to add more than 1008 PTS trunk members into table TRKMEM against GWC n. However, the tuple will be added to the table.

Error Messages specific to PRI with Semipermanent Packet

Use the following information for an explanation of the error messages associated with table TRKMEM.

Reason: While tables CLLI, TRKGRP, and TRKSGRP datafill, table SPECCONN does not datafill. When table TRKMEM datafills, table TRKMEM searches for a DS0 connection on table SPECCONN. If the DS0 connection is not present on table SPECCONN, the following error message displays.

```
DS-0 must be nailed up in SPECCONN for X25 PRA.
```

Action: Datafill table SPECCONN before table TRKMEM.

Reason: All the tables datafill for PRI with Semipermanent Packet LTID. An error message displays when operating company personnel try to change the DS0, which maps to a PRI with Semipermanent Packet LTID.

```
Delete the LTMAP entry first.
```

Action: Delete the tuple in table LTMAP. Then try to change the tuple in table TRKMEM for the corresponding DS0.

Error Messages specific to the PRI-PRI Over Multiple XPMs feature

Error messages appear under the following conditions:

If the CLLI is not mapped in table LTMAP and the protocol variant is other than NTNI:

- adding a distributed B-channel displays a warning message as follows:

  ```
  Warning: Members spanning different PMs are
  supported only for NTNI protocol variant
  ```

- changing a normal/distributed B-channel to distributed B-channel displays a warning message as follows:

  ```
  Warning: Members spanning different PMs are
  supported only for NTNI protocol variant
  ```

If the CLLI is mapped in table LTMAP and the protocol variant is other than NTNI:

- adding a distributed B-channel is rejected and the switch displays the following error message:

  ```
  ERROR: Members spanning different PMs are
  supported only for NTNI protocol variant
  ```

- changing a normal/distributed B-channel to distributed B-channel is rejected and the switch displays the following error message

  ```
  ERROR: Members spanning different PMs are
  supported only for NTNI protocol variant
  ```

If the protocol variant is NTNI, adding a distributed B-channel in the 17th distributed XPM as an interface, the switch displays the following error message

```
ERROR: Distributed PRI interface can span only 16
XPMs
```

Error messages specific to the SPM DS-1 Assignment SOC Control feature

If the The upper limit of provisioned carriers with either PRI or ISUP/PTS is reached, the following error message is displayed:

```
ERROR: This office has reached its upper limit of
carriers provisioned with PRI (ISUP/PTS) trunks in
SOC option id SPMS0017 (SPMS0016)
```

Error messages specific to provision of ECAN resources

If an attempt is made to add a tuple to table TRKMEM for a non-BICC IT trunk, the attempt will be rejected with the following error message:

```
Internal ECSTAT in TABLE TRKSGRP is not supported for
this trunk type.
```

If both packet and legacy trunk members are datafilled in table TRKMEM in the same trunk subgroup, the following warning is generated:

```
WARNING: This trunk subgroup contains a mix of packet
and legacy members. Echo cancellor datafill applies
to all members and may be interpreted differently
based on the node type.
```

Translation verification

To verify datafill associated with a particular CLLI, use the CLLIREF tool to find associated tuples:

```
CLLIREF SEARCH <clli name>
```

Table history

SN07

Table TRKMEM migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 12 of 12*, 297-8021-351.09.03.

TRKSGRP

Trunk subgroup

Table TRKSGRP lists the supplementary information for each subgroup that is assigned to one of the trunk groups listed in table TRKGRP.

Input data must be specified for at least one subgroup for each trunk group listed in table TRKGRP, excluding trunk groups that are defined in table TRKSGRP as maintenance (MAINT) group type. No data is required in table TRKSGRP for the MAINT trunk group type.

For TRKGRP type GTRK (global trunks), table TRKSGRP is replaced by table TRKSIGPF.

The following table lists the signaling systems available in DMS switches. For the description of datafill for each system, refer to the appropriate section of table TRKSGRP in this document.

DMS signaling systems

Signaling system	See subtable
C7UP	TRKSGRP type C7UP
CCITT6	TRKSGRP type CCITT6
DPNSS	TRKSGRP type DPNSS
DS0TL	TRKSGRP type DS0TL
FST	TRKSGRP type FST
G1TR7	TRKSGRP type G1TR7
ISDN	TRKSGRP type ISDN
JSTD	TRKSGRP type JSTD
MAINT	not required
N5	TRKSGRP type N5
NOSIG	TRKSGRP type NOSIG
R1 or R1N5	TRKSGRP type R1/R1N5
R2	TRKSGRP type R2

DMS signaling systems

Signaling system	See subtable
SIGSYS	TRKSGRP type SIGSYS
STD	TRKSGRP type STD
STDTL or CCIS6	TRKSGRP type STDTL/CCIS6
TUP	TRKSGRP type TUP
UKSTD	TRKSGRP type UKSTD
X.25	TRKSGRP type X25
X.75	TRKSGRP type X75

The defined order is SIGNALLING_DATA_SELECTOR {STD, DS0TL, STDTL, C7UP, ISDN, X75, NOSIG, X25}.

Office parameters for timing on trunks

A list of standard office parameters in table OFCOPT that define timing (wink or delay dial) on trunks includes:

- DPREC_INTER_DGT_TIMING
- EA_REC_MAX_WK_TIME
- EA_REC_SUB_PRE_WK_TIME
- EA_REC_1ST_PRE_WK_TIME
- EAEO_REC_1ST_PRE_WK_TIME
- EAEO_REC_2ND_PRE_WK_TIME
- IMMED_PRE_DIAL_DELAY
- MF_ID_TIME
- MIN_REC_DP_PULSE_WD
- MK_BRK_DP_OUTPULSING
- PRE_ANI_SPILL_DELAY
- PRE_SND_WK_DD_TIME
- REC_MAX_DD_TIME
- REC_MAX_WK_TIME
- REC_MIN_DD_TIME
- REC_MIN_WK_TIME

- REC_PRE_DD_TIME
- REC_PRE_WK_TIME
- RP_INTER_SELECTION_TIMER
- RP_INTRA_SELECTION_TIMER
- RP_OVERALL_TIMER
- SND_DD_TIME
- SND_DP_WK_TIME
- SND_MF_WK_TIME
- SWHK_FLTR_TIME_400MS_ENABLED
- SWHK_FLTR_TIME_640MS_ENABLED
- WK_DD_PRE_DIAL_DELAY

Trunk selection and compatibility

DANGER
Call failure
If the setup method is used for the Calling Name Delivery features, the calling name information is sent in an optional field of the initial address message (IAM). If a trunk group to a GTD5 office is datafilled with an adjacent node type value of DMS in table ADJNODE, calls over that trunk group fail because the other node does not recognize the IAM.

Restricting access to table TRKSGRP

Access to table TRKSGRP can be restricted by datafilling table CUSTPROT. For United Kingdom operating companies, access to table TRKSGRP must be restricted by datafilling table CUSTPROT. Because the signaling parameters are defined in table CUSTPROT, any alterations affect the integrity of United Kingdom operating companies' networks.

Data restrictions for utility telemetry trunks

Utility telemetry (UT) trunks connect a Central Office Service Unit (COSU) to a DMS switch. When connected by UT trunks, the COSU can initiate and control telemetry calls to subscriber lines through the DMS switch, which attempts to establish the connections.

For subgroups associated with UT trunk groups, no changes have been made to table TRKSGRP. However, certain restrictions are imposed on

the UT data specified in table TRKSGRP. These restrictions are shown in the following table.

Restricted fields for UT trunk subgroups

Field name	Permissible value
DIR	IC
IPULSTYP	MF
ISTARTSG	WK
OVLP	N
CCONT	NO
RNGBCK	NO
ESUPR	N
SAT	N
REMBSY	N
DIALMODE	M
ECSTAT	UNEQ

Default tuple added to table TRKSGRP for trunk group DTU

The following table shows the default values that are added to table TRKSGRP, after table TRKGRP is datafilled for trunk group type DTU.

Default values for DTU trunk group

Field name	Value
SGRPKEY	DTU 1
CARDCODE	4X23AA
SCRPVAR	NOSIG
SIGDATA	STD
DIR	OG
OPULSTYP	NP

Default values for DTU trunk group

Field name	Value
OSTARTSG	WK
IDIGTIME	0
NUMSTOPS	0
CCONT	NO
RNGBCK	NO
ESUPR	N
SAT	N
REMBSY	N
TRKGRDTM	17

ISUP integrated business network trunk datafill

ISUP integrated business network (IBN) trunks are datafilled in much the same manner as basic IBN trunks. Table CLLI is datafilled first, then table TRKGRP is datafilled with a trunk group type of IBNTO (outgoing), IBNTI (incoming), or IBNT2 (two way). After datafilling table TRKGRP, datafill table TRKSGRP to identify an IBN trunk group as an ISUP trunk group by setting field SIGDATA to C7UP.

After table TRKSGRP is datafilled, table ISUPDEST must be datafilled to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks can be added to table TRKMEM as normal. Table C7TRKMEM must be datafilled to associate the ISUP IBN trunks with a circuit identification code.

Note 1: The DMS switch rejects the table TRKSGRP tuple for those ISUP IBN trunks that do not have appropriate datafill in table TRKGRP. After you enter information in table TRKSGRP, the system generates an information message to indicate any datafill errors.

Note 2: It is not possible to have one trunk subgroup datafilled with C7UP signaling and another datafilled with non-C7UP signaling within the same trunk group type.

Note 3: Table TKCVDATA provides a mechanism to convert existing per-trunk signaling (PTS) trunks to ISUP trunks.

CCITT7 ISUP trunk datafill for DMS-300

DMS-300 CCITT No. 7 signaling ISUP trunks have a signaling selector type of C7UP, a pulse type of SS7 with an external protocol of CCITT.

After table TRKSGRP is datafilled, table ISUPDEST must be datafilled to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks are added to table TRKMEM in the normal manner. Table C7TRKMEM must be datafilled to associate the CCITT No. 7 signaling ISUP trunks with a circuit identification code.

Country Code CLI Prefix

The Calling Line Identity (CLI) is converted to an international format, or the CLI completely removed on outgoing international IBN7 or European Telecommunications Standards Institute Integrated Services Digital Network User Part (ETSI ISUP) routes. The CLI is controlled by datafill on a TRKSGRP basis.

CLI refers to both the originating line identity (OLI) and default CLIs.

The EDITCLI option triggers modification or removal of the CLI. The option is only allowed on outgoing or two-way trunk types, and is rejected on incoming trunks.

Modification of the CLI results in the modification of the Calling Party Number (CGPN) parameter in the Initial Address Message (IAM). If the CLI is to be converted to an international format, the country code of the country where the switch is located (set by parameter NATIONAL_COUNTRY_CODE in table OFCENG), is prefixed to the CLI and the Nature Of Address (NOA) is set to international (INTL). Because only one datafilled country code is supported, modification of the CLI to an international format is not supported when one switch terminates lines from multiple countries. To modify the CLI, the NOA field of the CGPN parameter must be set to National Significant Number (NSN), and the Numbering Plan Indicator (NPI) must be set to ISDN (Telephony) numbering plan (E164).

Removal of the CLI results in the CGPN parameter not being included in the IAM, because it is an optional parameter. The CLI is removed regardless of the NOA or NPI settings of the CGPN parameter.

PRI: Location Indicators

The PRI: Location Indicators feature provides the actual location, the CAUSE location, for which the DMS-100 switch generates a CAUSE value. The CAUSE value is the reason for the call failure. The CAUSE location is the location at which the call failure occurs.

Feature AF7875 maps the CAUSE location values and provisions for primary rate interface (PRI) NTNA and NTNI protocol variants.

Feature AF7585 provides the following functionalities, beginning with NA011:

- a location option, LOC_MAP, in table TRKSGRP
- a location mapping algorithm

The CAUSE location option, LOC_MAP, in the LOCATION field in table TRKSGRP is introduced, and provides the location mapping capability for the:

- CAUSE location indicator for Northern Telecom North America PRI (NTNA)
- Northern Telecom National ISDN (NTNI) protocol variants

The location option, LOC_MAP, is the default value for PRI NTNI protocol variants. For PRI NTNA, the location option needs to be provisioned.

Note: The value LOC_MAP applies to the network side of the customer premises equipment (CPE) to DMS-100 interface when the datafill for subfield IFCLASS in table TRKSGRP is NETWORK.

To activate this function, the datafill for the subfield LOCATION is LOC_MAP.

The CAUSE location is part of the CAUSE information element (IE) and is set based on where the CAUSE value occurs. The CAUSE IE is the mechanism that reports CAUSE values and location indicators are sent within certain PRI messages to report diagnostic information to and from the CPE. These PRI messages include disconnect, progress, release, release complete, and status messages. The following table list the messages.

Error messages that contain CAUSE IE

Call establishment message	Description
PROGRESS	indicates interworking with non-ISDN or in-band information as available
Call clearing messages	
DISCONNECT	call clearing request

Error messages that contain CAUSE IE

Call establishment message	Description
RELEASE	indicates the channel was disconnected and requests the channel release and call reference release
Call clearing messages	
RELEASE COMPLETE	indicates that the channels and call reference are released
Miscellaneous message	
STATUS	response to a status inquiry

Information specific to PRI with Semipermanent Packet

The PRI with Semipermanent Packet feature provides X.25 primary rate B-channel packet services to meet National ISDN-2 requirements. This feature allows operating company personnel to assign a B-channel on the PRI T1 link from the customer premises equipment (CPE) to the packet handler. The existing X.25 services on BRI are available on PRI.

The SGRPVAR field can be datafilled with signaling type X.25. Signaling type X.25 distinguishes PRI with Semipermanent Packet on PRI CLLI from other types of CLLIs.

Information specific to Spectrum peripheral module (SPM)

Table TRKSGRP provides an integer index to table SPMECAN. Thus, each trunk in table TRKSGRP can be associated to a tuple in table SPMECAN. This is done by providing an option called SPMECIDX for SS7 trunks in table TRKSGRP. The SPMECIDX option is used to reference an existing tuple in table SPMECAN and associate it with a PTS trunk subgroup.

This allows a trunk to be spread across a digital trunk controller (DTC) and an SPM. That is, some members in the trunk group are on a DTC, while other members of the same trunk group are on an SPM. The members of a trunk group provisioned on an SPM use the SPMECIDX option, while members on the DTC use the ECSTAT field.

Note: The existing functionality in table TRKSGRP that supports external and internal echo cancellers remains unchanged.

The following rules apply to table control for table TRKSGRP:

- SPM PTS trunks datafilled in table TRKMEM cannot have an associated IPULSTYP = nil_pulse_type.
- If the IPULSTYP associated with an SPM PTS trunk = MF, there must be at least one MF resource provisioned in table MNCKTPAK on the given SPM node.
- If the IPULSTYP associated with a SPM PTS trunk = DT, there must be at least one DTMF resource provisioned in table MNCKTPAK on the given SPM node.

Beginning with SP13, echo cancellation (ECAN) functionality is available for NA100 applications. ECAN functionality is supported for the following ISUP trunks in the NA100 market:

- ATC
- IBNTI
- IBNTO
- IBNT2
- IT
- TI
- TO
- T2

ECAN functionality is not supported for PTS and PRI trunks in the NA100 market. Datafilling only supported trunks is enforced when trying to datafill SPMECDIX option in table TRKSGRP. An attempt to datafill the SPMECDIX option for an unsupported trunk results in an error message that SPMECDIX is not allowed.

Datafill sequence and meaning

The following tables must be datafilled before table TRKSGRP:

- ACTTRTMT
- ADJNODE (before datafilling G1TR7 signaling in table TRKSGRP)
- ATPIES
- C7UPTMR
- DCMEINV (if the DCME option for C7UP trunks is used)
- ISDNPARM
- LNSIGSYS (before datafilling digital N5 signaling in table TRKSGRP)

- RGSIGSYS
- R2PROT
- TKSIGSYS (before datafilling JSTD signaling in table TRKSGRP)
- TRKGRP
- TRTMTACT

The following universal translations route tables must be datafilled after table TRKSGRP:

- PXRTE
- FARTE
- OFCRTE
- CTRTE
- ACRTE
- FTRTE

If a tuple exists with the option ATPINDEX selected, the ATPIDX selected for that option is found in table ATPIES.

Fields CONTCHK and COTREQ must be datafilled on the BCS+1 side. To transfer the data to the peripheral, busy (BSY) and return to service (RTS) the pulse code modulation (PCM) 30 digital trunk controller (PDTC).

The enhanced digital carrier module (DCME) option for C7UP trunks are only added or removed if there are no trunk members datafilled in the trunk group. The trunk members can be datafilled after this option is set, and after table DCMEINV is datafilled.

In table TRKMEM, the following checks are present:

- The trunk is on a carrier to a DCME.
- The trunk is on the same DCME as previous members.
- Not more than 16 trunk groups are datafilled on a DCME.

Datafill sequence and meaning for PRI with Semipermanent Packet

Datafill tables in the following order:

- CLLI
- TRKGRP
- TRKSGRP

Datafill sequence and meaning for SPM

Datafill tables in the following order:

- MNPRTGRP
- MNNODE
- MNSHELF
- MNCKTPAK
- MNLINK
- MNHSCARR
- SPMECAN
- TRKSGRP
- TRKMEM

Table size

The maximum number of trunk groups possible for each office is 8 191.

The number of trunk subgroups is equal to two times the number of trunk groups. The maximum number of trunk subgroups that can be assigned is 16 382.

Table TRKSGRP can have up to two tuples in each tuple in table TRKGRP.

If the number of trunk subgroups is not equal to two times the number of trunk groups, the quantity is automatically adjusted by table control.

Memory for the number of trunk subgroups is set in field SIZE in table DATASIZE. Field DATSKEY in table DATASIZE must be set to TRKSGRP.

Datafill

The following table lists datafill for table TRKSGRP.

Datafilling table TRKSGRP (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric	*Card code* Enter a card code from the list of available entries.
SGRPVAR		alphanumeric	*Signaling data selector* Enter a selector from the list of available entries.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfields SIGDATA and DIR, and subfields specific to the value in subfield DIR.
	SIGDATA		*Signaling data* Enter one of the entries as detailed in the refinements.
	DIR		*Direction* Enter IC, OG, or 2W.

Datafilling table TRKSGRP (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
SGRPVAR		see subfields	*Variable subgroup data* This field contains the area refinements for trunk subgroup variables. Only the subfields that apply to SPM nodes are described below.
	ESUPR	F, H, or N	*Echo suppressor* Enter N (no) if the trunk subgroup is part of an SPM PTS trunk group. ***Note:*** Echo suppressor is not available for NA100 applications.
	OPTION	SPMECIDX	*Option* If this field contains the value SPMECIDX (SPM echo canceller index), enter data to subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN. This associates the trunk subgroup with the required echo canceller in table SPMECAN. Option SPMECIDX is used by C7UP-, ISDN-, PTS-, STD- and TUP-signaled trunks, and specified ISUP trunks supervised by an SPM node. The index must exist in table SPMECAN before it is entered as datafill in table TRKSGRP.

Datafilling table TRKSGRP (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
ALL_NOA			*All natures of address* This trunk subgroup member can send and receive all values of NOA, including spares.
ALL_NPI			*All numbering plan indicators* This trunk subgroup member can send and receive all values of NPI, including spares.

Table activation

Table TRKSGRP no longer requires a restart after datafill changes. Activation is immediate.

Additional information

This section provides information on dump and restore procedures for table TRKSGRP and feature package error messages that relate to table TRKSGRP.

Enabling B-channel negotiation of an existing tuple

Operating company personnel cannot enable the B-channel negotiation field of a tuple in table TRKSGRP if:

- the trunk group maps to a logical terminal in table LTMAP
- table AINPRI references the same logical terminal

The following error message is displayed:

```
*** Delete the AINPRI entry before enabling B-channel
negotiation ***
```

In this case, operating company personnel must manually delete the tuple from table AINPRI before changing the tuple in table TRKSGRP.

Dump and restore

If the signaling data is SIGSYS (the entry in subfield SIGDATA is SIGSYS), the entry in field OVLP must be N for dump and restore procedures.

Feature package error messages

Error messages specific to feature packages and options follow.

D-channel backup
If the feature package does not include the D-channel backup feature, the datafill to backup the D-channel field is rejected and the following error message is displayed:

```
BACKUP D CHANNEL IS NOT SUPPORTED
```

Note: This restriction did not apply to BCSs prior to BCS31. All secondary D-channel data must be removed for BCSs prior to BCS31 if the backup D-channel is not available.

D-channel backup provisioning, NA008 PRI maintenance
Primary and backup D-channels on PRI trunks must have the same parameters. Feature PRI NA008 MTC allows independent provisioning of the backup D-channel on ISDN PRI trunks. If any SGRPVAR variables on the backup D-channel are datafilled incorrectly with respect to the primary D-channel, the following error message can be displayed and static data is not loaded.

```
ONLY BACKUP D-CHANNEL DATAFILL ALLOWED. TO CHANGE
OTHER DATA D-CHANNEL MUST BE INB.
```

Q33SUP
The Q33SUP option (feature NC0321) for C7UP and N5 trunks can be changed only if there are no trunk members datafilled in table TRKMEM against the trunk subgroup. Otherwise, the following error message is displayed:

```
CANNOT CHANGE Q33 OPTION WITH TRUNKS DATAFILLED IN
TABLE TKRMEM
```

The Q33 timer must be datafilled in table LNSIGSYS before the Q33SUP option is datafilled in table TRKSGRP. Otherwise the following error message is displayed:

```
Q33 TIMER NOT DATAFILLED IN TABLE LNSIGSYS
```

Error messages and warning message specific to PRI: Location Indicators

For the PRI: Location Indicators feature, the following messages appears on the MAP (maintenance and administration position) display if the following scenarios occur:

- When the DMS switch attempts to datafill a PRI non-NTNA or non-NTNI to a PRI trunk with the LOC_MAP location value in tables TRKSGRP and LTMAP, the following error message displays:

  ```
  LOCATION LOC_MAP is only supported for NTNA and
  NTNI protocol variants. Change protocol variants
  in table LTDEF.
  ```

- When the DMS switch attempts to datafill IFCLASS field as USER to a PRI trunk with the LOC_MAP location value in table TRKSGRP, the following error message displays:

  ```
  User IFCLASS is not supported with Location
  LOC_MAP.
  ```

- When the operating company personnel attempt to turn on option LOC_MAP in field LOCATION in table TRKSGR on a PRI non-NTNA or non-NTNI, the following warning message displays:

  ```
  WARNING: LOCATION LOC_MAP is only supported for
  NTNA and NTNI protocol variants.
  ```

Error messages and information messages specific to PRI with Semipermanent Packet

For the PRI with Semipermanent Packet feature, the following messages appears on the MAP (maintenance and administration position) display if the following scenarios occur:

Reason: For PRI Semipermanent Packet, use signaling type X25 for both subgroups 0 and 1. The following error message displays under the following conditions:

- The trunk group type is primary rate access (PRA) and the signaling type is X25 for subgroup 0. During datafill in table TRKSGRP, if the signaling type ISDN datafills subgroup 1, then the error message displays. The error message displays because this feature uses both subgroups 0 and 1 for the X25 signaling types.
- The trunk group type is PRA and the signaling type is ISDN for subgroup 0. During datafill in table TRKSGRP, if the signaling type X25 datafills subgroup 1, then the error message displays. The error

message displays because this feature uses both subgroups 0 and 1 for the X25 signaling types.

```
Cannot mix signaling types in subgroups if ISDN is
involved.
```

Action: For X25 signaling type, use both subgroups 0 and 1. Use a tuple in the TRKSGRP table with signaling type X25 for the same CLLI and for the other subgroup, provided the first subgroup has X25 signaling.

Reason: The following error message displays when table TRKSGRP datafills for PRI with Semipermanent Packet and for X75 trunks. In table TRKGRP, the datafill for CLLI contains a wrong entry for SELSEQ. For this feature, the SELSEQ for CLLI is CWCTH or CCWCTH because the functionality is similar to X75 trunks.

```
SELSEQ must be CWCTH or CCWCTH for X75 trunks.
```

Action: Go to table TRKGRP and delete the tuple with key as PRI with Semipermanent Packet LTID CLLI. Add an entry in table TRKGRP with CLLI for this feature and with SELSEQ as either CWCTH or CCWCTH. Then datafill table TRKSGRP.

Reason: The following error message displays if the card-code value in table TRKSGRP is not DS1SIG for PRI with Semipermanent Packet on PRI trunks.

```
Cardcode must be DS1SIG on Packet PRI trunks.
```

Action: For PRI with Semipermanent Packet on PRI trunks, use card-code DS1SIG with signaling type X25.

Supplementary information about SPM

An integer index in table TRKSGRP references tuples in table SPMECAN for PTS, SS7, PRI, and TUP trunks. Integer indexes are implemented in the form of options, called SPMECIDX.

Note: Multiple SPMECIDX options can be added to a tuple, but only the first SPMECIDX entry is assigned to the trunk.

SPMECIDX options are supported over the following access trunks:

- PTS FGD
- FGA
- FGB
- FGC

- DAL
- DALTIE
- PTS IMT
- CAMA

For NA100 applications only, SPMECIDX options are supported for the following ISUP trunks:

- ATC
- IBNTI
- IBNTO
- IBNT2
- IT
- TI
- TO
- T2

The numeric value entered for SPMECIDX must be identical to the numeric key for the existing tuple in table SPMECAN. If an index is used by a trunk in table TRKSGRP, it cannot be deleted from table SPMECAN.

Multiple trunks are allowed to use identical SPMECIDXs.

Error messages specific to SPM

The following error messages are specific to SPM.

Nil incoming pulse type

If the IPULSTYP field changes to NP (nil_pulse_type), but there are SPM PTS trunks in table TRKMEM that belong to this subgroup, the following message is displayed:

```
ERROR: Cannot change the IPULSTYP to mil_pulse_type,
as there are SPM PTS trunks in table TRKMEM that
belong to this subgroup. SPM trunks cannot have a nil
incoming pulse type.
```

No MF resources provisioned in table MNCKTPAK

An attempt is made to change the IPULSTYP field to MF. If there are SPM PTS trunks in table TRKMEM that belong to this subgroup, but

there are no MF resources provisioned in table MNCKTPAK, the following message is displayed:

```
ERROR: Cannot change the IPULSTYP to MF, as there are
SPM PTS trunks in table TRKMEM that belong to this
subgroup, and there are no MF resources provisioned
in table MNCKTPAK.
```

No DTMF resources provisioned in table MNCKTPAK
An attempt is made to change the IPULSTYP field to DT. If there are SPM PTS trunks in table TRKMEM that belong to this subgroup, but there are no DTMF resources provisioned in table MNCKTPAK, the following message is displayed:

```
ERROR: Cannot change the IPULSTYP to DT, as there are
SPM PTS trunks in table TRKMEM that belong to this
subgroup, and there are no DTMF resources provisioned
in table MNCKTPAK.
```

No echo canceller index provisioned in table SPMECAN
An attempt is made to enter the option SPMECIDX to a tuple in table TRKSGRP where the SPMECAN tuple identified does not exist. The following message is displayed:

```
ERROR: SPMECIDX MUST FIRST BE DATAFILLED IN TABLE
SPMECAN.TUPLE TO BE CHANGED:
<sgrpkey> <cardcode> <sgrpvar>... (SPMECIDX
<ec_idx>) $
```

Supplementary information about fields ECSTAT, CONTCHK and COTREQ

When datafilling fields ECSTAT, CONTCHK and COTREQ, changes to in-service trunk members (circuits) should be Busied (BSY) and Returned To Service (RTS) in order for the changes to be effective.

In SN06, BICC IT trunks may datafill the ECSTAT field to INTERNAL. This indicates that ECAN should be requested when interworking with IW SPMs that support ECAN. Note that this does not apply to the AAL2 IXC (BICC on the GWC) solution.

Table history

ISN06 (TDM)

Feature A89007299 changes datafill due to BICC IT trunks. Refer to Supplementary information.

Customer Request Q00497427

Added supplementary information for fields ECSTAT, CONTCHK and COTREQ for customer request Q00497427.

MMP15

Added support for Czech ISUP in TRKSGRP (refer to TRKSGRP type C7UP for details).

Added support for Hungarian ISUP in TRKSGRP (refer to TRKSGRP type C7UP for details).

Added NETINFO2 suboption for OPTION MBG to support activity 59024957, NETINFO VPN Enhancements (refer to TRKSGRP type C7UP for details).

MMP14

Added support for the SPMECIDX option for TRKSGRP type TUP.

Added support for protocol Japan Interconnect ISUP for TRKSGRP type C7UP (refer to TRKSGRP type C7UP for details).

SP13

Added information supporting SPM ECAN for the NA100 market.

MMP13

The following changes were made:

- Added option SSUTR2 to field VARIANT for protocol RBTUP (SGRPVAR = C7UP).
- Updated the DMS signaling systems list to match MMP13 software.
- Added the SPMECIDX option for TRKSGRP type TUP. This option applies to two-way trunks, incoming trunks, and outgoing trunks.

  Note: The MMP13 release does not support the SPMECIDX option.

APC011

Added options ALL_NOA and ALL_NPI.

NA011

The following changes were made:

- Added information about the PRI: Location Indicators feature.
- Added option LOC_MAP to the LOCATION subfield.

- Added supplementary information about two error messages and one warning message that occur for feature PRI: Location Indicators.
- Added entry X25.
- Added signaling system type X.25 to the DMS signaling system table for AF7585, PRI with Semipermanent Packet.
- Added datafill sequence and implication information for AF7585, PRI with Semipermanent Packet.

NA010

Added supplementary information about error messages that can occur when enabling B-channel negotiation.

CSP08

SPM was introduced, which caused the following changes to this table:

- Added information about SPM to “Functional description”.
- Added “Datafill sequence and meaning for SPM” to show datafill needs of SPM.
- Added “Supplementary information about SPM” and SPM-related error messages to “Supplementary information.”

EUR008

Added Country Code CLI Prefix functionality.

NA008

Added warning when datafilling backup D-channels for PRI NA008 maintenance feature.

EUR006

For C7UP signaling, added 100_WHITE to the range in subfield VERSION when field PROTOCOL is datafilled as Q767.

For C7UP, added caution that if PROTOCOL is Q767 and VERSION is datafilled as 100-WHITE, then field PRODUCT in the appropriate tuple in table ADJNODE must be datafilled as either NIL or OTHERNODE.

GL03.1

Added the NOSIG DMS signaling system.

CSP03

Table activation is now immediate.

NA002

Added data restrictions for UT trunks.

BCS36

The following changes were made:

- for STD signaling data, clarified field datafill information for IBNT2 trunks
- from ISDN signaling data refinements, removed field ADJNODE
- for C7UP signaling data, added NIL to the range of field ADJNODE, added options DEFITC, CCTOBDY and refinements, added refinement VERSION for field PROTOCOL, value NCCI
- for TUP signaling data, changed the description and applicability of field ALTRTE
- added note that trunk groups to a GTD5 fail if adjacent node type is DMS in table ADJNODE

BCS35

The following changes were made:

- added value G1TR7 to SIGDATA and refinements
- for N5 signaling data, added options Q33SUP and OVLDCNTL
- for C7UP signaling data, added option Q33SUP

TRKSGRP type C7UP

CCS7 User Part

If the type of pulsing is Common Channel Signaling 7 (CCS7), datafill table TRKSGRP as described in the following datafill table. This datafill also applies to DMS-300 CCITT No. 7 ISDN user part signaling (ISUP), the United Kingdom variant of national user part (BTUP), telephone user part (TUP), and telephone user part plus (TUPPLUS or TUP+) trunk groups.

Note: TUPE is renamed TUP_BLUE and C7TUP is renamed TUP_RED.

Datafill

The following table lists the datafill for table TRKSGRP type C7UP.

Field descriptions for conditional datafill (Sheet 1 of 10)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfields SIGDATA and DIR, and subfields specific to the value in subfield DIR.

Field descriptions for conditional datafill (Sheet 2 of 10)

Field	Subfield	Entry	Explanation and action
	SIGDATA	C7UP	*Signaling data* Enter C7UP.
	DIR	IC, OG, or 2W	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the entry in field DIR is 2W, datafill subfields ESUPR, SAT, ECSELECT, ABCNTL, PROTOCOL, OPTIONS, TMRNAME, and GLAREVAR. If the entry in field DIR is IC, datafill subfields ESUPR, SAT, ECSELECT, ABCNTL, PROTOCOL, OPTIONS, and TMRNAME. If the entry in field DIR is OG, datafill subfields ESUPR, SAT, ECSELECT, ABCNTL, PROTOCOL, OPTIONS, and TMRNAME.

Field descriptions for conditional datafill (Sheet 3 of 10)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA. Enter N for DMS-300 CCITT No. 7 Signaling ISDN user part (ISUP) trunks and Austrian user part (ATUP) on DMS switches, because no echo suppressors are present.
	SAT	Y or N	*Satellite* Enter Y (yes) if trunk subgroup is configured to switch through satellite. Otherwise, enter N (no).
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

Field descriptions for conditional datafill (Sheet 4 of 10)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceler status* This field indicates the status of the echo canceler on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceler status equipment, and no call processing control is involved. Field ABCNTL must be checked. Enter INNOTONE if internal echo canceler status is used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill subfield NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup is equipped on the NT6X50EC card in the digital trunk controller (DTC) frame, and is enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill subfields NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the echo canceler status remains OFF. Enter UNEQ for DMS-300 CCITT No. 7 Signaling ISUP trunks, because no echo suppressors are present.

Field descriptions for conditional datafill (Sheet 5 of 10)

Field	Subfield	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INNOTONE or INTERNAL, datafill this field. Enter Y to show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively cancelling echoes. Enter N to indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes. The default is N.
SGRPVAR (continued)	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, datafill this field. Enter Y to show that auto re-enable is ON. The echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy. Enter N to indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

Field descriptions for conditional datafill (Sheet 6 of 10)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	ABCNTL	ACTIVEA or NONE	*A-bit control* Enter ACTIVEA if A-bit signaling as set by office parameters takes place. The office parameters are ECHO_CANCELER STATUS_CONTROL_FORWARD and ECHO_CANCELER STATUS_CONTROL_ BACKWARD in table OFCVAR. Enter NONE if this field is not used by call processing control software. FOR C7UP signaling selector in trunk subgroup, field ABCNTL replaces field XFERRAT. If the entry in field XFERRAT was 56 kbit/s, enter ACTIVEA in field ABCNTL. If the entry in field XFERRAT was 64 kbit/s, enter NONE in field ABCNTL. Other datafill conditions can still affect AB-bit control if this field is set to NONE. The other datafill conditions are as follows: If the value of the subfield ECSTAT is EXTERNAL, A-bit signaling takes place regardless of the value of field ABCNTL. If the value of the field PRODUCT in table ADJNODE is ESS1A, A-bits are set to an idle condition. The value of field ADJNODE is used as a key into table ADJNODE.

Note: The following information explains C7UP data, depending on the combined datafill present in subfield ECSTAT and field ABCNTL.

ECSTAT	ABCNTL	Comments
UNEQ	ACTIVEA	A-bit signaling as set by office parameters

Field descriptions for conditional datafill (Sheet 7 of 10)

Field	Subfield	Entry	Explanation and action
EXTERNAL	ACTIVEA	ECHO_CANCELLER_CONTROL_FORWARD	
INTERNAL	ACTIVEA	ECHO_CANCELLER_CONTROL_BACKWARD	
INNOTONE	ACTIVEA		
INTERNAL	NONE		A-bit signaling as set by the above office parameters, regardless of the value of field ABCNTL. This applies only to the DMS-250 switch.
UNEQ INTERNAL	NONENONE		Field ABCNTL is not used by call processing control software, and the above office parameters are not used.
INNOTONE	NONE		Field ACNTL is not used by call processing control software, and the above office parameters are not used. The entry in table ADJNODE, field PRODUCT is ESS1A. A-bits are set to an idle condition. The value of field ADJNODE in table TRKSGRP is used as a key into table ADJNODE.

Field descriptions for conditional datafill (Sheet 8 of 10)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	PROTOCOL	AISUP, ATUP, BTUP, CCITT, CTUP, GSM, GWIBN7, IBNISUP, JPNISUP, NCCI, Q764, Q767, RBTUP, TUPE, TUPPLUS, TUP_BLUE, TUP_RED, or UCP	*Signaling protocol type* Enter the required signaling protocol and datafill any applicable subfields as described in sections "DIR = IC, 2W, or OG and PROTOCOL = AISUP, CCITT, NCCI, Q764, TUPPLUS, TUP_BLUE or UCP" to section "DIR = 2W or OG, and PROTOCOL = BTUP", then continue datafill with field OPTIONS. The applicability of subfields CONTCHK, COTREQ, ADJNODE, ACO, OVLP, VARIANT, VERSION, CBI, and ALTRTE, which depend on the value of fields DIR and PROTOCOL, is outlined prior to the datafill description for each subfield. External protocol AISUP is used by Australian switching units. Signaling protocol ATUP is used by Australian switching units. Signaling protocols BTUP, Q764, Q767, and TUPPLUS are used by switching units in the United Kingdom.

Field descriptions for conditional datafill (Sheet 9 of 10)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	PROTOCOL (continued)		When field PROTOCOL is datafilled Q767 (ETSI ISUP), datafill subfield VERSION with BLUE, WHITE, MTX_BLUE, MTX_WHITE, AVENTEL, GSM_BLUE, GSM_WHITE, 100_BLUE, 100_WHITE, or 100_EIV3. ***Note:*** The relevant trunk or PM must be returned to service to make this change effective. Signaling protocol CCITT is used by international switching units. CTUP is not a valid entry from BCS33 forward. Enter TUP_RED instead. Signaling protocol CTUP is used to specify the CTUP trunk for the switching units in China CTUP (Chinese Telephone User Part) and is supported on the DMS-100MMP and CS2KC. GSM (group special mobile) is based on the Q931 external protocol. External protocol GWIBN7 is used by gateway DMS-300.

Field descriptions for conditional datafill (Sheet 10 of 10)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)			Signaling protocol JPNISUP is used by switching units in Japan. Protocol NCCI allows the datafill of New Common Carrier Interface No. 7 Signaling protocol trunks. Signaling protocol Q764 is used by North American and United Kingdom switching units. Signaling protocol Q767 is used by North American, United Kingdom, and Australian switching units. Signaling protocol Q767 is used by European Telecommunications Standards Institute (ETSI) integrated services digital network (ISDN) European DMS-100 switches. TUPE is not a valid entry from BCS33 forward. Enter TUP_BLUE instead. Signaling protocol UCP provides ISUP connectivity between the DMS-250 switch and the MSL-100 switching units. ***Note:*** Protocols ATUP, BTUP, CCITT, IBNISUP, Q764, Q767, TUPPLUS, TUP_RED, and UCP can be used on DMS-300 switching units.

DIR = IC, 2W, or OG and PROTOCOL = AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP
DIR = 2W and PROTOCOL = TUP_RED
DIR = OG and PROTOCOL = ATUP or TUP_RED

Datafill subfield CONTCHK as described in the following table if one of the following conditions is true:

- The entry in field DIR is IC and the entry in field PROTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.
- The entry in field DIR is 2W and the entry in field PROTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in field DIR is OG and the entry in field PROTOCOL is AISUP, ATUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CONTCHK	LOOPAROUND, THRH, THRL, TLRH, or 2W2W	*Continuity check* Datafill this field to specify the type of continuity test to be performed if such a test is requested. Enter one of the following values: • LOOPAROUND • THRH - transmit high and receive high • THRL - transmit high and receive low • TLRH - transmit low and receive high • 2W2W - two-wire-two-way

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CONTCHK (continued)		If the entry in field PROTOCOL is ATUP or Q764, Q767, it is possible to datafill this field using the 2W2W entry. Because the signaling path is not the same as the voice path, the quality of the voice path on analog trunks must be checked. The voice path on a digital trunk is not a problem due to the internal carrier maintenance. The continuity check is done by connecting a tone and a receiver to the originating end and causing the tone to be looped back at the terminating end. The originating end checks the validity of the tone and, if the tone passes, the voice path is connected. If not, another attempt on another trunk is made. The default value for this field is THRH. The tone frequencies are as follows: High tone = 2000 Hz, Low tone = 1780 HZ ***Note:*** Continuity checking on ISDN user part (ISUP) trunks causes longer call setup times. The following types of continuity checks are available: LOOPAROUND - This test is used for an incoming four-wire continuity check, and is only acceptable for incoming trunks. Use this test only if the far end switching unit is four-wire. This entry indicates that the trunks are looped instead of each transmitting its own tone.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CONTCHK (continued)		THRH - Transmit high tone, receive high tone. This test is used for an outgoing four-wire continuity check only, and is only acceptable for outgoing and two-way trunks. It can be used if the far end switching unit is four-wire. If datafilled for a two-way trunk on which an incoming continuity test is being performed, the trunk loops the tone. Use this test if connected to a four-wire switching unit. THRL - Transmit high tone, receive low tone. This test is used for an outgoing continuity check only, and is only acceptable for outgoing or two-way trunks. It can be used only if the far end switching unit is two-wire. This option is not allowable for a Bellcore switching unit but can still be datafilled. If this option is datafilled on a two-way trunk group, and an incoming continuity test is being performed, the trunk monitors for the reception of the low tone before transmitting the high tone. TLRH - Transmit low tone, receive high tone. This test is used for an outgoing continuity check only, and is acceptable only for outgoing or two-way trunks. Use this test only if the far end switching unit is two-wire. If this option is datafilled on a two-way trunk group, and an incoming continuity test is being performed, the trunk monitors for the reception of the high tone before transmitting the low tone.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CONTCHK (continued)		2W2W - Two-wire-two-way. This test is allowed only on a two-way trunk subgroup. If this value is datafilled for a two-way trunk subgroup, the DMS switch performs a continuity test on the two-way trunk subgroup as if the DMS were a two-wire machine. If this value is specified for non two-way trunk subgroup, an error message is displayed. ***Note:*** The 2W2W entry is supported only for Bellcore ISUP (datafilled as ATUP or Q764, Q767, in field PROTOCOL).

DIR = 2W or OG, and PROTOCOL = AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP

DIR = OG and PROTOCOL = ATUP

Datafill subfield COTREQ as described in the following table if one of the following conditions is true:

- The entry in field DIR is 2W and the entry in field PROTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in field DIR is OG and the entry in field PROTOCOL is AISUP, ATUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	COTREQ	numeric (0 to 100) or blank	*Continuity test required* The continuity check indicator is determined by datafill in table TRKSGRP. Because continuity is not supported for AISUP trunks, a value other than 0 (zero) is not allowed if datafilling field COTREQ for AISUP trunks. If the trunk direction is outgoing or two-way, enter the percentage of calls on each trunk in this subgroup that requests a continuity test be performed during call setup. If the trunk direction is incoming, leave this field blank. If a continuity test is performed during a call, a significant time delay is made on the ISUP call (60 ms to 3 s). This is caused by the delay encountered at the near end waiting for the continuity to pass and the delay at the far end awaiting the reception of the continuity message. These tests are mainly used for commissioning and thereafter are used on a small sampling of the trunks.

DIR = IC, 2W, or OG, and PROTOCOL = AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP

DIR = 2W and PROTOCOL = TUP_RED

DIR = OG and PROTOCOL = ATUP or TUP_RED

Datafill subfield ADJNODE as described in the following table if one of the following conditions is true:

- The entry in field DIR is IC and the entry in field PROTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.
- The entry in field DIR is 2W and the entry in field PROTOCOL is AISUP, ATUP, NCCI, CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in field DIR is OG and the entry in field PROTOCOL is AISUP, ATUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.

CAUTION
Risk of service interruption
If DIR = IC, 2W, or OG, PROTOCOL = Q767 and VERSION = 100_WHITE, datafill field PRODUCT in table ADJNODE as OTHER.

CAUTION
Risk of service interruption
For MMP13, if DIR = IC, 2W, or OG and PROTOCOL = Q767, datafill field PRODUCT in table ADJNODE as DMS_ETSIISUP.

Q767 trunks must reference a separate table ADJNODE entry to Q764 trunks.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ADJNODE	alphanumeric (1 to 12 characters) or NIL	*Adjacent node* Enter the 1- to 12-character name, previously datafilled as the key in table ADJNODE. Table ADJNODE also contains the adjacent node data used for this trunk subgroup. If the reference to table ADJNODE does not apply, enter NIL. ***Note:*** All 2W, IC, and OG CCITT ISUP, blue book TUP, and TUPPLUS trunks must reference a tuple in table ADJNODE to determine whether group unblocking messages can be sent to the far-end office.

DIR = IC, 2W, or OG, and PROTOCOL = AISUP

Datafill subfield VERSION as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is AISUP.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	VERSION	AUST, INTRCONN, PTUP, or MISUP	*Version* This field determines the protocol version of the Australian ISUP (AISUP) signaling system. Enter AUST to specify that the signaling protocol is Australian ISUP. Enter INTRCONN to specify that the signaling protocol is Interconnect ISUP (I-ISUP). Enter PTUP to specify that the signaling protocol is Philippines telephone user part (PTUP). Enter MISUP to specify that the signaling protocol is Malaysian ISUP (MISUP).

DIR = 2W or OG, and PROTOCOL = CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP

Datafill subfield ACO as described in the following table if one of the following conditions is true:

- The entry in field DIR is 2W and the entry in field PROTOCOL is CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.
- The entry in field DIR is OG and the entry in field PROTOCOL is CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ACO	Y or N	*Answer charge* This field determines if an answer charge is applied on BTUP to ISUP calls. Enter Y if the type of answer sent by the DMS switch is always chargeable. Enter N if the type of answer is not modified and is therefore mapped from the BTUP answer message (ANM).

DIR = 2W or OG and PROTOCOL = CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP

DIR = OG and PROTOCOL = ATUP

Datafill subfield OVLP as described in the following table if one of the following conditions is true:

- The entry in field DIR is 2W and the entry in field PROTOCOL is CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in field DIR is OG and the entry in field PROTOCOL is ATUP, CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OVLP	Y or N	*Overlap signaling* This field is for use with the DMS-300 switch. Enter Y if overlap signaling is permitted. Enter N if digits are outpulsed en bloc, that is, outpulsing does not begin until all digits have been received from the incoming trunk. The default is N.

DIR = IC, 2W or OG, and PROTOCOL = CCITT or Q767

Datafill subfield VARIANT as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is CCITT or Q767.

CAUTION
Risk of XPM outage
VARIANT entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
SGRPVAR	VARIANT	BASE, GERMANY, FRANCE, SPAIN, BELGIUM, ITALY, ISRAEL, PNG, SPARE, UK, CHILE, COSTA_RICA, NORWAY, NEW_ZEALAND, ETHIOPIA, GEORGIA, MYANMAR, VIETNAM, ISDEFO, SAUDI, ACIF_AUSTRALIA, BRAZIL, MEXICO, TURKEY, PORTUGAL, DENMARK, SPIROU, SWEDEN, AUSTRIA, EGYPT, JPN_INTERCONN, PERU, ARGENTINA, POLAND, CZECH, HUNGARY, CA30_AUSTRALIA, HONGKONG, TAIWAN, SINGAPORE, CHINA, BANGLADESH, RUSSIA, GISUP, TISUP, HONDURAS, MOROCCO	*Variation* This field is used if the user part of ISUP is datafilled against the trunk subgroup to identify the variation of ISUP. The default is BASE. ***Note 1:*** Entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages. ***Note 2:*** The entry BRAZIL indicates Brazilian TUP.

DIR = IC, 2W or OG, and PROTOCOL = Q767 (ETSI ISUP) or NCCI

Datafill subfield VERSION as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is Q767 or NCCI.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	VERSION	V1 or V2	*Version* Enter V1 to specify that the signaling protocol is NCCI No. 7 Version 1.
	VERSION	BLUE, WHITE, MTX_BLUE, MTX_WHITE, AVENTEL, GSM_BLUE, GSM_WHITE, 100_BLUE, 100_WHITE, or 100_EIV3	Enter BLUE, WHITE, MTX_BLUE, MTX_WHITE, AVENTEL, GSM_BLUE, GSM_WHITE, 100_BLUE, 100_WHITE, or 100_EIV3 for ETSI ISDN trunks. ***Note:*** If this field is datafilled as 100_WHITE, field PRODUCT in the appropriate tuple in table ADJNODE must be datafilled as OTHER.

DIR = IC, 2W or OG, and PROTOCOL = RBTUP

Datafill subfield VERSION as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is RBTUP.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	VERSION	DEFAULT, BRAZIL, SSUTR2	*Version* Enter DEFAULT to indicate a standard Redbook telephone user part (RTUP). Enter SSUTR2 to indicate French telephone user part (FTUP).

DIR = 2W or OG, and PROTOCOL = BTUP

If the entry in field PROTOCOL is BTUP, datafill fields CBI and ALTRTE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	CBI	Y or N	*Cross border indicator* Enter Y if the call is traversing the boundary between two networks. Otherwise, enter N. ***Note:*** Datafilling this option has no effect on the PNTK BTUP Version 2 functionality in the European market for releases EUR003 and up. Option CBI is replaced with the blocking indicator (BI) parameter in the initial address message (IAM) and final address message (IFAM).
	ALTRTE	Y or N	*Alternate routing* Enter Y if the succeeding switching unit is to attempt to re-route calls upon encountering congestion in a national network. Otherwise, enter N.

DIR = IC, 2W, or OG

If the entry in field DIR is 2W, IC, or OG, datafill subfields OPTIONS and TMRNAME as described in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	ACO, ADMIN_CLI, ATPINDEX, BLOCK CCTOBDY, CRGDELAY, DCME, DEFITC, NO_HOP MBG, Q33SUP, RCGLI, REMDISP, TR2COL, VACT	*Option* Enter up to seven of the following options. If the entry in field PROTOCOL is BTUP, Q764, Q767, or TUPPLUS, enter ACO. Enter ADMIN_CLI to activate the request calling line identification (CLI) functionality in the European market. The ADMIN_CLI option allows the RCGLI option to override the BI parameter. For the ISUP access transport parameter information elements table index, enter ATPINDEX and datafill subfield ATPIDX. Enter BLOCK to block ISUP traffic rather than re-route during SS7 congestion.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OPTION (continued)		For the call completion trunk optimization (CCTO) boundary option, enter CCTOBDY. This option, which can only be added to incoming or two-way ISUP trunks, specifies that the CCTO request from another office, in the form of an ISUP release message containing a service activation parameter, will not be passed on to the next office in the chain. Instead, the request will be processed by the current office. An incoming trunk with option CCTOBDY acts as the boundary for any backward traveling CCTO requests. If table TRKSGRP is datafilled as an NCCI No. 7 trunk, enter CRGDELAY to determine the charge message delay and datafill subfield INTERVAL. If the entry in field DIR is 2W or OG, enter DCME to indicate that all members of this trunk subgroup must terminate on a single enhanced digital carrier module (DCME). DCME can only be added or removed if there are no trunk members datafilled against the trunk group.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OPTION (continued)		To specify the default information transfer capability option for ISUP trunks, enter DEFITC and datafill subfield INFO_TRANSFER_CAPABILITY. Enter the NO_HOP option to indicate that for this trunk subgroup, the hop counter (HC) parameter is not included in IAMs originating from this switch (outgoing direction). The HC value of an incoming IAM is not decremented if the IAM is being tandemed using an outgoing trunk subgroup with the NO_HOP option datafilled (the HC parameter is passed transparently). When the HC functionality is activated (by using a SOC keycode), it is activated for the entire exchange. It can be suppressed per trunk subgroup basis by adding the keyword NO_HOP to the corresponding trunk subgroup. This option is only valid for Q764, Q767 trunks in conjunction with a two-way (2W) or outgoing (OG) configuration. For Q767, the version must be 100_WHITE to support ETSI ISUP V2 trunks.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OPTION (continued)		If the entry in field PROTOCOL is CCITT, ISUP, BTUP, TUPPLUS, or TUP_BLUE, enter Q33SUP to show Q33 failures on a trunk-by-trunk basis. This option indicates that circuit supervision is supported on all members of the trunk group. For multi-location business groups, enter MBG and datafill subfield MBG_PARAMETER. ***Note:*** North America does not support the MBG option. The Q33SUP option can be changed only if there are no trunk members datafilled in table TRKMEM against the trunk subgroup. Otherwise, the following error message is displayed: `CANNOT CHANGE Q33 OPTION WITH TRUNKS DATAFILLED IN TABLE TRKMEM`

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OPTION (continued)		The Q33 timer must be datafilled in table LNSIGSYS before the Q33SUP option is datafilled in table TRKSGRP; otherwise, the following error message is displayed: `Q33 TIMER NOT DATAFILLED IN TABLE LNSIGSYS` Enter RCGLI to initiate a CLI request for BTUP-to-ISUP calls in the European market. Datafilling the RCGLI option requests a CLI only if the blocking indicator (BI) parameter in the initial address message (IAM)-initial and final address message (IFAM) is set to allow CLI requests. For calls that terminate to a Networked automatic call distribution (NACD) group, the CLI is requested regardless of the datafill in option RCGLI. If the trunk group is IBN or AUTOVON ISUP with signaling type C7UP datafilled in table TRKSGRP, Enter REMDISP. This option provides IBN and AUTOVON ISUP trunks with the ability to include network CLLIDs in the initial address message (IAM) on calls originating from these trunks. The network CLLI ID (NETCLLID) ensures that unique CLLIs will exist across the network by mapping a local CLLI ID to a network CLLI ID. The NETCLLID will be added only to the IAM when the originator is a trunk and table NTWKCLLI is datafilled for the originator's trunk group CLLI. For vacant treatment, enter VACT and datafill subfield HANDLING.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ATPIDX	numeric (0 to 15)	*ISUP access transport parameter information elements table index* If the option in field OPTION is ATPINDEX, datafill this field. Enter a number to index table ATPIES. Table ATPIES indicates which information elements are discarded in the received access transport parameter.
	INTERVAL	numeric (0 to 100)	*Delay interval* If the entry in field OPTION is CRGDELAY, datafill this field. Enter the value that represents the number of 10 ms increments. The time delay is the interval after transmitting the NCCI No. 7 CRG message before the next NCCI No. 7 message is transmitted if the call routes to treatment on NCCI No. 7 IAM receipt. The range of the delay interval following the CRG message is from 0 to 1. Enter 0 (zero) for no delay. The default is 50 for a time delay interval of 500 ms.
	INFO_ TRANSFER_ CAPABILITY	SPEECH or 3_1KHZ	*Handling* If the entry in field OPTION is DEFITC, datafill this field to specify a value that will override the value of office parameter DEFAULT_BEARER_CAPABILITY in table OFCENG. This option can be assigned only to outgoing or two-way ISUP trunks.
	HANDLING	GIVETRMT, RLSANDLG, or SENDRLS	*Handling* If the entry in field OPTION is VACT, datafill this field.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	MBG_ PARAMETER	NONE NETINFO NETINFO2	*MBG parameter* If the value in field OPTION is MBG, datafill this field. If a NETINFO parameter needs to be generated on an outgoing IBN trunk, enter NETINFO. Otherwise, enter NONE. If the latest values of CUSTGRP and NCOS need to be generated, enter NETINFO2. If the NETINFO2 entry is not datafilled, the last redirecting line values of CUSTGRP and NCOS are sent in the IAM in the forward direction
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name previously datafilled in table C7UPTMR, which is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found. For each entry in table TRKSGRP, field TMRNAME must be a corresponding tuple with the same TMRKEY in table C7UPTMR. Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded.

DIR = 2W

If the entry in field DIR is 2W, datafill subfield GLARE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	GLAREVAR	see subfield	*Variable glare control data* If the entry in field DIR is 2W, datafill this field. This field consists of subfield GLARETYP.
	GLARETYP	CIC or SGRPYLD	*Glare type* If the entry in field DIR is 2W, datafill this subfield. Enter CIC (circuit identification code) if glare is resolved using CICs. For example, given two switching units connected with two-way trunks, if glare occurs, the switching unit with the higher originating point code is granted control of all the trunks with even-numbered CICs. This other switching unit, with the lower originating point code, is granted control of all the trunks with odd-numbered CICs. Enter SGRPYLD (subgroup yield) if glare is resolved on a trunk subgroup basis. For example, the switching unit administrators agree among themselves which trunk subgroups they are going to control and which they are going to yield. This is done on a trunk subgroup basis. The subgroup glare resolution method is available only if office parameter ISUP_SUBGRP_GLARE_AVAILABLE in table OFCOPT is set to Y.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
			Note: If subfield GLARETYP is new, CIC is the default value since it retains the same glare yield method that was in effect before this field was added.
	GLAREYLD	Y or N	*Glare yield* If the entry in subfield GLARETYP is SGRPYLD, datafill this field. If the switching unit is to yield control of the trunks in this subgroup in a glare condition, enter Y. Otherwise, enter N. The far end office must enter N for this subfield correspondingly.

Additional information

Error and warning messages

Error and warning messages are as follows.

Notification, warning, and error messages for table TRKSGRP

Message	Description
`Table TRKOPTS DYNAMIC option is assigned. Only trunk subgroup 0 is allowed.`	Only one subgroup can be defined for dynamic trunk groups. Use the existing subgroup or add a subgroup for a different trunk group.
`Table TRKOPTS DYNAMIC option is assigned. The PROTOCOL must be Q764.`	The table TRKSGRP signaling data must be C7UP and the PROTOCOL must be Q764. Do not change PROTOCOL from Q764.
`Table TRKOPTS DYNAMIC option is assigned. Continuity checking is not supported; COTREQ must be 0.`	Table TRKSGRP field COTREQ must be 0. The COTREQ field is available only on outgoing and two-way trunks. Do not change COTREQ from 0.

Notification, warning, and error messages for table TRKSGRP

Message	Description
`Table TRKOPTS DYNAMIC OC option is assigned. The trunk group direction must be OG or 2W.`	For the OC-IP application, TRKSGRP field DIR must be IC or OG, or the TRKOPTS DYNAMIC option can not exist. Do not change DIR from IC or OG.
`Table TRKOPTS DYNAMIC OC option is assigned. No options are allowed in Table TRKSGRP.`	No TRKSGRP options can be entered in table TRKSGRP for a dynamic trunking subgroup. Select another trunk subgroup that does not have any options.
`Table TRKOPTS DYNAMIC OC option is assigned. Tuples for this CLLI must be deleted from Table TRKOPTS.`	Table TRKOPTS has tuples for the same CLLI that must be deleted before the associated tuple in table TRKSGRP can be deleted.
`Table TRKOPTS DYNAMIC OC option is assigned. The SGRPVAR must be C7UP.`	The DYNAMIC OC option in table TRKOPTS is only supported for an associated tuple in table TRKSGRP of type C7UP.
`Table TRKOPTS DYNAMIC OC option is assigned. The glare method must be SGRPYLD N.`	The DYNAMIC OC option in table TRKOPTS requires that the associated tuple in table TRKSGRP with field GLARETYP = SGRPYLD must have subfield GLAREYD = N.

Table history

ISN07

Added new C7UP (Q767) variant HONDURAS, to support activity A00003410.

Added new C7UP (Q767) variant MOROCCO, to support activity A00004563.

ISN06 (TDM)

Added new CCITT (Q767) variant RUSSIA, to support activity A00000937.

Added CTUP to field PROTOCOL specifying CTUP trunk to support activity 89008212.

ISN04 (TDM)

Added CHINA to subfield VARIANT to support activity 59036494. The DMS-100MMP China ISUP feature provides the capability of datafilling the China variant for ISUP trunks.

TRKSGRP type CCITT6

CCITT No. 6 Signaling

If type of pulsing is CCITT6 (CCITT no. 6 signaling), datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type CCITT6.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric (up to 6 characters)	*Card code* Enter the product engineering code (PEC) of the members of the trunk group. See the *DMS-100 Provisioning Manual*.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements ESUPR, SAT, GLARECTL, RSTCKT, and RSTBND.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	SIGDATA	CCITT6	*Signaling data* Enter CCITT6.
	ESUPR	Y or N	*Echo suppressor* Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no).
	SAT	Y or N	*Satellite* Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N.
	GLARECTL	EVEN or ODD	*Glare control* Enter EVEN on double seizure if this office controls all even numbered circuits in a two-way trunk group (does not yield to glare). Enter ODD if this office controls all odd numbered circuits in a two-way trunk group. This indicator must be mutually agreed upon between the two end offices so only one controls the even circuits and the other controls the odd circuits.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	RSTCKT	NSUP or SUP	*Far end reset circuit support* Enter SUP (supported) if a reset circuit message is accepted and acted upon by the far end. Enter NSUP (not supported) if a reset circuit message is not sent to the far end since the far end does not accept a reset circuit message.
	RSTBND	NSUP or SUP	*Far end reset band support* Enter SUP (supported) if a reset band message is accepted and acted upon by the far end. Enter NSUP (not supported) if a reset band message is not sent to the far end since the far end does not accept a reset band message.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type DPNSS

Digital Private Network Signaling System No. 1

Table TRKSGRP provides the table control required to datafill DPNSS trunk subgroups. DPNSS, a UK common channeling signaling standard for interconnecting private branch exchanges (PBXs) in private networks, can also be used as a PBX access to virtual private network (VPN) services. The IBN7 must be used for interconnecting signaling when networking DPNSS features between DMS 100 switches.

To support the DASS2 protocol for connection to PBXs the DPNSS trunks that are part of the converter interface (as opposed to true DPNSS trunks) need to be identified to the switch as DASS2 access trunks. The DASS2_ACCESS field in table TRKSGRP provides that identification.

Datafill the DASS2_ACCESS field for all DPNSS trunks as follows:

- If the trunk is a DASS2 access trunk, set DASS2_ACCESS to Y (yes).
- If the trunk is a true DPNSS trunk, set DASS2_ACCESS to N (no). The default value is N.

Datafill

The following table lists the datafill for table TRKSGRP type DPNSS.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
SGRPKEY (continued)	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields DIR, SAT, OGOVLP, GLAREYD, and OPTIONS.
	SIGDATA	DPNSS	*Signaling data* Enter DPNSS for trunks of group type IBNTI, IBNTO, or IBNT2 that are used in the Digital Private Network Signaling System No. 1 (DPNSS) between private branch exchanges (PBXs).
	DIR	2W, IC, or OG	*Direction* Enter the trunk direction: 2W (two-way, IC (incoming), or OG (outgoing). If the entry in field DIR is 2W, datafill subfields SAT, OGOVLP, GLAREYD, and OPTIONS as described below. If the entry in field DIR is IC, datafill subfields SAT and OPTIONS as described below. If the entry in field DIR is OG, datafill subfields SAT, OGOVLP, and OPTIONS.

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). If the entry in field DIR is IC, go to field OPTIONS to complete datafill for SIGDATA = DPNSS.
	DASS2_ ACCESS	Y or N	*Digital Access Signalling System Number 2* During the development of DASS2 using a DASS2/DPNSS converter it is necessary to distinguish between a true DPNSS trunk and a DPNSS trunk which is being used for DASS2 access. The DASS2_ACCESS field has been added to table TRKSGRP for all trunk types (IC, OG and 2W). The default value is N, which indicates a true DPNSS trunk. If the trunk is to be used for DASS2 access then the value should be set to Y.

DIR = 2W or OG

If the entry in field DIR is 2W or OG, datafill subfield OGOVLP as shown in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OGOVLP	Y or N	*Overlap working* If the entry in field DIR is 2W or OG, datafill this field. Enter Y (yes) if trunk-to-trunk overlap outpulsing is required. Overlap working or en-bloc is used. Otherwise enter N (no). Overlap working is disallowed and en-bloc is used.

DIR = 2W

If the entry in field DIR is 2W, datafill subfield GLAREYD as shown in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	GLAREYD	Y or N	*Yield to glare* If the entry in field DIR is 2W, datafill this field. Enter Y if the trunk subgroup must yield to glare. Otherwise enter N.

DIR = all entries

For all entries in field DIR, datafill field OPTIONS as shown in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
OPTIONS		see subfield	*Options* This field consists of subfield OPTION.
	OPTION	EXT_EC, ENBL_CLI, REV_XLA, DFLTPI, SCREEN, or $	*Option* Enter EXT_EC if the external echo canceler status is connected to the switch. Enter ENBL_CLI to enable the transfer of CLI from a BTUP trunk to a DPNSS terminator. Activation occurs when this option is datafilled. Enter REV_XLA to trigger reverse translations for voicemail purposes.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
			Note: Calls forwarded over IBN7 (non-DFT) then routed to DPNSS have the B party address formatted as a public number. For voicemail purposes, this must be a private number. Enter REV_XLA in the option field to make calls interworked from IBN7 to DPNSS have the B party address subjected to reverse translations. This is valid only for outgoing and two-way DPNSS trunks. Enter DFLTPI to enable CLI blocking/ unblocking. Enter subfields PI, and MODE. Enter SCREEN to enable DPNSS to convert partial, private CLIs to the public number format. Enter subfields OVLYCLI and OVLYCNT. Otherwise, enter $.

OPTION = DFLTPI

If the entry in field OPTION is DFLTPI, datafill the subfields as shown in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	PI	ALLOW or RESTRICT	Enter ALLOW or RESTRICT. ALLOW indicates that the OLI received on the DPNSS trunk can be presented to the terminator. RESTRICT indicates that the OLI received on the DPNSS trunk cannot be presented to the terminator. The Calling Line Identity Presentation (CLIP) option in table TRKGRP is used to decide the presentation or restriction of the CLI only if the DFLTPI option is NOT datafilled.
	MODE	TEMP or PERM	Enter TEMP or PERM. TEMP indicates that the presentation/restriction is active on a per-call basis. If the incoming DPNSS message has a NPR string, then presentation is restricted; otherwise, presentation is allowed. PERM indicates that the restriction or presentation is active for all calls.

OPTION = SCREEN

If the entry in field OPTION is SCREEN, datafill the subfields as shown in the following table.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	OVLYCLI	vector of up to 13 digits, with integer range of 0-9 for each digit in the vector	Enter the value for OVLYCLI.
	OVLYCNT	integer with a range of 0-13	Enter a value for OVerLaY CouNT. Values 1-13 specify the number of least significant digits from the partial CLI (incoming private CLI). This number is overlayed on top of the least significant digits of OVLYCLI to form a complete number in the public format.

Table history

MMP13

Added option DFLTPI to enable number presentation restriction for DPNSS trunks separately from the functionality provided by the SCREEN option.

EUR009

The SCREEN option was added to enable DPNSS to convert partial, private CLIs to public number format. Support for Number Presentation Restriction for DPNSS trunks was also introduced.

EUR008

The REV_XLA option was added to enable reverse translations to occur for calls interworked from IBN7 to DPNSS.

EUR004

The ENBL_CLI option was added to enable the transfer of a CLI from a BTUP trunk to a DPNSS terminator.

EUR003

The following changes were made:

- added introductory information detailing new field DASS2_ACCESS
- modified existing MAP display example
- added new MAP display example

UK002

The following changes were made:

- corrected title (changed from “Data Packet Network special services” to “Digital Private Network Signaling System No. 1")
- added introductory paragraph

DS0TL

Default datafill for digital jacks, if the JACK trunk group is datafilled in table TRKGRP, is supplied in subgroup 1. The default datafill is only provided if the optional subsystem DJACKSUB is present in the load. This default is supplied automatically.

The default data for analog jack trunks is supplied in subgroup 0.

Datafill

The following table lists the datafill for table TRKSGRP type DS0TL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS0SIG	*Card code* Enter DS0SIG.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA.
	SIGDATA	DS0TL	*Signaling data* Enter DS0TL for the United Kingdom national variant of the Common Channel Signaling 7 (CCS7) ISDN user part (ISUP) type trunks.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type FDCP

Flexible Digital CAS Platform

Table TRKSGRP provides the table control required to datafill Flexible Digital CAS Platform (FDCP) trunk subgroups. The new FDCP trunk subgroup supports a generic R2 signaling system on Meridian Digital Centrex (MDC) trunks. The support applies to IBNTI (incoming), IBNTO (outgoing), and IBNT2 (two-way) trunks.

Datafill

The following table lists the datafill for table TRKSGRP type FDCP.

Field descriptions (Sheet 1 of 11)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common-language location identifier* Enter the common-language location identifier (CLLI) code that represents the trunk group in table CLLI.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero). The default is 0.
CARDCODE		P30CAS	*Card code* Enter P30CAS.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields SAT, DIALSTRT, REMBSY, DIRSEL, LSSIDX, RSSIDX, A_IDLEPOL, PROTSEL, FSTSIG, RXTXSEP, and OPTIONS.

Field descriptions (Sheet 2 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	SIGDATA	FST	*Signaling data* Enter FST
	SAT	Y or N	*Satellite* Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N.
	DIALSTRT	DELDIAL, IMMEDIATE, IMSZA, NILTYPE, or WINK	*Dial start mode* Enter the type of dial start trunk required: • DELDIAL— delay dial start trunk • IMMEDIATE — immediate dial trunk • IMSZA— immediate-seize-acknowledge dial trunk • WINK— wink start dialing trunk Enter NILTYPE if this field is not applicable. The default is NILTYPE.
	REMBSY	Y or N	*Remote make-busy* Enter Y if trunk subgroup is assigned the Remote Make-Busy (RMB) feature. Otherwise, enter N.
	DIRSEL	see subfield	*Direction selection* This field consists of subfield DIR and subfield GLAREYD (if applicable).

Field descriptions (Sheet 3 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	DIR	IC, OG or 2W	*Direction* Enter the trunk group direction: IC (incoming), OG (outgoing) or 2W (two-way). The entry in this field must be the same as the entry in field DIR for the trunk group datafilled in table TRKGRP. If the trunk group type (field GRPTYP in table TRKGRP) is TPS101, only directions IC or OG can be entered. If the trunk group type is NFA, only 2W can be entered. If the entry in field DIR is 2W, add datafill to field GLAREYD.
	GLAREYD	Y or N	*Yield to glare* If the entry in field DIR is 2W, add datafill to this field. Enter Y if the subgroup must yield to glare. Otherwise, enter N.

Field descriptions (Sheet 4 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	LSSIDX	LSSN5 LSSR2 LSSR1 LSSC1 LSSCNB LSSPSB LSS_R1_01 LSS_R1_02 LSS_R1_03 LSS_R1_04 LSS_R1_09 or NIL	*Line signaling index* Enter LSSN5 if N5 line signaling is used on the trunk. Enter LSSR2 if R2 line signaling is used on the trunk. Enter LSSR1 if R1 line signaling is used on the trunk. Enter LSSC1 if C1 line signaling is used on the trunk. Enter LSSCNB for E&M continuous line signaling types. Enter LSSPSB for E&M pulsed line signaling types. Enter LSS_R1_01 if (R1) NTLS01 line signaling is used on the trunk. Enter LSS_R1_02 if (R1) NTLS02 line signaling is used on the trunk. Enter LSS_R1_03 if (R1) NTLS03 line signaling is used on the trunk. Direction field is only OG. Enter LSS_R1_04 if (R1) NTLS04 line signaling is used on the trunk. Direction field is only IC. Enter LSS_R1_09 if (R1) NTLS09 line signaling is used on the trunk. Enter NIL if this field is not applicable.
	RSSIDX	alphanumeric (1 to 16 characters) or NIL	*Register signaling index* This field is an index into table RGSIGSYS. Enter an NTRS11 (only when FSTSIG=R2) register signaling system instance of table RGSIGSYS. Enter an MF3 register signaling system instance of table RGSIGSYS for R1 trunks.

Field descriptions (Sheet 5 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	PROTSEL	see subfield	*Protocol selection* This field consists of subfield FSTSIG.
	FSTSIG	R1, R2, N5 or GR1	*Signaling system* Enter R1 if R1 line signaling is used on the trunk. Datafill field RXTXSEP, ANISEL, B_BIT_BLOCK and LNSIGINX. Enter R2 if R2 line signaling is used on the trunk. Add datafill to fields TANDEM, PROTIDX and TRTMTIDX. Enter N5 if N5 line signaling is used on the trunk. Datafill fields N5LNIDX, PTSNMSIG, SZTOPTS, PTSTPST, DISD, ECSTAT, and ECINCL. Enter GR1 if GR1 line signaling (Generic R1) is used on the trunk. Enter datafill for fields RXTXSEP, LNSIGIDX, ANISEL and R1OPTIONS for the GR1 protocol.
	RXTXSEP	Y or N	*Receive transmit path separate* If the entry in subfield FSTSIG is R1 or GR1, add datafill to this field. Enter Y if the four-wire trunk is allowed to separate the receive and transmit lines of the trunk. Enter N if the trunk is two-wire and is not allowed to separate the receive and transmit lines. ***Note:*** This field is used for ARTER test purposes on international R1 trunks. It is also used on trunks that have the entry in field SIGDATA in table TRKSGRP equal to SIGSYS. Continue to add datafill to field OPTIONS.

Field descriptions (Sheet 6 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	A_IDLEPOL	0 or 1	*A bit idle polarity* The A_IDLEPOL field applies to FSTSIG value R1. A_IDLEPOL allows operating company personnel to define the polarity of the A bit in the ABCD IDLE signal. Operating company personnel can define the A bit as either 0 or 1.
	ANISEL	Y or N	*Automatic number identification (ANI)* If the entry in subfield FSTSIG is R1, enter data for this field. This field allows operating company personnel to define the type of ANI signaling for the trunk to use with MF3 register signaling. If the trunk uses ANI signaling, operating company personnel can define the format and the type of the ANI directory number (DN). An entry of Y in this field requires a matching entry in the TRKGRP table.
	R1OPTIONS	MCTOGRLS, MCTICRLS	The MCTOGRLS and MCTICRLS options are only valid for MCT (NTLS09 R1) trunks. These options control how trunks are held and released after MCT activation.
	MCTOGRLS	Y or N	Enter Y in the MCTOGRLS subfield to release the outgoing trunk automatically. Enter N in the MCTOGRLS subfield to release the outgoing trunk using the FRLS maintenance command.
	MCTICRLS	Y or N	Enter Y in the MCTICRLS subfield to release the incoming trunk automatically. Enter N in the MCTICRLS subfield to release the outgoing trunk using the FRLS maintenance command.

Field descriptions (Sheet 7 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	B_BIT_ BLOCK	0 or 1	*B bit block* If the entry in subfield FSTSIG is R1, set the B bit to 0 or 1.
	LNSIGIDX	String	*LNSIGSYS index* If the entry in subfield FSTSIG is R1 or GR1, enter data for this field. This field allows operating company personnel to refer to the key of table LNSIGSYS. The values of this field depend on the tuples in table LNSIGSYS.
	TANDEM	EEND or LNK	*Tandeming method* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter EEND if end-to-end tandeming is used, or LNK if link-by-link tandeming is used.
	PROTIDX	alphanumeric or NIL	*R2 protocol index* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter the R2 register signaling index as described by the command interpreter (CI) command R2VER.
	TRTMTIDX	alphanumeric (4 characters) or NIL	*R2 treatment index* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter the R2 treatment and activity mapping index in tables ACTTRTMT and TRTMTACT.
	N5LNIDX	N5DEF or NIL	*N5 line index* If the entry in subfield FSTSIG is N5, add datafill to this field. Enter N5DEF or NIL.

Field descriptions (Sheet 8 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	PTSNMSIG	numeric (4 to 20)	*Proceed to send to receipt of numeric signal* If the entry in subfield FSTSIG is N5 and the trunk group is incoming or two-way, enter the time, in seconds, between the register seizure and the proceed to send (PTS) signal. Enter the default if the trunk group is incoming. The default is 20.
	SZTOPTS	numeric (10 to 20)	*Register seizure to proceed to send* If the entry in subfield FSTSIG is N5 and the trunk group is outgoing or two-way, enter the time, in seconds, between the register seizure (SZ) and the PTS signal. Enter the default if the trunk group is incoming. The default is 20.
	PTSTOST	numeric (20 to 40)	*Proceed to send to signal terminal* If the entry in subfield FSTSIG is N5 and the trunk group is incoming or two-way, enter the time, in seconds, between the PTS signal and the ST signal. Enter the default if the trunk group is outgoing. The default is 20.
	DISD	Y or N	*Discrimination digit* If the entry in subfield FSTSIG is N5, add datafill to this field. Enter Y or N to indicate how the discrimination digit is used.

Field descriptions (Sheet 9 of 11)

Field	Subfield	Entry	Explanation and action
	ANI_FORMAT	BELL or INTL	*Automatic number identification format* If the entry in field ANISEL is Y, enter data for the ANI_FORMAT subfield. Operating company personnel can define the format of the ANI signaling for the trunk.
	ANI_DN_SIZE	4 to 10	*Automatic number identification directory number size* If the entry in subfield ANISEL is Y, enter data for this field. Operating company personnel can define the DN size of the ANI signaling for the trunk.

Field descriptions (Sheet 10 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	ECINCL	Y or N	*Echo canceller INCL* If the entry in subfield FSTSIG is N5, add datafill to this field.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.

Field descriptions (Sheet 11 of 11)

Field	Subfield	Entry	Explanation and action
	OPTION	DIGCOL or NIL	*Option* Enter DIGCOL if digit collection analysis is used and add datafill to field DGNAME. Otherwise, enter NIL.
	DGNAME	alphanumeric (up to 8 characters) or NIL	*Digit analysis table index* If the entry in subfield OPTION is DIGCOL, add datafill to this field. This field is an index into table DGHEAD. Enter the detail digit collection information from table DGHEAD.

DIR = IC, 2W or OG, and PROTOCOL = CCITT or Q767

CAUTION
Risk of XPM outage
VARIANT entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages.

Datafill subfield VARIANT as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is CCITT or Q767.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	VARIANT	BASE, BRAZIL, DEFAULT, DENMARK, GERMANY, FRANCE, MEXICO, PORTUGAL, SPAIN, BELGIUM, ITALY, ISRAEL, PNG, UK, CHILE, COSTA RICA, NORWAY, NEW_ZEALAND, V15, V16, V17, V18, V19, V20, SAUDI, SPIROU, or TURKEY	*Variation* This field is used if the user part of ISUP is datafilled against the trunk subgroup to identify the variation of ISUP. The default is BASE. ***Note 1:*** Entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages ***Note 2:*** BRAZIL is used to indicate a Brazilian R2 trunk. .

Table history

ISN06 (TDM)

Added C1 specific activities to table FDCP to support activity 89008204.

FST

Table TRKSGRP provides the table control required to datafill flexible signaling trunk (FST) trunk subgroups. The new FST trunk subgroup supports a generic R2 signaling system on Meridian Digital Centrex (MDC) trunks. The support applies to IBNTI (incoming), IBNTO (outgoing), and IBNT2 (two-way) trunks.

Datafill

The following table lists the datafill for table TRKSGRP type FST.

Field descriptions (Sheet 1 of 12)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common-language location identifier* Enter the common-language location identifier (CLLI) code that represents the trunk group in table CLLI.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero). The default is 0.
CARDCODE		P30CAS, UK3JOG or UK3JIC	*Card code* Enter P30CAS, UK3JOG, or UK3JIC.

Field descriptions (Sheet 2 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields SAT, DIALSTRT, REMBSY, DIRSEL, LSSIDX, RSSIDX, A_IDLEPOL, PROTSEL, FSTSIG, RXTXSEP, and OPTIONS.
	SIGDATA	FST	*Signaling data* Enter FST
	SAT	Y or N	*Satellite* Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N.
	DIALSTRT	DELDIAL, IMMEDIATE, IMSZA, NILTYPE, or WINK	*Dial start mode* Enter the type of dial start trunk required: • DELDIAL— delay dial start trunk • IMMEDIATE — immediate dial trunk • IMSZA— immediate-seize-acknowledge dial trunk • WINK— wink start dialing trunk Enter NILTYPE if this field is not applicable. The default is NILTYPE.
	REMBSY	Y or N	*Remote make-busy* Enter Y if trunk subgroup is assigned the Remote Make-Busy (RMB) feature. Otherwise, enter N.

Field descriptions (Sheet 3 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	DIRSEL	see subfield	*Direction selection* This field consists of subfield DIR and subfield GLAREYD (if applicable).
	DIR	IC, OG or 2W	*Direction* Enter the trunk group direction: IC (incoming), OG (outgoing) or 2W (two-way). The entry in this field must be the same as the entry in field DIR for the trunk group datafilled in table TRKGRP. If the trunk group type (field GRPTYP in table TRKGRP) is TPS101, only directions IC or OG can be entered. If the trunk group type is NFA, only 2W can be entered. If the entry in field DIR is 2W, add datafill to field GLAREYD.
	GLAREYD	Y or N	*Yield to glare* If the entry in field DIR is 2W, add datafill to this field. Enter Y if the subgroup must yield to glare. Otherwise, enter N.

Field descriptions (Sheet 4 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	LSSIDX	LSSN5 LSSR2 LSSR1 LSSC1 LSSCNB LSSPSB LSS_R1_01 LSS_R1_02 LSS_R1_03 LSS_R1_04 LSS_R1_09 or NIL	*Line signaling index* Enter LSSN5 if N5 line signaling is used on the trunk. Enter LSSR2 if R2 line signaling is used on the trunk. Enter LSSR1 if R1 line signaling is used on the trunk. Enter LSSC1 if C1 line signaling is used on the trunk. Enter LSSCNB for E&M continuous line signaling types. Enter LSSPSB for E&M pulsed line signaling types. Enter LSS_R1_01 if (R1) NTLS01 line signaling is used on the trunk. Enter LSS_R1_02 if (R1) NTLS02 line signaling is used on the trunk. Enter LSS_R1_03 if (R1) NTLS03 line signaling is used on the trunk. Direction field is only OG. Enter LSS_R1_04 if (R1) NTLS04 line signaling is used on the trunk. Direction field is only IC. Enter LSS_R1_09 if (R1) NTLS09 line signaling is used on the trunk. Enter NIL if this field is not applicable.

Field descriptions (Sheet 5 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	RSSIDX	alphanumeric (1 to 16 characters) or NIL	*Register signaling index* This field is an index into table RGSIGSYS. Enter an NTRS11 (only when FSTSIG=R2) register signaling system instance of table RGSIGSYS. Enter an MF3 register signaling system instance of table RGSIGSYS for R1 trunks.
	PROTSEL	see subfield	*Protocol selection* This field consists of subfield FSTSIG.
	FSTSIG	R1, R2, N5 or GR1	*Signaling system* Enter R1 if R1 line signaling is used on the trunk. Datafill field RXTXSEP, ANISEL, B_BIT_BLOCK and LNSIGINX. Enter R2 if R2 line signaling is used on the trunk. Add datafill to fields TANDEM, PROTIDX and TRTMTIDX. Enter N5 if N5 line signaling is used on the trunk. Datafill fields N5LNIDX, PTSNMSIG, SZTOPTS, PTSTPST, DISD, ECSTAT, and ECINCL. Enter GR1 if GR1 line signaling (Generic R1) is used on the trunk. Enter datafill for fields RXTXSEP, LNSIGIDX, ANISEL and R1OPTIONS for the GR1 protocol.

Field descriptions (Sheet 6 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	RXTXSEP	Y or N	*Receive transmit path separate* If the entry in subfield FSTSIG is R1 or GR1, add datafill to this field. Enter Y if the four-wire trunk is allowed to separate the receive and transmit lines of the trunk. Enter N if the trunk is two-wire and is not allowed to separate the receive and transmit lines. ***Note:*** This field is used for ARTER test purposes on international R1 trunks. It is also used on trunks that have the entry in field SIGDATA in table TRKSGRP equal to SIGSYS. Continue to add datafill to field OPTIONS.
	A_IDLEPOL	0 or 1	*A bit idle polarity.* The A_IDLEPOL field applies to FSTSIG value R1. A_IDLEPOL allows operating company personnel to define the polarity of the A bit in the ABCD IDLE signal. Operating company personnel can define the A bit as either 0 or 1.

Field descriptions (Sheet 7 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	ANISEL	Y or N	*Automatic number identification (ANI).* If the entry in subfield FSTSIG is R1, enter data for this field. This field allows operating company personnel to define the type of ANI signaling for the trunk to use with MF3 register signaling. If the trunk uses ANI signaling, operating company personnel can define the format and the type of the ANI directory number (DN). An entry of Y in this field requires a matching entry in the TRKGRP table.
	R1OPTIONS	MCTOGRLS, MCTICRLS	The MCTOGRLS and MCTICRLS options are only valid for MCT (NTLS09 R1) trunks. These options control how trunks are held and released after MCT activation.
	MCTOGRLS	Y or N	Enter Y in the MCTOGRLS subfield to release the outgoing trunk automatically. Enter N in the MCTOGRLS subfield to release the outgoing trunk using the FRLS maintenance command.

Field descriptions (Sheet 8 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	MCTICRLS	Y or N	Enter Y in the MCTICRLS subfield to release the incoming trunk automatically. Enter N in the MCTICRLS subfield to release the outgoing trunk using the FRLS maintenance command.
	B_BIT_BLOCK	0 or 1	*B bit block.* If the entry in subfield FSTSIG is R1, set the B bit to 0 or 1.
	LNSIGIDX	String	*LNSIGSYS index.* If the entry in subfield FSTSIG is R1 or GR1, enter data for this field. This field allows operating company personnel to refer to the key of table LNSIGSYS. The values of this field depend on the tuples in table LNSIGSYS.
	TANDEM	EEND or LNK	*Tandeming method* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter EEND if end-to-end tandeming is used, or LNK if link-by-link tandeming is used.
	PROTIDX	alphanumeric or NIL	*R2 protocol index* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter the R2 register signaling index as described by the command interpreter (CI) command R2VER.

Field descriptions (Sheet 9 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	TRTMTIDX	alphanumeric (4 characters) or NIL	*R2 treatment index* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter the R2 treatment and activity mapping index in tables ACTTRTMT and TRTMTACT.
	N5LNIDX	N5DEF or NIL	*N5 line index* If the entry in subfield FSTSIG is N5, add datafill to this field. Enter N5DEF or NIL.
	PTSNMSIG	numeric (4 to 20)	*Proceed to send to receipt of numeric signal* If the entry in subfield FSTSIG is N5 and the trunk group is incoming or two-way, enter the time, in seconds, between the register seizure and the proceed to send (PTS) signal. Enter the default if the trunk group is incoming. The default is 20.
	SZTOPTS	numeric (10 to 20)	*Register seizure to proceed to send* If the entry in subfield FSTSIG is N5 and the trunk group is outgoing or two-way, enter the time, in seconds, between the register seizure (SZ) and the PTS signal. Enter the default if the trunk group is incoming. The default is 20.

Field descriptions (Sheet 10 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	PTSTOST	numeric (20 to 40)	*Proceed to send to signal terminal* If the entry in subfield FSTSIG is N5 and the trunk group is incoming or two-way, enter the time, in seconds, between the PTS signal and the ST signal. Enter the default if the trunk group is outgoing. The default is 20.
	DISD	Y or N	*Discrimination digit* If the entry in subfield FSTSIG is N5, add datafill to this field. Enter Y or N to indicate how the discrimination digit is used.
	ANI_FORMAT	BELL or INTL	*Automatic number identification format.* If the entry in field ANISEL is Y, enter data for the ANI_FORMAT subfield. Operating company personnel can define the format of the ANI signaling for the trunk.
	ANI_DN_SIZE	4 to 10	*Automatic number identification directory number size.* If the entry in subfield ANISEL is Y, enter data for this field. Operating company personnel can define the DN size of the ANI signaling for the trunk.

Field descriptions (Sheet 11 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	ECINCL	Y or N	*Echo canceller INCL* If the entry in subfield FSTSIG is N5, add datafill to this field.

Field descriptions (Sheet 12 of 12)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	DIGCOL or NIL	*Option* Enter DIGCOL if digit collection analysis is used and add datafill to field DGNAME. Otherwise, enter NIL.
	DGNAME	alphanumeric (up to 8 characters) or NIL	*Digit analysis table index* If the entry in subfield OPTION is DIGCOL, add datafill to this field. This field is an index into table DGHEAD. Enter the detail digit collection information from table DGHEAD.

DIR = IC, 2W or OG, and PROTOCOL = CCITT or Q767

Datafill subfield VARIANT as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is CCITT or Q767.

CAUTION
Risk of XPM outage
VARIANT entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	VARIANT	BASE, BRAZIL, DEFAULT, DENMARK, GERMANY, FRANCE, MEXICO, PORTUGAL, SPAIN, BELGIUM, ITALY, ISRAEL, PNG, UK, CHILE, COSTA RICA, NORWAY, NEW_ZEALAND, V15, V16, V17, V18, V19, V20, SAUDI, SPIROU, or TURKEY	*Variation* This field is used if the user part of ISUP is datafilled against the trunk subgroup to identify the variation of ISUP. The default is BASE. ***Note 1:*** Entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages ***Note 2:*** BRAZIL is used to indicate a Brazilian R2 trunk. .

Table history

MMP13

Added values BRAZIL and DEFAULT to subfield VARIANT to support activity 59014280.

TRKSGRP type G1TR7

G1TR7

Table TRKSGRP provides the table control required to datafill 1TR7 trunk subgroups. G1TR7 is associated with the trunk groups GERIC, GEROG, and GER2W (German incoming, outgoing, and two-way) that are required for the German Intelligent Network field trial in order to handle the requirements of 1TR7 ISUP signaling.

Datafill

The following table lists the datafill for table TRKSGRP type G1TR7.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code representing the trunk group in table CLLI.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero).The default is 0.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements ADJNODE, DIR, GLARECTL, DEFCLI_N, and DEFCLI_I.
	SIGDATA	G1TR7	*Signaling data* Enter G1TR7 to specify G1TR7 signaling.
	ADJNODE	alphanumeric (1 to 12 characters)	*Adjacent node* Enter the index into table ADJNODE. Table ADJNODE provides information regarding the connected or adjacent switch and therefore must be datafilled before table TRKSGRP. This field cannot be changed if it affects the associated PRODUCT in table ADJNODE.
	DIR	IC, OG, or 2W	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). The datafill in this field must match the direction of the trunk group datafilled in table TRKGRP If the entry in field DIR is 2W, field GLARECTL must be datafilled.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	GLARECTL	Y, N, or blank	*Glare control* If the entry in field DIR is 2W, datafill this field. Enter Y (yes) to control simultaneous seizures of 2W trunks. Y indicates that circuits are under local control. Otherwise, enter N (no).
	DEFCLI_N	numeric (0 to 9)	*Default calling line identification national* Enter a default calling line identification (CLI) if no CLI is received by the service switching point (SSP). A default CLI must be datafilled.
	DEFCLI_I	numeric (0 to 9)	*Default calling line identification international* Enter a default CLI if no CLI is received by the SSP. A default CLI must be datafilled.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type ISDN

ISDN

If type of pulsing is Integrated Services Digital Network (ISDN), or if the trunk group type in table TRKGRP is primary rate interface (PRI), enter the data for table TRKSGRP.

Datafill

The following table lists the datafill for table TRKSGRP type ISDN.

Field descriptions (Sheet 1 of 11)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric(1 to 16 characters)	*Common language location identifier* Enter the code that is assigned in table CLLI to the trunk group to which the subgroup belongs. ***Note:*** With CLLI datafilled in table IPINV, there can be no changes to table TRKSGRP.
	SGRP	0	*Subgroup number* Enter the number assigned to the trunk subgroup. Only subgroup 0 (zero) is valid for ISDN signaling.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.

Field descriptions (Sheet 2 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields PSPDSEIZ, PARTDIAL, VERSION, CRLENGTH, BCHNEG, BCHGLARE, IFCLASS, CONFIG, LOCATION, SAT, ECSELECT, TRKGRDTM, L1FLAGS, PARMNAME, DCHNL, and DCHBCKUP. ***Note:*** Primary and backup D-channels on PRI trunks must have the same datafill. Feature PRI NA008 MTC (AF6860) allows independent provisioning of the backup D-channel on ISDN PRI trunks. If any SGRPVAR variables on the backup D-channel are datafilled differently than the primary D-channels, the following error message is displayed and static data will not be loaded. `ERROR: ONLY BACKUP D-CHANNEL DATAFILL ALLOWED. TO CHANGE OTHER DATA D-CHANNEL MUST BE INB.`
	SIGDATA	ISDN	*Signaling data* Enter ISDN for ISDN type trunks.
	PSPDSEIZ	numeric (2 to 30)	*Permanent signal or partial dial on seizure timing* Enter the time, in seconds, that the trunk waits for reception of the first digit.
	PARTDIAL	numeric (2 to 30)	*Partial dial timing* Enter the time, in seconds, that the trunk has to wait for reception of each digit, excluding the first digit.

Field descriptions (Sheet 3 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	VERSION	87Q931 ANSI607 P41449 UNISPEC20 or 96ISOQSIG	*Protocol version* Enter the version of the protocol. Value for all PRI variants. Value for all QSIG variants.
	CRLENGTH	numeric (1 or 2)	*Call reference length* Enter the number of octets in the call reference.
	BCHNEG	Y or N	*B-channel negotiation* Enter Y (yes) if B-channel negotiation is allowed. Otherwise, enter N (no).
	BCHGLARE	YIELD or STAND	*B-channel glare* Enter YIELD if the B-channel is used in set-up messages, simultaneously in both directions, or if the call must be taken down by this switch. Enter STAND if the switch must wait for the other switch to yield.

Field descriptions (Sheet 4 of 11)

Field	Subfield	Entry	Explanation and action

SGRPVAR (continued)	IFCLASS	NETWORK or USER	*Interface class*
			Enter NETWORK if it is the network end. If the datafilled protocol in table LTDEF is INS500, then the interface class must be NETWORK.
			For the National ISDN primary rate interface (NIPRI) variant only the value NETWORK can be datafilled.
			Enter USER if the PRA link is considered the user end of the protocol.
			If the operating company personnel attempts to enter the data for the interface class as USER and the protocol in table ADJNODE is datafilled as INS1500, then the following error message is displayed:
			`USER IFCLASS IS NOT SUPPORTED ON INS1500.`
			If you enter the data for the interface class as USER, and the ECT option is selected in table LTDATA, the following error message is displayed:
			`Field IFCLASS must be set to NETWORK in table TRKSGRP or ECT must be removed from table LTDATA.`

	CONFIG	PT_MLT_PT or PT_PT	*Configuration* If broadcast procedures are to be used on this interface, enter PT_MLT_PT (point-to-multipoint). Otherwise, enter PT_PT (point-to-point).

Field descriptions (Sheet 5 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	LOCATION	LOCALEO PVTNET USER or LOC_MAP	*Location* Enter the location to be used if creating CAUSE information elements. The following CAUSE information elements are contained in release messages that map to a specific treatment: • LOCALEO - local end office (public network) location • PVTNET - private network location • USER - user location • LOC_MAP - location map
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk subgroup is configured to switch by satellite. Otherwise, enter N (no).
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

Field descriptions (Sheet 6 of 11)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* This field indicates the status of the echo canceler status on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceler status equipment, and no call processing control is involved. Field ABCNTL must be checked. Enter INNOTONE if internal echo canceler status are used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter the data for refinement NSMATCH.
SGRPVAR (continued)	ECSTAT (continued)		Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the digital trunk controller (DTC) frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter the data for subfields NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the echo canceler status remains OFF.

Field descriptions (Sheet 7 of 11)

Field	Subfield	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INNOTONE or INTERNAL, enter the data for this field. Enter Y to show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively cancelling echoes. Enter N to indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes. The default is N.
SGRPVAR (continued)	AUTOON	Y or N	*Auto reenable control* If the entry in subfield ECSTAT is INTERNAL, enter the data for this field. Enter Y to show that auto reenable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy. Enter N to indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

Field descriptions (Sheet 8 of 11)

Field	Subfield	Entry	Explanation and action
	TRKGRDTM	numeric (1 to 255)	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. If the trunks are PX/FX, the entry is a 160 ms increment.
SGRPVAR (continued)	ADJNODE	alphanumeric (1 to 12 characters)	*Adjacent node* Enter the data for this field for switch loads prior to BCS36. Enter the index into table ADJNODE. Table ADJNODE provides information regarding the connected or adjacent switch and must be datafilled before table TRKSGRP. This field cannot be changed if it affects the associated PRODUCT in table ADJNODE.

Field descriptions (Sheet 9 of 11)

Field	Subfield	Entry	Explanation and action
	L1FLAGS	Y or N	*Layer 1 flags* This field is used by ISDN primary rate access (PRA) trunks to indicate whether or not the ISDN DTC (DTCI) sends layer 1 flags if the D-channel is in flagfill mode. Enter Y if the connection is between DMS and a different vendor. Enter N for DMS-to-DMS PRA connections. This field is automatically set to Y if a PRA node is selected and the node is defined as SL1 in table ADJNODE.
	L1FLAGS (continued)	alphanumeric (1 to 8 characters) or DEFAULT	*ISDNPARM name* Enter a name in table ISDNPARM. This field associates the information found in table ISDNPARM with the primary rate interface defined by the table TRKSGRP tuple. The default is DEFAULT.

Field descriptions (Sheet 10 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	DCHNL	see subfield	*D-channel* The entries in this field define the main D-channel to be used for this PRA interface. The D-channel that serves an interface can be changed so that the interface is served by a new D-channel. This is accomplished by changing the field DCHLOC in table TRKSGRP. If such a change is made, the B-channels that were formerly associated with the old D-channel must be reassociated with the new D-channel. This is accomplished by sending a bulk format B-channel static data tuple. The bulk tuple performs the necessary association, while removing the association that previously existed. This field consists of subfield PMTYPE.

Field descriptions (Sheet 11 of 11)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	PMTYPE	DTCI, GWC, IAC, ICP, LTC, PDTC, PRA_ADTC	*Peripheral module type* Enter the peripheral module (PM) type. *DTCI - ISDN DTC* Enter the data for subfields DTCINO, DTCICKTNO, DTCICKTTS, and fields DCHRATE and HDLCTYPE. *Gateway controller* No subfields are required for this entry type. *IAC - ISDN access controller* Enter the data for subfields IACNO, IACCKTNO, and IACCKTTS. *ICP - integrated cellular peripheral* Enter the data for subfields ICPNO, ICPCKTNO, and ICPCKTTS, and field DCHRATE. *LTC - line trunk controller* Enter the data for subfields LTCNO, LTCCKTNO, LTCCKTTS, and fields DCHRATE and HDLCTYPE. *PDTC - PCM30 digital trunk controller (DTC)* Enter the data for fields P30NO, P30CKTNO, and P30CKTTS, and fields DCHRATE, and HDLCTYPE. *PRA_ADTC - primary rate access Austrian DTC* No subfields are required for this entry type.

PMTYPE = DTCI

If the entry in subfield PMTYPE is DTCI, enter the data for subfields DTCINO, DTCICKTNO, and DTCICKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DTCINO	numeric (0 to 511)	*ISDN digital trunk controller number* If the entry in field PMTYPE is DTCI, enter the data for this field. Enter the DTCI number of the D-channel.
	DTCICKTNO	numeric (0 to 19)	*ISDN digital trunk controller circuit number* If the entry in field PMTYPE is DTCI, enter the data for this field. Enter the DS-1 span (DS-1 circuit number) on the DTCI used for the D-channel.
	DTCICKTTS	numeric (0 to 24)	*ISDN digital trunk controller circuit time slot* If the entry in field PMTYPE is DTCI, enter the data for this field. Enter the time slot of the DS-1 span (DS-1 circuit number) used for the D-channel. Go to field DCHRATE to complete datafill for DTCI.

PMTYPE = IAC

If the entry in subfield PMTYPE is IAC, enter the data for subfields IACINO, IACICKTNO, and IACICKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	IACNO	numeric (0 to 127)	*ISDN access controller number* If the entry in field PMTYPE is IAC, enter the data for this field. Enter the IAC number of the D-channel.
	IACCKTNO	numeric (0 to 19)	*ISDN access controller circuit number* If the entry in field PMTYPE is IAC, enter the data for this field. Enter the IAC DS-1 circuit number used for the D-channel.
	IACCKTTS	numeric 1 to 24)	*ISDN access controller circuit time slot* If the entry in field PMTYPE is IAC, enter the data for this field. Enter the time slot of the DS-1 circuit number used for the D-channel.

PMTYPE = ICP

If the entry in subfield PMTYPE is ICP, enter the data for subfields ICPINO, ICPICKTNO, and ICPICKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ICPNO	numeric (0 to 511)	*Integrated cellular peripheral number* If the entry in field PMTYPE is ICP, enter the data for this field. Enter the ICP number of the D-channel.
	ICPCKTNO	numeric (0 to 19)	*Integrated cellular peripheral circuit number* If the entry in field PMTYPE is ICP, enter the data for this field. Enter the ICP DS-1 circuit number used for the D-channel.
	ICPCKTTS	numeric (1 to 24)	*Integrated cellular peripheral circuit time slot* If the entry in field PMTYPE is ICP, enter the data for this field. Enter the time slot of the DS-1 circuit number used for the D-channel. Go to field DCHRATE to complete datafill for ICP.

PMTYPE = LTC

If the entry in subfield PMTYPE is LTC, enter the data for subfields LTCNO, LTCCKTNO, and LTCCKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	*Line trunk controller* Enter the LTCI number of the D-channel.
	LTCCKTNO	numeric (0 to 19)	*Line trunk controller circuit number* Enter the DS-1 span (DS-1 circuit number) on the LTC used for the D-channel backup.
	LTCCKTTS	numeric (1 to 24)	*Line trunk controller circuit time slot* Enter the time slot of the DS-1 circuit number used for the D-channel. Go to field DCHRATE in Field descriptions table in section “PMTYPE = all PM types” to complete datafill for LTCI.

PMTYPE = PDTC

If the entry in subfield PMTYPE is PDTC, enter the data for subfields P30NO, P30CKTNO, and P30CKTTS as described in the following

table, then go to refinement DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	P30NO	numeric (0 to 511)	*P30 number* If the entry in field PMTYPE is PDTC, enter the data for this field. Enter the PDTC number of the D-channel. The D-channel location can be on any port from 0 (zero) to 15 for a PDTC.
	P30CKTNO	numeric (0 to 19)	*P30 circuit number* If the entry in field PMTYPE is PDTC, enter the data for this field. Enter a number to indicate the PCM30 circuit range.
	P30CKTTS	numeric (1 to 31)	*P30 circuit time slot* If the entry in field PMTYPE is PDTC, enter the data for this field. Enter a number from 1 to 31 representing the circuit number time slot.

PMTYPE = all PM types

For all peripheral modules types, datafill refinement DCHRATE as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
DCHRATE		56K or 64K	*D-channel data rate* Enter the data rate of the D-channel, 56K or 64K. The data transmission rate of the carrier (DS-1) and of the D-channel on it must be compatible. If the carrier is datafilled to transmit at 56K, then the entry in field DCHRATE must also be 56K. If the entry in subfield PMTYPE is IAC or ICP, datafill is complete for table TRKSGRP, SIGDATA = ISDN.

PMTYPE = DTCI, LTC, PDTC

If the entry in subfield PMTYPE is DTCI, LTC, or PDTC, enter the data for refinement HDLCTYPE as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	HDLCTYPE	HDLC or INVHDLC	*High level data link type* If the entry in field PMTYPE is DTCI, LTC, or PDTC, enter the data for field HDLCTYPE. This field specifies how the LTC or DTCI sends and/or receives D-channel messages. If the entry in field PMTYPE is DTCI or LTC, enter HDLC for high level data link or INVHDLC for inverted high level data link. ***Note:*** The inverted HDLC is a format in which all 0s (zeros) are changed to 1s and all 1's are changed to 0's (zeros). Some ISDN vendors use the inverted HDLC for PRA interfaces.

For all tuples

For all tuples, enter the data for the remaining fields as described in the following table.

Field descriptions (Sheet 1 of 2)for conditional datafill

Field	Subfield	Entry	Explanation and action
DCHBCKUP		see subfield	*D-channel backup* The entries in this field define the backup D-channel used for this PRA interface. This field consists of subfield PMTYPE.

Field descriptions (Sheet 2 of 2)for conditional datafill

Field	Subfield	Entry	Explanation and action
	PMTYPE	DTCI, GWC, IAC, ICP, LTC, PDTC, PRA_ADTC	*Peripheral module type* Refer to field PMTYPE for a complete description of entries and fields.
OPTION		OVLOPOFF, OVLIPOFF	*Option* Enter any of the following options if required. Enter OVLOPOFF to disable overlap outpulsing on ETSI PRI trunks. When entered, all outgoing calls are sent using Enbloc. Enter OVLIPOFF to disable overlap inpulsing on ETSI PRI trunks. When entered, incoming calls are rejected if there are insufficient digits in the SETUP message to route the call.

Table history

CR Q00839922

Added PMTYPE=GWC in table TRKSGRP type ISDN.

NA012

Added the information that CLLI datafill in table IPINV blocks changes to table TRKSGRP.

MMP12

Added a warning to IFCLASS. IFCLASS must be set to NETWORK or ECT must be removed from table LTDATA.

NA011

Added LOC_MAP option to the LOCATION subfield in table TRKSGRP type ISDN (AF7769).

EUR009

Added OVLOPOFF and OVLIPOFF options to the OPTION field in table TRKSGRP type ISDN (AU2834).

NA008

Added warning to SGRPVAR when datafilling backup D-channels for PRI NA008 maintenance feature (AF6860).

EUR006

The 96ISOQSIG option was added to the range of values for subfield VERSION in table TRKSGRP type ISDN.

TRKSGRP type JSTD

Japan standard

Japan standard (JSTD) signaling is used for Japan interexchange trunk (IET) subgroups.

Note: This table contains an index into table TKSIGSYS. Datafill table TKSIGSYS before datafilling this table.

Datafill

The following table lists the datafill for table TRKSGRP type JSTD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code representing the trunk group in table CLLI.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, Enter 0 (zero).
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements DIR, IPULSTYP, ISTARTSIG, REMBSY, TKICSSI, OPULSTYP, OSTARTSIG, REMBSY, and TKOGSSI.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SIGDATA	JSTD	*Signaling data* Enter JSTD for Japan standard signaling.
	DIR	IC or OG	*Direction* Enter the trunk group direction: IC (incoming) or OG (outgoing). The entry in this field must be the same as the entry in field DIR in tables TRKGRP and TKSIGSYS. If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSIG, REMBSY, and TKICSSI as described below. If the entry in field DIR is OG, datafill refinements OPULSTYP, OSTARTSIG, REMBSY, and TKOGSSI as described below.

DIR = IC

If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSIG, REMBSY, and TKICSSI as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	MF	*Incoming type of pulsing* Enter MF for multifrequency.
	ISTARTSG	RA	*Incoming start dial signal* Enter RA for register attached.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y (yes) to indicate that a blocking signal must be sent on an incoming trunk if the trunk is manually made busy. Otherwise, enter N (no).
	TKICSSI	alphanumeric (1 to 16 characters)	*Incoming trunk signaling system index* Enter the index into table TKSIGSYS. The associated tuple in table TKSIGSYS must be datafilled before this subgroup tuple. Datafill for SIGDATA = JSTD is complete after datafilling this field.

DIR = OG

If the entry in field DIR is OG, datafill refinements OPULSTYP, OSTARTSIG, REMBSY, and TKOGSSI as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	MF	*Outgoing type of pulsing* Enter MF for multifrequency.
	OSTARTSG	RA	*Outgoing start dial signal* Enter RA for register attached.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y to indicate that a blocking signal must be sent on an incoming trunk if the trunk is manually made busy. Otherwise, enter N.
	TKOGSSI	alphanumeric (1 to 16 characters)	*Outgoing trunk signaling system index* Enter the index into table TKSIGSYS. The associated tuple in table TKSIGSYS must be datafilled before this subgroup tuple. Datafill is complete for SIGDATA = JSTD after datafilling this field.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type N5

N5

If type of pulsing is N5, datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type N5.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code, assigned to the trunk group, in table CLLI to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric (up to 6 characters)	*Card code* Enter the product engineering code (PEC) of the members of the trunk group. See the *DMS-100 Provisioning Manual*.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and fields PTSNMSIG, SZTOPTS, PTSTOST, ESUPR, and SAT.
	SIGDATA	N5	*Signaling data* Enter N5.

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	PTSNMSIG	numeric(4 to 20)	*Proceed to send to receipt of numeric signal* If the trunk group is incoming or two-way, enter the time, in seconds, between the register seizure and the proceed to send (PTS) signal. Enter the default if trunk group is incoming. The default is 20.
	SZTOPTS	numeric(10 to 20)	*Register seizure to proceed to send* If trunk group is outgoing or two-way, enter the time, in seconds, between the register seizure (SZ) and the PTS signal. Enter the default if the trunk group is incoming. The default is 20.
	PTSTOST	numeric(20 to 40)	*Proceed to send to signal terminal* If the trunk group is incoming or two-way, enter the time, in seconds, between the PTS signal and the ST signal. Enter the default if the trunk group is outgoing. The default is 20.
	ESUPR	Y or N	*Echo suppressor* Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no).
	SAT	Y or N	*Satellite* Enter Y if the trunk group is connected to the distant office through satellite. Otherwise, enter N.

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
DELDISD		Y or N	*Delete discrimination digit* Enter Y to remove the CCITT No. 5 Signaling discrimination digit from the digit stream before translations. Otherwise, enter N. If table TRKSGRP is dumped and restored using the MOVEBCS process, the reformat process adds a value of N to field DELDISD of each tuple restored. The default is N.
N5VAR		see subfield	*N5 variable* This field consists of subfield DIGITAL and refinements.
	DIGITAL	Y or N	*Digital* If this field is for digital N5 trunks, enter Y and datafill refinements LNSSI, ECSTAT, and OPTIONS. For analog N5 trunks, enter N. The default is N.
N5VAR (continued)	LNSSI	N5DEF	*Line signaling system selector index* f the entry in field DIGITAL is Y, datafill this field. Enter N5DEF as the index into table LNSIGSYS. This field is only required for digital N5 trunk subgroups.

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* This field indicates the status of the echo canceler status on the trunk subgroup. Enter EXTERNAL to indicate an external echo canceler status is required. Enter INNOTONE to indicate echo canceler status internal to the DMS with the 2100-Hz tone disabling function must be turned off. Enter INTERNAL to indicate echo canceler status internal to the DMS must be used. Enter UNEQ (unequipped) if no echo canceler status are required for calls involving digital N5 trunks.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements.

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
N5VAR (continued)	OPTION	DCME OVLDCNTL or Q33SUP	*Option* Enter DCME to indicate that all members of this trunk subgroup must terminate on an enhanced digital carrier module (DCME). No further datafill for N5 signaling data is required. Enter OVLDCNTL to indicate that overload control is required on N5 trunks and datafill field NUMOFCLF. The OVLDCNTL option cannot be changed if trunks are datafilled in table TRKMEM, otherwise the following error message is displayed: `CANNOT CHANGE OVLDCNTL OPTION WITH TRUNKS IN TABLE TRKMEM` Enter Q33SUP to show Q33 failures on a trunk by trunk basis. No further datafill for signaling data N5 is required. The Q33SUP option indicates that circuit supervision is supported on all members of the trunk group. field DIGITAL must be set to Y and field DIR can be 2W, IC, or OG.

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action

N5VAR (continued)			The Q33SUP option can only be changed if there are no trunk members datafilled in table TRKMEM against the trunk subgroup, otherwise the following error message is displayed:
			
			`CANNOT CHANGE Q33 OPTION WITH TRUNKS DATAFILLED IN TABLE TRKMEM`
			
			The Q33 timer must be datafilled in table LNSIGSYS before the Q33SUP option is datafilled in table TRKSGRP, otherwise the following error message is displayed:
			
			`Q33 TIMER NOT DATAFILLED IN TABLE LNSIGSYS`

	NUMOFCLF	numeric (1 to 31)	*Number of clear forwards* If the entry in field OPTION is OVLDCNTL, datafill this field. Enter the maximum number of clear forwards permitted on the carrier the trunk subgroup is datafilled on. Field NUMOFCLF cannot be changed if trunks are datafilled in table TRKMEM, otherwise the following error message is displayed: `CANNOT CHANGE OVLDCNTL OPTION WITH TRUNKS IN TABLE TRKMEM`

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type OC

OG/2W from Local to CAMA Trunk Group Type

Trunk group type OC is used in one of the following configurations:

- In a DMS end office, outgoing trunk group type OC interfaces with a toll office to carry noncoin subscriber-dialed chargeable calls (TOPS operator assistance not required) recorded by centralized automatic message accounting (CAMA) in the toll office.

  Signaling formats include the CAMA automatic number identification (ANI) pulsing format (non-TSPS CAMA office).

  If the toll office is a DMS switch, the far end of trunk group type OC enters the DMS toll office as trunk group type SC.

- In a DMS end office, two-way trunk group type OC interfaces with a toll office to carry outgoing trunk traffic and the following incoming trunk traffic:

  — dedicated to toll-completing

  — dedicated to verification

  — combined toll-completing and verification

For more information on verification calls, refer to table TRKGRP(VR).

- In a DMS equal-access end office (EAEO) or an access tandem office with the feature group B (FGB) equal access carriers, two-way trunk group type OC interfaces with the Feature Group B (FGB) Equal Access Carriers feature package.

- In a DMS toll or TOPS office, outgoing trunk group type OC tandems a call to another toll office as a CAMA call, and outpulses ANI if required.

  The hold type for this trunk group type is no hold, which means that the call is taken down if either the originator or the terminator goes on-hook.

Datafill

The following table lists the datafill for table TRKGRP type OC.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, ANITYPE, BILLSPILL, EA, and V2DATA. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OC	*Group type* Enter OC to specify the outgoing or two-way local to CAMA trunk group type.

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to the general section of table TRKGRP.

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	MIDL, LIDL, CWCTH, CCWCT, HASEQ, or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			Entries outside this range are invalid. For more information, refer to the general section of table TRKGRP. ***Note:*** The selection sequence for an existing trunk group can be changed from ASEQ to DSEQ, or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ). The selection method for an existing trunk group cannot be changed. To change the selection method for an existing trunk group from ASEQ or DSEQ to CWCTH or CCWCTH, or to MIDL or LIDL, define a new trunk group, as follows: Create a new trunk group with the required trunk selection method, delete the individual trunks from the old trunk group, and add the trunks to the new trunk group.

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ANITYPE	WK, REV, NO, or REVUK	*ANI request type* For special requirements (RCF/TCF), enter WK (wink). This is the correct automatic number identification (ANI) fail-and-answer supervision on the second leg of a remote call-forwarding call. For normal Bell standard offices, enter REV (reversal or answer). This is the default datafill value. If ANI is not performed, enter NO. If interworking with DMS-250 TOPS trunks is required, enter REVUK. REVUK uses the UK250 ANI protocol format. ***Note:*** If optional feature package NTXE34AA (4X Operation - AMR5 Format ANI) is present, enter REV for this field value. Feature package NTXE34AA allows ANI to be forwarded if Feature Group C (FGC) signaling is used. If this package is present, other values for ANITYPE are not valid.
	BILLSPILL	Y or N	*Spill billing* In offices with feature package NTX159AA (AT&T LAMA Format) and feature package NTX986AA (ANI with AMA), enter Y (yes) if direct-dialed calls terminating to the trunk group are to be recorded in a Bellcore AMA-format billing record. Otherwise, enter N (no).

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	EA (see Note 1)	Y or N	*Equal access* Enter Y if double ANI digits are to be sent out. Otherwise, enter N. ***Note 1:*** Canada only ***Note 2:*** If optional feature NTXE34AA (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter N for this field. If NTXE34AA is present, Y is not a valid entry value.
	V2DATA	see subfields	*Trunk group data* This field consists of subfield DIR and refinements.

Outgoing local to CAMA trunk groups

For outgoing local to CAMA trunks, datafill subfield DIR and refinements as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG	*Trunk direction* Enter OG to specify that the trunk group direction is outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinement.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Two-way local to CAMA trunk groups

For two-way local to CAMA trunks, datafill subfield DIR and refinements as described below.

Field descriptions for conditional datafill (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W	*Trunk direction* Enter 2W to specify that the trunk group direction is two-way. Office parameter TWO_WAY_FOR_OC in table OFCOPT must be set to Y for two-way trunk groups. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions for conditional datafill (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). This field is used in subtable HNPACONT.HNPACODE to prevent a non-authorized originator from access to certain operators, and to verify that the number of digits received is correct. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	MODE	ARCRCV or VF	*Mode of operation* Enter one of the following modes of operation: • AR for toll-completing with automatic ringing • CR for toll-completing with control ringing • CV for combined toll-completing and verification • VF for dedicated verification If the number to which a verification call is to terminate is busy, the call is completed using the operator verification trunk group (trunk group type VR) and table MTATRK.
	VDEVAR	see subfields	*Variable digit data* This field consists of subfield VDESEL and refinements.
	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is fixed, enter N and datafill refinement DIGREGEN. If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2.

Field descriptions for conditional datafill (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerated* Datafill this field if the value in field VDESEL is N. Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits.
	DIGSINI	numeric (1 to 18)	*Minimum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the minimum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIGSINI2	numeric (1 to 18)	*Maximum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the maximum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	FGB_AREA	see subfield	*Feature group B information* This field consists of subfield FGBTRAFC and refinements.
	FGBTRAFC	Y or N	*Feature group B traffic* To indicate that a trunk group connects to an OCC switch and carries Feature Group B (FGB) calls, enter Y and datafill fields FGBANI and CARRNM. Otherwise, enter N.
	FGBANI	Y or N	*Feature group B ANI* Datafill this field if the value in field FGBTRAFC is Y. If normal ANI is provided, enter Y. If KP + ST is required, enter N.
	CARRNM	alphanumeric (1 to 16 characters) or NILC	*Carrier name* Datafill this field if the value in field FGBTRAFC is Y. Enter the name of the carrier, using an OC trunk group previously datafilled in table OCCINFO. NILC is the default entry.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type OI

Incoming Operator Trunk Group Type

In a DMS end office, incoming trunk group type OI connects to an operator board or a Traffic Operator Position System (TOPS) office to carry simple call-processing traffic. An OI type trunk cannot handle feature-related call processing. An OI trunk type cannot terminate to an IBNTO trunk type.

Verification calls can originate on trunk group type OI under certain conditions. Refer to table TRKGRP type VR for more information.

There is no ring time out on a call placed with an OI trunk type.

The hold type for this trunk group type is terminating hold, which means that the call is taken down if the terminator goes on hook.

Datafill

The following table lists the datafill for table TRKGRP type OI.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, MODE, VDEVAR, and COLOCATED. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	OI	*Group type* Enter OI to specify the incoming operator trunk group type.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* For incoming trunk groups, this field is not required. Enter NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to the general section of table TRKGRP.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	MODE	AR, CR, CV, or VF	*Mode of operation* Enter one of the following modes of operation: • AR for toll-completing with automatic ringing • CR for toll-completing with control ringing • CV for combined toll-completing and verification • VF for dedicated verification If the number to which a verification call is to terminate is busy, the call is completed using the operator verification trunk group (trunk group type VR) and table MTATRK.
	VDEVAR	see subfields	*Variable digit data* This field consists of subfield VDESEL and refinements.
	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is fixed, enter N and datafill refinement DIGREGEN. If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. ***Note:*** If the number of incoming digits is variable, a corresponding variable-digit-format entry is required in the table STDPRTCT.STDPRT.

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerated* Datafill this field if the value in field VDESEL is N. Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the minimum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIGSIN2	Y or N	*Maximum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the maximum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	COLOCATED	Y or N	*Collocated switchboard* Enter Y if operator switchboards NE 3, 3C, 3CL, or AE no. 30 or 31 are located in the same building as the switch. Otherwise, enter N. If switchboards are collocated, use trunk circuits with PEC NT3X07AA (incoming trunk to 3C, 3CL, or AE31 switchboard, sleeve lead circuit card).

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type OP

OG/2W from Local or Toll to TOPS or TSPS Trunk Group Type

Trunk group type OP is used in one of the following two configurations:

- In a DMS end office, outgoing trunk group type OP connects with a Traffic Operator Position System (TOPS) or Traffic Service Position System (TSPS) office and can be set up to carry any or all of the following types of traffic:
  - noncoin subscriber-dialed chargeable calls recorded by centralized automatic message accounting (CAMA) in the TOPS office using automatic number identification (ANI) or operator number identification (ONI), provided they are not recorded by local automatic message accounting (LAMA) in the end office

    This function is similar to the function of trunk group type OC.
  - coin and noncoin TOPS operator-assisted calls that can be recorded by CAMA in the TOPS office using ANI or ONI

    Signaling formats include dial pulse for TSPS from the local office.

    If the far-end switch is a DMS TOPS office, the far end of trunk group type OP enters the office as trunk group type TOPS.
- In a DMS end office, two-way trunk group type OP (in addition to the outgoing trunk functions) can be set up for the following incoming trunk functions:
  - dedicated to toll completing
  - dedicated to verification
  - combined toll completing and verification

Refer to TRKGRP type VR for additional information on verification calls.

Office parameters for alarm sending of ANI

If alarm sending of ANI information digit 8 over a TSPS or TOPS trunk is required, refer to the following variable office parameters in table OFCVAR:

- ASCS_MONITOR_DELAY
- ASCS_NOALARM_THRESHOLD
- ASCS_NOSEND_THRESHOLD
- ASCS_ROUTE_INDEX
- ASCS_TRUNK_TIMEOUT

If alarm sending of ANI information digit 8 over a TSPS or TOPS trunk is required, datafill the trunk using the pseudo common language location identifier (CLLI) ASCS in table CLLI.

If identification digit 9 is to be outpulsed on intercept calls, set the parameter SPILL_ANI_9 in table OFCENG to Y.

Datafill

The following table lists the datafill for table TRKGRP type OP.

Field descriptions (Sheet 1 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, STNCLS, TRAFTYPE, ANITYPE, (CONTMARK on form only), HOLDTYPE, BILLSPILL, V2DATA, EADATA, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OP	*Group type* Enter OP to specify the outgoing or two-way local/toll to TOPS/TSTS trunk group type.

Field descriptions (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to the general section of table TRKGRP.

Field descriptions (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	MIDL, LIDL, CWCTH, CCWCTH, ASEQ, or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 5 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			Entries outside this range are invalid. For more information, refer to the general section of table TRKGRP. ***Note:*** The selection sequence for an existing trunk group can be changed from ASEQ to DSEQ, or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ). The selection method for an existing trunk group cannot be changed. To change the selection method for an existing trunk group from ASEQ or DSEQ to CWCTH or CCWCTH, or to MIDL or LIDL, define a new trunk group, as follows: Create a new trunk group with the required trunk selection method, delete the individual trunks from the old trunk group, and add the trunks to the new trunk group.
	STNCLS	HOT, NCN, COIN or COMB	*Station class* This field contains the station class assigned to the trunk group. Enter one of the following values: • HOT for hotel • NCN for noncoin • COIN for coin • COMB for combined

Field descriptions (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFTYPE	OPL, ZPL, ZMN, ZPM, or MIX	*Traffic type* This field contains the type of traffic on the trunk group. Enter one of the following values: • OPL for one plus • ZPL for zero plus • ZMN for zero minus • ZPM for zero plus and minus • MIX for mixed A trunk group that uses dial pulse requires a combined station class and a mixed traffic type, and uses the full range of ST signals at the end of the called-digit stream (or ANI spill): • ST for coin direct dialed • STP for coin operator assisted • ST2P for noncoin direct dialed • ST3P for noncoin operator assisted A trunk group that specifies a mixed traffic type and a station class that is not combined uses only the following ST signals: • ST for coin direct dialed • STP for operator assisted A trunk group that specifies a traffic type other than mixed uses ST (coin direct dialed) only.

Field descriptions (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ANITYPE	WK, REV, NO, or REVUK	*ANI request type* For special requirements (RCF/TCF), enter WK (wink). This is the correct automatic number identification (ANI) fail-and-answer supervision on the second leg of a remote call-forwarding call. For normal Bell standard offices, enter REV (reversal or answer). This is the default datafill value. If ANI is not performed, enter NO. If interworking with DMS-250 TOPS trunks is required, enter REVUK. REVUK uses the UK250 ANI protocol format. ***Note:*** If optional feature package NTXE34AA (4X Operation - AMR5 Format ANI) is present, enter REV for this field value. Feature package NTXE34AA allows ANI to be forwarded if Feature Group C (FGC) signaling is used. If this package is present, other values for ANITYPE are not valid.
	HOLDTYPE	NOHOLD or TERMHOLD	*Hold type* Enter NOHOLD if the call is to come down if either the originator or terminator goes on-hook. Use NOHOLD in no-operator configurations when trunk group type OP is used for ANI. Enter TERMHOLD (terminating operator hold) if the call is to come down only if the terminator goes on-hook. Entries outside this range are not valid.

Field descriptions (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	BILLSPILL	Y or N	*Spill billing* In offices with feature package NTX159AA (AT&T LAMA Format) and feature package NTX986AA (ANI with AMA), enter Y (yes) if direct-dialed calls terminating to the trunk group are to be recorded in a Bellcore AMA-format billing record. Otherwise, enter N (no).
	V2DATA	see subfields	*Data for two-way trunk group* This field consists of subfield DIR and refinements.

Outgoing trunks

For outgoing trunks, datafill field DIR as described below and then datafill fields EADATA and OPTIONS as described in "Outgoing and two-way trunks".

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG	*Direction* Enter OG to specify that the trunk group direction is outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Two-way trunks

For two-way trunks, datafill field DIR and refinements PRTNM, SCRNCL, SNPA, ORIGSRC, MODE, and VDEVAR as described below, and then datafill fields EADATA and OPTIONS as described in "Outgoing and two-way trunks".

Field descriptions for conditional datafill (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W	*Direction* Enter 2W to specify that the trunk group direction is two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). For two-way trunk groups, option TWO_WAY_FOR_OP in table OFCOPT must be set to Y.
	PRTNM	alphanumeric (1to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Field descriptions for conditional datafill (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). This field is used in subtable HNPACONT.HNPACODE For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	MODE	AR, CR, CV, or VF	*Mode of operation* Enter one of the following modes of operation: • AR for toll-completing with automatic ringing • CR for toll-completing with control ringing • CV for combined toll-completing and verification • VF for dedicated verification If the number to which a verification call is to terminate is busy, the call is completed using the operator verification trunk group (trunk group type VR) and table MTATRK.
	VDEVAR	see subfields	*Variable digit data* This field consists of subfield VDESEL and refinements.

Field descriptions for conditional datafill (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is fixed, enter N and datafill refinement DIGREGEN. If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. ***Note:*** If the number of incoming digits is variable, a corresponding variable-digit-format entry is required in the table STDPRTCT.STDPRT.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerated* Datafill this field if the value in field VDESEL is N. Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the minimum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSINI2	numeric (1 to 18)	*Maximum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the maximum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Outgoing and two-way trunks

For all outgoing and two-way trunks, datafill fields EADATA and OPTIONS as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	EAEADATA	see subfield	*Equal access data* This field consists of subfield EA and refinements.
	EA	Y or N	*Equal access selector* If equal-access signaling (double ANI digits) is required, enter Y and datafill refinements EAOSS and RTEVIAAT. Otherwise, enter N (no). ***Note:*** If optional feature NTXE34AA (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter N for this field. If NTXE34AA is present, Y is not a valid entry value.

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	EAOSS	Y or N	*Exchange access operator services signaling* Datafill this field if the value in field EA is Y. Enter Y if EAOSS signaling is to be used on the trunk. Enter N if EAOSS signaling is not used. Enter N if the trunk is datafilled in table KP2TRUNK.
	RTEVIAAT	Y or N	*Route via access tandem* Datafill this field if the value in field EA is Y. Enter Y if the trunk is between an equal access end office and a TOPS access tandem switch. Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements.

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME or NRMLTRAF	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. Use NRMLTRAF to indicate that the OP trunk carries normal traffic. When the NRMLTRAF option is not datafilled, the OP trunk defaults to carrying essential services. ***Note:*** Only OP trunks that carry normal traffic should encounter AIN 0.1 triggers. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Additional information

When a T1 (off a DCM) is terminated on a two wire circuit, tones are audible. While outpulsing or during an ANI spill, the DCM is incapable of disabling the return speech path.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type OPR

International Operator (No Metering) Trunk Group Type

Trunk group type OPR is used by international extended multiprocessor system (XMS)-based peripheral module (IXPM) trunks. The direction of this trunk group is incoming, outgoing or two-way, and metering is not allowed. Ring forward is available through the line signaling system (see table LNSIGSYS for more information). This trunk group is intended for any trunk carrying operator-involved calls, and supports BA-1 operator capability through the selection of appropriate line and register signaling systems, as specified in table TRKSGRP.

Translation types

Both trunk groups allow selectable translator type (for example, North American or universal translations) from the trunk group data.

One of the translation data selectors is an index into table NETATTR. If this selector is used, translation data is datafilled in table NETATTR instead of table TRKGRP.

End-to-end connections

Under certain conditions, an office only needs to collect enough digits to route a call. Once the call has been routed, the outgoing trunk to the next office is seized. A speech path between the incoming and outgoing trunk is then connected, and a signal is sent back to the previous office instructing it to resend the digits. The outgoing register of the previous office can then signal to the incoming register of the next office. This situation is shown in the figure “End to end connection”.

If an end-to-end connection cannot be established through an office, the incoming trunk must collect all signals from the previous office, and then once routed to the next office, send the signals out. This mode of operation is referred to as link-by-link, or transfer. End-to-end connections set up toll calls faster than link-by-link connections. When possible, the international DMS-100 (DMS-100i) switch attempts to establish end-to-end connections.

The following describes cases in which end-to-end connections cannot be established (for switches in China):

- In the automatic toll network, inter-register signals cannot be sent to transit toll exchanges or terminating toll exchanges directly from an

originating local exchange. They must be sent from the originating toll exchange.

- In general, inter-register signals cannot be sent to the local terminating exchange by transit toll or originating toll exchanges. They must be sent from the terminating toll exchange.
- In the local network, there are situations in which tandem exchanges use transfer mode for transmission quality reasons.
- In the automatic toll network, there are situations in which incoming registers of a transit toll exchange must transfer all inter-register signals for transmission quality reasons.

End-to-end connections cannot be established at originating toll or terminating toll offices. If an incoming trunk group is datafilled with a traffic class of either centralized automatic message accounting (CAMA) (originating toll) or TLLC (toll completion) (terminating toll), no attempt is made to establish an end-to-end connection.

For other incoming trunks that must not establish end-to-end connections, field TANDEM in table TRKGRP must be set to LNK. With this field set to LNK, all incoming trunk circuits belonging to the trunk group (regardless of their traffic class) cannot establish end-to-end connections.

End-to-end connections can only be established on incoming trunks with field TRFC in table TRKGRP set to either ITLL, EASV, or NONE, and with field TANDEM set to EEND.

An end-to-end connection is established as follows. Assume you have three offices, Office A at one end, Office B in the middle, and Office C at the other end. Once office B collects enough digits from a call from Office A to route the call, the outgoing trunk from office B to office C is seized. Office B then connects a speech path and then requests office A to resend the digits. At this point, the outgoing register at office A is signaling to the incoming register to office C.

Traffic class

The list of traffic classes includes the following.

CAMA

Centralized automatic message accounting is used for trunk groups between offices in which the calling subscriber number and KA information can be signaled.

Note that KA is the billing party category signal used in Chinese No.1 trunk signaling for national calls.

EASV
Extended area service is used for trunk groups that handle local (non-toll) traffic only.

ITLL
Inter-toll is used for trunk groups between toll offices.

TLLC
Toll completion is used for trunk groups between a toll office and a terminating toll office.

TNCA
Tandem CAMA is used to collect the calling party information, but not to do toll billing. It is used on trunk group type MTR in China for malicious call identification.

NONE
The traffic class of NONE is used for trunk groups that do not fit one of the other traffic classes.

CAMA traffic class
Trunk groups must be datafilled with a traffic class of CAMA whenever the calling subscriber information can be sent or received over a trunk group. In China, it can be used for trunk groups between:

- an originating local and an originating toll
- an originating local office and a local/toll office

An outgoing trunk group only sends the calling subscriber information forward in response to an A6 backwards signal if that outgoing trunk group is datafilled with a traffic class of CAMA.

Note: In the MFC signaling system, an A6 backwards signal indicates that the outgoing register must send forward a KA signal and the calling subscriber number.

If an outgoing trunk group that is datafilled with a traffic class of CAMA receives an A6 backwards signal, it sends forward the following information:

- KA signal (contains calling subscriber category)
- calling subscriber number (office code + station number)
- end-of-digits (I15) signal

If an outgoing trunk group with a traffic class not datafilled as CAMA receives an A6 backwards signal, it is not able to send the KA signal and calling subscriber number forward. In this situation, only the end-of-digits (I15) signal is sent forward.

If an incoming trunk group is datafilled with a traffic class of CAMA, it does not necessarily send back an A6 signal. It is possible (from a stored program control (SPC) office, for example) to handle local calls over a trunk group datafilled as CAMA.

If an incoming trunk group with a traffic class of CAMA is handling a toll call, once digit analysis indicates that enough digits have been collected (and translations has enough digits to determine an outgoing route), an A6 signal is sent backward to the previous office. After the incoming trunk sends the A6 signal, it collects the KA information and the calling subscriber number. Once that information has been collected, the remaining called subscriber number is collected.

Note: If translations are not able to determine a route after the first few digits have been reported, more digits are collected until a route can be determined. It is important to datafill the digit analysis and digit translation systems together. If the first few digits that are reported by digit analysis cannot be translated into an outgoing route, the call capacity is affected due to the additional time required to collect enough digits to route the call.

Outgoing trunk groups with a traffic class of CAMA are required to provide extra information to the outgoing register. This extra information is sent to the next office. Because of the additional information, calls made over these trunk groups are slower than calls made over trunk groups with a traffic class other than CAMA.

EASV traffic class

Trunk groups must be datafilled with a traffic class of EASV if they carry local traffic only.

ITLL traffic class

Trunk groups must be datafilled with a traffic class of ITLL if they carry toll traffic between toll offices. In the C1 MFC signaling system, a KC signal (indicating the priority of the calling subscriber) is sent between offices in the toll network. Some offices use this information for special routing. A traffic class of ITLL on an incoming trunk group indicates to the DMS-100i switching unit that a KC signal can be expected in the flow of inter-register signals from the previous office.

Note: KC is the connection control signal used in Chinese No. 1 trunk signaling for national calls.

If an outgoing trunk group is datafilled with a traffic class of ITLL, it sends the KC information along with the outpulsed digits to the next office (if this office has not established an end-to-end connection). If an incoming trunk group is datafilled with a traffic class of ITLL, the

DMS-100i attempts to establish an end-to-end connection through the office.

Note: The above does not provide the ability to perform priority routing at a toll office based on the KC information.

Incoming trunk groups with this traffic class do not attempt to establish enlightened connections.

TLLC traffic class
Trunk groups must be datafilled with a traffic class of TLLC if they carry traffic from a toll office to a terminating toll office.

TNCA traffic class
The tandem CAMA traffic class enables a call to collect calling party information. It does not enable the call to do toll billing. A tandem office between a local and a toll office can pass calling party information without the occurrence of billing at the tandem office.

NONE traffic class
Datafill trunk groups with a traffic class of NONE if none of the other traffic classes apply. For example, for trunk groups that carry traffic between local offices, use a traffic class of NONE. Similarly, for trunk groups that carry traffic from a terminating toll office to a terminating local office, use a traffic class of NONE.

Digit analysis

For a DMS-100 switching unit, digit analysis can be performed for both trunk groups and line attributes.

Two main tables are used for specifying digit analysis: DGHEAD and DGCODE. Each tuple in table DGCODE specifies the type of analysis that is carried out for the digit range given in the key to that tuple. The key for each tuple consists of an instance name and a digit range. The digit range is composed of “from" digits and “to" digits. The “from" and “to" digits can be either one or two digits in length. The names of all instances must be in table DGHEAD. Table DGHEAD is used to associate default values with each instance. The values in table DGHEAD are only used if the instance does not appear in table DGCODE.

To associate an incoming trunk with a particular type of analysis, the name of the required instance in table DGHEAD is entered in field DGNAME of table TRKGRP type OPR.

By providing digit analysis for trunk groups, the DMS-100i switching unit is able to use different digit analyses for incoming trunks from

different offices. This system also enables trunks carrying different classes of traffic to use different digit analysis schemes.

Digit regeneration

Field DIGREGEN is used by the incoming and two-way international trunk group OPR to prefix incoming digits with up to four additional digits. This field contains the digits that require regeneration so that the number dialed in the remote office can be regenerated. If no digits require regeneration, the entry is N (no).

Office parameters

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be manually busied before changing the value of this field through a data modification order (DMO).

Restarts

The software meters used for trunk metering can survive warm and cold restarts. On a reload from image, mismatches can occur if the software meter assignment on the image tape differs from that of the switch before the reload occurred. If there is no difference, the software meters survive the reload. If there is a difference, the meter audit logs all meters that do not match the datafill.

Calls do not survive cold or reload restarts, and are automatically taken down. The software meters are not updated for these calls.

Calls survive warm restarts. Those calls that terminate after the restart have their software meters updated properly. Those calls that terminate during the restart have their meters updated upon the next usage of the trunk. The restart time is used as the disconnect time, since the exact disconnect time is not known.

Datafill (Incoming international trunk group)

The following table lists the datafill for incoming international trunk groups (type OPR) in table TRKGRP.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, MCTANI, XLAD, MTRIC, DIGREGEN, DGNAME, PROTIDX, and TRTMTIDX. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OPR	*Group type* Enter OPR for the international trunk group.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk is configured to switch through a satellite connection. Otherwise, enter N (no).
	ESUPR	Y or N	*Echo suppressor* If the trunk subgroup has echo suppressors, enter Y. Otherwise, enter N.
	IAA	N	*Interadministration accounting* Enter N. Interadministration accounting (IAA) is not applicable to OPR trunk groups.
	TANDEM	EEND or LNK	*Tandem mode* Enter EEND (end-to-end operation) if end-to-end connections are enabled over the trunk group. Enter LNK (link-by-link) if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to MFC R2 signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is ignored.

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRFC	CAMA, EASV, ITLL, TLLC, TNCA, or NONE	*International traffic class* Enter the type of traffic that is expected to flow through this trunk group. The types of traffic classes are: • CAMA - Centralized automatic message accounting is the traffic class for trunk groups if the calling subscriber digits are signaled between switching units. • EASV - Extended area service is the traffic class for trunk groups that handle local (non-toll) traffic only. • ITLL - Intertoll is the traffic class for trunk groups that carry traffic in the toll network. • TLLC - Toll-completion is the traffic class for trunk groups that carry traffic between a toll switching unit and a terminating toll switching unit. • TNCA - Tandem CAMA is the traffic class used to collect the calling party information, but not to perform toll billing. It is used in China for malicious call identification. • NONE is the traffic class used for trunk groups that do not belong to one of the other traffic classes, or for a trunk group to which traffic class is not applicable.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIR	IC	*Direction* This field specifies the trunk group direction. Enter IC for incoming. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	MCTANI	Y or N	*Forward automatic number identification enable* Enter Y to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is required. Enter N to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is not required. This option is applicable for R2 calls only.
	XLAD	see subfield	*Translation fields* This field consists of subfield XLADSEL and refinements.
	XLADSEL	NALT, NETATTR, or UNIV	*Translation selector* If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill refinement NETINDX. If the universal translation system is used, enter UNIV and datafill refinement XLAAREA.

XLADSEL = NALT

If the entry in subfield XLADSEL is NALT, datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). The originating source determines, for the code dialed, whether the call is routed or blocked by the code type in the HNPACODE subtable. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

XLADSEL = NETATTR

If the entry in subfield XLADSEL is NETATTR, datafill refinement NETINDX as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	numeric (0 to 1023)	*NETWORK attribute index* Enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.

XLADSEL = UNIV

If the entry in subfield XLADSEL is UNIV, datafill refinement XLAAREA as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	XLAAREA	see subfield	*Universal translation fields* This field consists of subfield XLASYS and refinement XLANAME.
	XLASYS	AC, AM, CT, CTY, DN, FA, FT, NSC, OFC, PX, or NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Enter a name from the code table that belongs to the head table referenced by field XLASYS.

Metering and other data for all incoming trunks

For the metering and other data for all incoming trunks, datafill additional refinements as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	MTRIC	see subfield	*Meter incoming information* This field consists of subfield METERIC and MDI.
	METERIC	N	*Meter option* Enter N. Metering is not supported for OPR trunk groups.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DIGREGEN	numeric (1 to 4 characters) or NIL	*Digits to be regenerated* Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DGNAME	alphanumeric (1 to 8 characters) or NIL	*Digit collection name* Enter the digit analysis instance required for an incoming trunk group. The digit analysis instance must have been previously defined in table DGHEAD. Enter NIL if no digit analysis is required.

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2, BRAR2, CHILER2, CHIR2, GUYR2, HAITIR2, IRER2L, IRER2T, MEXR2, MORR2L, MORR2T, PERU1R2, SOCR24, SOCR26, SOCR26A, SOCR27, or NIL	*R2 protocol* This field references table indexes in table R2PROT that are required by this trunk group for R2 signal/activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters before R2 corresponding to the target area. T or L after the characters R2 indicates that the protocol is for toll or local calls, respectively. Enter the required R2 protocol for the trunk, or enter NIL if trunk group does not use R2 signaling. Entry values other than those listed are not valid.
	TRTMTIDX	BELTRT, BRATRT, CHILETRT, CHITRT, GUYTRT, HAITITRT, MEXTRT, MORTRTL, MORTRTT, PERUTRT, SOCTRTL, SOCTRTT, or NIL	*R2 treatment* This field references table indexes in tables TRTMTACT and TRTTRTMT required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters before TRT corresponding to the target area. T or L after the characters TRT indicates that the treatment is for toll or local calls, respectively. Enter the required R2 treatment for the trunk, or enter NIL if the trunk group does not use R2 signaling. Entry values other than those listed are invalid.

Datafill (Two-way international trunk group field descriptions)

The following table lists the datafill for two-way international trunk groups (type OPR) in table TRKGRP.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, MCTANI, XLAD, MTRIC, SELSEQ, MTROG, DIGREGEN, ANIIDX, DGNAME, PROTIDX, and TRTMTIDX. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OPR	*Group type* Enter OPR for the international trunk group.

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register (in OM groups OFZ2 and SOTS) is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk is configured to switch through a satellite connection. Otherwise, enter N (no).
	ESUPR	Y or N	*Echo suppressor* If the trunk subgroup has echo suppressors, enter Y. Otherwise, enter N.
	IAA	N	*Interadministration accounting* Enter N. Interadministration accounting (IAA) is not applicable to OPR trunk groups.

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TANDEM	EEND or LNK	*Tandem mode* Enter EEND (end-to-end operation) if end-to-end connections are enabled over the trunk group. Enter LNK (link-by-link) if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to MFC R2 signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is ignored.
	TRFC	CAMA, EASV, ITLL, TLLC, TNCA, or NONE	*International traffic class* Enter the type of traffic that is expected to flow through this trunk group. The types of traffic classes are: • CAMA - Centralized automatic message accounting is the traffic class for trunk groups if the calling subscriber digits are signaled between switching units. • EASV - Extended area service is the traffic class for trunk groups that handle local (non-toll) traffic only. • ITLL - Intertoll is the traffic class for trunk groups that carry traffic in the toll network.

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			• TLLC - Toll-completion is the traffic class for trunk groups that carry traffic between a toll switching unit and a terminating toll switching unit. • TNCA - Tandem CAMA is the traffic class used to collect the calling party information, but not to perform toll billing. It is used in China for malicious call identification. • NONE is the traffic class used for trunk groups that do not belong to one of the other traffic classes, or for a trunk group to which traffic class is not applicable.
	DIR	2W	*Direction* This field specifies the trunk group direction. Enter 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	MCTANI	Y or N	*Forward automatic number identification enable* Enter Y to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is required. Enter N to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is not required. This option is applicable for R2 calls only.
	XLAD	see subfield	*Translation fields* This field consists of subfield XLADSEL and refinements.
	XLADSEL	NALT, NETATTR, or UNIV	*Translation selector* If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill refinement NETINDX. If the universal translation system is used, enter UNIV and datafill refinement XLAAREA.

XLADSEL = NALT

If the entry in subfield XLADSEL is NALT, datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). The originating source determines, for the code dialed, whether the call is routed or blocked by the code type in the HNPACODE subtable. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

XLADSEL = NETATTR

If the entry in subfield XLADSEL is NETATTR, datafill refinement NETINDX as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	numeric (0 to 1023)	*NETWORK attribute index* Enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.

XLADSEL = UNIV

If the entry in subfield XLADSEL is UNIV, datafill refinement XLAAREA as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	XLAAREA	see subfield	*Universal translation fields* This field consists of subfield XLASYS and refinement XLANAME.
	XLASYS	AC, AM, CT, CTY, DN, FA, FT, NSC, OFC, PX or NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Enter a name from the code table that belongs to the head table referenced by field XLASYS.

Metering and other data for all two-way trunks

For the metering and other data for all incoming trunks, datafill additional refinements as described below.

Field descriptions for conditional datafill (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	MTRIC	see subfield	*Meter incoming information* This field consists of subfield METERIC and MDI.
	METERIC	N	*Meter option* Enter N. Metering is not supported for OPR trunk groups.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.

Field descriptions for conditional datafill (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQLIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to section “General field information" in table TRKGRP.

Field descriptions for conditional datafill (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ (continued)		***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	MTROG	see subfields	*Meter outgoing information* This field consists of subfields METEROG and MDI.
	METEROG	N	*Meter option* Enter N. Metering is not allowed on OPR trunks.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.
	DIGREGEN	numeric (1 to 4 characters) or NIL	*Digits to be regenerated* Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX.

Field descriptions for conditional datafill (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			If no digits are to be prefixed, enter N. The switch then expects seven incoming digits. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ANIIDX	alphanumeric (1 to 8 characters) or NIL	*Fixed automatic number identification index* Enter the index into table FIXEDANI for this trunk group. If this field is datafilled, automatic number identification (ANI) is taken from table FIXEDANI rather than the calling party. For trunks with a traffic class other than CAMA or TNCA, enter the value NIL.
	DGNAME	alphanumeric (1 to 8 characters) or NIL	*Digit collection name* Enter the digit analysis instance required for an incoming trunk group. The digit analysis instance must have been previously defined in table DGHEAD. Enter NIL if no digit analysis is required.

Field descriptions for conditional datafill (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2, BRAR2, CHILER2, CHIR2, GUYR2, HAITIR2, IRER2L, IRER2T, MEXR2, MORR2L, MORR2T, PERU1R2, SOCR24, SOCR26, SOCR26A, SOCR27 or NIL	*R2 protocol* This field references table indexes in table R2PROT that are required by this trunk group for R2 signal/activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters before R2 corresponding to the target area. T or L after the characters R2 indicates that the protocol is for toll or local calls, respectively. Enter the required R2 protocol for the trunk, or enter NIL if trunk group does not use R2 signaling. Entry values other than those listed are not valid.
	TRTMTIDX	BELTRT, BRATRT, CHILETRT, CHITRT, GUYTRT, HAITITRT, MEXTRT, MORTRTL, MORTRTT, PERUTRT, SOCTRTL, SOCTRTT or NIL	*R2 treatment* This field references table indexes in tables TRTMTACT and TRTTRTMT required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters before TRT corresponding to the target area. T or L after the characters TRT indicates that the treatment is for toll or local calls, respectively. Enter the required R2 treatment for the trunk, or enter NIL if the trunk group does not use R2 signaling. Entry values other than those listed are invalid.

Datafill (Outgoing international trunk group field descriptions)

The following table lists the datafill for outgoing international trunk groups (type OPR) in table TRKGRP.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, SELSEQ, MTROG, ANIIDX, PROTIDX, and TRTMTIDX. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OPR	*Group type* Enter OPR for the international trunk group.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register (in OM groups OFZ2 and SOTS) is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk is configured to switch through a satellite connection. Otherwise, enter N (no).
	ESUPR	Y or N	*Echo suppressor* If the trunk subgroup has echo suppressors, enter Y. Otherwise, enter N.
	IAA	N	*Interadministration accounting* Enter N. Interadministration accounting (IAA) is not applicable to OPR trunk groups.
	TANDEM	EEND or LNK	*Tandem mode* Enter EEND (end-to-end operation) if end-to-end connections are enabled over the trunk group. Enter LNK (link-by-link) if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to MFC R2 signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is ignored.

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRFC	CAMA, EASV, ITLL, TLLC, TNCA, or NONE	*International traffic class* Enter the type of traffic that is expected to flow through this trunk group. The types of traffic classes are: • CAMA - Centralized automatic message accounting is the traffic class for trunk groups if the calling subscriber digits are signaled between switching units. • EASV - Extended area service is the traffic class for trunk groups that handle local (non-toll) traffic only. • ITLL - Intertoll is the traffic class for trunk groups that carry traffic in the toll network.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			• TLLC - Toll-completion is the traffic class for trunk groups that carry traffic between a toll switching unit and a terminating toll switching unit. • TNCA - Tandem CAMA is the traffic class used to collect the calling party information, but not to perform toll billing. It is used in China for malicious call identification. • NONE is the traffic class used for trunk groups that do not belong to one of the other traffic classes, or for a trunk group to which traffic class is not applicable.
	DIR	OG	*Direction* This field specifies the trunk group direction. Enter OG for outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Metering and other data for all outgoing trunks

For the metering and other data for all outgoing trunks, datafill additional refinements as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQLIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.
	SELSEQ (continued)		If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to section “General field information" in table TRKGRP.

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	MTROG	see subfields	*Meter outgoing information* This field consists of subfields METEROG and MDI.
	METEROG	N	*Meter option* Enter N. Metering is not allowed on OPR trunks.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.
	ANIIDX	alphanumeric (1 to 8 characters) or NIL	*Fixed automatic number identification index* Enter the index into table FIXEDANI for this trunk group. If this field is datafilled, automatic number identification (ANI) is taken from table FIXEDANI rather than the calling party. For trunks with a traffic class other than CAMA or TNCA, enter the value NIL.

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2, BRAR2, CHILER2, CHIR2, GUYR2, HAITIR2, IRER2L, IRER2T, MEXR2, MORR2L, MORR2T, PERU1R2, SOCR24, SOCR26, SOCR26A, SOCR27, or NIL	*R2 protocol* This field references table indexes in table R2PROT that are required by this trunk group for R2 signal/activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters before R2 corresponding to the target area. T or L after the characters R2 indicates that the protocol is for toll or local calls, respectively. Enter the required R2 protocol for the trunk, or enter NIL if trunk group does not use R2 signaling. Entry values other than those listed are not valid.
	TRTMTIDX	BELTRT, BRATRT, CHILETRT, CHITRT, GUYTRT, HAITITRT, MEXTRT, MORTRTL, MORTRTT, PERUTRT, SOCTRTL, SOCTRTT, or NIL	*R2 treatment* This field references table indexes in tables TRTMTACT and TRTTRTMT required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters before TRT corresponding to the target area. T or L after the characters TRT indicates that the treatment is for toll or local calls, respectively. Enter the required R2 treatment for the trunk, or enter NIL if the trunk group does not use R2 signaling. Entry values other than those listed are invalid.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type OS

Outgoing from Toll Trunk Group Type

In a DMS toll office equipped with feature package NTXE34AA (4X Operation - AMR5 Format ANI), outgoing trunk group type OS is used for toll-completing and toll-tandem calls requiring joint hold on timeout. Feature package NTXE34AA allows ANI to be forwarded if feature group C (FGC) signaling is used.

Datafill

The following table lists the datafill for table TRKGRP type OS.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, ANIREQ, OUTPANI, CHARGE, and JNTHOLD. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	OI	*Group type* Enter OI to specify the incoming operator trunk group type.

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	MIDL, LIDL, CWCTH, CCWCTH, ASEQ, or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			Entries outside this range are invalid. For more information, refer to table TRKGRP. ***Note:*** The selection sequence for an existing trunk group can be changed from ASEQ to DSEQ, or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ). The selection method for an existing trunk group cannot be changed. To change the selection method for an existing trunk group from ASEQ or DSEQ to CWCTH or CCWCTH, or to MIDL or LIDL, define a new trunk group, as follows: Create a new trunk group with the required trunk selection method, delete the individual trunks from the old trunk group, and add the trunks to the new trunk group.
	ANIREQ	REV	*Automatic number identification request* If feature package NTXE34AA (4X Operation - AMR5 Format ANI) is present, enter REV (reversal or answer). Entries outside this range are invalid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	OUTPANI	Y or N	*Outpulse ANI* Enter Y (yes) if ANI is to be outpulsed. Otherwise, enter N (no). If ANI is not outpulsed, the trunk does not wait for an ANI request signal, wink, or reversal. If ANI is outpulsed and no calling or called digits are present, only KP + ST (an ANIFAIL message) is sent. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	CHARGE	Y or N	*Charge* Enter Y if automatic message accounting (AMA) recording is required. Otherwise, enter N (no). If AMA recording is required and there are no calling or called digits, a special charge class (SPCL) is used in table TOLLENTC. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	JNTHOLD	Y or N	*Joint hold* Enter Y if joint hold is required. Otherwise, enter N.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type P2

Two-way DID/DOD PBX Trunk Group Type

In a DMS end office, two-way, incoming, or outgoing trunk group type P2 connects with a private branch exchange (PBX) for direct inward dialing (DID), direct outward dialing (DOD), or both.

If the trunk group is AT&T message rate, all trunks in the group must belong to the same message rate service area.

One trunk group is required for each message rate service area.

Datafill

The following table lists the datafill for table TRKGRP type P2.

Field descriptions (Sheet 1 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, DIGSOUT, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, CHGCLSS, ZEROMPOS, BILLNO, LCANAME, LCABILL AIOD, TDN, TDV, CPH, RMR, RMT, MRSA, EA, and BCLID. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS

Field descriptions (Sheet 2 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	GRPTYP	P2	*Group type* Enter P2 to specify the group type for two-way DID/DOD PBX trunks.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCID (no-circuit inward dial. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 5 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			Entries outside this range are invalid. For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* Enter the number of digits to be outpulsed. If this field is set to anything other than 0 (zero), the digits to be deleted or prefixed (indicated in table OFRT) are ignored. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TOLL	Y or N	*Toll* If the PBX is toll, enter Y. Otherwise, enter N.

Field descriptions (Sheet 6 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard peregrinations is required, enter the name of the standard pretranslator table assigned to the trunk group. If peregrinations is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (entry in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving NPA* Enter the serving NPA code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 7 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the "Notes on originating source" section in table HNPACONT.HNPACODE.
	CHGCLSS	CAM0, DATO, LCDR, RCFW, SPCL, TOPS, TUXO, WAT0, or NONE	*Charge class* If a switch is configured for Local Automatic Message Accounting (LAMA), enter the charge class assigned to the trunk group. Otherwise, enter NONE.
	ZEROMPOS	AMRX, CAMA, CTOP, RTE1, RTE2, RTE3, RTE4, TOPS, TSPS, or NONE	*Zero minus position* If a trunk group is configured for operator (0-) and special toll (0+) dialing, enter the position in the position table to which operator (0-) calls are to be routed. Otherwise, enter NONE.
	BILLNO	numeric (7 or 10 digits)	*Billing number* If the switch is non-LAMA, enter the seven-digit billing number assigned to the trunk group. If the switch is LAMA, enter the ten-digit billing number (NPA + DN) assigned to the trunk group.
	LCANAME	alphanumeric (1 to 8 characters) or NLCA	*Local calling area screening name* If you require screening of local NNX codes, enter the local calling area screening name assigned to the trunk group. 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.

Field descriptions (Sheet 8 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	LCABILL	Y or N	*Local calling area billing* If a non-incoming call is considered a local call for billing purposes, enter Y. If a non-incoming call is considered a toll call for billing purposes, enter N.
	AIOD	see subfields	*Auto-identified outward dialing information* This field consists of subfield AIOD and refinement AIODGRP.
	AIOD	Y or N	*Auto-identified outward dialing* If the trunk group is from a PBX that has an auto-identified outward dialing (AIOD) data link to the office for the billing of outgoing calls from the PBX to individual PBX stations, enter Y to indicate that the trunk group is supported by AIOD, and datafill refinement AIODGRP. Otherwise, enter N.
	AIODGRP	alphanumeric (1 to 16 characters) or blank	*Auto-identified outward dialing data link trunk group* Datafill this field if the value in field AIOD is Y. Enter the CLLI that is assigned to the AIOD data link trunk group in table CLLI. This CLLI must exist in table AIODGRP. Up to seven trunk groups of type P2 (from the same PBX) can be datafilled for service by the same AIOD data link trunk group.
	TDN	Y or N	*Toll denied* Enter Y if toll calls on a trunk group are to be routed to toll denied (TDND) treatment. Otherwise, enter N.

Field descriptions (Sheet 9 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TDV	Y or N	*Toll diverted* Enter Y if toll calls on a trunk group are to be routed to a PBX attendant. Otherwise, enter N.
	CPH	Y or N	*Called party hold* Enter Y if called party hold is required. Otherwise, enter N. (Canada only.)
	RMR	Y or N	*Answer supervision local calls* Enter Y if answer supervision for local calls is required. Otherwise, enter N. (Canada only.)
	RMT	Y or N	*Answer supervision toll calls* Enter Y if answer supervision for toll calls is required. Otherwise, enter N. (Canada only.)
	MRSA	alphanumeric (1 to 8 characters) or nil	*Message rate service area* If the trunk group is AT&T message rate, enter the name of the message rate service area to which the trunk group belongs. Otherwise, enter NIL.
	EA	see subfield	*Equal access information* This field consists of subfield EA and refinements.

Field descriptions (Sheet 10 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	EA	Y or N	*Equal access* For an equal access end office (EAEO), enter Y and datafill refinements PIC, CHOICE, and LATANM. For a non-EAEO, enter N (the default value for this field). No refinements are applicable for an entry value of N. If the EA field contains an entry of N and the end office is an EAEO, all outgoing calls are treated as non-EA calls. Call routing is based on standard translations (table HNPACODE), and non-EA billing is used.
	PIC	alphanumeric (1 to 16 characters)	*Primary inter-LATA carrier* Datafill this field if the value in field EA is Y.
	CHOICE	Y or N	*Choice* Datafill this field if the value in field EA is Y. If 10XXX dialing is allowed in the EAEO office, enter Y. Otherwise, enter N.
	LATANM	alphanumeric (1 to 16 characters)	*Local access and transport area* Datafill this field if the value in field EA is Y. Enter a local access and transport area (LATA) name specified in table LATANAME.

Field descriptions (Sheet 11 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	BCLID	Y or N	*Bulk calling line identification* If the bulk calling line identification feature (BCLID) is used, enter Y and datafill refinement BCLID. Otherwise, enter N. Enter the bulk calling line identification group number for the trunk group.
	BCLID	see subfield	*Bulk calling line identification information* This field consists of subfield BCLID and refinement.
	BCGRPNUM	numeric (0 to 2047)	*Bulk calling line identification group number* Datafill this field if the value in field BCLID is Y.
	OPTION	CHGNUM	*Charge number delivery* Enter CHGNUM to send a charge number and originating line information parameter (OLI) with the initial address message (IAM).

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type PRA

ISDN Primary Rate Access Trunk Group Type

In a DMS office, the primary rate access (PRA) trunk group type is used when a minimum of service and translation related data, such as billing and trunk selection information, is required.

Datafill

The following table lists the datafill for table TRKGRP type PRA.

Field descriptions (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SELSEQ, BILLDN, LTID, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	PRA	*Group type* Enter PRA to specify the primary rate access trunk group type.

Field descriptions (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*

Field descriptions (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CNTLEVN, CNTLODD, CCWCTH, CWCTH, DSEQ, LIDL, MIDL, or WIDEBAND	*Select sequence* Enter ASEQ or DSEQ for ascending or descending sequential selection, based on the order of trunk members in table TRKMEM. The trunk circuit connected to the other end can use the opposite selection sequence in order to reduce B-channel glare. Enter select sequence LIDL (least idle) if trunk selection is made on a status of least idle. The connecting trunk at the end office must be a link list switcher and must be set up with the LIDL select sequence. The entries CNTLEVN and CNTLODD are only valid if the Japan Public Network ISDN user part (JPNISUP) trunks are installed in the switching unit. The JPNISUP trunks are divided into controlling groups and non-controlling groups. These groups in turn are divided into even and odd circuit identification codes (CICs). The differences in the four groups relates to the selection sequence used for locating idle trunks. Enter CNTLEVN in order to select the MIDL selection sequence algorithm for even numbered CICs in the controlling group.

Field descriptions (Sheet 5 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			Enter select sequence MIDL (most idle) if trunk selection is made on a status of most idle. The connecting trunk at the end office must be a link list switcher and must be set up with the MIDL select sequence. If the end office is not a link list switcher and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is in the switching unit, base the selection order on the order of the trunks in table TRKMEM and enter CWCTH for clockwise or CCWCTH for counterclockwise circular trunk hunting based on the most recently released trunk in the trunk group (if the far end is CWCTH or CCWCTH respectively). Enter CNTLODD in order to select the MIDL selection sequence algorithm for odd numbered CICs in the controlling group. If all circuits in the controlling group are busy, the least idle (LIDL) trunk in the noncontrolling group is selected. This applies to both CNTLEVN and CNTLODD selection sequences.

Field descriptions (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			If wideband trunk selection is allowed for primary rate access (PRI) ISUP trunks, enter WIDEBAND and datafill refinements WBSELSEQ, WBGRPING, and WBSEARCH. The WIDEBAND entry value is only valid if feature NTXR49AA (Dialable Wide Band Service PRI) is in the switching unit. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	WBSELSEQ	ASEQ or DSEQ	*Wideband select sequence* If the value in field SELSEQ is WIDEBAND, datafill this field. Enter ASEQ or DSEQ for ascending or descending sequential selection respectively, based on the order of trunk members in table TRKMEM. The trunk circuit connected to the other end can use the opposite selection sequence in order to reduce B-channel glare.

Field descriptions (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	WBGRPING	FIXED, FLEXIBLE, or FLOATING	*Wideband DS-0 time-slot grouping method* If the value in field SELSEQ is WIDEBAND, datafill this field. Enter FIXED if the usable idle DS-0 time-slots in a DS-1 carrier are fixed in number and must be in consecutive numeric group. Enter FLEXIBLE if the usable idle DS-0 time-slots in a DS-1 carrier vary in number and are in a non-consecutive numeric group. Enter FLOATING if the usable idle DS-0 time-slots in a DS-1 carrier vary in number and must be in a consecutive numeric group.

Field descriptions (Sheet 8 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	WBSEARCH	BESTFIT or FIRSTFIT	*Wideband DS-0 time-slot search method* If the value in field SELSEQ is WIDEBAND, datafill this field. Enter FIRSTFIT if the FIRSTFIT search algorithm is required. The FIRSTFIT algorithm searches the list of digital trunks in table TRKMEM in order to find one or more vacant DS-0 time-slots in available DS-1 trunks. The FIRSTFIT algorithm takes the first fitting match even though there may be excess time-slots in the first DS-1 found. Enter BESTFIT if the BESTFIT search algorithm is required. The BESTFIT algorithm searches the list of digital trunks in table TRKMEM in order to find one or more vacant DS-0 time-slots in available DS-1 trunks. The BESTFIT algorithm takes the best fitting match. For example, the BESTFIT for a ten-time-slot carrier is eleven if the search list contains DS-1s with 7, 11, 14, and 20 time-slots.
	BILLDN	numeric (10 digits or N)	*Billing directory number* Enter the directory number that all calls are billed to. If no BILLDN is required, enter N (no).

Field descriptions (Sheet 9 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	LTID	$	*Logical terminal identifier* This field consists of subfields LTGRP and LTNUM. These read-only fields display the LTID that has been mapped to the trunk group by table LTMAP. Field LTID cannot be datafilled by operating company personnel. Enter $. ***Note:*** If the PRA trunk is NIL-2, check table LTDATA for the BNS SBN option. The BNS SBN option allows the BILLDN of the trunk group to be used.
	LTGRP	ISDN or INTEC	*Logical terminal group* This read-only field contains the logical terminal group.
	LTNUM	numeric (1 to 1022)	*Logical terminal number* This read-only field contains the logical terminal number within the group.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinement.
	OPTION	MCH	*Option* Enter MCH to specify malicious call hold for PRA trunks. This option is supported on TS14 trunks for the Australian market.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type PRIVLN

Private Line Trunk Group Type

Trunk group type PRIVLN is used for private lines. The following switching unit dependent data must be datafilled in this table for each private line trunk group:

- the common language location identifier (CLLI)
- the trunk group type
- the traffic separation number
- the name of the pad group
- the no-circuit class
- the country code translator name
- the class of service screening
- the international pretranslator
- the call detail recorder class
- the select sequence
- the trunk group direction (incoming or outgoing)
- the common calling class category (incoming trunks only)

Note 1: Field PADGRP contains the name of the pad group in table PADDATA that lists the value of pad circuits that can be switched into the network when one of the members of the group is involved in a call. Different pad circuit values can be specified when the circuit connects to an agent with a different pad group. Network pad switching is only applicable when the circuit is connected to a new network.

Note 2: When the trunk group is the last route in a route list and a line or trunk encounters an all trunks busy condition in this list, the no-circuit class NCRT is incremented (OFZ2 NCRT), the originating line or trunk is routed to generalized no-circuit treatment (GNCT) in the appropriate treatment table, and treatment GNCT is incremented.

If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busied prior to changing the value of fields through a data modification order (DMO).

Dial pulse (DP), Digitone (DT), and multifrequency (MF) dialing are allowed on incoming Gateway 101 test trunk groups and private line trunk groups. A switching unit must be equipped with DT or MF receivers for DT or MF reception, respectively. For a description of

other trunk group formats, see the trunk group type descriptions in table TRKGRP.

For trunk subgroup data for Gateway 101 test trunk groups and private line trunk groups, see table TRKSGRP.

For trunk member data for Gateway 101 test trunk groups and private line trunk groups, see table TRKMEM.

Datafill

The following table lists the datafill for table TRKGRP type PRIVLN.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, CCTRNSL, SCRNCL, PRTNM, CDRCLASS, SELSEQ, and DIR_DEP. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP		*Group type* Enter PRIVLN to specify the private line trunk group type.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	CCTRNSL	alphanumeric (1 to 4 characters)	*Country code translator name* If the trunk direction is incoming (IC) and country code translation is required, enter the country code translator name assigned to the private line trunk group by the operating company. Otherwise, enter NCTR (no country code translation).
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class of service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters)	*Standard pretranslator name* If the trunk direction is incoming (IC) and standard pretranslation is required, enter the international pretranslator name applicable to the trunk group. Standard pretranslators are defined in table STDPRTCT. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	CDRCLASS	numeric (1 to 4 characters)	*Call detail recorder class* Enter the recorder class of the private line trunk group defined by the operating company. Up to 31 different classes can be assigned, each being represented by a four-character name. If no call detail recorder class is required, enter NCDR (no call detail recording).
	SELSEQ	MIDL	*Select sequence* This field is not required for this trunk group. Enter MIDL.
	DIR_DEP	see subfield	*Direction data* This field consists of subfield DIR and refinement.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC or OG	*Direction* If the direction of traffic flow is incoming, enter IC and datafill refinement CCPC. If the direction of traffic flow is outgoing, enter OG. An entry of 2W is not valid for this field.
	CCPC	numeric (0 to 15 or N)	*Common calling party category* Datafill this field If the value in field DIR is IC. Enter a numeric value to specify the common calling party category. If no common calling party category is required, enter N. The default value is N.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type PX

Two-way Digital PBX Trunk Group Type

In a DMS end office, two-way trunk group type PX is used in a digital private branch exchange (PBX) for either direct inward dialing (DID), direct outward dialing (DOD), or both.

MS-1 (teleconferencing) System 1+, 011 calls

For the MS-1 system to receive the proper answer supervision from the DMS-100 over the PX trunk group, route the call as follows:

- use outgoing trunk group type OC with field ANITYPE set to WK (wink)
- use incoming trunk group type SC with field ANITYPE set to WK

For the MS-1 system, do not route a call using outgoing trunk group type OP and incoming to a DMS-200 trunk group type TOPS. These trunk group types do not have the feature for WK supervision.

PX trunks and UTRs (Universal Tone Receivers)

PX trunks with ground start FX signalling cannot use UTRs. Digitone receivers will be used to collect digits even if a UTR exists in the same peripheral as the PX trunk. In addition, the CFRA (Call Forward Remote Activation) feature will use a digitone receiver instead of a UTR when a PX trunk with FX signalling (ground start or loop start) is used to access the CFRA feature.

Changing trunk selection method and sequence

The selection sequence for an existing trunk group can be changed from ascending sequence (ASEQ) to descending sequence (DSEQ), or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ).

The selection method for an existing trunk group cannot be changed.

To change the selection method for an existing trunk group from ASEQ or DSEQ to clockwise circular trunk hunt (CWCTH) or counterclockwise circular trunk hunt (CCWCTH), or to most idle (MIDL) or least idle (LIDL), (field SELSEQ), define a new trunk group, as follows:

1. Create a new trunk group with the required trunk selection method.

2. Delete the individuals trunks from the old trunk group.

3. Add the trunks to the new trunk group.

Datafill

The following table lists the datafill for table TRKGRP type PX.

Field descriptions (Sheet 1 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFLCS, SELSEQ, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, CHGCLSS, ZEROMPOS, LCANAME, LCABILL, AIOD, AIODGRP, PXCGRP, MRSA, BILLNO, DTONE, LOCALCMC, EA, PIC, CHOICE, and LATANM. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	PX	*Group type* Enter the group type PX.

Field descriptions (Sheet 2 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	DIR	IC, OG, or 2W	*Direction* This field specifies the trunk group direction. Enter IC for incoming, OG for outgoing, or 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ LIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 5 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. For more information, refer to table TRKGRP. ***Note:*** Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	TOLL	Y or N	*Toll* If the private branch exchange (PBX) is toll, enter Y (yes). Otherwise, enter N (no).

Field descriptions (Sheet 6 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 7 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	CHGCLSS	CAM0, DAT0, LCDR, RCFW, SPCL, TOPS, TWX0, WAT0, or NONE	*Charge class* If the switch is arranged for local automatic message accounting (LAMA), enter the charge class assigned to the trunk group. Otherwise, enter NONE.
	ZEROMPOS	AMRX, CAMA, CTOP, TOPS, TSPS, RTE1, RTE2, RTE3, RTE4, or NONE	*Zero minus position* If a trunk group is arranged for operator (0-) and special toll (0+) dialing, enter the position in the position table to which operator calls are to be routed. Otherwise, enter NONE.
	LCANAME	alphanumeric (1 to 8 characters) or NLCA	*Local calling area screening name* If screening of local NNX codes is required, enter the name of the local calling area screening name assigned to the trunk group. 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.

Field descriptions (Sheet 8 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	LCABILL	Y or N	*Local calling area billing* If a non-incoming call is considered a local call for billing purposes, enter Y. If a non-incoming call is considered a toll call for billing purposes, enter N.
	AIOD	Y or N	*Automatically-identified outward dialing* If the trunk group is from a PBX that has an automatically-identified outward dialing (AIOD) data link to the office for billing of outgoing calls from the PBX to individual PBX stations, enter Y to indicate that the trunk group is supported by AIOD and datafill refinement AIODGRP. Then enter the CLLI of the AIOD data link in field AIODGRP below. Otherwise, enter N.
	AIODGRP	alphanumeric or blank	*Auto-identified outward dialing data link trunk group* If the entry in refinement AIOD is Y, datafill this refinement. Enter the CLLI of the AIOD data link trunk group. This CLLI must already exist in table AIODGRP. Up to seven trunk groups of type P2 from the same PBX can be datafilled for service by the same AIOD data link trunk group.
	PXCGRP	32 to 255	*Private branch exchange customer group* Enter the index into table CXGRP to define the options associated with this trunk group.

Field descriptions (Sheet 9 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	MRSA	alphanumeric or NIL	*Message rate service area* If trunk group is AT&T message rate, enter the name of the message rate service area to which the trunk group belongs. Otherwise, enter NIL.
	BILLNO	numeric (7 or 10 digits)	*Billing number* If the switch is non-LAMA, enter the seven-digit billing number assigned to the trunk group. If the switch is LAMA, enter the ten-digit billing number (NPA ± DN) assigned to the trunk group.
	DTONE	DIALTN or NODIALTN	*Dial tone for FX circuits* If this trunk group is used with FX circuits then enter DIALTN if dial tone is to be provided. Otherwise, enter NODIALTN. If the non-FX trunk group requires dialtone as a start signal, datafill field ISTARTSG of table TRKSGRP with the value DIALTONE.
	LOCALCMC	Y or N	*Local cellular mobile carrier* Enter Y if the PX trunk group serves as a cellular type 1 or 2B interconnection. Otherwise, enter N.

Field descriptions (Sheet 10 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	EA	Y or N	*Equal access* Enter Y for an equal access end office (EAEO) and datafill refinements PIC, CHOICE, and LATANM. Enter N (the default) for a non-EAEO. If the EA field contains an N and the end office is an EAEO, all outgoing calls are treated as non-EA calls. Call routing is based on standard translations (HNPACODE), and non-EA billing is used.
	PIC	alphanumeric (1 to 16 characters)	*Primary inter-LATA carrier* If the entry in refinement EA is Y, datafill this refinement. Enter an inter-LATA (local access and transport area) or international carrier name or names specified in table OCCNAME.
	CHOICE	Y or N	*Choice* If the entry in refinement EA is Y, datafill this refinement. Enter Y if 10XXX dialing is allowed. If 10XXX dialing is not allowed, enter N.
	LATANM	alphanumeric (1 to 16 characters)	*Local access and transport area name* If the entry in refinement EA is Y, datafill this refinement. Enter a LATA name specified in table LATANAME.
	BCLID	Y or N	*Bulk Calling Line Identification* Enter Y if the Bulk Calling Line Identification (BCLID) feature is used and datafill refinement BCGRPNUM. Otherwise, enter N.

Field descriptions (Sheet 11 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	BCGRPNUM	0 to 2047	*Bulk Calling Line Identification Group number* If the entry in refinement BCLID is Y, datafill this refinement. Enter the BCLID group number for the trunk group.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinement.
	OPTION	BCNAME	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.
	CLID	CLID or $	*Calling line identification* The CLID option allows the customer premise equipment (CPE) to know the telephone number of the calling party. The system prompts for a control value of CPNONLY, CPNREST, CPNPREF, or CHGONLY.

Field descriptions (Sheet 12 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DNIS	DNIS or $	*Dialed number identification service* The DNIS option allows the delivery of additional call information to the CPE when a call requires DNIS.
	DTI	DTI or $	*Dialtone incoming* The DTI option provides a wink plus dial tone start signal combination.
	OUTSCHM	OUTSCHM or $	*Digits to be outpulsed* The OUTSCHM option prompts for a control value from one to eight.
	NODELAY	NODELAY or $	*No delay* The NODELAY option is used to indicate that the 4-second post dial delay will not be present for 1+10 digit calls using the AMBI TIM selector using an incoming or two-way PX trunk.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

R1 or R1N5

If the type of pulsing is R1 or R1N5, datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type R1/R1N5.

Field descriptions (Sheet 1 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.

Field descriptions (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE		alphanumeric (up to 6 characters)	*Card code* If the trunk is analog, enter the product engineering code (PEC) of the trunk card (for example, 2X82AA). See *DMS-100 Provisioning Manual*, 297-1001-450. If the trunk is digital, enter the applicable code as detailed below. • Enter DS1SIG if normal North American R1 signaling is required. The following fields must be datafilled with the values shown below: — field SIGNLBIT set to AB — field IDLEPOL set to 0 — field RMBSYBIT set to NONE — field RMBSYPOL set to 1 • Enter R1PCM if enhanced R1 signaling is required.
SGRPVAR		see subfields	*Variable subgroup data* This field consists of subfield SIGDATA and refinements R1LINSIG, R1DIGSIG, IDGTIME, RSZTOKP, KPTOADG, RSZTOST, DDDURN, DDTOSD, SAT, ESUPR, OVLAP, SIGNLBIT, IDLEPOL, RMBSYBIT, and RMBPOL.
SGRPVAR (continued)	SIGDATA	R1 or R1N5	*Signaling data* Enter R1 or R1N5.

Field descriptions (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	R1LINSIG	DD DIALTONE IM or WK	*R1 line signaling* Enter the type of R1 signal required: • DD - delay dial on-hook idle • DIALTONE - dialtone supplied • IM - immediate seize without outpulsing • WK - wink
	R1DIGSIG	DTMF or N5MF	*R1 digit signaling* Enter the type of R1 digit signal required: • DT - Digitone • MF - R1 multifrequency • N5MF - R1N5 multifrequency If the entry in subfield R1LINSIG is IM, enter DT.
	IDGTIME	numeric (2 to 30)	*Interdigital timing* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the interdigital time, in seconds, with a range of 15 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the interdigital time, in seconds, with a range of 3 to 8. Enter a minimum of 2 (200 ms) for dial pulse (DP) trunks. Enter the default value if the trunk group is outgoing. The default is 20.

Field descriptions (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	RSZTOKP	numeric (2 to 30)	*Register seizure to key-pulse* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the time, in seconds, between the register seizure and the key-pulse (KP) signal with a range of 15 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the time, in seconds, between the register seizure and the KP signal with a range of 10 to 20. Enter the default value if the trunk is outgoing. The default is 20.
	KPTOADG	numeric (2 to 30)	*Key-pulse to a digit* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the time, in seconds, between the receipt of KP and receipt of the A digit with a range of 15 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the time, in seconds, between the receipt of KP and the receipt of the A digit with a range of 10 to 20. Enter the default value if the trunk group is outgoing. The default is 20.

Field descriptions (Sheet 5 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	RSZTOST	numeric (15 to 40)	*Register seizure to signaling terminal* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the time, in seconds, between the register seizure and the signaling terminal (ST) signal with a range of 20 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the time, in seconds, between the register seizure and the ST signal with a range of 15 to 30. Enter the default value if the trunk group is outgoing. The default is 20.
	DDDURN	numeric (20 to 120)	*Delay dial duration* If the trunk group carries operator traffic, enter the minimum duration of the delay dial signal, in units of 10 ms. For example, an entry of 20 means the minimum duration of the delay dial signal is 200 ms. Enter the default value in other cases. The default is 20.
	DDTOSD	numeric (5 to 10)	*Delay dial to start dial* If the trunk group is outgoing or two-way, enter the time, in seconds, between the delay dial signal and the start dial signal. Enter the default value if the trunk group is incoming. The default is 10.

Field descriptions (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	SAT	Y or N	*Satellite* Enter Y if the trunk group is connected to the distant office through satellite. Otherwise, enter N.
	ESUPR	Y or N	*Echo suppressor* Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no).
	OVLAP	Y or N	*Overlap signaling* Enter Y if overlap signaling is required. Otherwise, enter N. This field must be datafilled for incoming, outgoing, and two-way trunk subgroups that use R1 or R1N5 protocols. Although overlap signaling exists for trunks with R1N5, it can only be datafilled N. For calls over trunks used on the incoming leg of a call, a value of Y indicates that an attempt is made to find an outgoing route before an attempt is made to route the call. Overlap signaling is only applicable on R1 trunks if the following conditions are true: • the R1 trunk has subfield SIGDATA set to R1, not R1N5 • the R1 trunk uses universal tone receivers (UTR) for digit collection not MF300 receivers • the translations for the call do not index table GWDIGMAN

Field descriptions (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)			Field OVLAP can only be set to Y if the entry in subfield SIGDATA is R1. Otherwise, only a value of N is permitted. If any other circumstances occur the call defaults to en-bloc regardless of the value of subfield OVLAP.
	SIGNLBIT	A or AB	*Signaling bit* Enter A if the signaling information is carried on the A-bit. Enter AB if the signaling information is carried on both the A- and B-bits. Enter AB if the trunk is analog.
	IDLEPOL	numeric (0 or 1)	*Idle polarity* Enter the polarity, either 0 (zero) or 1, of the signaling bit if the trunk is in the idle state. Enter 0 (zero) if the trunk is analog.

Field descriptions (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	RMBSYBIT	ABAB or NONE	*Remote make busy bit* Enter the bit, either A, B or AB, that carries the remote make busy (RMB) signal. Enter NONE if remote make busy (RMB) is not applicable or if the trunk is analog.
	RMBPOL	numeric (0 or 1)	*Remote make busy bit polarity* Enter the polarity, either 0 or 1, of the RMB bit effective if the RMB signal is transmitted on the B-bit. The RMB signal is a backward signal and can be transmitted in the A-bit (if the line signals are being transmitted on the A-bit), the AB-bits (if the line signals are being transmitted on the AB-bits) or the B-bit (if the line signals are being transmitted on the B-bit). If the RMB signal is transmitted on the same bit(s) as the line signals, the polarity of the RMB signal is the opposite to the idle polarity.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

R2

If the type of pulsing is R2 and type of trunk is GW (gateway) in table TRKGRP, datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type R2.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements SAT, ESUPR, ECSTAT, REMBSY, OVLAP, TRKGRDTM, R2LINSIG, RGSSI, and DIR.
	SIGDATA	R2	*Signaling data* Enter R2.

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	SAT	Y or N	*Satellite* Enter Y if the trunk group is connected to the distant office through satellite. If the trunk group is not connected to the distant office by satellite, enter N. If the entry is Y, the link-by-link connection is done in R2 to R2 calls. This data is also sent by the trunk if required.
	ESUPR	Y, N or REQ	*Echo suppressor* The entry in this field determines which country code indicator is sent on a transit call (I_11, I_12 or I_14). Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no). No internal echo suppressors are used. Enter REQ to indicate that a request is sent to the next switching unit to connect an echo suppressor on the outgoing side (signal I_11). The value REQ is not allowed if field LONGHAUL in table TRKGRP is set to Y.

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceler status* This field indicates the status of the echo canceler status on the trunk subgroup. Enter EXTERNAL if an external echo canceler status is required. Enter INNOTONE if internal echo canceler status with 2100-Hz tone disabling is turned off. Enter INTERNAL if echo canceler status internal to the DMS must be used. Enter UNEQ (unequipped) if no echo canceler status are required for calls involving digital R2 trunks, or if the echo canceler status remains OFF.
	REMBSY	Y or N	*Remote make busy* Enter Y if an incoming trunk sends blocking or the outgoing trunk has to expect blocking. Otherwise, enter N.

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	OVLAP	Y or N	*Overlap signaling* Enter either Y or N to indicate whether overlap signaling is permitted. This field is present for two-way, incoming, and outgoing trunk subgroups using the R2 protocol. For calls over incoming and two-way trunks used on the incoming leg of a call, a value of Y indicates that an attempt is made to find an outgoing route before all the digits have been collected. For calls over outgoing and two-way trunks used on the outgoing leg of a call, a value of Y indicates that overlap outpulsing is permitted. An attempt to overlap outpulse is made if the incoming trunk is using overlap inpulsing. A value of N for incoming and two-way trunks used on the incoming leg of a call indicates that overlap inpulsing is not permitted. All digits are collected before an attempt is made to route the call. A value of N for outgoing and two-way trunks used on the outgoing leg of a call indicates that overlap outpulsing is not permitted. All digits are outpulsed en-bloc, that is, outpulsing does not begin until all digits have been received from the incoming trunk in the call. Overlap signaling is only applicable to R2 trunks if the following conditions are true:

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)			The R2 trunk is using digital line signaling (field R2LINSIG is set to DIGR2 in table TRKSGRP). The R2 trunk is using MFC R2 register signaling (field RGSIGTYP is MFCR2 in table RGSIGSYS, indexed by field RGSSI in table TRKSGRP). The variant of R2 register signaling is CCITT international MFC R2 (field PROTOCOL is INTLMFC in table MFCPROT, indexed by field PROTINDX in table RGSIGSYS). The above is the only combination for which field OVLAP can be set to Y.
	TRKGRDTM	numeric (1 to 255)	*Trunk lock-out timeout* If the entry in field DIR is OG or 2W, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. The default is 10 (100 ms). If the trunks are PX/FX, the entry is a 160 ms increment.

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	R2LINSIG	ANR2, DIGR2 or T3R2	*R2 line signaling type* Enter the R2 line signaling type. If the entry in field R2LINSIG is ANR2, datafill refinements RLSPLSTM, RLSACKTM, ABCDSND, and ABRCV as described below. If the entry in field R2LINSIG is DIGR2, datafill refinements TRKSZATM and AUDINTTM in the following tables. If the entry in field R2LINSIG is T3R2, datafill refinements ABCDSND, ABRCV, FLTRTIME, RMINSPLS, RMAXSPLS, SSPLSDUR, SLPLSDUR, SMINIDL, and SMINACLB in the following tables.

R2LINSIG = ANR2

If the entry in field R2LINSIG is ANR2, datafill refinements RLSPLSTM and RLSACKTM as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RLSPLSTM	numeric (10 to 250)	*Release pulse time* If the entry in field R2LINSIG is ANR2, datafill this field. Enter the time, in 10-ms intervals, of the release pulse. When the incoming trunk receives a clear forward signal, it sends a pulse of this duration on the A-bit. The default is 10 (100 ms).
	RLSACKTM	numeric (10 to 250)	*Release acknowledge time* If the entry in field R2LINSIG is ANR2, datafill this field. Enter the time, in 10-ms intervals, that the outgoing trunk waits after sending a clear forward signal, before checking for a release signal. During this time any changes on the A-bit are ignored. The default is 25 (250 ms).

R2LINSIG = ANR2, T3R2

If the entry in field R2LINSIG is ANR2 or T3R2, datafill fields ABCDSND and ABRCV as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ABCDSND	numeric (4 digits of 0 or 1)	*Value of the ABCD-bits sent on idle* If the entry in field R2LINSIG is ANR2 or T3R2, datafill this field. Enter the value of the ABCD-bits to be sent on idle state. The default is 1101.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ABRCV	numeric (00, 01, 10, 11, or N)	*Value of the AB-bits received on idle* If the entry in field R2LINSIG is ANR2 or T3R2, datafill this field. Enter the value of the AB-bits expected on idle state. The A-bit indicates on or off hook signals. The B-bit indicator is not used. If N is datafilled for any bit, that bit is ignored. The default is 11. If the entry in field R2LINSIG is ANR2, go to field RGSSI in the following tables to continue datafill.

R2LINSIG = T3R2

If the entry in field R2LINSIG is T3R2, datafill refinements FLTRTIME, RMINSPLS, RMAXSPLS, RMINLPLS, RMAXLPLS, SSPLSDUR, SLPLSDUR, SMINIDL, and SMINACLB as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	FLTRTIME	numeric (0 to 15)	*Filter time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the maximum interruption, in 10 ms units, to a signal that is ignored. The default is 3 (30 ms).
	RMINSPLS	numeric (0 to 15)	*Minimum received short pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, to recognize a received short pulse, beyond the filter time. The default is 3 (30 ms).

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	RMAXSPLS	numeric (0 to 15)	*Maximum received short pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the maximum time, in 10-ms units, for a received short pulse, beyond the minimum short pulse time. The default is 3 (30 ms).
	RMINLPLS	numeric (0 to 255)	*Minimum received long pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, to recognize a received long pulse, beyond the maximum time of a short pulse. The default is 11 (110 ms).
	RMAXLPLS	numeric (0 to 255)	*Maximum received long pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the maximum time, in 10-ms units, for a received long pulse, beyond the minimum long pulse time. The default is 42 (420 ms).
	SSPLSDUR	numeric (0 to 255)	*Send short pulse duration* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the duration, in 10-ms units, for sending a short pulse. The default is 15 (150 ms).
	SLPLSDUR	numeric (0 to 255)	*Send long pulse duration* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the duration, in 10-ms units, for sending a long pulse. The default is 60 (600 ms).
	SMINIDL	numeric (0 to 255)	*Minimum time between successive signal* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, between the sending of successive signals. The default is 30 (300 ms).

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SMINACLB	numeric (0 to 255)	*Minimum time to prevent clear backward signal* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, that the answer signal is held before being pulsed back. This is to prevent a clear backward signal from occurring and being returned immediately after answer. The default is 12 (120 ms). Go to field RGSSI in the following tables to continue datafill.

R2LINSIG = DIGR2

If the entry in field R2LINSIG is DIGR2, datafill refinements TRKSZATM and AUDINTTM as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRKSZATM	numeric (0 to 200)	*Trunk seizure acknowledgement timer* If the entry in field R2LINSIG is DIGR2, datafill this field. After a seize signal is sent, the seizure acknowledgement timer is started. A seizure acknowledgement signal is expected till this timer expires. Time is measured in 10 ms units, that is, an entry of 1 is actually 10 ms.
			This field is only for two-way and outgoing trunk subgroups. Enter 0 (zero) for an incoming trunk group. The range for field TRKSZATM is different for satellite and terrestrial calls. For satellite calls the range is 100 to 200 and for terrestrial calls the range is 10 to 20.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	AUDINTTM	numeric (0 to 4)	*Audit interval time* If the entry in field R2LINSIG is DIGR2, datafill this field. This field determines the timer interval in which the audit for R2 trunks run. The time is given a 1-minute unit. This field is only for two-way and outgoing trunk subgroups. Enter 0 (zero) if the entry in field DIR is IC. Enter 2 to 4 for two-way or outgoing trunk subgroups (field DIR is set to 2W or OG).

R2LINSIG = all entries

For all entries in field R2LINSIG, datafill fields RGSSI and DIR as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	RGSSI	alphanumeric (1 to 16 characters)	*Register signaling system instance* Enter a register signaling system instance of table RGSIGSYS.
	DIR	2W, IC or OG	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the entry in field R2LINSIG is ANR2, the entry in field DIR must be IC or OG. The trunk cannot be 2W. If the entry in field DIR is 2W, datafill fields TRKCBTM, MFCR2RPT, and OPTION. If the entry in field DIR is IC, datafill field TRKCBTM. If the entry in field DIR is OG, datafill fields MFCR2RPT and OPTION.

DIR = 2W or IC

If the entry in field DIR is 2W or IC, datafill refinement TRKCBTM as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TRKCBTM	numeric (10 to 250))or blank	*Trunk clear back time* Enter the time, in seconds, that an incoming or two-way trunk waits following the propagation of a clear back signal, for a clear forward signal from the calling end or a reanswer signal from the called end. The default is 60 (60 s). If the entry in field DIR is IC, datafill is complete for the R2 signaling system (subfield SIGDATA set to R2).

DIR = 2W or OG

If the entry in field DIR is 2W or OG, datafill refinement MFCR2RPT and OPTION as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	MFCR2RPT	Y or N	*Multifrequency compelled R2 repeat* This field is used to control whether a repeat attempt is done if a timeout occurs on outpulsing the digits. Enter Y if R2 register signaling behaves as before. Enter N for no repeat attempt.
	OPTION	DCME	*Option* Enter DCME to indicate that all members of this trunk subgroup terminate on an enhanced digital carrier module.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type RC

Recording Completing Trunk Group Type

In a DMS office, trunk group type RC connects with a type 3CL switchboard and provides an audible class-of-service tone that is forwarded to the operator.

The type of class-of-service tone forwarded to the operator depends on the following items:

- the type of line or trunk originating the call
- the datafill in table TRKGRP for group type RC
- the class-of-service high tone (field CSTHTONE) and class-of-service low tone (field CSTLTONE) datafilled in table OFRT
- the class-of-service tone (field COST) datafilled in table LINEATTR

Table ”Tone resulting from a combination of factors” shows the resulting tone for each combination of factors.

For the product engineering codes (PEC) of the trunk group circuits used for recording completing trunk groups, refer to table TRKSGRP.

Tone resulting from a combination of factors

Table OFRT field CSTHTONE	Table OFRT field CSTLTONE	Type of originator	Table LINEATTR field COST	Resulting tone
N	N	line or trunk	any entry value	none
N	Y	line or trunk	any entry value	low
Y	N	line or trunk	any entry value	high
Y	Y	trunk	not applicable	none
Y	Y	party lines	any entry value	none
Y	Y	other lines	NT	none
Y	Y	other lines	LO	low

Tone resulting from a combination of factors

Table OFRT field CSTHTONE	Table OFRT field CSTLTONE	Type of originator	Table LINEATTR field COST	Resulting tone
Y	Y	other lines	HI	high
Note: In the type of originator column, the reference to other lines refers to non-party lines (for example, coin).				

Datafill

The following table lists the datafill for table TRKGRP type RC.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, AUDRING, COLOCATED, and HOLDTYPE. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	RC	*Group type* Enter RC to specify the group type for recording completing trunks.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	RC	*Traffic usage class* Enter RC to specify the recording completing traffic class. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group is outgoing and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are not invalid. For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	AUDRING	Y or N	*Audible ring* Enter Y (yes) if the switch is to provide audible ringing. Otherwise, enter (no).
	COLOCATED	Y or N	*Co-located switchboard* If switchboards are located in the same building as the switch, enter Y. Otherwise, enter N.
	HOLDTYPE	NOHOLD, JNTHOLD, or TERMHOLD	*Hold type* If the call must be taken down when either the originator or terminator goes on hook, enter NOHOLD. Use NOHOLD in no-operator configurations. If the call must be taken down only when both the originator and the terminator are on hook, enter JNTHOLD. If the call must be taken down only when both the originator and the terminator are on hook, enter JNTHOLD. If the call must be taken down only when the terminator goes on hook, enter TERMHOLD.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type RONI

TOPS Remote ONI Trunk Group Type

In a TOPS office, trunk group type RONI is part of a feature that enables operator number identification (ONI) calls to be recorded by Local Automatic Message Accounting (LAMA) or Centralized Automatic Message Accounting (CAMA) in an office with no CAMA positions in operation.

Traffic Operator Position System (TOPS) operators or CAMA board operators are required to collect the calling customer's phone number on ONI calls or calls for which the ANI (Automatic Number Identification) equipment has failed. This number is included in the initial entry on the Automatic Message Accounting (AMA) billing tape.

In a TOPS remote operator number identification (RONI) configuration, calls requiring a CAMA operator (ONI or ANI fail) at a toll office are routed to a distant TOPS complex where a TOPS operator collects the calling number and releases the call. The number is outpulsed back to the toll office for validity checks. If the validity check of the number fails, the call is returned to a distant TOPS operator as call of type RONI RECALL and a subsequent attempt to collect the correct number is made. The RONI RECALL call cannot leave the position until the operator has collected the correct number or terminates the call. Once the correct number has been collected, control is passed back to the toll office and the call floats.

This feature is necessary when the toll office does not have CAMA or TOPS positions of its own, or these devices have been shut down. Note that the toll office can be any type of switch (for example, 4A, XBT, SP1 4W, SP1 2/4W, or 5XB).

The toll office and the TOPS office communicate using on-hook/off-hook supervision signals on two trunks: a data trunk and a voice trunk. Information about the call type (ONI or ANI fail) is transmitted using 480 Hz tone bursts over the voice trunk. The collected digits are outpulsed to the toll office over the data trunk.

Datafill

The following table lists the datafill for table TRKGRP type RONI.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, PROTOCOL, SIGINFO, NBECID, and SNPA. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	RONI	*Group type* Enter RONI to specify the group type for remote ONI TOPS trunks.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for TOPS trunk groups. Enter NCRT. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	DIR	IC	*Direction* Enter IC to specify that the trunk group direction is incoming.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PROTOCOL	NT or TSPS	*Protocol* If the POSITION_ATTACHED signal must be returned immediately after trunk seizure, enter NT. If the POSITION_ATTACHED signal must be returned when an actual position is connected, enter TSPS.
	SIGINFO	see subfields	*Signaling information* This field consists of subfield SIGTYPE and refinements.
	SIGTYPE	EANDM or LOOP	*Signaling type* Enter the type of signaling hardware being used. For E&M signaling, enter EANDM and datafill refinements REVSIG and CXRFAIL. For loop signaling, enter LOOP (no refinements apply for this entry value).
	REVSIG	Y or N	*Reverse signaling* Datafill this field only if the value in field SIGTYPE is EANDM. If reverse signaling is required, enter Y (yes). Otherwise, enter N (no).
	CXRFAIL	ON or OFF	*Carrier fail option* Datafill this field only if the value in field SIGTYPE is EANDM. If on-hook supervision is required for the RONI carrier fail option, enter ON. If off-hook supervision is required for the RONI carrier fail option, enter OFF.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NBECID	numeric (4 digits)	*Non-BOC exchange carrier identification* In offices with feature EBAF (Expanded Bellcore Automatic Message Accounting (AMA) Format), enter the four-digit non-Bell Operating Company (non-BOC) exchange carrier identification number for RONI calls originating on this trunk. Otherwise, enter 0000.
	SNPA	numeric (3 digits)	*Serving numbering plan area* In offices with feature EBAF, enter the three-digit serving numbering plan area (SNPA) code associated with RONI calls originating on this trunk. Otherwise, enter the value of field NPA found in the first tuple of subtable HNPACONT.HNPACODE.

Additional information

This section provides information related to table TRKGRP and group type RONI.

Notes concerning table TRKSGRP

Table TRKSGRP contains supplementary signaling information for trunk group type RONI and other trunk group types. There is one subgroup for every trunk group of type RONI.

The interaction between table TRKSGRP and TRKGRP type RONI is illustrated in the datafill example section.

For additional information, refer to table TRKSGRP.

Notes concerning table TRKMEM

Although voice and data trunks are datafilled separately in table TRKMEM, these trunks must reside on the same card.

Analog trunks must be assigned consecutively on a card, with voice on the even circuits and data on the odd circuits.

For digital trunk assignments the “n, n 4" rule is used. Digital assignment for voice must be within the range 1 to 4, 9 to 12, or 17 to 20 and data assignments must be within the range 5 to 8, 13 to 16, or 21 to 24.

These assignment rules are used to post the voice or data side at the test trunk position (TTP).

The interaction between table TRKMEM and TRKGRP type RONI is illustrated in the datafill example section.

For additional information, refer to table TRKMEM.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type ROTL

Remote Office Test Line Trunk Group Type

Trunk group type ROTL is used for remote line testing in a DMS office.

This trunk group is represented in table CLLI by pseudo-common language location identifier (CLLI) ROTLTP.

Trunk cards for table TRKGRP and group type ROTL have product engineering code (PEC) NT3X91AA (remote office test line circuit).

Datafill

The following table lists the datafill for table TRKGRP type ROTL.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	ROTLTP	*Common language location identifier* Enter the pseudo-common language location identifier (CLLI) code ROTLTP.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SNPA, and SCRNCL. Refer to section “General field information” in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	ROTL	*Group type* Enter ROTL to specify the group type for remote office test line trunks.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0)	*Traffic separation number* Enter 0 (zero) to specify that a traffic separation number is not required.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SNPA	numeric (3 digits)	*Serving NPA* Enter the serving NPA code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type SC

2W/IC from North AMR5 or CAMA Trunk Group Type

Trunk group type superCAMA (centralized automatic message accounting) (SC) is used in one of the following two configurations:

- Incoming trunk group type SC in a DMS toll office, and under certain conditions, in a DMS TOPS (Traffic Operator Position System) office, connects with an end office to carry non-coin, subscriber-dialed, chargeable calls (TOPS operator assistance not required) recorded by CAMA in the toll office.

  Signaling formats include the CAMA automatic number identification (ANI) dial-pulse format (that is, the office is not a traffic service position system (TSPS) office).

  Inband coin control is optional.

  ANI calls are recorded by CAMA automatically.

  ANI fail and operator number identification (ONI) calls are handled by the CAMA operator, who enters the calling number manually to record the call by CAMA. The call is then sent on for toll completion.

  If feature package NTX193AA (4X Operation—AMR5 Format ANI) is present, operator-assisted traffic (0+ and 0-) can tandem through the switch to a switch with TOPS or TSPS using outgoing trunk group type OP.

  When the far end is a DMS switch, the far end of trunk group type SC leaves the far end DMS switch as trunk group type OC.

- Two-way trunk group type SC in a DMS toll office, in addition to the incoming trunk functions, can be set up for one of the following outgoing trunk functions:

  — dedicated to toll completing

  — dedicated to verification

  — combined toll completing and verification

This trunk group cannot be configured as an OG (outgoing) trunk.

Refer to TRKGRP type VR for additional information on verification calls.

Changing trunk selection method and sequence

The selection sequence for an existing trunk group can be changed from ascending sequence (ASEQ) to descending sequence (DSEQ), or

from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ).

The selection method for an existing trunk group cannot be changed.

To change the selection method for an existing trunk group from ASEQ or DSEQ to clockwise circular trunk hunt (CWCTH) or counter clockwise circular trunk hunt (CCWCTH), or to most idle (MIDL) or least idle (LIDL), (field SELSEQ), define a new trunk group, as follows:

1. Create a new trunk group with the required trunk selection method.

2. Delete the individual trunks from the old trunk group.

3. Add the trunks to the new trunk group.

Datafill

The following table lists the datafill for table TRKGRP type SC.

Field descriptions (Sheet 1 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.

Field descriptions (Sheet 2 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, ONI, SNPA, PRTNM, NODIGRTE, NODIGCTP, TRTMTSUP, NPRETSUP, NOBILLCD, ANISEIZ, ANIPDIAL, DIR, SELSEQ, DIGSOUT, SDATA, ANITYPE, and RECORDNP. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	SC	*Group type* Enter the trunk group type SC.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	ONI	Y or N	*Operator number identification* Enter Y (yes) if traffic on trunk group is 100% operator number identification (ONI) traffic. Otherwise, enter N (no).

Field descriptions (Sheet 4 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	NODIGRTE	NONE	*No-digit route* Enter the operator position to which incoming calls are routed when no digits are received. Enter NONE to indicate that all operator-assisted calls are routed to position CAMA in table POSITION. Entries outside this range are invalid.

Field descriptions (Sheet 5 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	NODIGCTP	DD, NP, or OA	*No-digit call type* Enter the type of call to be assigned to calls with no incoming digits (seizure only): direct dial (DD), no prefix (NP), or operator assisted (OA). Entries outside the indicated range are invalid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TRTMTSUP	OFFHOOK, NOHOOK, or OFFHKWK	*Treatment supervision* Enter the type of supervision required when translation is routed to a treatment, tone, or announcement: OFFHOOK, ONHOOK, or OFFHKWK (off-hook wink).

Field descriptions (Sheet 6 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NPRETSUP	OFFHOOK, NOHOOK, or OFFHKWK	*No-prefix return supervision* Enter the return supervision required on no-prefix type of calls: OFFHOOK, ONHOOK, or OFFHKWK (off-hook wink). Specify the type of return supervision required if the type of call is no-prefix (NP). If the no-prefix return supervision is set to OFFHOOK, then off-hook supervision is sent to the originator right away. Otherwise an off-hook signal is sent whenever the terminator goes off-hook. If the trunk group carries equal-access traffic, enter ONHOOK. If this field is set to ONHOOK, it does not send an off-hook signal back to the end office to start the automatic number identification (ANI) spill.
	NOBILLCD	1 to 63	*Number of bill codes* Enter the number of bill codes plus spares that are reserved in table BILLCODE. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	*Automatic number identification seizure timing* Enter the time, in seconds, that the trunk waits for reception of first automatic number identification (ANI) digit or signal. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 7 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ANIPDIAL	2 to 30	*Automatic number identification partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each ANI signal or digit after the first. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIR	IC or 2W	*Direction* This field specifies the trunk group direction. Enter IC for incoming or 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 8 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 9 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are invalid. For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* If the number of digits to be outpulsed is variable, enter 0 (zero) and specify the number of digits to be outpulsed in the appropriate route list. If the number of digits to be outpulsed is a fixed quantity, enter a value from 0 to 18.

Field descriptions (Sheet 10 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SDATA	see subfield	*Signaling data* This field consists of subfield SIGFMT and refinements CC_XLA_NAME and TRAFTYPE.
	SIGFMT	AMR5A	*Signaling format* Enter the signaling format AMR5A. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	CC_XLA_ NAME	STD or alphabetic	*Category code translator* If signaling format is AMR5A, enter the category code translator assigned to the trunk group. ***Note:*** The value NIL is not allowed for this field.
	TRAFTYPE	AMRCOMB, AMRONE, or AMRZERO	*Traffic type* If signaling format is AMR5A, enter the traffic type: AMRCOMB (1+, 0, 0-), AMRONE (1+), or AMRZERO (0+, 0-).

Field descriptions (Sheet 11 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ANITYPE	NO, REV, REVUK, or WK	*Automatic number identification type* Enter NO if ANI is not performed. Enter REV (reversal or answer) for normal Bell standard offices. If optional feature package NTXE34AA (4X Operation—AMR5 Format ANI) (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter REV. If feature package NTXE34AA is present, other values for ANITYPE are invalid. Enter REVUK if interworking with DMS-250 TOPS trunks is required. REVUK uses the UK250 ANI protocol format. Enter WK for special requirements (RCF/TCF). (The correct ANI fail-and-answer supervision on the second leg of a remote call-forwarding call is WK [wink].) The default datafill is REV. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	RECORDNP	Y or N	*Record calls of type np* If the office includes the feature package NTX386AA (Access Tandem Switch), enter Y to indicate that calls of are type NP are to be recorded. Otherwise, enter N.

Field descriptions (Sheet 12 of 12)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements. Up to three options can be specified. If less than three options are required, end the list with a $ (dollar sign).
	OPTION	BCNAME, NOUTR, or PIA	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To specify if the trunk group bypasses the use of the universal tone receiver (UTR), enter NOUTR. To specify the propagate immediate answer option, enter PIA. Option PIA is used to send a message back to the originator immediately. If this option is not set, propagation delays of up to 2 seconds can occur. For certain systems, the call drops due to long propagation delays. The PIA option is only valid for incoming or two-way trunks. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Field descriptions for two-way or incoming CAMA trunk group

Field names, subfield names, and valid data ranges for table TRKGRP (SC), two-way or incoming CAMA trunk groups, are described below.

Field descriptions for conditional datafill (Sheet 1 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, ONI, SNPA, PRTNM, NODIGRTE, NODIGCTP, TRTMTSUP, NPRETSUP, NOBILLCD, ANISEIZ, ANIPDIAL, DIR, SELSEQ, DIGSOUT, SDATA, ANITYPE, RECORDNP, SPLOOKUP, and OPTION. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	SC	*Group type* Enter the trunk group type SC.

Field descriptions for conditional datafill (Sheet 2 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions for conditional datafill (Sheet 3 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	ONI	Y or N	*Operator number identification* Enter Y (yes) if traffic on trunk group is 100% operator number identification (ONI) traffic. Otherwise, enter N (no).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 4 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 5 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NODIGRTE	AMRX, AOSS, CAMA, CTOP, OOC, RTE1, RTE2, RTE3, RTE4, RTE5, RTE6, RTE7, TOPS, TSPS, or NONE	*No-digit route* Enter the operator position to which incoming calls are routed when no digits are received. If a two-way or incoming trunk group is from CAMA, and all operator-assisted calls are routed to the position CAMA in table POSITION, set the value of field NODIGRTE to NONE. If a two-way or incoming trunk group is from CAMA, and all operator-assisted calls are routed to a position other than CAMA in table POSITION, set the field NODIGRTE to the position in table POSITION that routes the call to a TSPS or TOPS trunk group that has trunk group type OP. If a value for field NODIGRTE is specified that is not datafilled in table POSITION, calls which require an operator are sent to DTFL (datafill failure) treatment. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 6 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NODIGCTP	DD, NP, or OA	*No-digit call type* Enter the type of call to be assigned to calls with no incoming digits (seizure only): direct dial (DD), no prefix (NP), or operator assisted (OA). Entries outside the indicated range are invalid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TRTMTSUP	OFFHOOK, NOHOOK, or OFFHKWK	*Treatment supervision* Enter the type of supervision required when translation is routed to a treatment, tone, or announcement: OFFHOOK, ONHOOK, or OFFHKWK (off-hook wink).

Field descriptions for conditional datafill (Sheet 7 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NPRETSUP	OFFHOOK, ONHOOK, or OFFHKWK	*No-prefix return supervision* Enter the return supervision required on no-prefix type of calls: OFFHOOK, ONHOOK, or OFFHKWK (off-hook wink). Specify the type of return supervision required if the type of call is no-prefix (NP). If the no-prefix return supervision is set to OFFHOOK, then off-hook supervision is sent to the originator right away. Otherwise an off-hook signal is sent whenever the terminator goes off-hook. If the trunk group carries equal-access traffic, enter ONHOOK. If this field is set to ONHOOK, it does not send an off-hook signal back to the end office to start the automatic number identification (ANI) spill.
	NOBILLCD	1 to 63	*Number of bill codes* Enter the number of bill codes plus spares that are reserved in table BILLCODE. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	*Automatic number identification seizure timing* Enter the time, in seconds, that the trunk waits for reception of first automatic number identification (ANI) digit or signal. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 8 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ANIPDIAL	2 to 30	*Automatic number identification partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each ANI signal or digit after the first. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIR	IC or 2W	*Direction* This field specifies the trunk group direction. Enter IC for incoming or 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions for conditional datafill (Sheet 9 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions for conditional datafill (Sheet 10 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* If the number of digits to be outpulsed is variable, enter 0 (zero) and specify the number of digits to be outpulsed in the appropriate route list. If the number of digits to be outpulsed is a fixed quantity, enter a value from 0 to 18.

Field descriptions for conditional datafill (Sheet 11 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SDATA	see subfield	*Signaling data* This field consists of subfield SIGFMT and refinements GRPTYPE and DEFANIFL.
	SIGFMT	BELL	*Signaling format* Specify the signaling format BELL. If the signaling format is BELL and no called number is received, the call is routed to permanent signal timeout (PSIG) treatment. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	GRPTYPE	OSS, REGULAR, or SUPER	*Group type* Enter OSS if the start signal for DD calls is ST and two information digits are expected and datafill refinement IC_ROUTE. ***Note:*** Option OSS is related to equal access (EA) calls. Enter REGULAR if the start signal (ST) for direct dial (DD) calls is ST and one information digit is received. Enter SUPER if the start signal for DD calls is ST2P and one information digit is received.

Field descriptions for conditional datafill (Sheet 12 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	IC_ROUTE	alphanumeric (1 to 8 characters) or NONE	*Independent carrier route* If the entry in field GRPTYPE is OSS, datafill this refinement. Enter the position, known to table POSITION, field POS, to specify the route that is taken if the call is identified by the start signal as an independent carrier (IC) equal-access (EA) call.
	DEFANIFL	CAMA, TREAT, or TSPS	*Default automatic number identification fail* This field determines the route taken by translations if no ANI (ANI FAIL) is received. Enter CAMA if translation routes to position CAMA in table POSITION. Enter TREAT if translation routed to a hard-coded, toll-denied treatment. This treatment routes the originator to reorder tone. Enter TSPS if translation routes to position TSPS in table POSITION.

Field descriptions for conditional datafill (Sheet 13 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ANITYPE	NO, REV, REVUK, or WK	*Automatic number identification type* Enter NO if ANI is not performed. Enter REV (reversal or answer) for normal Bell standard offices. If optional feature package NTXE34AA (4X Operation—AMR5 Format ANI) (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter REV. If feature package NTXE34AA is present, other values for ANITYPE are invalid. Enter REVUK if interworking with DMS-250 TOPS trunks is required. REVUK uses the UK250 ANI protocol format. Enter WK for special requirements (RCF/TCF). (The correct ANI fail-and-answer supervision on the second leg of a remote call-forwarding call is WK [wink].) The default datafill is REV. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	RECORDNP	Y or N	*Record calls of type np* If the office includes the feature package NTX386AA (Access Tandem Switch), enter Y to indicate that calls of are type NP are to be recorded. Otherwise, enter N.

Field descriptions for conditional datafill (Sheet 14 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SPLOOKUP	Y or N	*Special lookup* Enter Y if the non-equal access end office is not capable of outpulsing the correct ANI information digit, and all incoming calls on the trunk group require a lookup in table SPLANILN. Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements. Up to three options can be specified. If less than three options are required, end the list with a $ (dollar sign).
	OPTION	BCNAME, NOUTR, or PIA	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To specify if the trunk group bypasses the use of the universal tone receiver (UTR), enter NOUTR.

Field descriptions for conditional datafill (Sheet 15 of 15)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			To specify the propagate immediate answer option, enter PIA. Option PIA is used to send a message back to the originator immediately. If this option is not set, propagation delays of up to 2 seconds can occur. For certain systems, the call drops due to long propagation delays. The PIA option is only valid for incoming or two-way trunks. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type SIGSYS

SIGSYS

If trunk group type in table TRKGRP is OPR, MTR, or ITOPS, datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type SIGSYS.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		P30CAS	*Card code* Enter P30CAS, the card code for an international extended multiprocessor system (XMS)-based peripheral module (IXPM) trunk with pulse code modulation 30 (PCM30).

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This subfield consists of subfield SIGDATA and refinements RXTXSEP, REMBSY, OVLP, DIALSTRT, DIR, LNICSSI, RGICSSI, MTICSSI, ALERTCTL, DIALMODE, CONTMARK, LNOGSSI, RGOGSSI, MTOGSSI, LN2WSSI, RG2WSSI, MT2WSSI, ALERTCTL, and DIALMODE.
	SIGDATA	SIGSYS	*Signaling data* Enter SIGSYS for international signaling.
	RXTXSEP	Y or N	*Receive transmit path separate* Enter Y (yes) for a trunk conversion to analog, using a channel bank and an analog transmit path separate from an analog receive path. Otherwise, enter N (no).
	REMBSY	Y or N	*Remote make busy* Enter Y if trunk subgroup is assigned the remote make busy (RMB) feature. Otherwise, enter N.
	OVLP	Y or N	*Overlap signaling* Enter Y if the register signaling is dial pulse (DP) or multifrequency compelled (MFC). This indicates that overlap signaling is available for the trunk subgroup. Through field OVLP, trunks can be selectively datafilled for the overlap signaling operation. Otherwise, enter N. ***Note:*** For dump and restore purposes, this field must be set to N.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	DIALSTRT	DELDIAL, IMMEDIATE, MANSWB, SASWBWINK, or NILTYPE	*Dial start mode* Enter the type of dial start trunk required: • DELDIAL - delay dial start trunk • IMMEDIATE - immediate dial trunk • MANSWB - manual-toll switchboard incoming trunk • SASWB - semiautomatic switchboard incoming trunk • WINK - wink start dialing trunk Enter NILTYPE if this field is not applicable. The default is NILTYPE. If the line signaling type is NTLS24, field DIALSTRT must be datafilled either IMMEDIATE, DELDIAL, or WINK.
	DIR	2W, IC, or OG	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the trunk type in table TRKGRP is SPC, the entry in field DIR must be OG. If the entry in field DIR is 2W, datafill fields LN2WSSI, R2WSSI, MT2WSSI as described below. If the entry in field DIR is IC, datafill fields LNICSSI, RGICSSI, and MTICSSI, and ALERTCTL and DIALMODE. If the entry in field DIR is OG, datafill fields LNOGSSI, RGOGSSI, MTOGSSI and fields ALERTCTL and DIALMODE.

DIR = 2W

If the entry in field DIR is 2W, datafill fields LN2WSSI, RG2WSSI, and MT2WSSI as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LN2WSSI	NTLS16	*Line two-way signaling system instance* If the entry in field DIR is 2W, datafill this field. Enter NTLS16 if an index into table LNSIGSYS is needed. This entry provides the line signaling system (LSS) used by the two-way trunk.
	RG2WSSI	NTRS11	*Register two-way signaling system instance* If the entry in field DIR is 2W, datafill this field. Enter NTRS11 if an index into table RGSISGYS is needed. This entry provides the register signaling system (RSS) used by the two-way trunk.
	MT2WSSI	alphanumeric (1 to 16 characters)	*Meter two-way signaling system instance* If the entry in field DIR is 2W, datafill this field. Enter a meter signaling system instance of table MTSIGSYS. Enter NIL if trunk group type is OPR. If the entry in field DIR is 2W, datafill for SIGDATA = SIGSYS is complete.

DIR = IC

If the entry in field DIR is IC, datafill fields LNICSSI, RGICSSI, and MTICSSI as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LNICSSI	alphanumeric (1 to 16 characters)	*Line incoming signaling system instance* If the entry in field DIR is IC, datafill this field. Enter a line signaling system instance of table LNSIGSYS. ***Note:*** If the trunk type is SPC, the entry in field LNICSSI must be NTLS14 and must have been previously datafilled in table LNSIGSYS.
	RGICSSI	alphanumeric (1 to 16 characters)	*Register incoming signaling system instance* If the entry in field DIR is IC, datafill this field. Enter a register signaling system instance of table RGSIGSYS. Changing the register signaling system type is not allowed. The message signaling type cannot be changed on an update or the following error message is displayed: `SIGNALING TYPE CANNOT BE CHANGED ON AN UPDATE` To change the register signaling system type (by changing fields RGOGSSI and/or RGICSSI) the trunk subgroup must be deleted and added again. This necessitates deleting the trunk members also.
	MTICSSI	alphanumeric (1 to 16 characters) or NIL	*Meter incoming signaling system instance* If the entry in field DIR is IC, datafill this field. Enter a meter signaling system instance of table MTSIGSYS. Enter NIL if trunk group type is OPR. Go to field ALERTCTL to complete datafill for incoming trunks (field DIR is set to IC).

DIR = OG

If the entry in field DIR is OG, datafill fields LNOGSSI, RGOGSSI, MTOGSSI, ALERTCTL, and DIALMODE as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LNOGSSI	alphanumeric (1 to 16 characters)	*Line outgoing signaling system instance* If the entry in field DIR is OG, datafill this field. Enter a line signaling system instance of table LNSIGSYS.
	RGOGSSI	alphanumeric (1 to 16 characters)	*Register outgoing signaling system instance* If trunk direction is outgoing, datafill this field. Enter a register signaling system instance of table RGSIGSYS. Changing the register signaling system type is not allowed. The message signaling type cannot be changed on an update or the following error message is displayed: `SIGNALING TYPE CANNOT BE CHANGED ON AN UPDATE` To change the register signaling system type (by changing fields RGOGSSI and/or RGICSSI) the trunk subgroup must be deleted and added again. This necessitates deleting the trunk members also.
	MTOGSSI	alphanumeric (1 to 16 characters) or NIL	*Meter outgoing signaling system instance* If the entry in field DIR is OG, datafill this field. Enter a meter signaling system instance of table MTSIGSYS. Enter NIL if trunk group type is OPR. Go to field ALERTCTL to complete datafill for outgoing trunks (field DIR is set to OG).

DIR = IC or OG

If the entry in field DIR is IC or OG, datafill fields ALERTCTL and DIALMODE as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ALERTCTL	TERM or ORIG	*Alert signal control* If the entry in field DIR is IC or OG, datafill this field. An alert signal can be such as a start ringing signal or a toll break-in (TBI) ringing signal. Enter ORIG if the originator has control of the alert signal and must physically initiate ringing to begin. The operator must initiate ringing to the subscriber.
			Enter TERM if the terminator has control of the alert signal and ringing is initiated if the terminator is connected. When subscriber A goes on hook after a TBI, subscriber A receives physical ringing immediately and the operator's lamp lights until the subscriber answers. If subscriber B goes on hook before subscriber A, the operator must rering subscriber A.
	DIALMODE	C or M	*Dial mode* If the entry in field DIR is IC or OG, datafill this field. Enter C (customer) if customer dialing is expected. In the case of an operator, the entry is C. Enter M (machine) if machine dialing is expected.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type SOCKT

Short or Open Circuit Test Line (OCKT) or SCKT

Trunk group type SOCKT is used in switches that are configured for short- and open-circuit testing.

Each transmission termination trunk consists of a trunk circuit with product engineering code (PEC) NT2X71AA (transmission termination trunk), and is represented in table CLLI by two pseudo-common language location identifiers (CLLI): SCKT and OCKT. An entry in table TRKGRP (for group type SOCKT) is required for each of the two pseudo-CLLIs.

Subgroup data is only required for pseudo-CLLI SCKT, and is produced automatically by table control.

In table CLLI, all trunk members are assigned to the pseudo-CLLI SCKT.

The trunk card with PEC NT2X71AA has only one circuit (even circuit number). The odd-numbered circuit must be specified (even circuit number incremented by 1) in table TRKMEM.

For each member of the trunk group, set field DBREC and DBTRANS in subtable CLLIMTCE.DIAGDATA equal to 36 and 20 respectively.

For related information, refer to table TRKGRP type MAINT.

Datafill

The following table lists the datafill for table TRKGRP type SOCKT.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	OCKT or SCKT	*Common language location identifier* Enter the pseudo-CLLI for the transmission termination trunk group.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and CARDCODE. Refer to section "General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	SOCKT	*Group type* Enter SOCKT to specify the group type for transmission terminating trunks.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	CARDCODE	2X71AA	*Card code* Enter 2X71AA to specify the product engineering code (PEC) that applies for members of the transmission termination trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, busy all trunks in the group before changing the value of this field by data modification order (DMO).

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type SPC

Semi-permanent Connections Trunk Group Type

Trunk group type SPC is used to define one of the agents used in a semi-permanent connection. The other agent is another trunk or a line.

A semi-permanent connection is one that can be set up or taken down by operating company personnel. Such a connection cannot be set up or taken down by signaling.

Trunk group type SPC can be datafilled to allow a trunk group to be used in a semi-permanent connection. Once such a trunk group is defined, it can only exist in a connection of this type.

Trunk group type SPC currently exists only in DMS-100 international software.

For more information on semi-permanent connections, refer to table SPECCON.

Datafill

The following table lists the datafill for table TRKGRP type SPC.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and DIR. Refer to section “General field information” in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	SPC	*Group type* Enter SPC to specify the group type that applies for semi-permanent connection trunks.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	DIR	OG	*Direction* Enter OG to specify that the trunk group is outgoing.

Additional information

This section provides additional information related to table TRKGRP and group type SPC.

The following information applies to SPC trunks:

- A stored program control (SPC) trunk involved in an SPC connection has a state of seized.
- Call processing busy (CPB) is not a valid state for SPC trunks.

- It is not possible to force the release (FRLS) of SPC trunks.
- SPC lines and trunks do not support testline tests such as the milliwatt and looparound tests.

CAUTION
Automatic trunk testing on SPC trunks can cause data corruption.
Do not set up automatic trunk testing on SPC trunks. Perform manual testing with care to avoid data corruption.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type STD

STD

For each trunk group with standard (STD) signaling datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type STD.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric(1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE		2X72BA 2X72BB 2X75BA 2X81AA 2X81BA 2X82AA 2X84BA 2X85AA 2X86AA 2X95AA 2X95BA 2X95BB 3X01AA 3X04AA 3X06AA 3X07AA 4X97AA DS1FXSGS DS1FXSLS DS1FXO DS1SIG FXOGS FXOLS FXSGS FXSLS MFESCN MFESCP UK3JIC UK3JOG UKAC15 UKEARTH UKLOOP UKDC15	*Card code* If the trunk is analog, enter the product engineering code (PEC) of the trunk card (for example, 2X82AA). If the trunk is digital, enter the applicable code as detailed below. If trunk group type is PX, enter DS1SIG, FXSLS, FXSGS, 2X82AA, 2X83AA, 2X88AA, or 2X81AA. If the trunk group is an integrated business network (IBN) foreign exchange station side (FXS), use cardcode DS1FXO and use ground start or loop start signaling protocol to access the Meridian SuperNode (MSN). Incoming signaling protocol for IBN per trunk signaling (PTS) trunks is specified by field ISTARTSIG, and must be datafilled as ground or loop start. Enter 2X75BA for the A-law looparound test line if trunk group type is LOOPA. Enter 2X85AA or 2X86AA for simplex ring back (the entry in field RNGBCK is SX). Enter 3X04AA if trunk group is incoming from A.E. Co. local test desk. Enter 2X95AA if trunk group type is P2. If trunk group type is PX, cardcode 2X95AA is not supported.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE (continued)			Enter 3X06AA if trunk group type is recording completing (RC) and operator NE 3, 3C, 3CL, or A.E. No. 30 or 31 switchboard is located in the same building as the switching unit. Enter DS1FXSLS if the entry in field OPTION in table TRKGRP is ACD. Enter DS1FXO for digital FX (foreign exchange) trunks. If an IBNTO or IBNT2 trunk group is added and has a cardcode of DS1FXO, table IBNFXDS1 must be examined and the trunk seize sequence (field SEIZESEQ in table IBNFXDS1) altered if necessary. The cardcode for an IBNT2 trunk can be either DS1FX0 or 6X50AB, but not DS1SIG. Enter DS1SIG if the trunk group is digital and other than an FX or IBNT2 trunk. Enter DS1SIG if the trunk group is NFA (network facility access). If switching unit is DMS-250 and trunk is an FX circuit, enter one of the following: FXOGS, FXOLS, FXSGS, or FXSLS. If an IBNTI or IBNT2 trunk group is added, and has a cardcode of UKAC15, dual tone multifrequency (DTMF) immediate start signaling can be used provided the trunks reside on a pulse code modulation (PCM)30 digital trunk controller (PDTC) with a universal tone receiver (UTR), the entry in field IPULSTYP must be DT, and the entry in field ISTARTSG must be IM.

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE (continued)			Enter UKLOOP if CLLI is UKLOOPIC, UKLOOPOG, or UKLOOP2W. Enter UKEARTH if CLLI is UKEARTHIC, UKEARTHOG, or UKEARTH2W. Enter 2X86AA for third wire coin control (the entry in field CCONT is 3W). Enter 3X07AA if trunk group type is incoming operator (IO) and operator NE 3, 3C, 3CL, or A.E. No. 30 or 31 switchboard is located in the same building as the switching unit. Enter 3X01AA if the entry in field CLLI is ROTLTP. If the CLLI is MTU, enter 4X97AA. The following are cardcodes used by United Kingdom operating companies: • 2X72BA - DC5 four-wire trunk used to handle calls between SL-100 digital private branch exchange (PBX) and the network. • 2X81BA - DC5 two-wire trunk used to handle calls between digital PBX and PBX by using private circuit. • 2X84BA - earth calling trunk used to handle calls between digital PBX and the network. • 2X95BA - DDI trunk used to handle calls from a local exchange to digital PBX. • UKAC15 - MEL type 2 trunk with AC15 signaling. • UKDC5 - MEL type 2 trunk with DC5 signaling. • UK3JIC - 3J type 4 incoming trunk with loop disconnect signaling. • UK3JOG - 3J type 2 outgoing trunk with loop disconnect signaling.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE (continued)			The following are cardcodes used to allow Spanish multifrequency (MFE) SOCOTEL signaling on IBN trunk types IBNTI (incoming) and IBNTO (outgoing): • MFESCN - incoming Spanish SOCOTEL trunk using type N line signaling and with trunk type IBNTI. • MFESCP - outgoing Spanish SOCOTEL trunk using type P line signaling and with trunk type IBNTO The following cardcodes are used in Spain: • 2X95BB - JUSMAG trunk, two-wire, 600 ohms direct dial outward. • 2X72BB - CAIA trunk, four-wire, 600 ohms direct dial outward. Incoming MFE SOCOTEL trunks with field IPULSTYP set to MFC must have the following additional datafill: • field ISTARTSG set to M • field OVLP set to M • field REMBSY set to Y • field DIALMODE set to M Outgoing MFE SOCOTEL trunks with field OPULSTYP set to MFC must have the following additional datafill: • field OSTARTSG set to IM • field DIALMODE set to M

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfields	*Variable subgroup data* For standard signaling, this field consists of subfield SIGDATA and refinements DIR, IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSTAT.
SGRPVAR (continued)	SIGDATA	STD	*Signaling data* Enter STD for standard signaling.

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W, IC, or OG	*Direction* Enter the trunk group direction: two-way (2W), incoming (IC), or outgoing (OG). Enter 2W if trunk group is NFA. Enter IC or OG if the entry in field GRPTYP in table TRKGRP is TPS101. If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, and ECSELECT. Refer to the datafill descriptions in table 2. If the entry in field DIR is 2W, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSELECT. Refer to the datafill descriptions in table 3. If the entry in field DIR is OG, datafill refinements OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and ECSELECT. Refer to the datafill descriptions in table 4.

DIR = IC

If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, and ECSELECT as described below.

Field descriptions for conditional datafill (Sheet 1 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	DP, DT, MF MFC, NP, RP, or blank	*Incoming type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing Enter DP, MF, or NP if the trunk group type is E911. Enter DP, MF, MFC, or RP if the trunk group type is T1. Enter DP or MF if the trunk group type is T2. Enter DP if the trunk group is UKEARTH2W. Enter DP if the trunk group is incoming from A.E. Co. local test desk. Enter DP if a trunk whose CLLI corresponds to the IBN cut-through selector. See table IBNXLA for cut-through dialing. The selection of DT, MF, and MFC type of incoming pulsing is incompatible with IM start dial signaling (field ISTARTSG set to IM). DT, MF, and MFC require tone receivers to process the incoming signaling tones. Under high traffic conditions, attachment of the receiver can take several hundred ms. Normally, this is handled by the selection of a start dial signaling protocol that includes a method to allow the necessary time needed to attach the tone receiver before tone dialing begins. An entry of IM in field ISTARTSG specifies that dialing can start within 70 ms of initiation of the trunk connection. This practice can result in improper connections.

Field descriptions for conditional datafill (Sheet 2 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP (continued)		Enter DP or DT if trunk group type is P2 or TPS101. Enter DT if trunk group is NFA. Enter DT if trunk group is UKLOOPIC or UKLOOP2W, or UKEARTHIC. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • Capability Set 1 Refined (CS-1R) trigger criteria checking can occur Enter MF for feature group D (FGD) calls over IBNTI and IBNT2 trunks to the MSN. If trunk group type is ATC, leave this field blank. If the entry in field OFFNET is not Y (yes) and the entry in field OFFNTACC is not DAT in table TRKGRP, an error message is output on the map stating that this trunk signaling combination is not allowed.
			In table TRKGRP, if required, one or two digits (fields DIGIT0 and DIGIT1) can be prefixed to the incoming digits stream. However, if either field DIGIT0 or field DIGIT1 is datafilled with anything other than N and the entry in field IPULSTYP in table TRKSGRP is DT, there can be a delay in call completion of 12 to 14 s. Datafilling the above combinations on incoming trunks is prohibited by table control. Datafill is not allowed for two-way trunks beginning in BCS31. Trunks already datafilled are allowed. The combination DT IM in fields IPULSTYP and ISTARTSG respectively, must only be allowed for trunk group types DAL, MEL, and IAL.

Field descriptions for conditional datafill (Sheet 3 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP (continued)		While the checking of office parameter DUMP_RESTORE_IN_PROGRESS in table OFCSTD enables existing DT IM trunks to be datafilled, no further DT IM trunks can be added. If an IBNTI or IBNT2 trunk group is added, and has a cardcode of UKAC15, DTMF can be used providing the trunks reside on a PDTC with a universal tone receiver (UTR), field IPULSTYP is set to DT, and field ISTARTSG is set to IM. If an attempt is made to add a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, or to change a tuple to this configuration, the entry for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access.
	ISTARTSG	DD, DIALTONE, GD, GO, GS, IM, LP, LS, SZ, WK, or, blank	*Incoming start dial signal* If incoming pulse type is DP, DT, or MF (field IPULSTYP), enter the type of start dial signal required: • DD - delay dial on-hook idle • DIALTONE • GD - ground • GO - ground start • GS - ground start • IM - immediate dial • LP - loop start • LS - loop start • SZ - seize protocol • WK - wink Enter DIALTONE if trunk group type is P2. Enter DIALTONE for non-FXS circuits if trunk group type is PX, and dial tone is provided on origination.

Field descriptions for conditional datafill (Sheet 4 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	ISTARTSG (continued)		Enter IM if the entry in field IPULSTYP is NP (for two-way trunk groups GD is also a valid entry for this field value). Enter IM if the entry in field CARDCODE is DS1SIG and the trunk group is IBNTI (DIALTONE is not compatible with cardcode DS1SIG for IBN trunks). Enter GD if the entry in field CARDCODE is DS1FXO (IBNT2 trunks should use a cardcode of DS1FXO). Enter GS if the entry in field CARDCODE is FXOGS or FXSGS.
			Enter IM if trunk group is incoming from A.E. Co. local test desk. Enter LS if the entry in field CARDCODE is FXOLS or FXSLS. Enter WK if trunk group type is ATC or NFA. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by the DMS-250 switch are: • For ONAL trunks: — GO - ground start — LP - loop start • For DAL trunks: — GS - ground start — LS - loop start • For DAL and ONAL trunks: — SZ - seize protocol For FXS circuits, field DTONE in table TRKGRP for PX trunks must be used. Enter any of the permitted values in field ISTARTSG.

Field descriptions for conditional datafill (Sheet 5 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	ISTARTSG (continued)		If an attempt is made to add or change a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, the entry in table TRKGRP for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access. If field OFFNET is not set to Y (yes) and field OFFNTACC is not set to DAT in table TRKGRP, an error message is output on the MAP stating that this trunk signaling combination is not allowed. The only exception is for DTMF pulsing with an immediate start trunk signaling combination. If an IBNTI or IBNT2 trunk group is added with a cardcode of UKAC15, DTMF immediate start signaling combination can be used provided the trunks reside on a PDTC with a UTR, field IPULSTYP is set to DT, and field ISTARTSG is set to IM.
	OVLP	Y, N, or, blank	*Overlap outpulsing* If trunk group is DP, intertoll, local, or IBN, and if trunk-to-trunk overlap outpulsing is required, enter Y. Otherwise enter N (no). Enter N if trunk group is applicable to DP trunks. Enter N if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W.
	PSPDSEIZ	numeric(2 to 30) or blank	*Permanent signal or partial dial on seizure timing* Enter the time, in seconds, that the trunk has to wait for reception of each digit up to and including the specified minimum number of digits expected.
	PARTDIAL	numeric(2 to 30) or blank	*Partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each digit received after the specified minimum expected number of digits is received.

Field descriptions for conditional datafill (Sheet 6 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, TR, 3W, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • IB - inband • MW - multiwink • TR - coin control • LN - line number • 3W - third wire Otherwise, enter NO. Expanded inband coin control and ring back (entry value EI) can be specified if the switching unit supports outgoing traffic service position system (TSPS). Expanded inband coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N. If the entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a TSPS to a local switching unit, to collect and return coins. Enter NO if the trunk type is NFA.

Field descriptions for conditional datafill (Sheet 7 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT (continued)		Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive. The number of winks is interpreted as follows: • 1 - operator released • 2 - operator attached • 3 - coin collect • 4 - coin return • 5 - re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. If 3W is specified, the PEC must be 2X86AA. Third-wire coin control is a method of signaling from the switchboard to the switching unit over a third wire.
			DC signals on this wire are detected by the switching unit, that initiates a coin collect or a coin return to the coin station. ***Note:*** IB, MW, TR, and 3W types of coin control are supplied with the local basic software package. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 8 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	C6, C7_RING, EI, IB, LN, MW, SX, WK, or, NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • C6 - CCITT No. 6 Signaling • C7_RING - Common Channeling Signaling 7 • EI - expanded inband • IB - inband • LN - line number • MW - multiwink • SX - simplex • WK - wink Otherwise, enter NO. The default value is NO.
			Entry value IB cannot be specified if the entry in field CCONT is LN. Enter MW in order for ring forward and ring back to work if a Traffic Operator Position System (TOPS) operator attempts to ring forward to another TOPS operator, using an intertoll trunk. If SX is specified, the entry in field CARDCODE must be 2X85AA or 2X86AA. Enter NO if the trunk group is NFA. ***Note:*** Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 9 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	ESUPR	F, H, or, N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA, or if trunk type is INT101, used by DMS-300.
	SAT	Y or N	*Satellite* Enter Y if trunk subgroup is configured to switch through satellite. Otherwise, enter N. Enter N if trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 10 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y if the trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. If Y is entered, if the circuit is busied, an off hook signal is sent on the trunk and an off hook signal on the FXS circuit starts ringing the phone from the channel-bank. Enter Y for the voice links in an OC_REMOTE OC_HOST configuration. Failure to do so can result in a REMOTE_PROCESS_O software error (Swer) in the OC_REMOTE switching unit. The problem occurs if the OC-HOST assigns a voice link to be used for a TOPS call, tells the OC_REMOTE of the assignment, and the OC_REMOTE finds the assigned voice link in a state other than IDL. The OC_REMOTE terminates the call and generates a Swer and a series of AUDs. Enter Y if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W. Enter N if trunk group type is PX for FXS circuits. Enter N if the trunk group type is NFA.
	DIALMODE	C, M, or blank	*Dial mode* Enter C if incoming digits originate from a subscriber. Otherwise, enter M if incoming digits are machine produced. If customer dialed, no logs are produced for permanent signal, partial dial, and abandoned calls. Enter M If trunk group type is NFA.
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

Field descriptions for conditional datafill (Sheet 11 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* Datafill this field to indicate the status of the echo canceler on the trunk subgroup. This subfield replaces field ECEQUIP. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external canceler status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceler status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill refinements NSMATCH and AUTOON.
	ECSTAT (continued)		Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 12 of 12)

Field	Subfield or refinement	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INTERNAL or INNOTONE, datafill this field. To show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively canceling echoes, enter Y. To indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes, enter N. The default is N.
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, datafill this field. To show that auto re-enable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy, enter Y. To indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed, enter N. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

DIR = 2W

If the entry in field DIR is 2W, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSELECT as described below.

Field descriptions for conditional datafill (Sheet 1 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	DP, DT, MF, MFC, NP, RP, or blank	*Incoming type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing Enter DP, MF, or NP if the trunk group type is E911. Enter DP, MF, MFC, or RP if trunk group type is T1. Enter DP or MF if the trunk group type is T2. Enter DP if trunk group is UKEARTH2W. Enter DP if trunk group is incoming from A.E. Co. local test desk.

Field descriptions for conditional datafill (Sheet 2 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP (continued)		Enter DP if a trunk whose CLLI corresponds to the IBN cut-through selector. See table IBNXLA for cut-through dialing. Enter DP or DT if trunk group type is P2 or TPS101. Enter DT if trunk group is NFA. Enter DT if trunk group is UKLOOPIC or UKLOOP2W, or UKEARTHIC. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur Enter MF for feature group D (FGD) calls over IBNTI and IBNT2 trunks to the MSN. If trunk group type is ATC, leave this field blank. If the entry in field OFFNET is not Y (yes) and the entry in field OFFNTACC is not DAT in table TRKGRP, an error message is output on the map stating that this trunk signaling combination is not allowed.

Field descriptions for conditional datafill (Sheet 3 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP (continued)		The selection of DT, MF, and MFC type of incoming pulsing is incompatible with IM start dial signaling (field ISTARTSG set to IM). DT, MF, and MFC require tone receivers to process the incoming signaling tones. Under high traffic conditions, attachment of the receiver can take several hundred ms. Normally, this is handled by the selection of a start dial signaling protocol that includes a method to allow the necessary time needed to attach the tone receiver before tone dialing begins. An entry of IM in field ISTARTSG specifies that dialing can start within 70 ms of initiation of the trunk connection. This practice can result in improper connections. In table TRKGRP, if required, one or two digits (fields DIGIT0 and DIGIT1) can be prefixed to the incoming digits stream. However, if either field DIGIT0 or field DIGIT1 is datafilled with anything other than N and the entry in field IPULSTYP in table TRKSGRP is DT, there can be a delay in call completion of 12 to 14 s. Datafilling the above combinations on incoming trunks is prohibited by table control. Datafill is not allowed for two-way trunks. The combination DT IM in fields IPULSTYP and ISTARTSG respectively, must only be allowed for trunk group types DAL, MEL, and IAL. While the checking of office parameter DUMP_RESTORE_IN_PROGRESS in table OFCSTD allows existing DT IM trunks to be datafilled, no further DT IM trunks can be added.

Field descriptions for conditional datafill (Sheet 4 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP (continued)		If an IBNTI or IBNT2 trunk group is added, and has a cardcode of UKAC15, DTMF can be used providing the trunks reside on a PDTC with a universal tone receiver (UTR), field IPULSTYP is set to DT, and field ISTARTSG is set to IM. If an attempt is made to add a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, or to change a tuple to this configuration, the entry for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access.
	ISTARTSG	DD, DIALTONE, GD, GO, GS, IM, LP, LS, SZ, WK, or blank	*Incoming start dial signal* If incoming pulse type is DP, DT, or MF (field IPULSTYP), enter the type of start dial signal required: • DD - delay dial on-hook idle • DIALTONE • GD - ground • GO - ground start • GS - ground start • IM - immediate dial • LP - loop start • LS - loop start • SZ - seize protocol • WK - wink Enter DIALTONE if trunk group type is P2. Enter DIALTONE for non-FXS circuits if trunk group type is PX, and dial tone is provided on origination. Enter GD if the entry in field CARDCODE is DS1FXO (IBNT2 trunks should use a cardcode of DS1FXO).

Field descriptions for conditional datafill (Sheet 5 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	ISTARTSG (continued)		Enter GS if the entry in field CARDCODE is FXOGS or FXSGS. Enter IM if the entry in field IPULSTYP is NP (for two-way trunk groups GD is also a valid entry for this field value). Enter IM if the entry in field CARDCODE is DS1SIG and the trunk group is IBNTI (DIALTONE is not compatible with cardcode DS1SIG for IBN trunks).
			Enter IM if trunk group is incoming from A.E. Co. local test desk. Enter LS if the entry in field CARDCODE is FXOLS or FXSLS. Enter WK if trunk group type is ATC or NFA. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by the DMS-250 switch are: • For ONAL trunks: — GO - ground start — LP - loop start • For DAL trunks: — GS - ground start — LS - loop start • For DAL and ONAL trunks: — SZ - seize protocol For FXS circuits, field DTONE in table TRKGRP for PX trunks must be used. Enter any of the permitted values in field ISTARTSG.

Field descriptions for conditional datafill (Sheet 6 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	ISTARTSG (continued)		If an attempt is made to add or change a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, the entry in table TRKGRP for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access. If field OFFNET is not set to Y (yes) and field OFFNTACC is not set to DAT in table TRKGRP, an error message is output on the MAP stating that this trunk signaling combination is not allowed. The only exception is for DTMF pulsing with an immediate start trunk signaling combination. If an IBNTI or IBNT2 trunk group is added with a cardcode of UKAC15, DTMF immediate start signaling combination can be used provided the trunks reside on a PDTC with a UTR, field IPULSTYP is set to DT, and field ISTARTSG is set to IM.
	OVLP	Y, N, or blank	*Overlap outpulsing* If trunk group is DP, intertoll, local, or IBN, and if trunk-to-trunk overlap outpulsing is required, enter Y. Otherwise enter N (no). Enter N if trunk group is applicable to DP trunks. Enter N if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W.
	PSPDSEIZ	numeric(2 to 30) or blank	*Permanent signal or partial dial on seizure timing* Enter the time, in seconds, that the trunk has to wait for reception of each digit up to and including the specified minimum number of digits expected.

Field descriptions for conditional datafill (Sheet 7 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	PARTDIAL	numeric(2 to 30) or blank	*Partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each digit received after the specified minimum expected number of digits is received.
	OPULSTYP	DP, DT, MF, MFC, NP, RP, or blank	*Outgoing type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing

Field descriptions for conditional datafill (Sheet 8 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP (continued)		Enter DP if trunk group type is EA FGB. Enter DP or DT if trunk group type is TPS101. Enter DP or MF if the trunk is an outgoing end office trunk with trunk group type TO. Enter DT if trunk group type is two-way PBX. Enter DT if trunk group type is NFA. Enter DT if the outgoing type is NFA. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur ***Note:*** If DT is the selected pulsing type, an NT3X68 card is required. Enter MF if trunk group type is ATCP. Enter MF if trunk group type is PX. Enter NP if trunk group type is AN. Enter NP for FXS circuits, outpulsing of digits is not done. ***Note:*** Using NP for FGB traffic can cause problems for FGB billing.

Field descriptions for conditional datafill (Sheet 9 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	OSTARTSG	DD, IM, GO, GS, LO, LS, SZ, WK, XD, or, blank	*Outgoing start dial signal* If outgoing pulse type is DP, MF, or DT, enter the type of start dial signal required: • DD - delay dial off-hook idle • IM - immediate dial • GO - ground start • GS - ground start • LO - loop start • LS - loop start • SZ - seize protocol • WK - wink • XD - delay dial off-hook idle Enter IM if OPULSTYP is NP. Enter IM if trunk group is NFA. Enter SZ if the connection is always to an ATD, even if the entry in field ATDANS in table TRKGRP is N. Enter WK if trunk group is ATC. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by DMS-250 are: • For ONAL trunks: GO and LO. • For DAL trunks: GS and LS. • For DAL and ONAL trunks: SZ.

Field descriptions for conditional datafill (Sheet 10 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	IDGTIME	numeric0 to 100, or blank	*Interdigital timing* If the entry in field OPULSTYP is DP, MF, or NP, enter the interdigital timing interval in 10-ms intervals. Enter a minimum time of 20 (200 ms) for DP trunks. Enter 7 (70 ms) if type of pulsing is MF. Enter 0 (zero) if type of pulsing is NP.
	NUMSTOPS	numeric0 to 3, or blank	*Number of stop/goes* If the trunks are intertoll with DP pulsing, enter the maximum allowable number of stop/go signals. Otherwise, enter 0 (zero). Enter 0 (zero) if trunk group type is NFA.
	GLAREYD	Y, N, or blank	*Yield to glare* If the trunk subgroup must yield to glare, enter Y. Otherwise, enter N. Enter Y if trunk group is two-way PBX. Enter Y if the entry in field CLLI is UKLOOP2W or UKEARTH2W. Enter N if trunk group is NFA.

Field descriptions for conditional datafill (Sheet 11 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, TR, 3W, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • IB - inband • MW - multiwink • TR - coin control • LN - line number • 3W - third wire Otherwise, enter NO. Extended inband coin control and ring back (field value EI) can be specified if switching unit supports outgoing traffic service position system (TSPS). Entended inband coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N. If the entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a TSPS to a local switching unit, to collect and return coins. Enter NO if the trunk type is NFA. Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive.

Field descriptions for conditional datafill (Sheet 12 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT (continued)		The number of winks is interpreted as follows: • 1 - operator released • 2 - operator attached • 3 - coin collect • 4 - coin return • 5 - re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. If 3W is specified, the PEC must be 2X86AA. Third-wire coin control is a method of signaling from the switchboard to the switching unit over a third wire. DC signals on this wire are detected by the switching unit, that initiates a coin collect or a coin return to the coin station. ***Note:*** IB, MW, TR, and 3W types of coin control are supplied with the local basic software package. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 13 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	C6, C7_RING, EI, IB, LN, MW, SX, WK, or NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • C6 - CCITT No. 6 Signaling • C7_RING - Common Channeling Signaling 7 • EI - expanded inband • IB - inband • LN - line number • MW - multiwink • SX - simplex • WK - wink Otherwise, enter NO. The default value is NO. Entry value IB cannot be specified if the entry in field CCONT is LN. Enter MW in order for ring forward and ring back to work if a Traffic Operator Position System (TOPS) operator attempts to ring forward to another TOPS operator, using an intertoll trunk. If SX is specified, the entry in field CARDCODE must be 2X85AA or 2X86AA. Enter NO if the trunk group is NFA. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 14 of 18)

Field	Subfield or refinement	Entry	Explanation and action
			Enter NO if the trunk group is NFA. ***Note:*** Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA, or if trunk type is INT101, used by DMS-300.
	SAT	Y or N	*Satellite* Enter Y if trunk subgroup is configured to switch through satellite. Otherwise, enter N. Enter N if trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 15 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y if the trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. If Y is entered, if the circuit is busied, an off hook signal is sent on the trunk and an off hook signal on the FXS circuit starts ringing the phone from the channel-bank. Enter Y for the voice links in an OC_REMOTE OC_HOST configuration. Failure to do so can result in a REMOTE_PROCESS_O software error (Swer) in the OC_REMOTE switching unit.
	REMBSY (continued)		The problem occurs if the OC-HOST assigns a voice link to be used for a TOPS call, tells the OC_REMOTE of the assignment, and the OC_REMOTE finds the assigned voice link in a state other than IDL. The OC_REMOTE terminates the call and generates a Swer and a series of AUDs. Enter Y if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W. Enter N if trunk group type is PX for FXS circuits. Enter N if the trunk group type is NFA.
	DIALMODE	C, M, or blank	*Dial mode* Enter C if incoming digits originate from a subscriber. Otherwise, enter M if incoming digits are machine produced. If customer dialed, no logs are produced for permanent signal, partial dial, and abandoned calls. Enter M If trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 16 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	TRKGRDTM	numeric(1 to 255) or blank	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. If the entry in field OSTARTSG is LS or GS, the entry in field TRKGRDTM must be greater than 17 (170 ms). Enter 160 if the trunks are PX or FX. Enter 50 or greater if trunk group type is PX. Enter 70 if the entry in field CLLI is UKLOOPOG, UKLOOP2W, or UKEARTH2W.
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.
OPTIONS		CLB	*Clear back* Enter CLB for incoming and two-way CAS routes with UKAC15 or UKDC5 card codes. This options field is only datafilled in the CEU market where a CLB option is bound against the vector. Default value is $.

Field descriptions for conditional datafill (Sheet 17 of 18)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* Datafill this field to indicate the status of the echo canceler on the trunk subgroup. This subfield replaces field ECEQUIP. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external canceler status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceler status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill refinements NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 18 of 18)

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS (continued)	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INTERNAL or INNOTONE, datafill this field. To show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively canceling echoes, enter Y. To indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes, enter N. The default is N.
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, datafill this field. To show that auto re-enable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy, enter Y. To indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed, enter N. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

DIR = OG

If the entry in field DIR is IC, datafill refinements OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and ECSELECT as described below.

Field descriptions for conditional datafill (Sheet 1 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	DP, DT, MF, MFC, NP, RP, or blank	*Outgoing type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing Enter DP if trunk group type is EA FGB. Enter DP or DT if trunk group type is TPS101. Enter DP or MF if the trunk is an outgoing end office trunk with trunk group type TO. Enter DT if trunk group type is two-way PBX. Enter DT if trunk group type is NFA. Enter DT if the outgoing type is NFA. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur ***Note:*** If DT is the selected pulsing type, an NT3X68 card is required.

Field descriptions for conditional datafill (Sheet 2 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP (continued)		Enter NP for FXS circuits, outpulsing of digits is not done. ***Note:*** Using NP for FGB traffic can cause problems for FGB billing. Enter MF if trunk group type is ATCP. Enter MF if trunk group type is PX. Enter NP if trunk group type is AN.
	OSTARTSG	DD, IM, GO, GS, LO, LS, SZ, WK, XD, or blank	*Outgoing start dial signal* If outgoing pulse type is DP, MF, or DT, enter the type of start dial signal required: • DD - delay dial off-hook idle • IM - immediate dial • GO - ground start • GS - ground start • LO - loop start • LS - loop start • SZ - seize protocol • WK - wink • XD - delay dial off-hook idle Enter IM if OPULSTYP is NP. Enter SZ if the connection is always to an ATD, even if the entry in field ATDANS in table TRKGRP is N. Enter IM if trunk group is NFA. Enter WK if trunk group is ATC. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur

Field descriptions for conditional datafill (Sheet 3 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	OSTARTSG (continued)		The type of start dial signals used by DMS-250 are: • For ONAL trunks: GO and LO. • For DAL trunks: GS and LS. • For DAL and ONAL trunks: SZ.
	IDGTIME	numeric0 to 100, or blank	*Inter-digital timing* If the entry in field OPULSTYP is DP, MF, or NP, enter the interdigital timing interval in 10-ms intervals. Enter a minimum time of 20 (200 ms) for DP trunks. Enter 7 (70 ms) if type of pulsing is MF. Enter 0 (zero) if type of pulsing is NP.
	NUMSTOPS	numeric0 to 3, or blank	*Number of stop/goes* If the trunks are intertoll with DP pulsing, enter the maximum allowable number of stop/go signals. Otherwise, enter 0 (zero). Enter 0 (zero) if trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 4 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, TR, 3W, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • IB - inband • MW - multiwink • TR - coin control • LN - line number • 3W - third wire Otherwise, enter NO. Expanded inband coin control and ring back (field value EI) can be specified if switching unit supports outgoing traffic service position system (TSPS). Expanded inband coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N. If the entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a TSPS to a local switching unit, to collect and return coins. Enter NO if the trunk type is NFA.

Field descriptions for conditional datafill (Sheet 5 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT (continued)		Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive. The number of winks is interpreted as follows: • 1 - operator released • 2 - operator attached • 3 - coin collect • 4 - coin return • 5 - re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. If 3W is specified, the PEC must be 2X86AA. Third-wire coin control is a method of signaling from the switchboard to the switching unit over a third wire. DC signals on this wire are detected by the switching unit, that initiates a coin collect or a coin return to the coin station. ***Note:*** IB, MW, TR, and 3W types of coin control are supplied with the local basic software package. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 6 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	C6, C7_RING, EI, IB, LN, MW, SX, WK, or NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • C6 - CCITT No. 6 Signaling • C7_RING - Common Channeling Signaling 7 • EI - expanded inband • IB - inband • LN - line number • MW - multiwink • SX - simplex • WK - wink Otherwise, enter NO. The default value is NO. Entry value IB cannot be specified if the entry in field CCONT is LN. Enter MW in order for ring forward and ring back to work if a Traffic Operator Position System (TOPS) operator attempts to ring forward to another TOPS operator, using an intertoll trunk. If SX is specified, the entry in field CARDCODE must be 2X85AA or 2X86AA. Enter NO if the trunk group is NFA. ***Note:*** Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 7 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA, or if trunk type is INT101, used by DMS-300.
	SAT	Y or N	*Satellite* Enter Y if trunk subgroup is configured to switch through satellite. Otherwise, enter N. Enter N if trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 8 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y if the trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. If Y is entered, if the circuit is busied, an off hook signal is sent on the trunk and an off hook signal on the FXS circuit starts ringing the phone from the channel-bank. Enter Y for the voice links in an OC_REMOTE OC_HOST configuration. Failure to do so can result in a REMOTE_PROCESS_O software error (Swer) in the OC_REMOTE switching unit. The problem occurs if the OC-HOST assigns a voice link to be used for a TOPS call, tells the OC_REMOTE of the assignment, and the OC_REMOTE finds the assigned voice link in a state other than IDL. The OC_REMOTE terminates the call and generates a Swer and a series of AUDs. Enter Y if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W. Enter N if trunk group type is PX for FXS circuits. Enter N if the trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 9 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	TRKGRDTM	numeric(1 to 255) or blank	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. If the entry in field OSTARTSG is LS or GS, the entry in field TRKGRDTM must be greater than 17 (170 ms). Enter 160 if the trunks are PX or FX. Enter 50 or greater if trunk group type is PX. Enter 70 if the entry in field CLLI is UKLOOPOG, UKLOOP2W, or UKEARTH2W.
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

Field descriptions for conditional datafill (Sheet 10 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* Datafill this field to indicate the status of the echo canceler on the trunk subgroup. This subfield replaces field ECEQUIP. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external canceler status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceler status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill refinements NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the trunk group type is NFA.

Field descriptions for conditional datafill (Sheet 11 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INTERNAL or INNOTONE, datafill this field. To show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively canceling echoes, enter Y. To indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes, enter N. The default is N.
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, enter Y to show that auto re-enable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy. Enter N to indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

STDTL or CCIS6

If the type of pulsing is CCIS6 (Common Channel Interface Signaling No. 6), or if trunk group type in table TRKGRP is TL (transmission link), datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type STDTL/CCIS6.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric(1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements.
	SIGDATA	CCIS6 or STDTL	*Signaling data* For CCIS6 type trunks, enter CCIS6 and datafill refinements DIR, IPULSTYP, OPULSTYP, CONTCH, ESUPR, SAT, and GLARECTL from the following tables. For trunk type TL, enter STDTL (standard transmission link) and datafill refinements ECSTATUS and OPTIONS as described below.

SIGDATA = STDTL

If the entry in subfield SIGDATA is STDTL, datafill fields ECSTATUS and OPTIONS as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTATUS	see subfield	*Echo canceler status* This field consists of subfield ECSTAT.
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* If the entry in subfield SIGDATA is STDTL, datafill this field to indicate the status of the echo canceler on the trunk subgroup. Enter the type of echo canceler status used for STDTL trunks. Enter EXTERNAL for external echo canceler status and datafill fields ECREQD and OPTIONS. The default is UNEQ (unequipped).

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ECREQD	Y or N	*Echo cancelers datafilled* If the entry in subfield ECSTAT is EXTERNAL, datafill this field. Enter Y (yes) if the echo canceler status datafilled in subfield ECSTAT must be turned on if a nailed-up connection is made. Otherwise, enter N (no). Leave this field blank if the entry in subfield ECSTAT is INNOTONE, INTERNAL, or UNEQ.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	DCME	*Option* If the entry in subfield SIGDATA is STDTL, datafill this field. Enter the options applicable to this subgroup. The only valid entry is DCME. The default is an empty list. Datafill is complete for SIGDATA = STDTL.

SIGDATA = CCIS6

If the entry in subfield SIGDATA is CCIS6, datafill field DIR as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W IC or OG	*Direction* If the entry in subfield SIGDATA is CCIS6, datafill this field. Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing).

DIR = 2W or IC

If the entry in field DIR is 2W or IC, datafill field IPULSTYP as described below, then datafill fields CONTCHK, ESUPR, and SAT as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	C6 or blank	*Incoming type of pulsing* If the entry in subfield SIGDATA is CCIS6, and if the entry in field DIR is 2W or IC, datafill this field. Enter C6 for type of pulsing.

DIR = OG

If the entry in field DIR is OG, datafill field OPULSTYP as described below, then datafill fields CONTCHK, ESUPR, and SAT as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	C6 or blank	*Outgoing type of pulsing* If the entry in subfield SIGDATA is CCIS6, and if the entry in field DIR is OG, datafill this field. Enter C6.

DIR = all entries

For all entries in field DIR, datafill fields CONTCHK, ESUPR, and SAT as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CONTCHK	LOOP-ARO UNDTHRH THRLTLRH or2W2W	*Continuity check* Enter one of the following values: • LOOPAROUND • THRH - transmit high and receive high • THRL - transmit high and receive low • TLRH - transmit low and receive high • 2W2W - two-wire-two-way If this value is datafilled for a two-way trunk subgroup, the DMS performs a continuity test on the two-way trunk subgroup as if the DMS is a two-wire machine. If this value is specified for non two-way trunk subgroup, the attempt is rejected.
	ESUPR	F, H, or N	*Echo suppressor* If the entry in subfield SIGDATA is CCIS6, datafill this field. Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection.
	ESUPR (continued)		Enter H (half) if the trunk group has echo suppressors, and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA. Enter N if trunk type is INT101, used by the DMS-300 switch.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SAT	Y, N, or blank	*Satellite* If the entry in subfield SIGDATA is CCIS6, datafill this field. Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N. If the entry in field DIR is IC or OG, datafill is complete for SIGDATA = CCIS6.

DIR = 2W

If the entry in field DIR is 2W, datafill field GLARECTL as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	GLARECTL	ODD, EVEN, or blank	*Glare control* If the entry in subfield SIGDATA is CCIS6, and if the entry in field DIR is 2W, datafill this field. Enter ODD if the trunk group is two-way, and if CCIS glare control is on odd bands for the switching unit. Otherwise, enter EVEN. Datafill is complete for SIGDATA = CCIS6.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type T101

101 Communication Test Line Trunk Group Type

Trunk group type T101, which can be incoming or outgoing, is used for 101 tests in DMS offices.

Incoming 101 test lines use dial pulse (DP), Digitone (DT), and multifrequency (MF) dialing.

Datafill

The following table lists the datafill for table TRKGRP type T101.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, PRTNM, SCRNCL, and SNPA. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	GRPTYP	T101	*Group type* Enter T101 to specify the group type for 101 test lines.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is outgoing, the initial value for this trunk group type is NCOT (no-circuit other trunk). If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	DIR	IC or OG	*Direction* This field specifies the trunk group direction. Enter IC for incoming or OG for outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ, DSEQ, CWCTH, CCWCTH, LIDL, or MIDL	*Select sequence* If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. If the trunk group is outgoing, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			Entries outside this range are invalid. For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type T105

Terminating 105 Test Line Trunk Group Type

In a DMS office equipped with package ROTL, trunk group type T105 is used for terminating 105 test lines.

In offices without the ROTL package, terminating 105 test line must be datafilled as trunk group type IT (incoming trunk).

Datafill

The following table lists the datafill for table TRKGRP type T105.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, CONNGNPA, PRTNM, SCRNCL, SNPA, TERMTC, TOLLCOMP, and CCWKVLD. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	T105	*Group type* Enter T105 to specify the 105 test line trunk group.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no-circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIR	OG	*Direction* Enter OG to specify that the trunk group is outgoing.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ, DSEQ, CWCTH, CCWCTH, LIDL, or MIDL	*Select sequence* Enter the order of trunk selection. The order in which trunks are searched is determined by the order in which the trunk groups are datafilled in table TRKMEM, and by the value of SELSEQ. If sequential selection does not apply, enter MIDL. For outgoing trunk groups with feature package NTX244AB (Enhanced Sequential Trunk Hunting) present on the switch, enter • ASEQ for ascending, or DSEQ for descending sequential selection • CWCTH for clockwise, or CCWCTH for counterclockwise circular trunk hunting from the most recently released trunk in the trunk group

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			***Note 1:*** For more information on field SELSEQ, refer to table TRKGRP. ***Note 2:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	CONNGNPA	numeric (three digits)	*Connecting NPA* If the outpulsed digits are translated, enter the NPA code of the switch.
	PRTNM	NPRT	*Standard pretranslator name* Standard pretranslation is not required on outgoing trunk groups. Enter NPRT (no pretranslator).
	SCRNCL	NSCR	*Class-of-service screening table name* Class-of-service screening table name Class-of-service screening is not required on outgoing trunk groups. Enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving NPA code to which the trunk group belongs.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TERMTC	numeric (3 digits)	*Terminating toll center* If the outpulsed digits are translated and the switch is assigned a terminating toll center code, enter the terminating toll center code. If there is no terminating toll center code, enter 000.
	TOLLCOMP	Y or N	*Toll completing* Enter Y (yes), if the trunk group is connected to an end office (toll completing). Enter N (no), if the trunk group is connected to a toll (intertoll) switch.
	CCWKVLD	Y or N	*Carrier connect wink* This field is not required for group type T105. Enter N.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type T2

Two-Way End Office Trunk Group Type

In a DMS office, two-way trunk group type T2 connects with an end or toll office for local, direct, or tandem switching.

If the trunk group uses dial pulse signaling and trunk-to-trunk overlap outpulsing is required, the variable number of digits format is required and the minimum number of digits is the number of digits received before overlap outpulsing starts.

Datafill sequence

For trunk group type T2, table TRIGGRP must be datafilled before table TRKGRP.

Refer to table TRKGRP for additional datafill dependencies.

Datafill

The following table lists the datafill for table TRKGRP type T2.

Field descriptions (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.

Field descriptions (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, DIGSOUT, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, VDEVAR, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	T2	*Group type* Enter the two-way end office trunk group type T2.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. It is recommended that incoming and outgoing traffic separation numbers 1 to 9 be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	MIDL, LIDL, CWCTH, CCWCTH, ASEQ, or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group is 2W, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group is 2W, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 5 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			***Note:*** The selection sequence for an existing trunk group can be changed from ASEQ to DSEQ, or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ). The selection method for an existing trunk group cannot be changed. To change the selection method for an existing trunk group from ASEQ or DSEQ to CWCTH or CCWCTH, or to MIDL or LIDL, define a new trunk group, as follows: Create a new trunk group with the required trunk selection method, delete the individual trunks from the old trunk group, and add the trunks to the new trunk group.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* If the number of digits to be outpulsed is variable, enter 0 (zero) and specify the number of digits to be outpulsed in the appropriate route list. If the number of digits to be outpulsed is a fixed quantity, enter a value from 0 to 18.
GRPINFO (continued)	TOLL	Y or N	*Toll* If the trunk group is outgoing tandem and the connecting office is toll, enter Y (yes). Otherwise, enter N (no).

Field descriptions (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters)	*Standard pretranslation name* Enter the name of the standard pretranslator datafilled in table STDPRTCT to which translation routes on receipt of the first incoming digit. If no pretranslation is required, enter NPRT (no pretranslator). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	VDEVAR	see subfield	*Variable digit data* This field consists of subfield VDESEL.
	VDESEL	Y or N	*Variable digit selector* If the variable digit format is used for the standard pretranslator, enter Y and datafill refinements DIGSIN1 and DIGSIN2. Otherwise, enter N and datafill refinement DIGREGEN. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGSIN1	numeric (1 to 15)	*Minimum number of incoming digits* If the entry in subfield VDESEL is Y, enter the minimum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 8 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIGSIN2	numeric (1 to 15)	*Maximum number of incoming digits* If the entry in subfield VDESEL is Y, enter the maximum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerated* If the entry in subfield VDESEL is N, enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The length of the digit string entered is subtracted from seven by the switch to determine the number of incoming digits to expect. The regenerated number is then translated in table STDPRTCT.STDPRT or HNPACONT.HNPACODE, or both. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 9 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	OPTIONS	see subfield	*Options* Datafill up to three multiples of subfield OPTION and refinements.
	OPTION	BCNAME or CHGNUM	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To specify the charge-number-delivery option, which sends a charge number and originating line information (OLI) parameter with the initial address message (IAM), enter CHGNUM. No refinements are required for this entry value.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TD

Incoming and Outgoing Test Desk Trunk Group Type

In a DMS end office, incoming and outgoing trunk group type TD connects with a test desk (for example, #14 LTD, #3 LTC). Members of these trunk groups have PECs NT2X90AB or NT2X90AD.

If the dialed number is busy, the trunk is connected automatically to the line through metallic test access.

Line equipment numbers that do not have associated directory numbers (for example, multiline hunt group members) can be addressed by (11 + LEN) for testing purposes.

For example, if a trunk group with field VERSION equal to MLT or TSTDK is connected to a line that has option PLP, RMB, RSUS, or SUS activated, and a test desk is connected in idle bridge mode to that line, the line will go to treatment TDBR in treatment subtable LNT if one of the following conditions occur:

- the test desk closes its tip-and-ring loop
- the line goes off-hook

Trunk group type TD can, under certain circumstances, be used for verification. Refer to table TRKGRP type VR for more information.

Datafill

The following table lists the datafill for table TRKGRP type TD.

Field descriptions (Sheet 1 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.

Field descriptions (Sheet 2 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, TRKDIR, PRTNM, SCRNCL, SNPA, ORIGSCRE, VDEVAR, TDTYPE, and BARGE. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	TD	*Group type* Enter TD to specify the incoming and outgoing test desk trunk group type.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required; enter NCRT (no circuit). The initial value for this trunk group type is NCRT. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	LIDLMIDL, CWCTH, CCWCTH, ASEQ, or DSEQ	*Select sequence* If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. If the trunk group is outgoing, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 5 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	TRKDIR	IC or OG	*Trunk direction* Enter IC to specify that the direction of traffic flow is incoming or OG to specify that the direction of traffic flow is outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 6 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PRTNM	alphanumeric (1 to 4 characters)	*Standard pretranslator name* If the trunk group is incoming, enter the name of the standard pretranslator defined in table STDPRTCT to which translation is to route on receipt of the first incoming digit. If the trunk group is outgoing, enter NPRT (no pretranslator). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening). If the trunk group is outgoing, enter NSCR.
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If the trunk group is outgoing, enter 000.

Field descriptions (Sheet 7 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	ORIGSRCE	LCL or NLCL	*Originating source* If the trunk group is incoming, enter the originating source of the call, local (LCL) or non-local (NLCL). This field is used to screen calls in subtable HNPACONT.HNPACODE. If the trunk group is outgoing, enter LCL. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	VDEVAR	see subfield	*Variable digit data* This field consists of subfield VDESEL.
	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. If the number of incoming digits is a fixed quantity, enter N and datafill refinement DIGREGEN. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* If the entry in subfield VDESEL is Y, enter the minimum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 8 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIGSIN2	numeric (1 to 18)	*Maximum number of incoming digits* If the entry in subfield VDESEL is Y, enter the maximum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerate* If the entry in subfield VDESEL is N, enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The length of the digit string entered is subtracted from seven by the switch to determine the number of incoming digits to expect. The regenerated number is then translated in table STDPRTCT.STDPRT or HNPACONT.HNPACODE, or both. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 9 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TDTYP	see subfields	*Test desk type* This field consists of subfield VERSION and refinements.
	VERSION	MLT or TSTDK	*Version* If the incoming trunk group and switch has an interface for a mechanized loop tester, enter MLT and datafill refinement DGTTST. If the incoming trunk group and switch has an interface for signaling type 14 LTD, enter TSTDK and datafill refinements DGTTST and TKTYP. The default value for TD trunks is TSTDSK.
	DGTTST	EXTRCVR or INTRCVR	*Digit test* If the value in field VERSION is MLT or TSTDK, datafill this field to specify whether an internal or an external receiver is used in the NT2X90AB or NT2X90AD test trunk for the digit test. For an internal receiver, enter INTRCVR. For an external receiver, enter EXTRCVR. The default value is INTRCVR.

Field descriptions (Sheet 10 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	TKTYP	REGULAR, NOTEST, or blank	*Trunk type* If the value in field VERSION is TSTDK, datafill this field. Enter REGULAR for regular trunks or NOTEST for no-test trunks.
	BARGE	Y or N	*Barge* Datafill this field to specify whether barging into an existing call is allowed. If barging is allowed, enter Y. Otherwise, enter N. The default value for this subfield is N.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TDDO

Tandem Two-stage Direct-dial Overseas Trunk Group Type

Trunk group type TDDO is an outgoing or two-way trunk group that connects with an international originating toll center for tandem switching of two-stage calls. Only incoming and two-way intertoll and local trunk groups can terminate to trunk group type TDDO.

The outgoing pulsing and start signal types in table TRKSGRP must be no pulsing (NP) and immediate dial (IM), respectively.

Datafill

The following table lists the datafill for table TRKGRP type TDDO.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and TDDO_VDATA. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	TDDO	*Group type* Enter TDDO to specify the group type for tandem two-stage direct-dial overseas trunks.

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCIT (no-circuit intertoll). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TDDO_ VDATA	see subfields	*Tandem two-stage direct-dial overseas data* This field consists of subfields DIR, SELSEQ, and refinements.
	DIR	OG or 2W	*Direction* Datafill this field to specify the direction of traffic flow. For outgoing trunk groups, enter OG and datafill subfield SELSEQ. For two-way trunk groups, enter 2W and datafill subfield SELSEQ and refinements TRAFCLS, TOLLCOMP, SCRNCL, PRTNM, CONNGNPA, TERMTC, and SNPA.

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group is outgoing and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming, enter MIDL. Sequential selection does not apply to incoming trunks. Entries outside this range are invalid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Datafill this field only if the value in field DIR is 2W. Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	TOLLCOMP	N or Y	*Toll completion* Datafill this field only if the value in field DIR is 2W. If the trunk group is toll completing, enter Y (yes). Otherwise, enter N (no).

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Datafill this field only if the value in field DIR is 2W. Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* Datafill this field only if the value in field DIR is 2W. If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters)	*Standard pretranslator name* Datafill this field only if the value in field DIR is 2W. If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	CONNGNPA	numeric (3 digits)	*Connecting NPA* Datafill this field only if the value in field DIR is 2W. Enter the NPA to which the far end of the trunk group is assigned.
	TERMTC	numeric (3 digits)	*Terminating toll center* Datafill this field only if the value in field DIR is 2W. Enter the terminating toll centre code assigned to the far end of the trunk group. If no terminating toll centre code is applicable, enter 000.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TI

Incoming End Office Trunk Group Type

In a DMS office, incoming trunk group type TI connects with an end or toll office for local, direct, or tandem switching.

If the trunk group uses dial pulse signaling and trunk-to-trunk overlap outpulsing, the variable number of digits format is required. The minimum number of digits specified is the number of digits received before overlap outpulsing starts.

Data fill sequence

For trunk group type TI, table TRIGGRP must be datafilled before table TRKGRP.

For additional dependencies, refer to section “Table size" in table TRKGRP.

Datafill

The following table lists the datafill for table TRKGRP type TI.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, VDEVAR, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS
	GRPTYP	TI	*Group type* Enter the incoming end office trunk group type TI.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. It is recommended that incoming and outgoing traffic separation numbers 1 to 9 be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for incoming trunk groups. Enter NCRT (no circuit).
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* Enter the name of the standard pretranslator datafilled in table STDPRTCT to which translation routes on receipt of the first incoming digit. If pretranslation is not required, enter NPRT (no pretranslator). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source LCL (local) or NLCL (nonlocal). For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	VDEVAR	see subfield	*Variable digit data* This field consists of subfield VDESEL.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. If the number of incoming digits is a fixed quantity, enter N and datafill refinement DIGREGEN. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* If the entry in subfield VDESEL is Y, enter the minimum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIGSIN2	numeric (1 to 18)	*Maximum number of incoming digits* If the entry in subfield VDESEL is Y, enter the maximum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerate* If the entry in subfield VDESEL is N, enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The length of the digit string entered is subtracted from seven by the switch to determine the number of incoming digits to expect. The regenerated number is then translated in table STDPRTCT.STDPRT or HNPACONT.HNPACODE, or both. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits.

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	OPTIONS	see subfield	*Options* This field consists of up to two multiples of subfield OPTION and refinements.
	OPTION	BCNAME	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. If option BCNAME does not apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TL

CCIS Transmission Link Trunk Group Type

Two-way trunk group type TL is used to connect a DMS office using common channel interoffice signaling (CCIS) with other offices using CCIS, to transmit and receive signals between the two offices.

Since trunk group type TL does not support call processing functions, the table does not have any fields pertaining to connecting numbering plan area (NPA), standard pretranslator, class of service screening, or serving NPA.

Datafill

The following table lists the datafill for table TRKGRP type TL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, and NCCLS. Refer to section “General field information” in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	GRPTYP	TL	*Group type* Enter TL to specify the group type for transmission link trunks.
	TRAFSNO	numeric (0)	*Traffic separation number* A traffic separation number is not required. Enter 0 (zero).
	PADGRP	NPDGP	*PAD group* Enter NPDGP to specify that no pad group is required for this trunk group type. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field contains the operational measurements (OM) no-circuit class (NCCLS) that indicates which OM register is incremented if treatment GNCT (generalized no circuit) occurs. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TO

Outgoing End Office Trunk Group Type

The outgoing end office trunk group type TO in a DMS office interfaces with toll office for local traffic, direct or tandem.

Datafill

The following table lists the datafill for table TRKGRP type TO.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, DIGSOUT, and TOLL.
	GRPTYP	TO	*Group type* Enter the outgoing end office trunk group type TO.

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ, CCWCTH, CWCTH, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL.

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)			If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIGSOUT	0 to 15	*Digits outpulsed* If the number of digits outpulsed is a fixed quantity, enter the number of digits to be outpulsed. If the number of digits to be outpulsed is variable, enter 0 (zero), and specify the number of digits to be outpulsed in the appropriate route list. If software is not available for this feature, enter 0 (zero) and specify the number of digits to be deleted in the appropriate route list. If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (Yes), it is required that all trunks in the group have to be busied out before changing the value of this field by the data modification order.
	TOLL	Y or N	*Toll* If the trunk group is outgoing tandem and the connecting office is toll, enter Y (yes). Otherwise, enter N (N). Trunk groups are classified as toll route calls if the toll essential line feature is activated.

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	CHGNUM	*Option* Subfield OPTION can hold up to nine entries. Only the CHGMUM entry is available at this time. To specify the charge-number-delivery option, which sends a charge number and originating line information (OLI) parameter with the initial address message (IAM), enter CHGNUM. No refinements are required for this entry value.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TOPSARU

TOPS External Audio Response Unit Trunk Group Type

Table TRKGRP.TOPSARU adds a new trunk group type to accommodate external audio response units (ARU).

There is a relationship between table TRKGRP and table ARUMEMBR. TRKGRP data for Traffic Operator Position System (TOPS) ARU (TOPSARU) trunks must be datafilled prior to table ARUMEMBR. Table CLLI must be datafilled prior to table TRKGRP for TOPSARU trunks.

Conversely, a group cannot be removed from table TRKGRP without all its members being deleted from table ARUMEMBR first.

Changes are not allowed in table TRKGRP if there is data in table ARUMEMBR for that CLLI.

Datafill sequence

Table CLLI must be datafilled before table TRKGRP type TOPSARU.

Table ARUMEMBR must be datafilled after table TRKGRP type TOPSARU.

Refer to the general section of table TRKGRP for additional datafill sequence information.

Datafill

The following table lists the datafill for table TRKGRP type TOPSARU.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, and NCCLS. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TOPSARU	*Group type* Enter a new group type for external aurio response units (ARU) associated with the Traffic Operator Position System (TOPS) directory assistance (DA) voice response.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for the TOPSARU trunk group. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*

Additional information

This section provides information on error messages when datafilling table TRKGRP type TOPSARU.

If an attempt is made to datafill table ARUMEMBR first, the following error message is produced:

```
MEMBER IS NOT IN TABLE TRKGRP
```

If an attempt is made to delete a group with members remaining in table ARUMEMBR, the following error message is produced:

```
MEMBERS EXIST IN ARUMEMBR
```

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TOPSVL

TOPS Voice Link Trunk Group Type

Trunks of type TOPSVL (Traffic Operator Position System voice link) are the voice links to external applications such as Automated Alternate Billing Service (AABS).

Datafill

The following table lists the datafill for table TRKGRP type TOPSVL.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP TRAFSNO, PADGRP, NCCLS, SELSEQ, and DIR. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TOPSVL	*Group type* Enter the trunk group type TOPSVL.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). Entries outside this range are not valid. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	SELSEQ	MIDL	*Selection sequence* Enter MIDL, for most idle selection sequence. Entries outside this range are not valid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC, OG, or 2W	*Direction* Enter IC to specify that the traffic flow is incoming, OG for out-going, or 2W for two-way. For OSSAIN, datafill trunks according to the node type as follows: • Standalone - Datafill OG for links to service nodes. • OSAC host - Datafill OG for links to OSAC remotes and service nodes. • OSAC remote - Datafill IC for the link to the OSAC host. This direction must match with the direction in table TRKSGRP.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TPS101

International 101 Test Line Trunk Group Type

The 101 test line is a communication test line enabling two-way talking capability between a test card or test position and any trunk incoming from or outgoing to a DMS-200 family switch. This enables personnel to discuss problems between offices. A 101 call from a distant office causes ringing on every test position in the office.

The 101 test line provides the International DMS-200 with the following capabilities:

- CALLTRF (call transfer, a trunk test position [TTP] level MAP [maintenance and administration position] command): Call transfer capability enables maintenance functions, in addition to talking, on 101 calls.
- FLASH (also RE_RING or RINGFORWARD): The flash function applies ringing to a telephone set that is connected to the 101 line. Ringing is applied while that set is on hold and until the on-hold telephone is answered. A switch-hook flash sends ringing to the called end of the line.

Note: The FLASH feature of the 101 communication test line does not work if either end of the call does not have a ring-forward signal in its signaling system.

The 101 test line can be either incoming or outgoing, but not two-way. Only dial pulse (DP), and DIGITONE (DT) dialing are allowed on international 101 test lines.

When datafilling table TRKSGRP for the international 101 test line trunk, use the signaling system equal to STD.

Use of T101 lines in a PTM

Package trunk modules (PTM) peripheral modules (PM) are manufacturer discontinued. PTMs that are datafilled as PTMs in table TMINV cause international 101 test lines to fail. PTMs must be datafilled as MTMs (maintenance trunk modules) to avoid this problem.

Datafill

The following table lists the datafill for table TRKGRP type TPS101.

Incoming International 101 Test Line

The following is the switching unit dependent data required for each of the incoming international 101 test lines.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, and XLADATA. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TPS101	*Group type* Enter TPS101 to specify the international 101 test line trunk type.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). Entries outside this range are not valid. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	DIR	IC	*Direction* This field specifies the trunk group direction. Enter IC for incoming. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). Entry values other than those listed are not valid.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	MIDL	*Select sequence* If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL (most idle). Entries outside this range are not valid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	XLADATA	see subfields	*Translation data* This field consists of subfields XLADSEL, PRTNM, SCRNCL, SNPA, ORIGSRC, NETINDX, XLASYS, and XLANAME.
	XLADSEL	NALT, NETATTR, or UNIV	*Translation selector* If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill refinement NETINDX. If the universal translation system is used, enter UNIV and datafill refinement XLAAREA.

XLADSEL = NALT

If the entry in subfield XLADSEL is NALT, datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC as described below.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). The originating source determines, for the code dialed, whether the call is routed or blocked by the code type in the HNPACODE subtable. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

XLADSEL = NETATTR

If the entry in subfield XLADSEL is NETATTR, datafill refinement NETINDX as described below.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	numeric (0 to 1023)	*Network attribute index* Enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.

XLADSEL = UNIV

If the entry in subfield XLADSEL is UNIV, datafill refinement XLAAREA as described below.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	XLAAREA	see subfield	*Universal translation fields* This field consists of subfield XLASYS and refinement XLANAME.
	XLASYS	AC, AM, CT, CTY, DN, FA, FT, NSC, OFC, PX, or NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Enter a name from the code table that belongs to the head table referenced by field XLASYS.

Outgoing international 101 Test Line

The following is the switching unit dependent data required for each of the outgoing international 101 test lines.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, and XLADATA. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TPS101	*Group type* Enter TPS101 to specify the international 101 test line trunk type.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	DIR	OG	*Direction* This field specifies the trunk group direction. Enter OG for outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). Entry values other than those listed are not valid.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SELSEQ	ASEQ, DSEQ, LIDL, or MIDL	*Select sequence* If the trunk group is outgoing and sequential selection applies (feature package NTX244AB must be present), enter ASEQ for ascending sequential selection or DSEQ for sequential descending selection (based on the order of trunk members in table TRKMEM). If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL.
	XLADATA	see subfields	*Translation data* If the trunk group is outgoing, this field consists of subfields XLADSEL, XLASYS, and XLANAME.
	XLADSEL	UNIV	*Translation selector* If the universal translation system is used, enter UNIV and datafill refinement XLAAREA. Entry values other than those listed are not valid.
	XLASYS	NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Leave this field blank. Entry values other than those listed are not valid.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type TTL2

Terminating 102 Test Line Trunk Group Type

The carrier milliwatt test termination trunk groups (type TTL2) are used in switches configured for milliwatt supply and balance termination testing. Decibel level and supervision combinations that are used are shown in table. “Decibel levels and supervision combinations”.

Decibel level and supervision combinations

Level	Card code	Supervision
0 dB	1X00AA1X00AB	100 balance102 toll102 local102 steady (DMS-250 only)
-10 dB	1X00AF	100 balance102 toll102 local102 steady (DMS-250 only)
-15 dB	1X00AH	100 balance102 toll102 local102 steady (DMS-250 only)
-20 dB	1X00AE1X00AG	100 balance102 toll102 local102 steady (DMS-250 only)

Note 1: Cards NT1X00AA and NT1X00AB emit a milliwatt source of 1004 Hz at a 0-dB level. Their function is the same. The NT1X00AB card is an enhanced version of the NT1X00AA card.

Note 2: Note 2: If using PMTYPE DTM in table TRKMEM, the NT1X80 (enhanced digital recorded announcement machine) card provides all the above milliwatt tones according to the datafill in field MWDBLEVEL. For example, if MWDBLEVEL is datafilled as 1X100AB, then the milliwatt source of 1004 Hz at a 0 dB level comes from the NT1X80 card. Similarly, if this field is datafilled as 1X00AH, then the NT1X80 provides the -15 dB tone.

For related information, refer to TRKGRP type MAINT.

Datafill

The following table lists the datafill for table TRKGRP type TTL2.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, MWSPRVSN, and MWDBLVL. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TTL2	*Group type* Enter TTL2 to specify the terminating 102 test line trunk group type.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	MWSPRVSN	BMW, LMW, TMW, or SMW	*Milliwatt supervision* Enter one of the following milliwatt supervision types: • BMW for 100 balance • LMW for 102 local • SMW for 102 steady • TMW for 102 toll
	MWDBLEVL	1X00AA, 1X00AB, 1X00AE, 1X00AF, 1X00AG, 1X00AH, or 1X00KA	*Milliwatt decibel level* Specify the required decibel level by entering one of the following card codes: • 1X00AB (enhanced version of 1X00AA) • 1X00AA for 0 dB level • 1X00AF for -10 dB level • 1X00AH for -15 dB level • 1X00AG for -20 dB level • 1X00AE for -20 dB level (ROH tone international) • 1X00KA for 950 Hz tone at 0 dB in compliance with the China specifications

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

Telephone user part

If the type of signaling is telephone user part (TUP) on trunk group types IBNTI, IBNTO, and IBNT2 as datafilled in table TRKGRP, datafill table TRKSGRP as described in the following datafill table.

Datafill

The following table lists the datafill for table TRKSGRP type TUP.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements DIR, IPULSTYP, OPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, and TMRNAME.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
SGRPVAR (continued)	SIGDATA	TUP	*Signaling data* Enter TUP for the United Kingdom national variant of the Common Channel Signaling 7 ISDN user part type trunks.
	DIR	2W, IC, or OG	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the entry in field DIR is 2W, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, GLAREVAR, RCGLI, and OPTIONS as described below. If the entry in field DIR is IC, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, ALTRTE, TMRNAME, and RCGLI. If the entry in field DIR is OG, datafill subfields OPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, and OPTIONS.

DIR = 2W

If the entry in field DIR is 2W, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, GLAREVAR, RCGLI, and OPTIONS as described below.

Field descriptions for conditional datafill (Sheet 1 of 5)

Field	Subfield	Entry	Explanation and action
	IPULSTYP	SS7	*Incoming type of pulsing* Enter SS7.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default value is N.
	SAT	Y, N, or NIL	*Satellite* Enter Y (yes), if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded. Table C7UPTMR is not datafilled for this trunk.

Field descriptions for conditional datafill (Sheet 2 of 5)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the digital trunk controller (DTC) frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	PROTOCOL	BTUP MBTUP or UCP	*Signaling protocol type* Enter BTUP if the protocol is for the United Kingdom variant of the national user part. Enter MBTUP if the protocol is for United Kingdom variant of the national user part used within a UK market specific network. Enter UCP to provide ISDN user part (ISUP) connectivity between the DMS-250 and the MSL-100 switching units.

Field descriptions for conditional datafill (Sheet 3 of 5)

Field	Subfield	Entry	Explanation and action
	CBI	Y or N	*Cross border indicator* Enter Y if the call is traversing the boundary between two networks. Otherwise, enter N.
	ALTRTE	Y or N	*Alternate routing* This field determines whether routing control indicator (RCI) override is in effect. To specify that RCI override is operative, enter Y (yes). Otherwise, enter N (no).
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name, previously datafilled in table C7UPTMR, that is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found.
	OVLP	Y or N	*Overlap outpulsing* Enter Y if trunk-to-trunk overlap outpulsing is required. Otherwise, enter N.
	GLAREVAR	see subfield	*Variable glare control data* This field consists of subfield GLARETYP.
	GLARETYP	CIC or SGRPYLD	*Glare type* Enter CIC (circuit identification code) if glare is resolved using CICs. For example, given two switching units connected with two-way trunks, if glare occurs, the switching unit with the higher originating point code is granted control of all the trunks with even-numbered CICs. This other switching unit, with the lower originating point code, is granted control of all the trunks with odd-numbered CICs.

Field descriptions for conditional datafill (Sheet 4 of 5)

Field	Subfield	Entry	Explanation and action
	GLARETYP (continued)		Enter SGRPYLD (subgroup yield) if glare is resolved on a trunk subgroup basis, and datafill subfield GLAREYLD. For example, the switching unit administrators agree between themselves as to which trunk subgroups they are going to control and which they are going to yield. This is done on a trunk subgroup basis. The subgroup glare resolution method is only available if the value of office parameter ISUP_SUBGRP_GLARE_AVAILABLE in table OFCOPT is set to Y.
	GLAREYLD	Y or N	*Glare yield* Datafill this field if the entry in subfield GLARETYP is SGRPYLD. Enter Y if this switching unit is to yield control of the trunks in a glare condition in this subgroup. Otherwise, enter N.
	RCGLI	Y or N	*Request calling line identity* Enter Y to request the calling line identity (CLI). Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field has one subfield, OPTION.
	OPTION	ACO, SPMECIDX, or blank	*Option* Enter ACO to specify answer charge override. Enter SPMECIDX to specify a Spectrum peripheral module (SPM) echo canceller index. Then enter data for subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN.

Field descriptions for conditional datafill (Sheet 5 of 5)

Field	Subfield	Entry	Explanation and action
			After entering data to the OPTIONS field, datafill is complete for SIGDATA = TUP.

DIR = IC

If the entry in field DIR is IC, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, ALTRTE, TMRNAME, RCGLI, and OPTIONS as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
	IPULSTYP	SS7	*Incoming type of pulsing* Enter SS7.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default value is N.
	SAT	Y, N, or NIL	*Satellite* Enter Y (yes), if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded. Table C7UPTMR is not datafilled for this trunk.

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	PROTOCOL	BTUP MBTUP or UCP	*Signaling protocol type* Enter BTUP if the protocol is for the United Kingdom variant of the national user part. Enter MBTUP if the protocol is for United Kingdom variant of the national user part used within a UK market specific network. Enter UCP to provide ISDN user part (ISUP) connectivity between the DMS-250 and the MSL-100 switching units.
	ALTRTE	Y or N	*Alternate routing* This field determines whether routing control indicator (RCI) override is in effect. To specify that RCI override is operative, enter Y (yes). Otherwise, enter N (no).

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name, previously datafilled in table C7UPTMR, that is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found.
	RCGLI	Y or N	*Request calling line identification* Enter Y (yes) to request the CLI. When RCGLI is datafilled with Y, this CLI request functions regardless of the terminating agent. Otherwise, enter N (no), the default value. If the entry in field DIR is IC, datafill is complete for SIGDATA = TUP. ***Note:*** For the UK market, software release EUR004 modified this field to accept CLI requests when terminating to any agent, not just ISUP.
	OPTIONS	see subfield	*Options* This field has one subfield, OPTION.
	OPTION	ACO, SPMECIDX, or blank	*Option* Enter ACO to specify answer charge override. Enter SPMECIDX to specify a Spectrum peripheral module (SPM) echo canceller index. Then enter data for subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN. After entering data to the OPTIONS field, datafill is complete for SIGDATA = TUP.

Note: The options list is common to the datafill for all the signaling data selectors. Therefore some options may not be applicable to certain trunk types. For TUP signaling, the ACO option cannot be

datafilled on an incoming trunk. An attempt to do so causes the following error message:
*** ACO option is invalid on incoming IUP trunks

DIR = OG

If the entry in field DIR is OG, datafill subfields OPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, and OPTIONS as described below.

Field descriptions for conditional datafill (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
	OPULSTYP	SS7	*Outgoing type of pulsing* Enter SS7.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default value is N.
	SAT	Y, N, or NIL	*Satellite* Enter Y (yes), if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded. Table C7UPTMR is not datafilled for this trunk.

Field descriptions for conditional datafill (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup.Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	PROTOCOL	BTUP MBTUP or UCP	*Signaling protocol type* Enter BTUP if the protocol is for the United Kingdom variant of the national user part. Enter MBTUP if the protocol is for United Kingdom variant of the national user part used within a UK market specific network. Enter UCP to provide ISDN user part (ISUP) connectivity between the DMS-250 and the MSL-100 switching units.

Field descriptions for conditional datafill (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
	CBI	Y or N	*Cross border indicator* Enter Y if the call is traversing the boundary between two networks. Otherwise, enter N.
	ALTRTE	Y or N	*Alternate routing* Enter Y if alternate routing is allowed. Otherwise, enter N.
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name, previously datafilled in table C7UPTMR, that is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found.
	OVLP	Y or N	*Overlap outpulsing* Enter Y if trunk-to-trunk overlap outpulsing is required. Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field has one subfield, OPTION.
	OPTION	ACO, SPMECIDX, or blank	*Option* Enter ACO to specify answer charge override. Enter SPMECIDX to specify a Spectrum peripheral module (SPM) echo canceller index. Then enter data for subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN. After entering data to the OPTIONS field, datafill is complete for SIGDATA = TUP.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type UKSTD

UKSTD

This trunk subgroup data is used for outgoing integrated business network (IBN) trunks supporting United Kingdom operating companies' 3J type III/IV loop disconnect signaling. A BT3J type III/IV call is a call outgoing from a DMS switch to a group switching center in the United Kingdom.

Datafill

The following tables list datafill for table TRKSGRP type UKSTD.

Field descriptions for conditional datafill (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		UK3JLDE	*Card code* Enter UK3JLDE, the card code for the United Kingdom 3J loop disconnect signaling trunk.

Field descriptions for conditional datafill (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* For United Kingdom standard signaling, this field consists of subfield SIGDATA and refinements DIR, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and OPDELAY.
	SIGDATA	UKSTD	*Signaling data* Enter UKSTD for United Kingdom standard signaling.
	DIR	OF	*Direction* Enter the trunk group direction, OG (outgoing). Only outgoing trunks are currently supported for UKSTD signaling.
	OPULSTYP	DP	*Outgoing type of pulsing* Enter DP (dial pulse). Only DP is supported for card code UK3JLDE.
	IDGTIME	numeric (50 to 135)	*Interdigital timing* If the entry in field DIR is OG and the entry in field OPULSTYP is DP, enter the interdigital timing interval in 10-ms intervals. For DP trunks, the minimum allowed interdigital time is 200 ms. The default is 80 (800 ms).
	NUMSTOPS	0	*Number of stop/goes* Enter 0 (zero) since stop and go signals are not supported.

Field descriptions for conditional datafill (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	CCONT	EI, IB, LN, MW, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • B - inband • MW - multiwink • TR - Coin control • LN - line number Otherwise, enter NO. The default is NO. I for coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N (no). If entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a traffic service position system (TSPS) to a local switching unit, to collect and return coins.

Field descriptions for conditional datafill (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)			Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. • The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive. • The number of winks is interpreted as follows: — 1. operator released — 2. operator attached — 3. coin collect — 4. coin return — 5. re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional datafill (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	RNGBCK	EI, IB, LN, MW, WK, or NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • EI - expanded inband • B - inband • LN - line number • MS - multiwink • WK - wink Otherwise, enter NO. The default is NO. If entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR or NO, then the datafill for field RNGBCK has no restriction. If office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is equal to N, EI for coin control and ring back is not allowed.

Field descriptions for conditional datafill (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	ESUPR	F, H, or N	*Echo suppressor* This field indicates the status of the echo canceler on the trunk subgroup. Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default is N.
	SAT	Y or N	*Satellite* Enter Y (yes) if trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). The default is N.
	REMBSY	Y or N	*Remote make busy* Enter Y if trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. The default is N.

Field descriptions for conditional datafill (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	TRKGRDTM	numeric (1 to 255) or blank	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. Enter a 160 ms increment if the trunks are PX/FX.
	OPDELAY		*Outpulsing delay* If the entry in field DIR is OG and the entry in field OUPLSTYP is DP, enter the maximum delay, in 10-ms intervals, between receiving a seize acknowledgement signal from the far end and the start of digit outpulsing. The default is 60 (600 ms).

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type UT

Utility Telemetry Trunk Group Type

Trunk group type UT is used to assign utility telemetry (UT) trunks, which connect a Central Office Service Unit (COSU) to a DMS office. When connected to the DMS office by UT trunks, the COSU can initiate and control telemetry calls to subscriber lines through the DMS office, which attempts to establish the connections.

Datafill

The following table lists the datafill for table TRKGRP type UT.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, OFFHKID, STDGT, STPDGT, ST2PDGT, MAXTIME, ANSWTIME, BILLING, CALLINTR, OPENDISC, and SFTRCODE. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	GRPTYP	UT	*Group type* Enter UT to specify the group type for utility telemetry trunks.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving NPA* Enter the serving NPA code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to section “Notes on originating source" in table HNPACONT.HNPACODE.
	OFFHKID	0 to 99	*OFF-hook transmission protocol identifier* Enter the ANI II identifier for off-hook transmission. The default value is 70.

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	STDGT	0	*ST digit abbreviated ring duration* Enter 0 (zero). An abbreviated ring duration is not supported in this version. The default value is 0.
	STPDGT	0	*STP digit abbreviated ring duration* Enter 0 (zero). An abbreviated ring duration is not supported in this version. The default value is 0.
	ST2PDGT	0	*ST2P digit abbreviated ring duration* Enter 0 (zero). An abbreviated ring duration is not supported in this version. The default value is 0.
	MAXTIME	1 to 999	*Maximum call time* Enter the maximum duration (in seconds) of a telemetry call. The default value is 20.
	ANSWTIME	0 to 20	*Answer timeout* Enter a timeout value (in units of 100 ms) for the interval between the generation of the post-cut-through wink sent to the trunk and the TIU answering the call. For no timeout, enter 0 (zero). The default value is 5.

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	BILLING	Y or N	*Billing record required* If calls originating on this trunk group will generate a billing record, enter Y (yes). Otherwise, enter N (no). The default value is Y. ***Note:*** The DMS office must meet the following two conditions for BILLING to be set to Y: • It must use the Bellcore AMA format for its billing records. The billing format is specified in table CRSFMT. • The LAMA software feature must be present. It is present if the office parameter LAMA_OFFICE is set to Y (yes) in table OFCOPT.
	CALLINTR	Y or N	*Call interrupt* If calls originated on this trunk group can be interrupted by a new incoming call to the end user's line, enter Y (yes). Otherwise, enter N (no). The default value is N.

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	OPENDISC	Y or N	*Open battery interval for disconnect* If an 800-ms open battery interval is to be applied to the line to disconnect the Telemetry Interface Unit (TIU), enter Y (yes). Otherwise, enter N (no). The default value is Y.
	SFTRCODE	0 to 999	*Service feature code* Enter the service feature code that is to appear in the AMA record (if one is generated). The default value is 0.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type VR

Operator Verification Trunk Group Type

Outgoing trunk group type VR (verification) in a DMS end office is used by a minibar switch to provide metallic path access to a call in progress.

Metallic path access is required if an operator has attempted an authorized call verification on a line that is busy.

Verification calls can originate on trunk group types A5, OC, OP, OI, or TD if one of the following conditions applies:

- the trunk group is dedicated to verification (field MODE is VF)
- the trunk group is dedicated to toll completing and verification (field MODE is CV), and the type of call is OA (operator assisted)

Trunks with the trunk group type VR are assigned to horizontals of the minibar switches in the table MTAMDRVE.

Trunks with trunk group type VR are datafilled with card code NT2X90A in table TRKSGRP.

The hold type for trunk group type verification (VR) type is joint hold. This means that the call is taken down if both the originator and the terminator are on hook.

Datafill

The following table lists the datafill for table TRKGRP type VR.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI. The operator verification trunk group for the switch has pseudo-CLLI VER90 in table CLLI. The codes in table CLLI for operator verification trunk groups for remote sites are defined by the operating company. For assignment of operation verification trunk groups for remote switches, see table SITE.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and TRAFCLS. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	GRPTYP	VR	*Group type* Enter the trunk group type VR.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type X25

X25

Table TRKSGRP provides the table control type for X.25. The SGRPVAR field can be populated with signaling type X.25. Signaling type X.25 distinguishes the PRI as a X.25 semi-permanent packet

Datafill

The following table lists datafill for table TRKSGRP type X25.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR	SIGDATA	X25	*Signaling data* This field establishes the PRA subgroup as X.25 semi-permanent packet.Enter X25 to indicate X.25 signaling type.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKSGRP type X75

X75

Table TRKSGRP provides the table control required to datafill for X.75 signaling. This signaling type can only be used for subgroups on X.75 trunk groups. Input data must be specified for exactly one subgroup (subgroup 0) for each X.75 trunk group listed in table TRKSGRP.

Datafill

The following tables list datafill for table TRKSGRP type X75.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code representing the trunk group in table CLL!.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero). The default is 0.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements SIGDATA, VERSION, TDI, RCI, CNIC, TDS, TRFOUT, TRFINC, NUI, CUGSCR, ACCHAR, PCP, and X75IDS.

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	SIGDATA	X75	*Signaling data* Enter X75 to specify X.75 signaling.
	VERSION	X75 or X75P	*Version* Enter X75 or X75P.
	TDI	Y or N	*Transit delay indication* The international mandatory utility is used to signal the transit delay of the virtual circuit. Enter Y (yes) if the international mandatory utility is inserted or passed. Otherwise, enter N (no).
	RCI	Y or N	*Reverse charging indication* Reverse charging indication is an international utility used for establishing virtual calls. Enter Y if virtual calls are allowed. Enter N if virtual calls are cleared.
	CNIC	Y or N	*Clearing network identification code* Enter Y if the international option X.75 network utility that provides additional information on the origin of the clear request packet is inserted or passed. Otherwise, enter N.
	TDS	Y or N	*Transit delay selection* Enter Y if an international optional utility used to signal the transit delay requested by the calling digital trunk equipment (DTE) is inserted or passed. Otherwise, enter N.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR (continued)	TRFOUT	Y or N	*Tariff-outgoing call* Enter Y if the international optional X.75 utility is inserted to pass information from one network to one or more other networks participating in the call to bill, account or tariff arrangements that exist among the respective administrations. Otherwise, enter N.
	TRFINC	Y or N	*Tariff-incoming call* Enter Y if the international optional X.75 utility is passed to send information from one network to one or more other networks participating in the call to bill, account or tariff arrangements that exist among the respective administrations. Otherwise, enter N.
	NUI	Y or N	*Network user identification* Enter Y if the X.75 utility is inserted or passed. Enter N if the packet is passed without the utility once it has been validated and the call is cleared.
	CUGSCR	Y or N	*Closed user group screening* Enter Y if the trunk performs closed user group (CUG) screening on outgoing CUG calls. Otherwise, enter N. If the entry in field VERSIOn is X75, datafill is complete for SIGDATA = X75.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ACCHAR	Y or N	*Access characteristics* If the entry in field VERSION is X75P, datafill this field. Enter Y if the Bell operating companies' (BOC) specific utility that carries information recorded in the automatic message accounting (AMA) records is inserted or passed. Otherwise, enter N.
	PCP	Y or N	*Protocol conversion permissions* If the entry in field SIGDATA is X75P, datafill this field. Enter Y if the BOC specific utility requiring protocol information is passed. Enter N if the utility is not passed, it is tandem only.
	X75IDS	Y or N	*X75 interface identifier signaled* If the entry in field SIGDATA is X75P, datafill this field. Enter Y if the BOC specific X.75 utility used to pass the X.75 identifier between subnetworks is inserted or passed. Otherwise, enter N.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

TRKGRP type ZI

0+ and 0- Tandem to TSPS or TOPS Trunk Group Type

For related information, refer to TRKGRP types OP, OS, and SC.

Incoming trunk group type ZI in a DMS toll office performs tandem switching of 0+ and 0- traffic to Traffic Operator Position Systems (TOPS) over outgoing trunk group type OP (operator position).

If the far-end switch is a DMS switch, the far-end trunk group type ZI leaves the far-end DMS office as trunk group type OP.

Signaling from the operator to the end office must be either inband or multiwink. If signaling is multiwink, it is transmitted directly through the switching network to the end office.

Note: TRKGRP type ZI is only used in currently existing DMS central offices.

For new applications, use one of the following trunk group types instead of TRKGRP type ZI:

- TRKGRP type OP: outgoing or two-way from a local or toll trunk group to a TOPS or traffic service position system (TSPS) trunk group
- TRKGRP type OS: outgoing from toll trunk group
- TRKGRP type SC: two-way or incoming centralized automatic message accounting (CAMA) AMR5 trunk group

Datafill

The following table lists the datafill for table TRKGRP type ZI.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, COIN, and POS. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	ZI	*Group type* Enter the trunk group type ZI.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*PAD group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued)	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). Entries outside the range indicated for this field are not valid. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* No pretranslation is required. Enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* Class-of-service screening is not required. Enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving NPA code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (continued	COIN	Y or N	*Coin* Enter Y (yes) if the trunk group carries coin traffic. Otherwise, enter N (no). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	POS	CTOP, TOPS, or TSPS	*Position* Enter the position in the position table that lists the CLLI of the terminating trunk group. Enter CTOP for the Centralized Traffic Operator Position, TOPS for the Traffic Operator Position System, or TSPS for the Traffic Service Position System.

Table history

SN08

Table migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual* , 297-8021-351.09.03.

USPPATHS

Automatic Call Distribution Routing

Universal Signaling Point M3UA table

Table USPPATHS stores the M3UA connection data for an IP connection between the DMS Core and USP identified in the PATHSET table.

Datafill sequence and meaning

Table USPPATHS must be datafilled in the following sequence:

- PATHSET
- USPPATHS

Table size

0 to 16 tuples

Datafill

The following table shows the datafill for table USPPATHS.

Field, subfield, and refinement descriptions for table USPPATHS (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PATH		<PATHSET> <number>	The name of the M3UA path defined in the table PATHSET, and a path number within the pathset. There can be up to 8 paths, and up to 16 path numbers for each path. For example, USP1.
SRCPORT		0 to 32767	IP port number The IP port number used by the core to connect to the USP for this PATH.
DESTIP		<IP_Address>	Destination IP address Enter the destination IP address for the this PATH.

Field, subfield, and refinement descriptions for table USPPATHS (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DESTPORT		0 to 32767	Destination port Enter the destination port number used by the USP for this PATH.
PATHSEL		0 or 1	Selector Enter the selector for the IP address used by this PATH in table CMIP.

VIRTGRPS

ATTENTION
This table applies to new or modified content for SN06 (DMS) that is valid through the current release.

Virtual Facility Group Table

The virtual facility group (VFG) tables consist of table VIRTGRPS, table VFGDATA, and table VFGENG.

For switching units with the Partitioned Table Editor, non-operating company users cannot change entries in table VIRTGRPS. They cannot change entries because each entry in the table can contain data for up to three different owners. Tables VFGDATA and VFGENG were created to give non-operating company users access to the data in table VIRTGRPS.

Non-operating company users only have access to tables VFGDATA and VFGENG. Changing the data in table VIRTGRPS affects the data in tables VFGDATA and VFGENG.

Calls via a Virtual Facility Group cannot be routed to make a Network Speed Call or an ESN-Network Speed Call.

Table VIRTGRPS provides a mechanism to eliminate loop-around trunks. Loop-around trunks are used to implement Integrated Business Networks (IBN) inward wide area telephone service (INWATS) and outward wide area telephone service (OUTWATS) and to provide equal access capabilities.

To simulate finite resources (lines or trunks) in software, a facility called virtual facility group (VFG) is provided. When a facility group is accessed from table IBNRTE, the switch checks if there are any virtual facilities available. If none are available, the call is blocked. If a virtual

facility is available, it is marked as used. The call is then retranslated through the VIRTGRPS table and one of the following events occurs:

- If the type of incoming call is nil, no new attributes are given to the call.
- If the type of incoming call is plain ordinary telephone service (POTS), a new billing number (if datafilled) and a new line attribute index are used for the next leg of the call.
- If the type of incoming call is IBN, a new billing number (if datafilled), a customer group and subgroup number, a terminating restriction code, a network class of service, and other attributes are used for the next leg of the call.

Billing numbers can be from 1 to 11 digits. It is recommended that the billing code be a ten-digit number. Under certain conditions, billing numbers of less than ten digits can cause traps.

If Station Message Detail Recording (SMDR) is specified, an SMDR record is generated. If SMDR is not specified, an SMDR record is not generated.

If Call Detail Recording (CDR) is specified, regardless of whether SMDR is specified or not, an SMDR record is generated.

The VFG can be assigned one or more of the following options:

- automatic message accounting (AMA) calling entry identification (ENTRYID)
- customer group (CUSTGRP)
- equal access (EA)
- Integrated Business Network Primary Inter-local access and transport access (LATA) carrier (IBNPIC)
- international primary carrier (INTPIC)
- primary billing directory number (PRIBILDN)
- primary interLATA carrier (PIC)
- primary intraLATA carrier (LPIC)
- routing characteristic name (RCNAME)
- special billing directory number (SPBDN)
- terminating billing option (TBO)
- toll restriction (TOLLRST)
- virtual facility group alternate line screening code (VFGALSC)

- virtual facility group automatic message accounting (VFGAMA)
- virtual facility group line screening code (VFGLSC)

A brief description of each of these options is provided in the following.

Automatic Message Accounting (AMA) calling entry identification (ENTRYID)

This option provides the ability to specify whether AMA calling entry identification is provided for AMA billable calls originated from the virtual facility group.

Customer group (CUSTGRP)

This option is required if the VFG is assigned to an attendant console for VFG access control or VFG group busy. This option specifies the customer group to which the VFG is assigned.

Equal access (EA)

This option provides equal access capabilities to IBN stations and incoming trunks. The IBN stations include attendant consoles, data units, P-phone sets, and standard IBN 500/2500 sets. These stations can reside in a dedicated SL-100 private branch exchange (PBX) or part of a customer group in a class 5 switching unit that has the IBN feature.

The EA option can only be used for entries that have POTS in field INCTYPE. It specifies whether the calling party can manually choose the PIC. This is determined by the entry in subfield CHOICE.

If the entry is N (no), the PIC must be specified in table VIRTGRPS. If the entry is Y (yes), the PIC is optional and can be manually chosen.

If the PIC is not specified, the called number must be prefixed by digits 10XXX. If digits 10XXX are used to manually choose a PIC, the digits 10XXX must not be deleted in table IBNXLA.

Integrated Business Network Primary Inter-local access and transport access (LATA) carrier (IBNPIC)

This option allows a line PIC or customer group PIC that is used in the first leg of translations to carry over to the second leg of translations. The VFG PIC, if present, is ignored. If the IBNPIC option is not present, the VFG PIC is used.

If the IBNPIC option is present and neither the line nor the customer group has a PIC assigned, the call proceeds to reorder treatment whether or not the VFG has a PIC assigned.

International Primary Carrier (INTPIC)

This option allows Equal Access End Office (EQEO) subscribers to use a presubscribed long distance carrier for international calls. It is only valid if option EA is also assigned.

When prompted for the option, datafill option INTPIC, the name of the desired international carrier in subfield CARRIER, and Y or N to allow or disallow the choice for Carrier Access Code (CAC) dialing in subfield CHOICE.

If the subscriber makes an international call and option INTPIC is not assigned in table VIRTGRPS, then the call defaults to the carrier specified in option EA in table VIRTGRPS.

Note: World Zone 1 calls do not use option INTPIC. These calls use option PIC to choose a carrier.

Inter-local access and transport area (LATA) primary carrier (PIC)

This option provides an equal access carrier for inter-LATA calls. It is only valid if option EA is also assigned.

Intra-local access and transport area (LATA) primary carrier (PIC)

This option provides an equal access carrier for intra-LATA calls. It is only valid if the EA option has been assigned.

Billing directory number (BILLDN)

This option spills the PRI trunk group's Billing Directory Number (BILLDN) over an E911 VFG.

Routing characteristic name (RCNAME)

This option provides integrated services digital network (ISDN) translation with an optional new routing characteristic name (RCNAME) for the retranslation of an ISDN originated VFG call.

If the RCNAME option is not present in table VIRTGRPS for an ISDN originated call, then the call's original RCNAME is used for the call's retranslation. If the RCNAME option is present for a non-ISDN originated call, then the option is ignored.

Special billing directory number (SPBDN)

This option spills the Calling DN's SPBDN over an E911 VFG.

Terminating billing option (TBO)

This option provides a billable method for charging the end user for a call. When a call terminates to a line assigned the TBO option, an AMA

record with a call code between 800 and 999 is generated. The call code is assigned when the TBO option is added to the line.

Toll restriction (TOLLRST)

This option allows a toll restriction for a call to carry through to the second leg of translations. The option is used when a call terminates to a virtual facility group (VFG) and retranslation occurs.

Virtual facility group alternate line screening code (VFGALSC)

This option is required when the VFG is assigned to an attendant console for VFG access control. With this option, the group is assigned an alternate line screening code flag number in table LSCFLAGS and an alternate IBN treatment number in table IBNTREAT. The alternate line screening and IBN treatment are used when the VFG access control is activated. Calls are routed to the IBN treatment when they fail screening.

Virtual facility group automatic message accounting (VFGAMA)

This option is required for Bellcore AMA recording. It identifies the VFG as being a member of a common control switching arrangement (CCSA) network or a tandem tie trunk (TDMTT).

With this option, an incoming IBN group is designated as a member of a CCSA network or a TDMTT. This AMA record is uniquely identified with call code 21 or call code 032, respectively. Each call that is routed through the VFG generates a detailed AMA recording for analysis.

Virtual facility group line screening code (VFGLSC)

This option provides line screening for the VFG. With this option, the VFG is assigned a line screening code flag number in table LSCFLAGS and an IBN treatment number in table IBNTREAT. Calls are routed to the IBN treatment when they fail screening.

Datafill sequence and meaning

Table RCNAME must be datafilled before table VIRTGRPS.

Interaction with office parameters

If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCSTD is set to Y and office parameter E911_NPD_TO_NPA_CONV_IN_EFFECT is set to N, datafill table E911NPD prior to datafilling field NPA in table VIRTGRPS for INCTYPE E911.

If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCSTD is set to Y and office parameter E911_NPD_TO_NPA_CONV

_IN_EFFECT is set to Y, table E911 does not need to be datafilled prior to datafilling field NPA in table VIRTGRPS for INCTPE.

If office parameter E911_CHECK_DEFAULT_ESN in table OFCVAR is set to Y (yes), table E911ESN must be datafilled before an E911 VFG entry can be datafilled in table VIRTGRPS.

If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCVAR is set to Y, table E911NPD must be datafilled before an E911 VFG entry can be datafilled in table VIRTGRPS.

Table size

0 to 8092 tuples

Memory is allocated dynamically. Because of dynamic memory allocation, each tuple is assigned a numeric index. Deleting tuples from table VIRTGRPS can change the index numbers used to populate SMDR records and Operational Measurements.

Datafill

CAUTION
Increased CPU occupancy
Each virtual facility group and its members are scanned every 10 s in order to compute OM group VFGIWUSE register VFGIWTRU. CPU occupancy may increase when several large virtual facility groups are added to table VIRTGRPS.

The following table lists datafill for table VIRTGRPS.

Field, subfield, and refinement descriptions for table VIRTGRPS (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
Key		see subfield	*Virtual facility group (VFG) key* This field is the key to table VIRTGRPS and consists of subfield VIRTGRP.
	VIRTGRP	alphanumeric (1 to 6 characters) or blank	*Virtual facility group* If the entry is the first entry for the VFG, enter a user-defined name. The addition of a tuple defines the name that is used in other tables that need VFGs. If the entry is not the first entry for the VFG, leave this field blank.
DATA		see subfields	*Virtual facility group data* This field consists of subfields MEMBERS and INCTYPE.

Field, subfield, and refinement descriptions for table VIRTGRPS (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	MEMBERS	see subfields	*Virtual facility group members* This subfield consists of refinement VFGTYPE, and subfields USESGRP and SIZE.
	VFGTYPE	SIZE or USES	*Virtual facility group type* If this is the first entry for the VFG, enter SIZE. If this is not the first entry, enter USES.
	USESGRP	alphanumeric or nil	*Virtual facility group name* Datafill this refinement if the value of VFGTYPE is USES. The VFG name is the name of the VFG specified in table VIRTGRPS. This entry provides the means to have virtual two-way trunks or to associate more than one set of screening data with the same set of virtual circuits, or both. If the entry is not the first for the VFG, enter NILVFG.

Field, subfield, and refinement descriptions for table VIRTGRPS (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
DATA (continued)	SIZE	0 to 2048	*Size* Datafill this refinement if the value of subfield VFGTYPE is SIZE. Enter the number of simultaneous accesses allowed for the VFG.
	INCTYPE	E911, IBN, NIL, or blank	*Incoming type* If this is the first entry for the VFG, do one of the following steps: Enter E911 to terminate 911 calls from an end office to an E911 tandem through incoming ISDN user part (ISUP) or super centralized automatic message accounting (SuperCAMA) trunks. The calls are translated to an E911 VFG and selectively routed to a primary public safety answering point (PSAP) based on the subscriber's directory number (DN). Enter IBN if the call is entering the Integrated Business Network (IBN) translation environment. Enter NIL if the VFG has no associated screening information.

INCTYPE = POTS

If the entry in subfield INCTYPE is POTS and it is the first entry for the VFG, datafill subfields BILLNUM, LINEATTR, and LINECDR as described in the following table. Otherwise leave the subfields blank.

Note 1: European market: Calls terminating to a POTS VFG do not support the IBN universal translation system.

Note 2: If a non 10-digit number is datafilled in field BILLNUM for POTS VFGs the following warning message is displayed:

```
Warning: billing numbers should be 10 digits in
length
```

Field descriptions for POTS conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
POTS	BILLNUM	numeric (vector of up to 11 digits) or N	*Billing number* Enter the billing number to which the next leg of the call is charged. If the call is charged to the originator's billing number for the next leg of the call, enter N.
	SNPA	3 digit integer	*Serving numbering plan area* Enter a 3 digit integer to prefix to the standard 7 digit billing number.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute index* Enter the line attribute index that specifies the translations and screening tables used for the next leg of the call.
	XLAPLAN	alphanumeric (1 to 16 characters)	*Translation plan index* Enter the index into the XLAPLAN table.
	RATEAREA	alphanumeric (1 to 16 characters)	*Rate area index* Enter the index into the RATEAREA table.
	LINECDR	Y or N	*Line call detail recording* Enter Y if CDR is required to record virtual line type calls. Enter N if CDR is not required.

INCTYPE = IBN

If the entry in subfield INCTYPE is IBN and it is the first VFG entry, datafill subfields BILLNUM and CUSTNAME as described in the following table.

Note: If a non 10-digit number is datafilled in field BILLNUM for IBN VFGs the following warning message is displayed:

```
Warning: billing numbers should be 10 digits in
length
```

Field descriptions for IBN conditional datafill if it is the first VFG entry

Field	Subfield or refinement	Entry	Explanation and action
	BILLNUM	numeric (vector of up to 11 digits) or N	*Billing number* Enter the billing number to which the next leg of the call is charged. If the call is charged to the originator's billing number for the next leg of the call, enter N.
	SNPA	3 digit integer	*Serving numbering plan area* Enter a 3 digit integer to prefix to the standard 7 digit billing number.
	CUSTNAME	alphanumeric (1 to 16 characters)	*Customer group name* Enter the customer group name.

INCTYPE = IBN

If the entry in subfield INCTYPE is IBN and it is the second VFG entry, datafill subfields SUBGRP, TRC, NCOS, INTRAGRP, SMDR and CDR as described in the following table.

Field descriptions for IBN conditional datafill if it is the second VFG entry

Field	Subfield or refinement	Entry	Explanation and action
	SUBGRP	0 to 7	*Subgroup number* Enter the subgroup number within the customer group being entered.
	TRC	0 to 7	*Terminating restriction code* Enter the TRC that determines whether a trunk can terminate on a specific line.
	NCOS	0 to 511	*Network class of service (NCOS)* Enter the NCOS number that screens and translates the next leg of the call.
	INTRAGRP	Y or N	*Intragroup* If the call is intragroup, enter Y. If the call is not intragroup, enter N.

Field descriptions for IBN conditional datafill if it is the second VFG entry

Field	Subfield or refinement	Entry	Explanation and action
	SMDR	Y or N	*Station message detail recording* If translation data requests SMDR records for this leg of the call, enter Y. Enter N to indicate that SMDR records are not generated.
	CDR	Y or N	*Call detail recording* If CDR records are produced unconditionally for this leg of the call, enter Y. If CDR records are not generated for the next leg of the call, enter N.

INCTYPE = E911

If the entry for subfield INCTYPE is E911, datafill subfields ESN, ESCO, SNPA, ECPHTIME, ORIGHOLD, and RESTRICT as described in the following table.

Field descriptions for E911 conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
E911	ESN	0 to 15999	*Emergency service number (ESN)* Enter a default ESN that is used to route a call if an ESN cannot be found by querying optional table E911SRDB or if an automatic number identification (ANI) fail condition occurs. ESN must be present in table I911ESN.
	ESCO	Table of 4 {1, 2, 3, 4, 5, 6, 7, 8, 9, 0} (4 digits)	*Emergency service central office code (ESCO)* Enter an ESCO in case an ANI fail condition occurs. If the calling party directory number (DN) cannot be obtained, an ESCO is displayed at the public safety answering point (PSAP).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving NPA of the E911 trunk group that has a numbering plan digit (NPD) datafilled in table E911NPD.

Field descriptions for E911 conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
E911 (continued)	ECPHTIME	0 to 255	*Enhanced called party hold (ECPH) time* This entry is used to indicate the number of seconds ECPH will be active. Default value is 0.
	ORIGHOLD	Y or N	*Originator hold (ORIDGHOLD)* Enter Y to activate E911 originator hold for calls routed through this VFG. When ORIGHOLD is active, the originator of an E911 call cannot disconnect the call. Enter N to indicate ORIGHOLD is not active.
	RESTRICT	Y or N	*Restrict* Enter Y to indicate that an E911 caller, whose call is routed through an E911 VFG, has the same restrictions as if the call were routed through an emergency services (ES) trunk. N is not valid. For example, the caller cannot activate call waiting or do a call transfer.
	BILLDN	Y or N	*Billing Directory Number* Enter Y to spill the PRI trunk group's BILLDN over the E911 VFG.

Field descriptions for E911 conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
E911 (continued)	SPBDN	Y or N	*Special Billing Directory Number* Enter Y to spill the Calling DN's SPBDN over the E911 VFG.
	OFBSR	Y or N	*Off-Board Selective Routing Database* Enter Y to use the OFBSR for routing of E911 calls The default is N.

All tuples

For all tuples, datafill subfield OPTIONS.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS		see subfield	*Options* This field consists of subfield OPTION. Subfield OPTION is a vector of up to 11 multiples.
	OPTION	CUSTGRP, EA, ENTRYID, IBNPIC, INTPIC, LPIC, NOMDR, PRIBILDN, SPBDN, RC, TBO, TOLLRST, VFGALSC, VFGAMA, VFGLSC, or NOLNPAMA	*Option* Enter the list of options assigned to the VFG. Each option and its refinement must be separated by a space. Use as many records as required to datafill the list of options and associated refinements. If an option is not provided, no datafill for that option is required.

OPTION = CUSTGRP

If the entry in subfield OPTION is CUSTGRP, datafill subfield CUSTGRP as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric (1 to 16 characters)	*Customer group* Enter the customer group name to which the VFG is assigned.

OPTION = EA

If the entry for subfield OPTION is EA, datafill subfields PIC and CHOICE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
EA	PIC	alphanumeric (1 to 16 characters)	*Primary Inter-LATA carrier* Enter the name assigned to the primary inter-LATA carrier (PIC) in table OCCNAME. Enter NONE if a PIC is not required.
	CHOICE	Y or N	*Choice* If the caller is allowed to dial a 10XXX prefix to choose a carrier manually, enter Y. If the caller is not allowed, enter N

OPTION = ENTRYID or IBNPIC

If the entry for subfield OPTION is ENTRYID or IBNPIC, no additional datafill is required.

OPTION = INTPIC

Option INTPIC provides the ability to choose a presubscribed carrier for international calls. This option can only be set if option EA is also assigned.

If the entry for subfield OPTION is INTPIC, datafill field CARRIER as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
INTPIC	CARRIER	alphanumeric (up to 16 characters)	*Carrier name* Enter the name of the presubscribed carrier for international calls. Table OCCNAME contains a list of valid carrier names.
	CHOICE	Y or N	*Choice* Enter Y to allow the choice for Carrier Access Code (CAC) dialing. Enter N to disallow CAC dialing.

OPTION = LPIC

The intra-LATA PIC (LPIC) option provides an equal access (EA) carrier for intra-LATA calls. This option can only be set if the EA option has also been assigned.

If the entry for subfield OPTION is LPIC, datafill fields IPIC and LCHOICE as described in the following table.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LPIC		MCI, ITT, SSO, or NILC	*Intra-LATA Carrier name* Enter the intra-LATA carrier name for this VFG. The carrier name must be datafilled in table OCCNAME before it can be datafilled in table VIRTGRPS.
	IPIC	alphanumeric (1 to 16 characters)	*Intra-LATA (local access and transport area) primary identification code (IPIC)* The IPIC option allows the user to choose a primary carrier for intra-LATA service. For the intra-LATA primary inter-LATA carrier option, enter LPIC and datafill refinement IPIC. Enter the name of the subscriber's intra-LATA carrier. This name must be datafilled in field CARRIER in table OCCNAME before it can be used here.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LPIC (continued)			The datafill of the IPIC option prompts for the LCHOICE field. ***Note:*** There are special checks made when SOC goes from IDLE to ON to see if it is the first time that the SOC has been turned on after a one night process (ONP) and a TABXFR have occurred. If it is the first time, SOC changes the LPIC option to match the existing PIC option if the PIC option exists.
	LCHOICE	Y or N	LPIC choice The LCHOICE entry (Y or N) determines if the LPIC subscriber is permitted to dial 10XXX/101XXXX codes. In the LCHOICE field, either Y or N must be entered; this field does not have a default value.

OPTION = NETINFO

If the entry for subfield OPTION is NETINFO, datafill subfields NCOS and CUSTGRP as described in the following table.

Note: The new option NETINFO can be datafilled only if the field incoming type (INCTYPE) in table VIRTGRPS is IBN. If the NETINFO

option subfields are both datafilled as N for a VFG, then the NETINFO option is not added to that VIRTGRPS tuple.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
NETINFO	NCOS	Y or N	*Choice* If the NCOS subfield is set to Y, the NCOS of the last VFG datafilled to Y is used. If the NCOS parameter is set to N, the system searches through the VFGs previously routed. The first VFG found to have the NCOS subfield set to Y has its NCOS put into the NETINFO parameter of the IAM. If none of the VFGs have the NCOS option set to Y, the NCOS of the originator is used.
	CUSTGRP	Y or N	*Choice* If the CUSTGRP subfield is set to Y, the last VFG with CUSTGRP set to Y is used. If the CUSTGRP subfield is set to N, the system searches through the VFG(s) previously routed. The system uses the first VFG found to have CUSTGRP set to Y.The system puts this CUSTGRP data into the NETINFO parameter of the IAM. If none of the VFGs have the CUSTGRP option set to Y, the CUSTGRP of the originator is used.

OPTION = NOMDR

Option NOMDR allows suppression of message detail records to avoid double billing. If the entry for subfield OPTION is NOMDR, no additional datafill is required.

OPTION = RC

If the entry in subfield OPTION is RC, datafill subfield RCNAME as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
RC	RCNAME	alphanumeric	*Routing characteristic name* Enter a routing characteristic name. For ISDN calls routed through VFS, RCNAME overrides the RCNAME originally attributed to the call (before retranslation). If a new RCNAME is not specified, then the old RCNAME applies for retranslation.

OPTION = TBO

If the entry in subfield OPTION is TBO, either subfield TBOVARS or CALLCODE will appear. Datafill subfield TBOVARS or CALLCODE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
TBO	TBOVARS	see subfields	*TBO variables* This field consists of subfields CALLCODE, SFPRSNT, and SFVAL.
	CALLCODE	800 to 999	*Call code* Enter the call code for the automatic message accounting (AMA) record.
TBO (continued)	SFPRSNT	Y or N	*Service feature code present* Enter Y to indicate that there is a service code associated with the feature that is printed on the AMA record. If this field is set to Y, subfield SFVAL must be datafilled. Enter N to indicate that a service code is not associated with the feature.
	SFVAL	800 to 999	*Service feature value* Enter the code associated with the feature printed on the AMA record.

OPTION = TOLLRST

If the entry in subfield OPTION is TOLLRST, no additional datafill is required.

OPTION = VFGAMA

If the entry in subfield OPTION is VFGAMA, datafill subfield FACILITY as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VFGAMA	FACILITY	CCSA, ETS, FX, or TDMTT	*Facility* Enter the facility from the following list. • CCSA (common control switching arrangement) • ETS (electronic telephone set) • FX (foreign exchange) • TDMTT (tandem tie trunk)

OPTION = VFGALSC

If the entry in subfield OPTION is VFGALSC, datafill subfields ALSC and ALSCINT as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VFGALSC	ALSC	0 to 255	*Alternate line screening code* Enter the alternate line screening code flag number assigned to the VFG.
	ALSCINT	0 to 63	*Alternate line screening code intercept number* Enter the treatment number to which a call is routed if line screening fails. The data for the treatment number is assigned in table IBNTREAT.

OPTION = VFGLSC

If the entry in subfield OPTION is VFGLSC, datafill subfields LSC and LSCINT as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VFGLSC	LSC	0 to 255	*Line screening code* Enter the alternate line screening code flag number assigned to the VFG.
	LSCINT	0 to 63	*Line screening code intercept number* Enter the treatment number to which a call is routed if line screening fails. The data for the treatment number is assigned in table IBNTREAT.

Table history

SN07

Table VIRTGRPS migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 12 of 12*, 297-8021-351.09.03.

SN06 (DMS)

added option E911 ESCO expansion to four digits as per feature A89007692.

NA015 (SN02)

Added the Off-Board Selective Routing database (OFBSR) subfield under the E911 INCTYPE. This subfield allows routing and translations to be processed through an OFBSR.

VOWINV

Virtual Office Worker Inventory

Table Virtual Office Worker Inventory (VOWINV) is used to store data associated with VOW functionality. It contains the physical or virtual LEN(s) associated with a VOW's dedicated DN and associated data, his or her personal ID code, and his or her primary DN.

As VOW log in and log out of their dedicated DNs, this table is automatically updated to keep the information up-to-date. VOWINV also contains information identifying the physical sets which have the VOWDN line option assigned.

Datafill sequence and meaning

There is no specific datafill sequence required for table VOWINV.

Table size

0 to 41 000 tuples.

Datafill

The following table lists the datafill for table VOWINV.

Field, subfield, and refinement descriptions for table VOWINV (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VOWKEY		VOW or VOWDN	VOWKEY is the table key and uniquely identifies a tuple through a customer group (CUSTGRP) and VOW_TUPLE_TYPE value (VOWTYPE).
VOWDATA		See subfields.	VOW data area VOWDATA contains the remaining data for the tuples. VOWTYPE within VOWDATA matches the value of VOWTYPE within VOWKEY.
	FWTYPE	FW or DLL	Firmware type. FW for ROM baseline. DLL for DLL baseline.

Field, subfield, and refinement descriptions for table VOWINV (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	VOWPID	vector, 4 to 10 digits	VOW personal ID. VOWPID provides the associated VOW passcode value.
	VOWLEN	EXT_LEN	VOW LEN VOWLEN provides the pre-assigned virtual VOW LEN for use by the associated VOW user.
	VOWMATE	Y or N	VOW Mate VOWMATE provides the pre-assigned virtual VOW mate LEN for use by the associated VOW user, if appropriate.
	LOGGEDIN	Y or N	Logged in. LOGGEDIN specifies whether or not the associated VOW user is logged in or not.
	PHYSLEN	EXT_LEN	Physical LEN. If LOGGEDIN is set to Y, then PHYSLEN provides the physical LEN through which the VOW user is logged in.
	PHYSMATE	MATE: Y or N and MATELEN: EXT_LEN	Physical mate LEN. If LOGGEDIN is set to Y, then PHYSMATE provides the physical mate LEN, if appropriate.

Additional information

Virtual VOW LENs are pre-assigned when the VOW line option is added to a set through Servord and a tuple is created in table VOWINV. Virtual VOW LENs are un-assigned only when the VOW line option is removed from a set through Servord and the corresponding tuple is deleted from table VOWINV.

Table history

SN07

Table VOWINV was added in SN07 by feature AX1236.

VRDNINV

Automatic Call Distribution Routing

VRDN inventory table

Table VRDNINV stores:

- the Media Gateway Controllers (MGCs) and their respective IP addresses
- the VRDNs that can connect to a specific MGC

Datafill sequence and meaning

Table ACDGRP must be datafilled in the following sequence:

- SERVRINV
- MGCINV
- VRDNINV

Table size

0 to 100 tuples

Datafill

The following table shows the datafill for table VRDNINV.

Field, subfield, and refinement descriptions for table VRDNINV (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VRDNNAME	none	vector (1 to 16 characters)	Name of VRDN For example, VRDNA.
GWCNAME	none	<XPMTYPE> <XPMNO>	Name of the remote GWC Enter the GWC name in the form <XPMTYPE> <XPMNO>. For example, GWC 1. Up to 80 GWCs can be datafilled. The GWCNAME must be datafilled in table SERVRINV. See other restrictions under Supplementary information

Field, subfield, and refinement descriptions for table VRDNINV (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RMGCLIST	none	<MGC_name>	Remote MGC list Enter the name of the MGC as datafilled in table MGCINV. If the VRDN is not connected to a remote MGC, leave the field empty.

Supplementary information

Once a GWC has been datafilled in table VRDNINV, it is a dedicated VRDN. As a result, the SIPT option in table SERVSINV cannot be datafilled.

XAFWLOAD

XA-Core firmware load

The system uses table XAFWLOAD to control firmware versions and to detect a firmware version mismatch.

Table XAFWLOAD contains the following information:

- firmware (FW) load file locations and names
- field-replaceable unit (FRU) product equipment codes (PECs)
- FW soak times
- valid FW versions

Datafill sequence and meaning

There is no specific datafill sequence required for table XAFWLOAD.

Table size

0 to 40 tuples.

Datafill

The following table lists the datafill for table XAFWLOAD.

Field, subfield, and refinement descriptions for table DNMAP (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FRU		PE, IOP or CMIC	Indicates the type of card or packlet.
PEC		alphanumeric (up to 8 characters)	Indicates the product equipment code (PEC).
VERSION		alphanumeric (up to 8 characters)	Indicates the FW version.
VOLUME		alphanumeric (up to 20 characters)	Indicates the volume name.
FILE		alphanumeric (up to 32 characters)	Indicates the file name.

Field, subfield, and refinement descriptions for table DNMAP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
STATUS		new, current, or old	The system uses the status entry to indicate which volume and filename to retrieve when executing the LoadFW command. All tuples have a unique combination of FRU, PEC and STATUS except when status = OLD.
SOAK		0 to 240	Indicates the time period in hours that the system soaks the firmware. The default entry is 48.

Table history

SN07

Table XAFWLOAD was added in SN07 by CR Q01005058-01.

Additional information

Table XAFWLOAD does not use translation verification tools.

The system uses the tuple with volume as unknown_volume_name and file as unknown_file_name for version control and to set the soak time for LOADFW clone option.

Do not delete this tuple.

XLABILL

XLAGRP Translation Refinement for Billing Types

Table XLAGRP Translation Refinement for Billing Types (XLABILL) provides the mechanism to refine the XLAGRP based on the billing type when using the XLAGRP method of translations through new table XLABILL.

Datafill sequence and meaning

The following tables must be datafilled in the sequence listed below:

- Table XLAGRP
- Table TOPSDP
- Table XLABILL

Table size

0 to 57 330 tuples.

Datafill

The following table lists the datafill for table XLABILL.

Field, subfield, and refinement descriptions for table XLABILL

Field	Subfield or refinement	Entry	Explanation and action
XLAGRP		None	Translations group. Contains the current XLAGRP associated with the call.
BILLTYPE		UNSPEC PAID COLLECT CCARD THIRD SPLCLG SPLCLD	Billing type. Enter the billing type.
NEWXLGRP		None	New translations group. Contains the new XLAGRP.

Table history

SN07

Table XLABILL was added in SN07 by feature A00002765.

XLACLASS

XLAGRP Translation Refinement for Calling Service Class

Table XLAGRP Translation Refinement for Calling Service Class (XLACLASS) provides the mechanism to refine the XLAGRP based on the calling service class when using the XLAGRP method of translations through new table XLACLASS.

Datafill sequence and meaning

The following tables must be datafilled in the sequence listed below:

- Table XLAGRP
- Table TOPSDP
- Table XLABILL

Table size

0 to 40 950 tuples.

Datafill

The following table lists the datafill for table XLACLASS.

Field, subfield, and refinement descriptions for table XLACLASS

Field	Subfield or refinement	Entry	Explanation and action
XLAGRP		None	Translations group. Contains the current XLAGRP associated with the call.
CLGCLASS		UNKNOWN STATION COIN HOTEL RESTRICTED	Calling service class. Enter the calling service class.
NEWXLGRP		None	New translations group. Contains the new XLAGRP.

Table history

SN07

Table XLACLASS was added in SN07 by feature A00002765.

XLAPLAN

ATTENTION
This table applies to new or modified content for NA015 (SN02) that is valid through the current release.

Translation Plan

Feature AU3279, LINEATTR Servord Enhancements, split table LINEATTR (Line Attribute) into three tables to make data management easier:

- LINEATTR
- RATEAREA
- XLAPLAN

Table Translation Plan (XLAPLAN) 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 XLAPLAN, the tuple is not added to table XLAPLAN and the XLAPLAN key copies back to table LINEATTR. If a specific tuple from table LINEATTR does not result in a tuple that exists in table XLAPLAN, the tuple is added to table XLAPLAN and the XLAPLAN key copies back to table LINEATTR.

Note: You can delete tuples in table XLAPLAN 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 table parameter XLAPLAN_RATEAREA_SERVORD_ENABLED (XRSE) is set to MANDATORY_PROMPTS. This warning does not prevent datafill validation.

Datafill sequence and meaning

The following tables must be datafilled before table XLAPLAN:

- CUSTENG
- SUBGRP
- NCOS
- SCRNCLAS

- SNPANAME
- POSNAME
- STDPRTCT

Table size

0 to 32 000 tuples.

Datafill

The following table lists the datafill for table XLAPLAN.

Field, subfield, and refinement descriptions for table XLAPLAN (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
XLAPIDX		alphanumeric (up to 16 characters)	XLAPLAN log key. Enter the index into table XLAPLAN.
SCRNCL		alphanumeric (up to 4 characters) or NSCR	Screening class. If screening by class of service is required, enter the name of the class of service subtable assigned to the LINEATTR key. If screening by class of service is not required, enter NSCR.
HSTS		numeric (0 to 999)	Serving translation scheme. Enter the serving numbering plan area (SNPA) assigned to the LINEATTR key. The HSTS of an existing tuple cannot be changed.
PRTNM		alphanumeric (up to 4 characters) or NPRT	Pretranslator name. If pretranslation of digits is required, enter the name of the standard pretranslator subtable assigned to the LINEATTR key. If standard pretranslation is not required, enter NPRT.

Field, subfield, and refinement descriptions for table XLAPLAN (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ZEROMPOS		alphanumeric (up to 10 characters) or NONE	Zero minus position. If a LINEATTR is configured for operator (0-) and special toll (0+) dialing, enter the position in the position table to which operator (0-) calls are routed. Otherwise, enter NONE.
RESINF		Y or N	Residential enhanced services information. Enter Y (yes) if the LINEATTR key is required to support RES lines (the LCC must be 1FR, 1MR, OWT, EOW, INW, 2WW, ETW, CCF, CDF, CFD, CSP, ZMD, or ZMZPA). Datafill subfields refinements CUSTGRP, SUBGRP, and NCOS. Otherwise, enter N (no), and leave CUSTGRP, SUBGRP, and NCOS blank.
	CUSTGRP	alphanumeric (up to 16 characters)	Customer group. Enter the customer group name assigned to the LINEATTR key. This name must appear in table CUSTENG field CUSTNAME.
	SUBGRP	numeric (0 to 7)	Customer subgroup. Enter the subgroup within the customer group associated with the LINEATTR key. This subgroup must appear in table SUBGRP.
	NCOS	numeric (0 to 511)	Network class of service. Enter the network class of service (NCOS) number in the customer group associated with the LINEATTR key. This number must appear in table NCOS field NCOS.

Field, subfield, and refinement descriptions for table XLAPLAN (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS		SECDT or $	Options. Enter SECDT to enable a secondary dial tone for wireless features that require that the subscriber enter more digits. Enter $ to end the option entry.
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 tuple. The operating company defines the content of this entry.

Table history

SN07

Table XLAPLAN migrated from *DMS-100 Family North American DMS-100 Customer Data Schema Reference Manual Volume 12 of 12*, 297-8021-351.09.03.